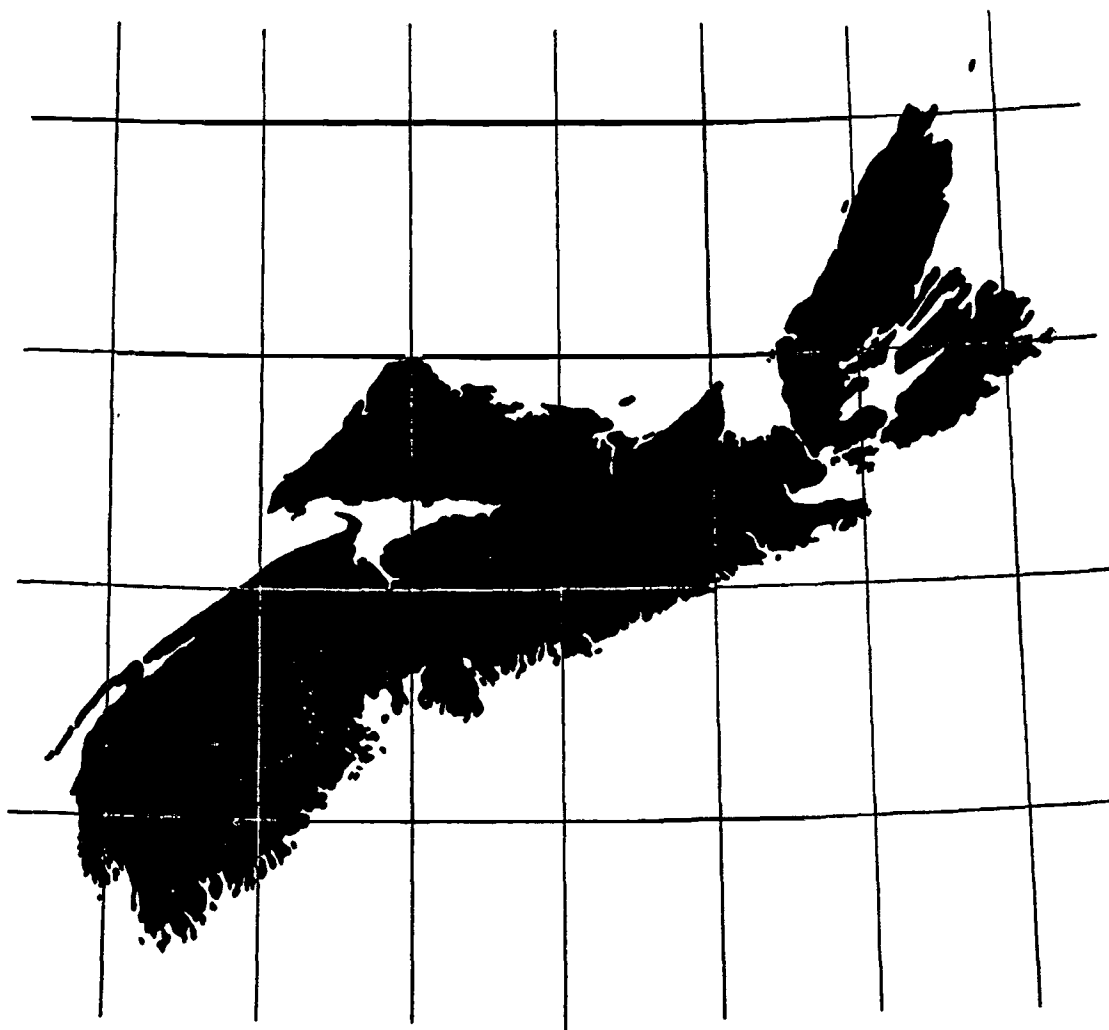


The NOVA SCOTIAN SURVEYOR



*Published by
The Association of Provincial Land Surveyors
of Nova Scotia*

Founded 1951
Volume 14

R. E. Millard, P.L.S., Managing Editor
MARCH 1963

Incorporated 1955
Number 34

The NOVA SCOTIAN SURVEYOR

Published four times a year by

The Association of Provincial Land Surveyors of Nova Scotia Incorporated

J. RONALD CHISHOLM
President

EDWARD P. RICE
Secretary-Treasurer

R. E. MILLARD
Editor

Volume 14

Number 34

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

Letters To The Editor

Supplementary Examinations December 1962

J. A. H. Church, P.L.S., Registration No. 20

January 4, 1963

In the role of watchdog in the interest of the Candidates, sitting the Intermediate and Final Examinations, I am forced to the extraordinary step of appealing to the rank and file of our Association against the arbitrary and scandalous behaviour of our present Board of Examiners. Space does not permit a review of all papers set but the paper on Practical Astronomy reflects discredit upon the Province of Nova Scotia, the entire Association of Provincial Land Surveyors, The Professional Engineers* by virtue of their representation on the Board of Examiners, the Executive Council of our Association and the Board of Examiners, appointed by Council.

Members must be aware of the dissatisfaction voiced by myself and others at the two last Annual Meetings, and in an article published in the Nova Scotian Surveyor in 1962, but they are not aware of a criticism made by me to the Board of Examiners on July 10th, 1962. This letter of criticism dealt particularly with the gross and inexcusable blunders in the Practical Astronomy paper in the Final Examination May 1962. The reply to my letter was to the effect that the points raised were received sympathetically.

The only result of my attempt to obtain justice for the Candidates has been the Practical Astronomy papers in the Supplemental Examinations Intermediate and Final in December 1962.

These two ridiculous and pitiful effusions constitute a grave injustice to the Candidates for which the fee of \$15.00 was exacted and a very serious menace to the continued existence of our Association. Authority to examine and certify surveyors-in-training as Provincial Land Surveyors has been delegated to us by the Government of this Province and we hold the Government in contempt by issuing the infantile trash set out in December 1962 examination. Suppose one Candidate be failed and he proceed to ventilate the subject either in the public press or by a question in the House of Assembly what could be our stand?

