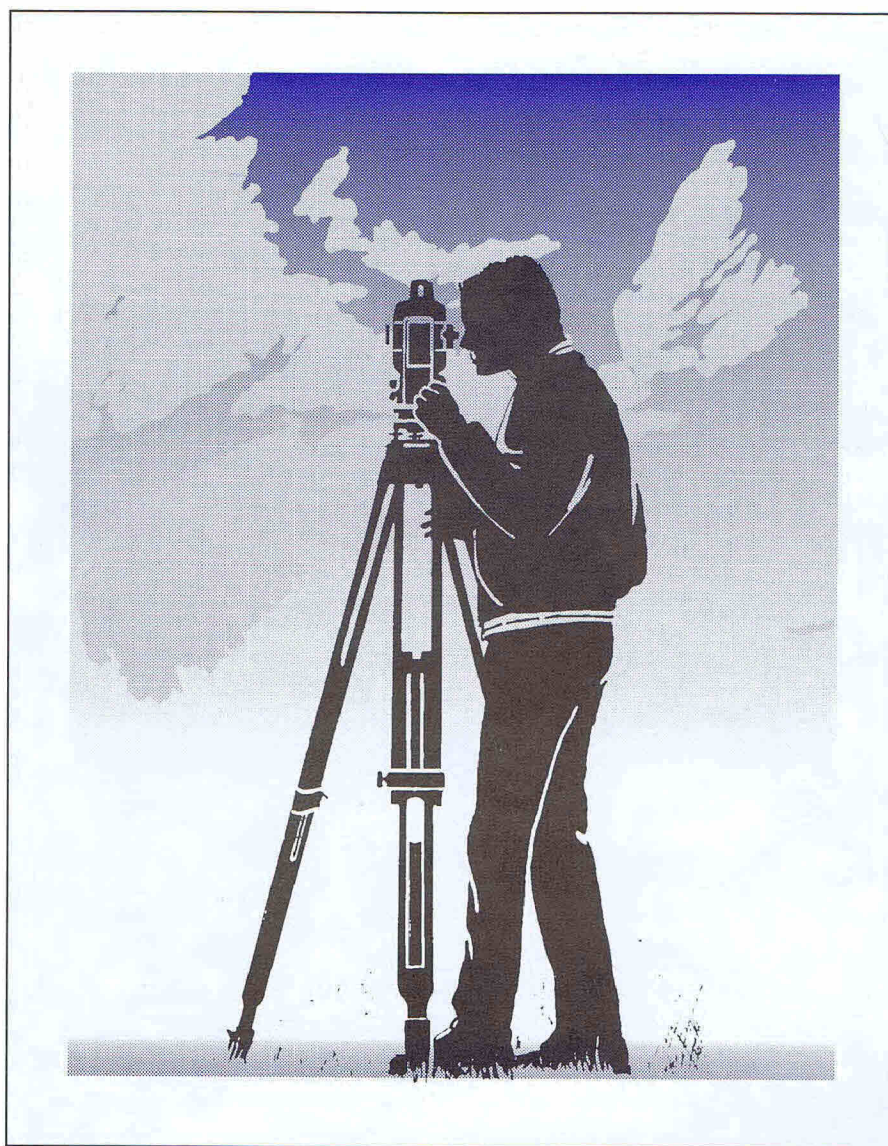


THE NOVA SCOTIAN SURVEYOR

Vol. 50

FALL 1990

No. 138



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THE NOVA SCOTIAN SURVEYOR

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Vol. 50

Fall 1990

No. 138

THE ASSOCIATION OF NOVA SCOTIA LAND SURVEYORS

159 Portland Street, Suite 301
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Contents

Page

President's Report	5
Association Affairs	7
Nominations for Council	10
Annual Reports	17
The Professional Liability Insurance Corner	28
Test Your Survey Savvy	29
The Greening of Land Surveying	31
Price Quoting	35
The Grumbler	38
Book Review	39
A Life Worthwhile	40
Book Review	40
Obituary - Dr. James Lambkin Ryan	41
Obituary - Roy Montrose Schofield	43
Obituary - Harold Burling Smith	43
Unspoken Words	44

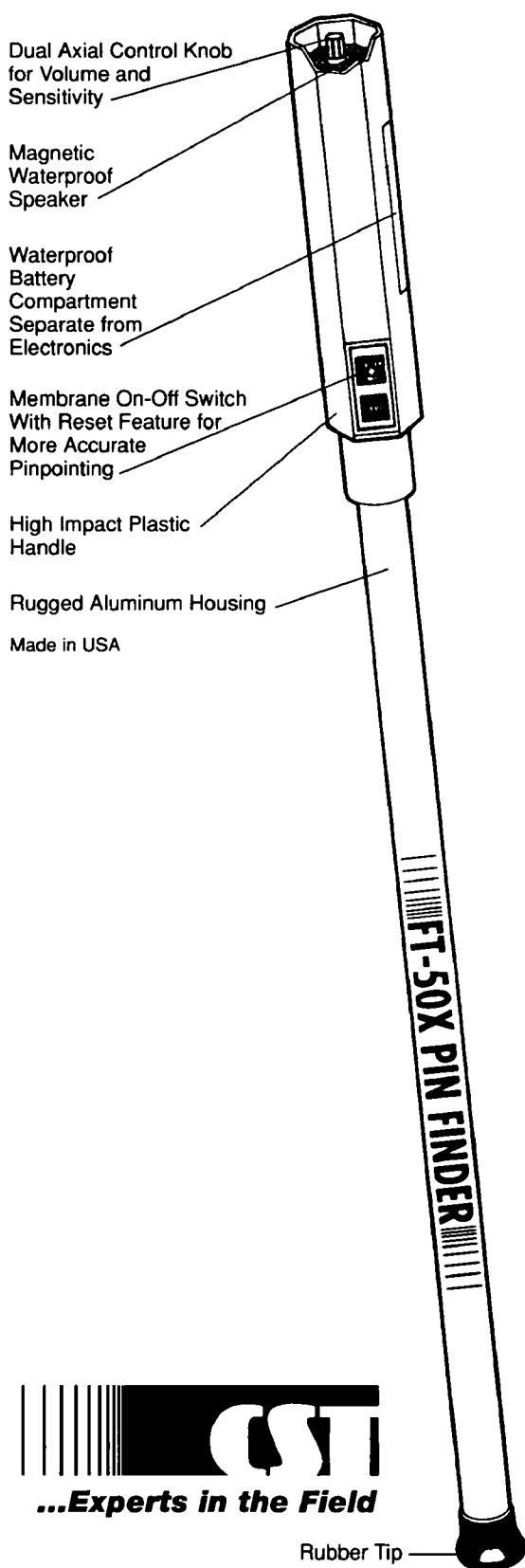
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Sokkisha Canada Inc.	6, 42
Eastward Drafting Supplies	35
UNB	8
Revolving Door Training Centre	16
COGS	3
Cooper Tools	28
Cornerstone Surveying Systems	Outside Back Cover