What is the function of the Board of Examiners? Surely each member should be competent to recognize a gaffe when he sees it in the solution of the examination paper submitted by the Examiner. Alternately, perhaps, no solution was submitted if such be the case every member of the Board is guilty of negligence in that he authorized payment of a fee to the delinquent examiner without checking his work.

I do not propose to work out the main problem, i.e. Azimuth by Altitude of the sun, but merely to show the simple basic checks on the data which members of the Board should be competent to make. I am dealing with the Intermediate

Practical Astronomy — a similar state of affairs may be found in the Final paper.

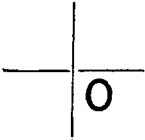
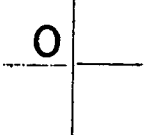
* Professional Engineers actually on the Board of Examiners numbered six, so the Engineers are implicated.

Intermediate Supplementary

1. The first 60 percent of the paper deals with time problems and the unfortunate examiner has not bothered to use the technical terms as laid down in Nautical Almanac, Star Almanac for Land Surveyors or the Ephemeris of the United States Department of the Interior Bureau of Land Management — this negligence causes delay and uncertainty to the Candidate. In a Professional Examination such action is reprehensible.

2. The next three questions are to the deplorably low standard to which all Astronomy questions are set in Nova Scotia — twenty years have accustomed us to that.

3. Question No. 10 is quoted in extenso

Position of Sun	Time	Horizontal Angle from Mark	Vertical Angle
	9H 35M A.D.T.	317° — 52'	41° — 47'
	9H 37M A.D.T.	317° — 45'	41° — 47'

Latitude 44° — 37' 5 July 15th, 1962 Longitude 63° — 35'

Find Azimuth of the Mark.

CRITICISM

(1) No statement of Direction in which Horizontal Angle is measured either RIGHT or LEFT from the Mark.

(2) No statement as to in which Hemisphere the observation was taken. Question No. 2 the Southern.

(3) No specification of Longitude whether E. or W. of Greenwich

(4) No statement as to type of instrument used i.e. erecting or inverting eye piece — The generally accepted convention is that an erecting eyepiece is intended unless otherwise specified.

Discussion on Question No. 10

1. To any person giving the most perfunctory consideration to the problem set two errors appear to require attention.

(a) Elapsed time interval for change in altitude of the Sun, in extent equal to the diameter of the sun. i.e. 31' 36" in July is only 2 minutes — this particular piece of imbecility was pointed out to the Board of Examiners on July 10th, 1962 for the question set in the May 1962 Finals — date of the observation in that case being June 19th.

(b) The change in Azimuth of the sun in 2 minutes elapsed time.

Preliminary Check on (a) and (b)

Ist Pointing:

(a) Observed altitude	UPPER LIMB OF SUN	41° — 47'
Mean Refraction		01' — 06" (n)
Parallax		00' — 06"
Corrected Altitude Upper Limb		41° — 46' — 00"
Semi-diameter of sun		— 15' — 48"
True Altitude Sun's Centre		41° — 30' — 12"

Identical computation for 2nd pointing on the Lower Limb will give true altitude of centre $42^{\circ} - 01' - 48''$

In 2 minutes elapsed time the difference in altitude is $31' - 36$ seconds
Therefore

the ratio of difference in altitude to elapsed time is $\frac{31.6'}{120 \text{ seconds}}$

or one minute of arc/ 3.8 seconds

If anyone will trouble to compute this quantity for the day in question he will find the ratio is one minute of arc/5.68 seconds.

The above is the basic check used in instruction of students while learning the method of taking observations, Solar or Stellar, by the altitude method.

(b) Correction to the Azimuth of the left or right limb (of the sun) or to the corresponding reading of the horizontal circle is angle a plus or minus semi diameter x cosecant of the altitude of the centre and I quote from page 64 of Astronomy Applied to Land Surveying by R. Roelofs, Professor of Surveying at the Technical University, Delft, Holland. In (a) the altitudes of the sun's centre were computed —

1st Pointing	Altitude of Sun's Centre	2nd Pointing
$41^{\circ} - 30' - 12''$	$42^{\circ} - 01' - 48''$	$42^{\circ} - 01' - 48''$
$317^{\circ} - 52'$	H. C. R. S. Sun	$317^{\circ} - 45'$
<u>$20' - 56''$ (pos)</u>	Correct to H. C. R. S.	<u>$21' - 06$ (neg)</u>
$318^{\circ} - 12' - 56''$	H. C. R. S. (Centre)	$317^{\circ} - 23' - 54''$

The above shows a ratio of one minute in Azimuth/Seconds of elapsed time of $49'$ in arc/120 seconds or 1 minute of arc/2.45 seconds.

Members of the Board should be aware of the fact that any heavenly body moves, at a maximum rate in Azimuth when on the meridian. The Ephemeris of the Sun, Polaris and other Stars for Year 1962 (Price 40c) prepared by the Nautical Almanac Office and U. S. Naval Observatory gives the following data on page 5 July 15th. Time of semi diameter passing the meridian 68 sec. Semi diameter $15' - 45.67''$, therefore the Azimuth/Time ratio on the meridian is $15.76/68$ seconds or 1 minute of arc/4.31 seconds.

A third and somewhat less accurate but speedy check can be made by the use of the Alt — Azimuth Tables without interpolation in conjunction with the Nautical Amanac. This check gives the Altitudes/Time ratio as 1/5.7 seconds and the Azimuth/Time ratio as 1/5 second

SOURCE	RATIOS	
	One minute increase in Altitude to Elapsed Time (Seconds)	One Minute in Azimuth to Elapsed Time (Seconds)
Examiner	One to 3.8 (Seconds)	One to 2.45 (Seconds)
Alt-Azimuth Tables	One to 5.7 (Seconds)	One to 5.0 (Seconds)
Napier's Analogy	One to 5.67 (Seconds)	One to 5.11 (Seconds)
Ephemeris	While on the Meridian	One to 4.31 (Seconds)

From this tabulation one can assess the gross and reprehensible negligence of the examiner and also of each member of the Board of Examiners.

Here is an odd, perhaps one might characterize it as almost comic comment — if the angle from the Mark to the Sun be read clockwise the Examiner has the sun moving Eastward, this surely is an all time low for a Professional examination repeated Three times in successive examination papers.

If any member believes that such gross blunders would pass investigation by the delegating authority he is a dedicated optimist. I can assure fellow members

that the standard of Professional Examination has created bitter resentment among the Surveyors-in-Training, they think, and I concur, that the fees are excessive and so indeed they are.

With malice to none and unbiased by mercenary or personal motive, I am voicing the resentment of Surveyors-in-Training who have absolutely no representation other than myself and perhaps two more in our Association.