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NOTICE OF ANNUAL MEETING

Pursuant to By-law 5.5 you are hereby given notice that the 40th Annual Meeting of the Association of Nova Scotia Land Surveyors will be held at the Holiday Inn, Wyse Road, Dartmouth, Nova Scotia, beginning Friday, November 16, 1990 at 9:30 a.m. and continuing on Saturday, November 17, 1990.

Rosalind Penfound
Executive Director
Secretary

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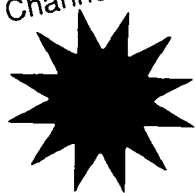


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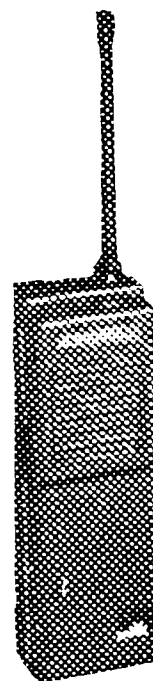
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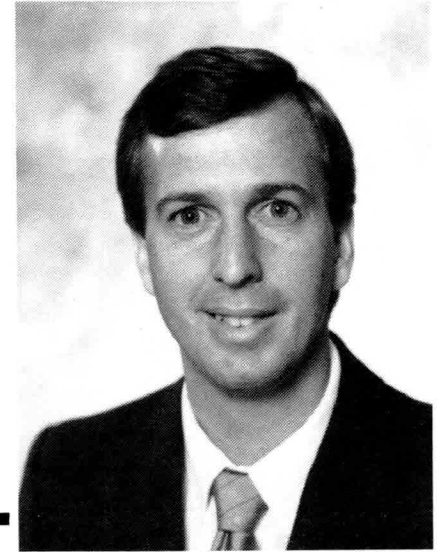
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PRESIDENT'S REPORT



Our Annual General Meeting is here once again, which means a busy time for our association staff and the end of my term. The year has certainly gone quickly, although at times there were weeks that seemed to be a month long. It has been an education and I have appreciated the opportunity to serve as your President. Being on the front line has given me a new perspective of our Association and the amount of work it requires to keep everything running smoothly. I have difficulty perceiving how our past presidents survived without a full time Executive Director. Rosalind Penfound has excelled in her duties and I thank her for her energy and support.

This past year has seen the implementation of Mandatory Liability Insurance and the beginning of our Survey Review Department. Jim Gunn now has his department very well organized and is handling this new position in a very capable manner.

The major item slated for our meeting this year is the adoption of regulations for Surveyor's Real Property Reports. Our Regulations Committee under the chairmanship of Carl Hartlen has prepared a set of regulations which reflect the current standard of practice across Canada. The product being offered by our members today is as varied in style as it is in effort. I believe these regulations are long overdue. It is important that we present the public with a consistent document prepared to the same standard, assuring them that their interests are being protected. It is also very important to have these regulations in effect in order to state very clearly that Surveyor's Real Property Reports are the function of a land surveyor, alleviating the possibility of non surveyors preparing them. Please take the time to read these regulations and attend your zone meetings where they will be discussed. We must all have a clear understanding of what we are voting on.

As stated at our last general meeting a new liaison committee with the Association of Professional Engineers of Nova Scotia was formed. The purpose for this new committee was to work with APENS and reach a mutual understanding of the rolls of the land surveyor and the engineer, and to specifically state the jurisdiction of both professions. Although I had originally hoped an agreement could be reached in a reasonably short period of time, the document is still undergoing revisions. I am very hopeful we can distribute final copies prior to the meeting to allow it on the floor for discussion.

This year the Canadian Council of Land Surveyors will be holding its Fall Directors Meeting in conjunction with our meeting. CCLS continues to provide the broad perspective of land surveying concerns, dealing with topics relating to land surveying across the country. We are all members of CCLS and as so I encourage you to make an opportunity to meet and talk with some of these surveyors from across Canada. There are only about 2,700 land surveyors in all of Canada; it is important we keep in touch with and support each other.

I thank you all for your support and encouragement throughout my term, and I look forward to a productive and enjoyable Annual Meeting.

Kenneth M. Whalen
President



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ASSOCIATION AFFAIRS



THE YEAR IN REVIEW

It is hard to believe that another year has passed and Convention '90 is upon us. It has been a busy year and one of unprecedented growth. 1989 saw the opening of a full-time office with full time staff. 1990 saw the introduction of new regulations and consequent increased activity for the Association.

Our Survey Review Department regulation came into force on January 1, 1990 and James Gunn, NSLS, CLS assumed the position of Manager of that Department in late February. He has proved to be an invaluable asset to the Association and I quickly learned to rely upon his knowledge and good sense on a regular basis. Jim has produced a Manual of Administrative Procedures for the Department and by the time of the Annual Meeting will have conducted at least one systematic plan review for each member signing plans and one comprehensive review. Most importantly he has developed a rapport with the members and has identified and provoked thought about current practice issues.