No member can be more aware than I of the serious step I am taking in challenging each member of the Board of Examiners in our publication "The Nova Scotian Surveyor" either to refute my criticism of the Practical Astronomy paper or amend his negligence. I am forced to this step after lengthy correspondence and representation to Council and the Board of Examiners none of which was answered except in platitudes and nebulous promises. What do the members expect if they will not take action to remedy this situation.

The Association of Provincial Land Surveyors of Nova Scotia

FINANCIAL REPORT

For Period September 30, 1961 to December 30, 1962

Bank Balance September 30, 1961	\$ 1,122.08	
Receipts	5,146.85	
Expenditures		\$ 4,224.26
Bank Balance September 30, 1962		2,044.67
	\$ 6,268.93	\$ 6,268.93

DETAIL OF RECEIPTS

Annual Membership dues	\$ 1,914.55	
Special Levy	730.90	
Examination Fees	1,575.15	
Advertising in "The Nova Scotian Surveyor"	168.25	
Annual Meeting	673.00	
New Members	85.00	
	\$ 5,146.85	\$ 5,146.85

DETAIL OF EXPENDITURE

Meetings of the Council	\$ 94.26	
100 copies of the Provincial Land Surveyors Act	20.00	
Legal Services	125.00	
Rubber Stamp	1.25	
Honorarium to Secretary-Treasurer for 1960 & 1961	300.00	
Typing and Stencil Services	30.72	
Printing expenses "The Nova Scotian Surveyor"	692.29	
Postage	45.00	
11th Annual Meeting	1,081.44	
Editor's expenses "The Nova Scotian Surveyor"	27.24	
Examination expenses	1,120.87	
Stationery and printing	34.32	
President's expenses to attend Annual Meeting of the Massachusetts Association of Land Surveyors and Civil Engineers	104.00	
2 Steel Filing Cases	32.24	
President's expenses to attend Annual Meeting of		

the Canadian Institute of Surveying, Ottawa, and the Ontario Land Surveyors Association at London, Ont.	210.00	
Telegram to Newfoundland Association	1.72	
President's expenses to attend Annual Meeting of the New Brunswick Land Surveyors Association	55.00	
Vice-President's expenses to attend Annual Meeting of Newfoundland Land Surveyors Association	85.19	
Major J. A. H. Church prize to student at the Nova Scotia Land Survey Institute making the best progress during the year	10.00	
President's expenses to attend the Annual Meeting of the Corporation of Quebec Land Surveyors	105.50	
Post Office Box Rental	6.00	
Flowers, Funeral of late R. J. Milgate, P.L.S.	10.50	
Brief case for use of Secretary-Treasurer	7.87	
Flowers, funeral of late Capt. G. R. Parry, P. L. S.	14.15	
	\$ 4,214.54	\$ 4,214.54
BANK CHARGES		
Exchange deducted from cheques	\$ 8.50	
Charges to transfer \$980.00 from Lawrencetown to Halifax	1.22	
	\$ 9.72	\$ 9.72
Total expenditures		\$ 4,224.26

Respectfully submitted,
H. B. ROBERTSON, P. L. S.,
Secretary-Treasurer

Advances in the Field of Map Drafting

Some recent advances in the Field of Map Drafting and how these advances affect
the training requirements of the Drafting Technician

This paper was presented at the November 23, 1962 meeting of the Halifax Branch of the Canadian Institute of Surveying by Mr. John F. Wightman, Cartographic Drafting Instructor, Nova Scotia Land Survey School, Lawrencetown, N. S.

In Cartographic Drafting — as in many other fields — the advent of the greatly increased technology, stimulated by the Second World War and accelerated by the cold war and space race, has made astounding changes in the requirements and background training of the present-day technician.

During the Second World War detailed maps were required by the armed forces of areas which, in most cases, were only very poorly mapped and in some cases had never been mapped before. These maps were needed on very short notice and the only way this could be done was a massive effort by photogrammetric means. New plotters were developed to speed up the processing of the prints. In the drafting and reproduction units ways were found to cut corners and reduce the time factor.

In Canada, at the war's end, the methods learned and the equipment used under combat conditions, were turned to the massive task of mapping the second largest country in the world. This is still going on.

Some of the methods devised to help give a quicker and better product have been:

(1) The Introduction of Plastics

Plastics were known, and used, before the war but it was only in recent years

that they have invaded the field of map drafting to any great degree. These materials, which have a high degree of erasability; smear resistance; clarity; stability of size; flexibility; resistance to moisture and strength, will in many cases accept both pencil and ink drawings equally well. The use of these plastics instead of the conventional tracing cloth and paper has eliminated the need for much of the duplication and redrafting of old sheets. Designs or diagrams drawn or printed on clear plastic have facilitated the production of cheaper and more attractive overlays for base maps.

(2) Negative Scribing:

During the Second World War a process of drafting was adopted in which the image was engraved, or scribed, on a coated glass negative. This produced a much better drawing but the problem was in the transportation of these large glass plates. A few years later it was found that a pre-coated plastic material could be used. The light, pliable, plastic materials are easily handled, transported and stored. In the scribing procedure a photograph is taken of the original manuscript and the image is transferred to the coated, plastic material by photomechanical means. The draftsman, by means of a precision needle or chisel-shaped tool, then cuts or scrapes away the coating to produce a negative from which the printing plate is made. Positive scribing is also done especially for maps which are too detailed to be scribed at printing size.

Scribing produces a sameness of style and a uniformity of line thickness which is impossible using the conventional pen and ink method. Most large map making offices use this scribing method to produce their maps and claim up to 50 per cent reduction in the drafting time with a great improvement in quality. The time element is not only reduced in the drafting itself, but in the training of the draftsman. Using the pen and ink method it might take several years to train a man whereas using scribing it is only a matter of months.

(3) Relief Shading:

Several years ago it became evident that Canada would soon obtain supersonic fighter aircraft which would operate at very low altitudes. Topographic maps and air navigation charts were not satisfactory for general terrain identification at great speed so very close to the ground. A two-dimensional chart which would give an accurate three-dimensional picture of the terrain was the answer. Several methods were used to try to produce these charts, one of which was to make a three-dimensional model and then photograph it using a light source, from one direction, to cause shadow effects. This method was discarded as being too time consuming and expensive. At the present time these maps are being produced in Ottawa by a method known as "Relief Shading." In this method very experienced draftsmen shade the eastward slopes of hills and mountains in such a way that the two-dimensional map seems to give a three-dimensional image. This method is very difficult because the finished product of the draftsmen's work will then be photographed by the "Half-Tone" method for reproduction and therefore the draftsman must be able to visualize what his product will look like when photographed. This is almost as difficult as trying to see stereoscopically with only one good eye.

(4) New Methods of Map Compilation:

Compilation and revision have been a part of map making from the very beginning. The use of maps of other scales and other information which can be collected are the main sources of material for new maps. Steps in streamlining this procedure by combining it with the drafting operation have been started on a limited scale recently. Now, not only does the compiler select the information to be used, but he scribes it onto the coated, plastic material at the same time. It has been found that this procedure eliminates one whole step and substantially reduces the time element. This method requires that the person doing the job not only have the skill of the draftsman, but, also the knowledge of the compiler. It is proposed that this method might be adopted in some way to the fields of hydrographic drafting and photogrammetry.

It can be seen that the role of the draftsman has been greatly affected by these

changes. He is no longer only that great artist who could produce magic with his pen but a modern technician who needs the knowledge of the topographer, hydrographer, and photogrammetrist as well as his basic drafting skill.

The army and Mines and Technical Surveys have had to train their own people in the Cartographic-Drafting field for years and training of this sort has not been available to the general public. It was with this fact in mind that courses in Photogrammetry and Cartographic-Drafting were set up at the Nova Scotia Land Survey Institute.

At the moment discussions are being held which, it is hoped, will lead to the establishment of additional training courses on the technical school level. These courses will not only give the draftsman an excellent background in Survey and Photogrammetry but will give both the surveyor and photogrammetrist a good basic understanding in each others' field as well as a good general drafting course.

The Chronicles of Bill

FROM CANADIAN SURVEYOR SUPPLEMENT
VOL. XVI, NO. 5, NOVEMBER 1962 — PAGE 6
Episode IV: TIME AND ETERNITY

It was a pleasant night such as is sometimes seen in late summer in northern latitudes, cool enough to make us grateful for a roaring fire of birch logs but so clear that we knew our sleeping bags would be sufficient cover. The four of us were appropriately dispersed around the fire in these same sleeping robes, filled with that sense of contentment that comes from a good day's work in the open, a full stomach, and the knowledge that our job here was done and tomorrow we should be packing up the fly camp and returning to base.