On June 1, 1990 regulations respecting Mandatory Liability Insurance and Admission to Membership became effective. Both generated a considerable amount of ongoing activity. The Board of Examiners is close to completing a new Student Handbook based on these regulations and is preparing for the offering of professional examinations in January as well as June of each year.

The Mandatory Liability Insurance regulations spawned a great deal of correspondence and telephone calls. This first year represents an adjustment period for members and staff alike with respect to the filing requirements. I am confident that the introduction of this regulation evidences our Associations commitment to the public we serve. I am also very pleased with reports from members that their premiums have indeed decreased.

Many of your committees have had a busy year. Both the Complaints and Discipline Committees have identified areas of the Act and regulations which might be reformed to streamline the procedures to enhance the handling of complaints and discipline matters. The Statutes Committee has begun the arduous task of reviewing the Act with a view to bringing proposed amendments to the 1991 Annual Meeting. The Regulations Committee has prepared a draft regulation respecting Surveyors Real Property Reports which you will have seen at fall zone meetings. These are only a few of the many committees upon which members have served voluntarily. I have had personal contact with most of the committees and have been continually impressed by the willingness and dedication of those members who serve on them.

The Association's Public Relations Committee has had another busy year, participating in home shows and exhibitions and arranging for advertisements. The work of this committee has been augmented by regular articles in the Homes Today section of the provincial paper and by the circulation of several hundred Speakers Bureau brochures throughout the province. These brochures have generated several requests for speakers and the membership has responded well when asked to participate.

Summer 1990 marked the first publication of the Nova Scotian Surveyor in magazine format. Positive comments about it have been received literally from across the country. It is a good quality, professional publication in which we should rightly take pride.

These are but a few of the activities and initiatives undertaken by your Association during the past year. But what of the year ahead?

Just as 1990 was a year of change and expansion, 1991 promises to be the same. It is likely that a full time technician will be hired in the Survey Review Department. In the event that Surveyors Real Property Reports become a reality in Nova Scotia, SRD activity will increase drastically. 1991 will likely see, in addition to proposed amendments to our Act and regulations, a review of our By-Laws to ensure that they are in harmony with the legislation and provide for effective administration.

It is apparent that there is an increased public awareness of professions in general. Land surveyors will not be spared increased scrutiny with respect to professional standards and ethics. As an Association we must collectively ensure that the highest standards and ethics are adhered to in order to fulfil our legislated mandate to serve and protect the public. Many other professions have lay representation not only on their Councils but also on their Complaints and Discipline Committees. We must ask ourselves whether this represents an effective way to serve and be seen to serve the public interest as well as that of our members. I look forward to working with you on these and other projects and issues throughout the coming year.

I would like to extend a personal thank you to all of you for your support and assistance throughout the year. In particular I appreciate the continuing efforts of Janice Bell and Jim Gunn in the Association office, and earlier in the year Janet Snow and our COGS summer student, Robert Sidebottom who served us so well for three months.

Rosalind C. Penfound
Executive Director



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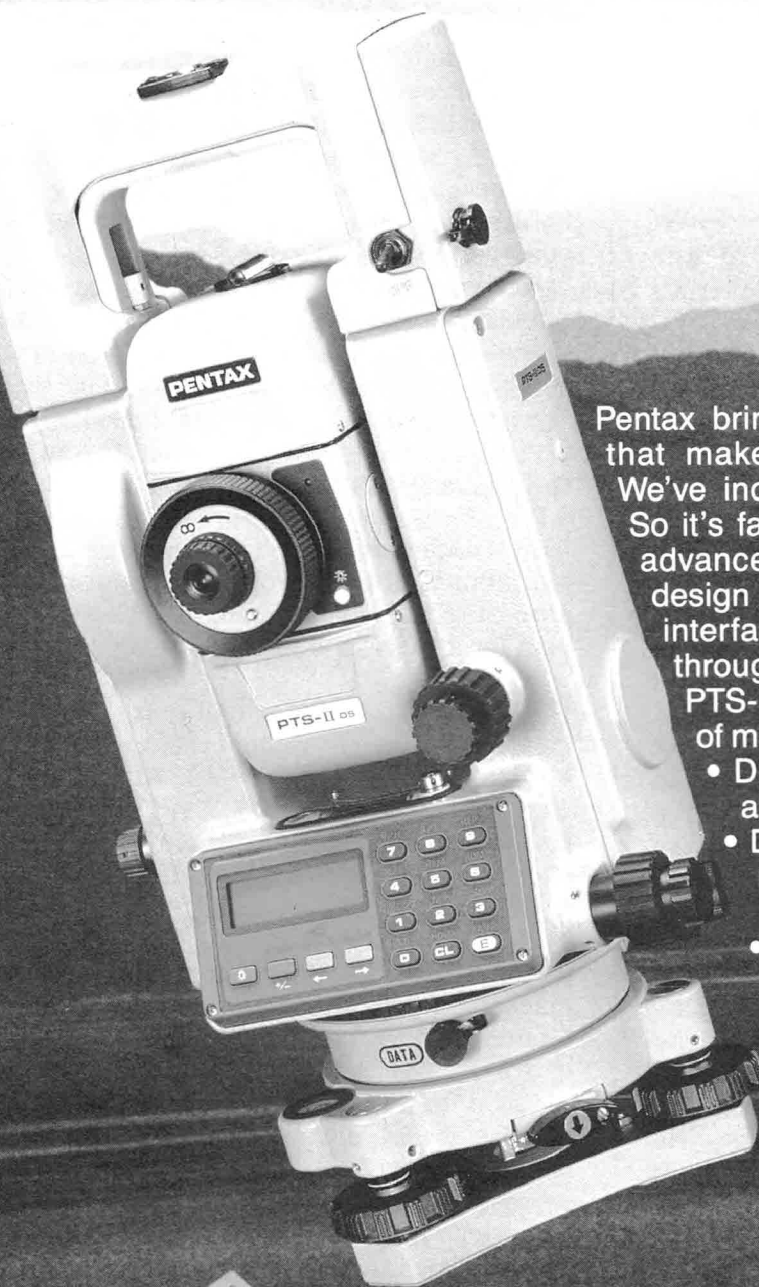
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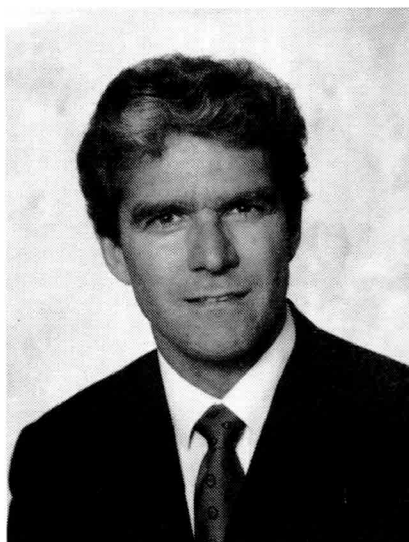
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NOMINATIONS FOR COUNCIL