Bill waved a calloused hand to deflect a tendril of wood smoke that was drifting toward his face, drew twice on his cigarette, and broke the lazy silence.

"It must run along this very ridge, up there where we built the last signal," he said, his brow furrowed in concentration.

Gently Sam removed a large limb whose broken end was interfering with his comfort. "I recognize the signs," he said dryly, "but let us humour our philosopher. What runs along this very ridge?"

"Why that interprovincial boundary, of course. The Act says it is to follow the height of land, and from up there I should say this is the highest ridge within a hundred miles."

"If there's an interprovincial boundary running along this ridge, why haven't we seen the line or some of the monuments?" asked Harry, our one and only student assistant.

"Hooked neatly, on the first try." Sam's voice was so soft that Harry, from his position on the opposite side of the fire, mistook it for after-dinner rumblings.

Bill's voice held just the right, barely perceptible shade of condescension. "Because, Son, it is not really there. It exists only in a legal document, and will never exist in reality until Authority gets around to a decision to make a boundary survey."

"And when do you think that will be?" said Harry, with the proper show of respect for the opinion of his seniors.

"I hesitate," and Bill hesitated, "to give a direct answer to that question. But there's a story in those stars up here that might give a good idea of how these things are done."

"I wondered how you were going to get around to it this time," said Sam appreciatively. "But go ahead and tell it and let us all get some sleep."

* * *

It happened a long time ago (said Bill) when there were no unions and no Jimmy Hoffa and the Lord himself had to work six days a week.

On the seventh day He stopped and reviewed his work. "It will be written in the Bible," He said, "that I must stop now and survey what I have done. I cannot contradict the manual. Let us call in the proper consultant."

He picked up the telephone and dialed the number of the archangel in charge of the Department of Moons and and Stellar Wonders.

"Hi, Archie," said the Lord benevolently into the telephone. "How are things going?"

"Well," came the answer in a tired voice, "I have been having a little trouble lately. You won't believe it, my Lord, but it is the Stygians again. They want an easement for their Broad Highway into the Milky Way. I have to be very careful, because their Minister of Highways holds a card in our union."

"Stall them off for a while," said the Lord. "I have need of you myself. You know I have to have a survey made of what I did during the past six days. How soon can you start?"

"Do the control survey after the construction is finished? Excuse me, my Lord, but are we to be like other construction outfits and put the cart before the horse? If so, I am afraid the reality will not fit your blueprint."

"Never mind," said the Lord impatiently. "I can change the blueprint any time. I am a government, myself, you know."

And the angels began the Great Survey. They dispersed all over the Universe with their planetometers and their universal theodolites, working with the utmost dispatch, and at the end of one long universal day the archangel unrolled before the Lord the Great Plan (afterwards known as the Boss Catalogue).

"Well done," said the Lord, evidently much pleased. "And how accurate is it?"

"As far as our own work is concerned, my Lord", answered the archangel hesitantly, "it must be extremely good, because we adjusted it by Least Squares, and some people say that this is closer to reality than reality itself. However, because of the recently inaugurated austerity program we had to be as economical as possible, and we therefore accepted the local surveys as they were."

"The hell with it!" thundered the Lord angrily. There was a blinding flash, a strong smell of sulphur, and hell came into being. "Then our plan is no more accurate than those local works. In that case I suspect the worst. Let us see how we stand, then." And so saying he picked at random a tiny planet coasting along the edge of the Milky Way and ordered it to take the shape shown on the local surveys.

On the far-off planet earth there was a tremendous quake. Mountains sank, new ridges appeared, rivers flowed over bridges, highways sank beneath the waters, and property boundaries writhed and twisted into the most unexpected shapes.

"I thought so," said the Lord. Then suddenly He started at a spot near the top of the convulsing planet, where a large mass of land remained as calmly undisturbed as before the cataclasm. "But what have we here?"

The angel followed the pointing divine finger. "I don't know for sure, my Lord, but I can look it up for you." And he took out his notebook (afterward known as FK-3) and riffled through the pages, forward and back. After a few minutes he looked up with a worried expression. "I don't find much about them. The land seems to have been settled by the French but now to be governed by the English and inhabited by Italians and Ukrainians. They seem to be very poor people, for they borrow constantly from their neighbours to the south and they do not seem even to own a flag. Perhaps they have not done anything yet."