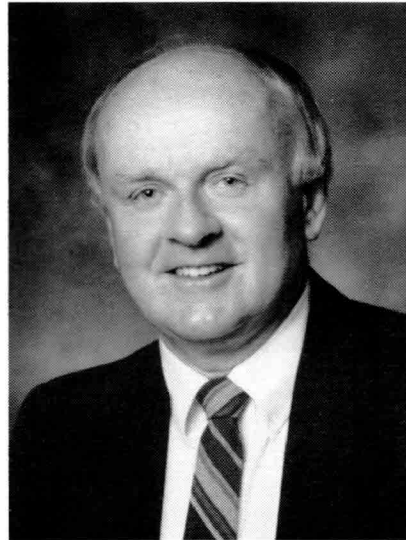
CANDIDATE FOR PRESIDENT DAVID A. STEEVES

David A. Steeves, NSLS, CLS, P.Eng., graduated from the University of New Brunswick in 1973 with a Bachelor of Science in Surveying Engineering. He received his Commission as a Manitoba Land Surveyor in 1975, a Canada Lands Surveyor in 1981 and a Nova Scotia Land Surveyor in 1985.

David was employed by Surveys and Mapping Branch in Winnipeg, Manitoba for seven years before returning to the Maritimes. He worked for C.J. MacLellan and Associates and Fentronics - NSI Ltd. before joining the Eastcan Group in 1984. He left Eastcan in 1987 to work for the Department of Lands and Forests and returned to Eastcan in 1988.

He has been a member and chairman of the Public Relations Committee of the Association, Chairman of an adhoc committee set up to look at the presentation of briefs to the government, Chairman of the Political Liaison Committee and Chairman of the COGS/NSLS Committee. He has spent two years on Council as a representative for Zone 6 and is presently Vice-president of the Association and the CCLS Director for Nova Scotia. He is a past chairman of the Halifax Branch of the Canadian Institute of Surveying and Mapping, and has served as Interim Vice-President of the Atlantic Chapter of the Urban and Regional Information Systems Association.

David, his wife, Janice and their three sons live in the City of Dartmouth.



**CANDIDATE FOR VICE-
PRESIDENT
R. GRANT MCBURNEY**

R. Grant McBurney, B.A.Sc., B.Sc., B.Ed., P.Eng., C.L.S., O.L.S. (Ret.), N.S.L.S., graduated from the University of Waterloo in 1967 with a Bachelor of Applied Science degree in Civil Engineering. His other formal education includes a degree in Survey Science from the University of Toronto (Erindale) in 1977, and a Bachelor of Education degree from Acadia University in 1985.

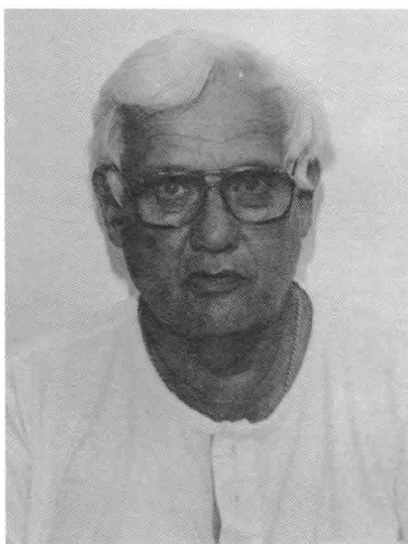
He became commissioned as a Canada Land Surveyor in 1973, Ontario Land Surveyor in 1977, and Nova Scotia Land Surveyor in 1985.

Grant was employed from 1967 until 1980 with the Federal Department of Energy, Mines and Resources. Most of this period was spent in the Field Surveys Section of the Legal Surveys Division performing surveys on Canada Lands in Ontario, Quebec and the North West Territories. He also spent one year with Geodetic Surveys of Canada, doing horizontal and vertical control surveys.

From 1980 until present he has been employed as a survey instructor at the Nova Scotia College of Geographic Sciences.

He has served on a number of ANSLS committees - Survey Standards, Statutes, Land Court, and is presently chairman of the Statutes Committee. He is a member of the Association of Professional Engineers of Nova Scotia, the Canadian Institute of Surveying and Mapping, and is the N.S. provincial representative on the Atlantic Provinces Board of Examiners for Land Surveyors.

Grant lives near Middleton, N.S., with his wife, Mary, and daughter, Erica. He also has a son, Stephen, working in British Columbia, and a daughter, Renee, attending university in Halifax.



**CANDIDATE FOR COUNCIL –
ZONE 1
ALEX M. MACDONALD, N.S.L.S.**

Alex was born at La Have, Lunenburg County, Nova Scotia on March 16, 1932.

He moved to Mahone Bay in 1940 and graduated from Mahone Bay High School and attended Acadia University in Pre Engineering for 2 years.

In 1954 Alex attended the Land Survey School which was run by Major Church at that time. The Land Survey School consisted of a room built on the back of the Old Legion Hall at Lawrencetown and had an enrollment at that time of 14 students.

In March 1955 Alex received his commission as a Provincial Land Surveyor and joined the Association of Provincial Land Surveyors of Nova Scotia on May 2, 1955. In this same year he worked for Errol B. Hebb.

Alex joined the Department of Highways now Department of Transportation in April 1956 and has carried on a part-time practice since graduation.

Alex took early retirement from the Department of Transportation in 1987 and is carrying on a full time Private Practice.

He is presently living at Mahone Bay with his wife Hugette and stepdaughters Chantal and Susy Laroche.

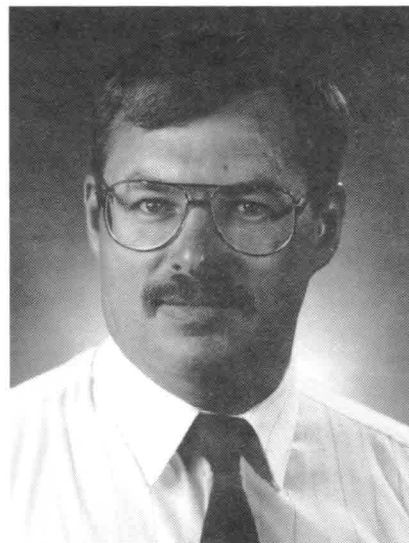


**CANDIDATE FOR COUNCIL –
ZONE 4
CLIVE S. MACKEEN**

Clive S. MacKeen, N.S.L.S., was born in Oshawa, Ontario in 1954. He moved to N.S. and attended school in Guysborough County, and graduated from St. Mary's Rural High in 1973. He attended the Nova Scotia Land Survey Institute and received a Diploma in Land Surveying in 1976.

Clive was employed with C.J. MacLellan and Associates from 1976-1979 and upon receiving his commission in 1979 has been a partner in the firm of Taylor and MacKeen Surveys Limited.

Clive, his wife Margo and children, Tania, Trent, Tyson and Tyler reside in Aspen, Guysborough County.



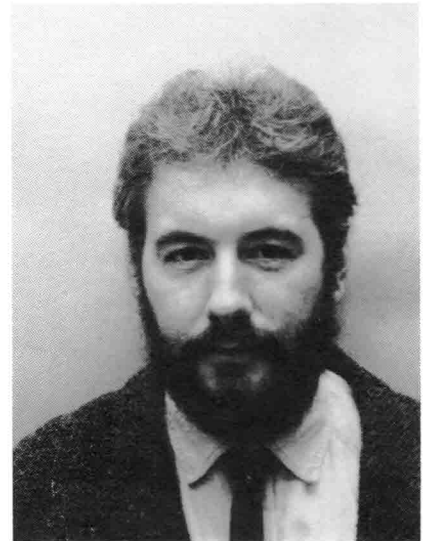
**CANDIDATE FOR COUNCIL –
ZONE 5
DENNIS PRENDERGAST**

Dennis Prendergast, N.S.L.S. graduated from the Nova Scotia Land Survey Institute in 1983 and received his commission in 1985.

Dennis was employed in the survey profession with The Nova Scotia Power Commission, The Town of Glace Bay, The Municipality of the County of Cape Breton, MacKinnon Surveys & Investments and with Cominco Ltd., Polaris Operation, N.W.T. He is presently in private practice operating Prendergast Surveys at Glace Bay which he began in the Spring of 1987.

Dennis, his wife Karen and their two children Carey and Stephen reside in Donkin, Cape Breton County.

In the more recent years Dennis has been involved in minor baseball and Donkin District Boys Club.



**CANDIDATE FOR COUNCILLOR –
ZONE 6**

JAMES C. BANKS

James C. Banks, N.S.L.S. graduated from the Nova Scotia Land Survey Institute in 1977, and received his Nova Scotia Land Surveyors Commission in 1982.

Jim has worked for L.R.I.S. (P.E.I.), Gillmore Surveys Ltd. (Alberta), Servant Dunbrack McKenzie & MacDonald Ltd. (Halifax), Marshall Macklin Monaghan Ltd. (United Arab Emirates), and Wallace MacDonald & Lively Ltd. (Bedford)

Jim is a partner in the firm of Wallace MacDonald & Lively Ltd., and has been with them since 1979. His ANSLS work has included the Convention Committee and the ANSLS/Architects Liaison Committee.

Jim, his wife, Roseann, and their son, Anthony, live in Hammonds Plains.

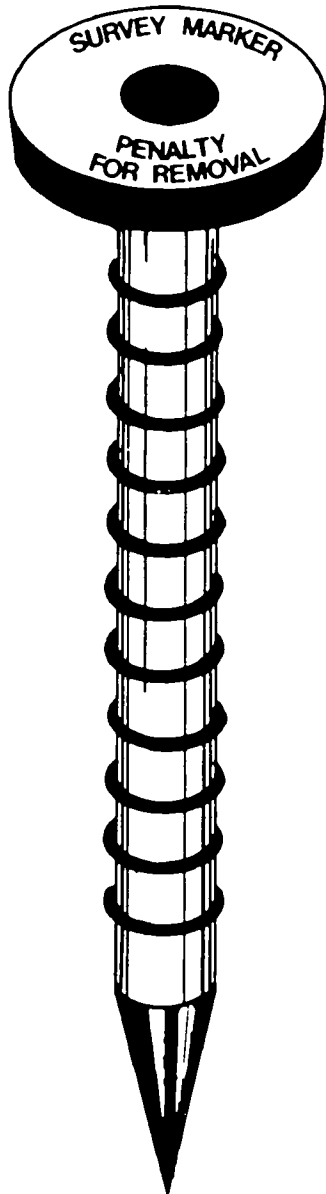
**CANDIDATE FOR COUNCILLOR –
ZONE 6**

E.G. JEFFREY

E.G. (Ed) Jeffrey graduated from Dartmouth High School in 1972. He attended Saint Mary's University in 1972-73. He attended the College of Geographic Sciences, graduating in 1980.