"Well, now," said the Lord, "that may be a good idea they have there. If nothing is done, nothing can be wrong. But what can we do with them now?"

The Lord sat in silent thought while the rumblings on the earth subsided, the raging rivers became placid streams, and the waves of darkness gave place to a faint but steady glow. Finally He spoke. "I shall allow another reasonable period for their Authorities to make up their minds what they want to be and what they want to do with their land." He turned to the angel messenger. "Now I shall retire

for a little rest. You watch them, my son, and when they are ready come and waken me."

So spoke the Lord, and so it was.

And so Eternity began.

* * *

The appreciative laughter that followed Bill's voice gradually faded to ever fainter chuckles, and finally a silence broken only by an occasional gentle snore settled over the dying embers.

C. I. S. Personality

Major James A. H. Church is now chief instructor at the Nova Scotia Land Survey Institute, Lawrencetown, N. S., but he did a number of interesting things before taking up this task.

He was born. Well back into the nineteenth century. In the province of Coorg, Southern India.

He moved to England at an early age and received his formal education there, graduating from grammar school in 1902.

He then entered a five-year apprenticeship with a firm of civil and mining engineers in Glasgow, Scotland.

Having completed his apprenticeship, he emigrated to Canada in 1907, and from then till 1914 he practised as a mining engineer in Crow's Nest Pass, Edmonton, and on the Alberta slopes of the Rocky Mountains.

On the outbreak of World War I he enlisted as a trooper in the 19th Alberta Dragoons, was posted overseas, and transferred to the 251st Tunnelling Company, Royal Engineers.

In February 1919 he was discharged, with the rank of major.

In the meantime he had been decorated with the D.S.O. and the M.C.

Returning to Alberta on repatriation, Major Church resumed his profession as a mining engineer, and became a member of the Association of Professional Engineers of Alberta on its formation. In 1931 he decided to exchange the profession of mining engineer for that of farmer, and moved to Nova Scotia.

This was a fortunate event for a number of young men who were interested in surveying as a profession, for it made him available to the education services of the armed forces when they were seeking a surveying instructor for No. 6 Vocational School in Halifax in 1943.

"Major Church's School" has moved several times since then and has been administered by several different departments of government, but Major Church has been its chief instructor throughout its history, and it has become so firmly identified with him that even officials of the administering departments refer to it by this name.

Speaking at the 1959 annual meeting of the Canadian Institute of Surveying, Mr. W. D. Mills, Assistant Director of the Vocational Education Division of the Nova Scotia Department of Education, described how the Nova Scotia Survey Institute had been made possible through donations of land and funds by Dr. J. B. Hall and the Canadian Legion.

Mr. Mills then added: "Money and property by themselves can never make a school.



For many years Major Church had directed his vision toward a school to provide a high standard of instruction in all land survey subjects and to be housed in a suitable building. Major Church's contributions must be regarded as useful, generous and contributory gifts along with the more material gifts of Dr. Hall and the Legion. His efforts were made in the direction of the Department of Education

through the Vocational Division in a series of submissions and recommendations for the better teaching of land surveying and associated courses, and in the direction of the Department of Lands and Forests through the Association of Provincial Land Surveyors of Nova Scotia for higher professional standards in entrance, training, and certification requirements."

"The Major" is respected not so much for the surveying he taught his pupils, although this has been a considerable contribution, as for the philosophy he passed on to them. A shirtsleeve philosophy. A pipe-smoker's philosophy. A good philosophy to live by and to work by. Students have come from nearly every province in the Dominion and from the West Indies and England to learn surveying from him and to imbibe his philosophy, and the influence of this man of character is being carried over a wide area by these students, who are today making their considerable impact on the surveying world.

It was The Major who made the original motion that led to the setting up of the CIS Student Loan Fund. He followed through with a sizeable contribution as soon as the fund was set up.

At the last annual meeting we made The Major an honorary member.
Long life to The Major.



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NOTICE

13th ANNUAL MEETING

THE 1963 ANNUAL MEETING OF THE
ASSOCIATION OF PROVINCIAL LAND
SURVEYORS OF NOVA SCOTIA WILL BE HELD AT
HALIFAX AT THE LORD NELSON HOTEL ON
FRIDAY AND SATURDAY NOVEMBER 8th AND 9th
1963.

PLAN NOW TO ATTEND.

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