Ed articulated and worked with Kent Carrick from 1981 until 1985 when he received his N.S.L.S. In 1985 he became a partner in R.K. Carrick Surveying Limited. Ed is the Secretary-Treasurer of the Association of Metropolitan Land Surveying Consultants and resides in Dartmouth. His hobbies are computer, basketball, tennis and piano.

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ANNUAL REPORTS

REPORT OF THE SECRETARY

The 1989-90 Association year ended on September 30, 1990. During the year three persons were admitted to membership. The Association noted with regret the deaths of two Life Members, James L. Ryan, #49, and Roy Schofield, #10 as well as former member Harold B. Smith, #308. Several members resigned during the year and several moved into the retired category.

At year end, September 30, 1990, membership statistics are as follows:

**MEMBERS 300
HONORARY MEMBERS 3
LIFE MEMBERS 13
ASSOCIATE MEMBERS 8
NON-PRACTICING MEMBERS 5
RETIRED MEMBERS 15
STUDENTS 21**

Your Council met three times during the year and your Executive met three times. Two Discipline Hearings were held during the year.

The Association has been represented at CISM, CCLS and other provincial association meetings across the country. As your Secretary I serve on the CCLS Professional Liability Insurance Committee and the CCLS Competition Committee.

During the course of the year we said good-bye to Janet Snow, our former Office Administrator and welcomed Janice Bell to that position. Jim Gunn joined our full-time staff in February as Manager of the Survey Review Department. COGS student Robert Sidebottom assisted Jim for three months during the summer.

As you will see upon reading the Committee reports contained in this issue it has again been a busy year for the Association. The Association offices could not possibly manage without the continued encouragement and support of the members, most particularly those who serve on Committees and Council. Thank you.

**Rosalind C. Penfound
Secretary**

REPORT OF THE BOARD OF EXAMINERS FOR 1990

The Board of Examiners has met twice since the 1989 Annual Meeting and plans a third meeting prior to the 1990 Annual Meeting. Some of the members were also in attendance at the Workshop in Truro in January.

The Amendments to the Regulations relating to the Board of Examiners and admission to membership were approved by the Lieutenant Governor of Nova Scotia in Council May 29, 1990.

James F. Doig, a member of the Board, has been appointed to prepare a new Student Handbook. This is about ready for presentation to Council.

STATISTICS

- 22 students presently registered
- Walter Johnson accepted as Member No. 604.
- 2 students, Allan Chisholm and Steven Keddy have successfully completed their Retracement Survey Projects and shall likely be sworn in prior to the Annual Meeting.
- A third student is also expected to complete his requirements prior to the Annual Meeting.
- 3 students wrote exams in June and all were successful.

I wish to express my thanks to Board Members Keith Aucoin (Ministerial Appointee), James Doig, James Chisholm, Forbes Thompson, David Cushing (A.P.E.N.S. Appointee), Bruce Gillis (Barristers Appointee) and to our Secretary, Rosalind Penfound, for their attendance and dedication.

John C. MacInnis, N.S.L.S.

REPORT OF THE SURVEY STANDARDS COMMITTEE

The activities of the Survey Standards Committee have had a marked change in the past year as a result of the creation of the Survey Review Department.

The composition of the committee was changed from a Zone - Area representation to a Region-Field of Practice representation. This required a change in volunteer personnel as the previous committees were generally government employee volunteers.

Thanks is expressed to those members who served on the committee over the years since 1979 for all their efforts in plan examinations and advice on the standards of survey.

This year the main function of the committee was to confer with and provide advice to the Survey Review Department and to follow up on discipline as instructed by Order of the Discipline Committee. The committee will continue to organize the Survey Plan Contest at the Annual meeting. The Committee would like to urge members to participate in the Survey Plan Contest both in submissions and judging as this is a valuable tool in sharing our ideas on the provision of our Information Services.

The members of the committee feel that this new function of conferring with the Survey Review Department is very worth while in providing the Association staff a cross-section of practice, experience and viewpoints. Thanks is expressed to Granville Leopold, Grant McBurney and John Covert for their valuable assistance.

William A. Thompson, N.S.L.S.
Chairman, Survey Standards

SURVEY PROFESSION COMMITTEE

The idea for forming a Survey Profession Committee to be comprised of the five most recent past-presidents, was conceived in 1977. The terms of reference called for the immediate past-presidents to act as chairman each year.

The reason for forming this standing committee thirteen years ago, made sense at that time. The Association had only a part-time secretary and there was no long range plan to mold the future direction of the Association. The five past presidents could

therefore make a very valuable contribution to the succeeding Councils in an advisory capacity by carrying forward the ideas and philosophies developed during their respective terms in office.

The Association has matured considerably since the formation of the Survey Profession Committee thirteen years ago. There is now a full time staff of three, including an Executive Director. The Association has officially adopted a long range plan to guide its future direction until the year 2001 A.D. Council may wish to consider, therefore, the need for continuing with this Committee. If there is a need for its continued existence, then perhaps the terms of reference should be reviewed.

The Committee held its first of two meetings during the reporting period at the Association Committee Workshop at Truro on January 27, 1990. Five items were identified by the Committee members which they felt should be promoted and sent to Council for consideration.

- 1) **Boundary problems created by unqualified persons surveying.** This matter has to do specifically with non land surveyors attempting to perform woodlot boundary line maintenance after the boundaries have been allowed to become obscure or virtually non visible through the passage of time. This problem has been before Council on several occasions during the last few years, but so far little progress has been made in rectifying the situation.
- 2) **Promotion of opportunities for practicing land surveyors to upgrade their qualifications.** UNB and COGS have a framework of extension courses available or are prepared to tailor make courses if there is enough interest and if pursued by the Association. Council may wish to have the Continuing Education Committee look into this further.
- 3) **A "last resort" rectification of boundary problems.** There are rare occasions when a member of the public suffers hardship through the imprudent or negligent actions of a member. This situation may arise when a member has performed an unsatisfactory service and is subsequently suspended as a result of disciplinary action. If the member is not reinstated, the Association should have some means of rectifying the harm that was caused to the client of the suspended member. This Committee believes the establishment of a trust fund to be used solely for correcting such situations as described above is a viable solution.

- 4) **The continued promotion of the establishment of a Land Titles System in Nova Scotia.** The Survey Profession Committee endorses and supports the efforts made thus far by the Association in lobbying the government for the establishment of a land titles system in this province. The Committee strongly recommends that Council not let up on its efforts to promote this matter with the Attorney General.
- 5) **The establishment of an Association Building Committee.** A proposal to form a Building Committee was approved at the 1988 annual meeting. The Building Committee's role would be to continue looking into the possibility of the Association acquiring an office building in approximately three years or, in other words, by the fall of 1991. This would coincide with the expiration of the three year lease on the existing office space. The acquisition of an office building falls within the guidelines of our long range plan. Therefore, the Survey Profession Committee urges Council to actively pursue this matter.

A second meeting of the Committee was held at the Association boardroom on May 5, 1990. This meeting focused mainly on a proposed new definition of "professional land surveying" which was a follow-up to several meetings the previous year. A recommended definition was agreed upon and passed on to the Chairman of the Statutes Committee for consideration.

Finally, there was again considerable discussion on the problem of unqualified persons attempting to perform boundary line maintenance on woodland boundaries where a retracement survey is likely required. The Committee has recommended to Council that perhaps a semi-retired member could be hired to investigate some of the reports that are coming in from members.

Murray Banks
Chairman

CONTINUING EDUCATION COMMITTEE

The committee members are:

David Wedlock
Alexander (Sandy) MacLeod
Stephen Wallace
Ivan Macdonald
James Gunn
Harry Ashcroft (c)

The one day seminar held last November 2nd in conjunction with the Annual Meeting was well attended and received.

Topics and speakers were as follows:

"Enhancing Our Professional Image" Eric Hustvedt
(Public Relations Workshop)

Basic Contract Law	Rosalind Penfound
Managing the Risk of Litigation	Roger Brett (Leslie, Wright & Rolfe Limited)
Claims Examples	Gordon Webster (Chairman-CCLS Professional Liability Insurance Committee.)

At the committee workshop held this past January, several ideas for upcoming seminars were suggested. An attempt to translate some of these suggestions into a spring seminar unfortunately did not meet with success.

For November 15th, we are planning a full day event to be held in conjunction with the Annual Meeting. The Professional Liability Insurance Loss Control Seminar is planned for the morning and in the afternoon we have booked a lawyer and a surveyor from CNR who will explain various aspects of railway boundary survey and title problems. This is a topic that has been suggested by many members over the past few years and we are expecting a good turnout.

Also, at the Annual Meeting, we are hoping to make room on the agenda for a presentation by Jim Gunn to be followed by a panel discussion on the activities of the Survey Review Department. It is shaping up to be a very busy (and informative) day.

The committee would again like to thank those who have been involved with us as speakers and also the Association members who have faithfully attended our events and offered suggestions.

Harry Ashcroft
Chairman

PUBLIC RELATIONS COMMITTEE ANNUAL REPORT 1990

Participation in the Committee Workshop in Truro on January 27, 1990 outlined various goals and issues to be addressed during the upcoming year. Plans were made for attendance at various Trade Shows directed at related professions and the general public. Distribution of Speakers Bureau pamphlets and recruitment of members to speak on behalf of the Association was also discussed.

I encourage all association members to consider speaking to community groups and government agencies. The Speakers Bureau is coordinated by the Association office through our Executive Director. At present, additional efforts are required to provide a better selection of resource material for speaking engagements.

The main thrust of the work accomplished this year, was attendance at Trade and Home Shows. The following is a list of our appearances:

Halifax- March 2 & 3 - N.S. Association of Architects
 "Product Review 1990"
 assisted Land
 Surveyors/Architects Liaison
 Committee.

Wolfville - March 30 & 31 - N.S. Real Estate
 Association Annual
 Convention.

Sydney River - April 7 & 8 - Y's Men's Home Show

Halifax - April 19-22 - N.S. Ideal Home Show

These shows provide an excellent opportunity to convey information to the general public and related professions and should be continued in the future.

Excellent public exposure for the Association has been provided by Rosalind Penfound's regular contribution of survey related articles to The Chronicle-Herald and The Mail Star (Saturday editions). The Public Relations Committee would like to commend Rosalind on her ongoing efforts directed at providing interesting survey information to the public.

A follow up meeting with Public Relations Consultant, Eric Hustvedt was held at the Association office on May 2, 1990. This meeting was arranged as a conclusion to the Public Relations seminar he conducted at last years Annual Convention and centered on long range options for public relations.

Eric outlined a number of items we should consider and noted that many of his strategies were already being followed.

Public relations is every members business and I would like to thank all who gave their time at the Trade Shows and in particular to David Lorimer and Gerald Pottier for serving on the committee.

Brian J. MacIntyre, NSLS
Chairman

REPORT OF THE COMPLAINTS COMMITTEE 1990

Committee members:

Al Wallace (Chairman)
 John MacInnis
 David Hiltz
 John Conn
 Bruce MacDonald
 Bob Daniels
 R. Penfound (Executive Director)


The Committee meets regularly on a monthly basis at the Association office.

As noted in Sec. 24 of our Act the objective of the Complaints Committee is "the protection of the public and the preservation of the reputation of the surveying profession". The Committee is charged with the responsibility to "investigate complaints to determine if there is or is not evidence which might reasonably be believed, which could support a finding of professional misconduct or misrepresentation". If no such evidence is found the complaint is not forwarded to the Discipline Committee.

The Committee is concerned about the restrictive nature of this legislation, especially when one considers our definition of professional misconduct, which includes (from Reg. 2(c)) " a breach of the Code of Ethics (Part III of the Regulations), the Act, the Regulations or the By-Laws.

It is the opinion of the Complaints Committee that there is a need for some discretionary powers such as is found under the Regulations for the committee investigating complaints against lawyers which read, in part, as follows:

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"Actions by sub-committee:

5) In the course of an investigation the Subcommittee may adopt one or more of the following courses of action as is deemed appropriate:

(c) determine that the evidence discloses conduct meriting a mild reprimand or counselling or both from the Subcommittee, and accordingly such reprimand or counselling or both be communicated to the member complained of, with an appropriate advice to the complainant, by the Chairman of the Subcommittee making the determination;

(k) determine to take such other appropriate action as is deemed advisable."

(Note the above sections (c) and (k) are two of a possible ten courses of action listed in the legislation).

Presently our legislation is under review by the Statutes Committee, and the Complaints Committee will be meeting with the Discipline Committee to review the appropriate legislation and forward our recommendations to Council and the Statutes Committee.

The following statistics cover the period January 1989 to September 1990:

- 34 complaints have been investigated
- 21 complaints have been dismissed.
- 5 complaints have been forwarded to the Discipline Committee
- 8 complaints remain under investigation at the time of writing

Of these 34 complaints investigated:

- 18 relate to boundary and/or title problems
- 12 relate to sub-standard surveys and plan preparation
- 3 relate to financial matters
- 1 related to a breach of the Code of Ethics

Many of the complaints could be alleviated if surveyors put more emphasis on the importance of clearer communication with the client and a full explanation and report relating to the work performed.

Respectfully submitted,
A.E. Wallace
Chairman

**1990
DISCIPLINE COMMITTEE
REPORT**

The Discipline Committee conducted two Formal Hearings during the months of June and July regarding complaints against one of our members. These Hearings resulted in one finding of Professional Misconduct and one finding of "Not Guilty".

The Association has since received notice of appeal regarding the first case.

In addition to the hearings, the committee met in June to review procedures and to review relevant portions of our Act with a view to passing recommendations for revision to the Statutes Committee and held a joint meeting in September with the Complaints Committee and the Complaints Committee Solicitor to discuss joint concerns of policy and procedures regarding the handling of cases.

Members should note that we are now using the services of the Provincial Taxing Master in an attempt at "Cost Recovery" after a "Guilty" finding at a Hearing.

We would urge all members to attempt to follow our Regulations and to communicate with our office and staff when you are having difficulty with Regulation Interpretation. To be a "Majority of One" in Regulation Interpretation is not recommended.

We want to be a lazy committee and never "meet" in the future.

Walter Rayworth
Chairman

STATUTES COMMITTEE REPORT

Chairperson: Grant McBurney

Members: Jim McNeil
David Roberts

Since the last Committee Workshop at Truro, Jim McNeil has been reviewing all new statutes. To date, no new legislation has been passed that significantly affects our Association.

The only other item that has been dealt with this year is that of revising the Land Surveyors Act. This Committee has received suggested additions to and deletions from our present Act, both from individual members as well as from a number of other Committees. The Statutes Committee will be meeting September 21, 1990 to review this material in detail, and perhaps to prepare a "first draft" for Council's consideration.

Any member who wishes to suggest changes to our present Act is invited to send comments to the Association office.

EDITOR'S REPORT

THE NOVA SCOTIAN SURVEYOR

The past year has been an eventful and rewarding one for the Nova Scotian Surveyor Committee. After many months of talking and planning, the transformation of the Nova Scotian Surveyor to a magazine style format was finally accomplished. Our January 1990 issue marked the last Nova Scotian Surveyor published in the old style format.

As a result of the activity surrounding this change, it was necessary to combine the Spring and Summer 1990 issues. Normally the "Surveyor" is published four times a year in January, April, July and October.

Thanks to the Association's new newsletter, The Right Angle, the content of the Nova Scotian Surveyor will be able to concentrate on such things as Minutes of Annual and Special Meetings, Discipline Orders, Official Notices of Meetings, Book Reviews, Nominations for Council, Annual Committee Reports and articles and developments relating to the surveying profession. The Nova Scotian Surveyor will continue to be the official publication of the Association.

Special thanks to Ken Whalen, Rosalind Penfound, Jim Doig, Dave Clark and Jim Gunn for their regular contributions during the past year.

Special thanks also to Janet Snow and her successor Janice Bell for their hard work in the production department.

The editorial staff also welcomed the appointment of Ed Jeffrey during the past year. Ed will be taking care of advertising duties.

In closing, I urge all members to contribute to the Nova Scotian Surveyor. The continued success of the "Surveyor" depends on your support. We hope that you enjoy reading the "new" Nova Scotian Surveyor and look forward to hearing from you.

Michael Crant
Editor

1990 ANNUAL REPORT ANSLS/COGS LIAISON COMMITTEE

The ANSLS/COGS Liaison Committee met on May 8, 1990 at the College of Geographic Sciences in Lawrencetown, N.S.. In attendance were David Woolnough, David Wedlock, Joe Alcorn and David Steeves.

Trig Star was carried out in the rural high schools and was a success. There were 9 winners out of the 10 schools utilized. Local surveyors made the award presentation this past June. Council will discuss the issue to see if the program will continue. COGS is willing to continue running the program.

The idea of COGS putting on a short course entitled Introduction to GIS was discussed. This will be pursued and discussed further at the next meeting.

The Surveyors Forum will be run again in January, 1991. The original format will be used again. An additional topic may be the future of surveying in Nova Scotia.

The following information was provided concerning COGS:

- Enrolment is 65 in first year, 24 in second year.
- COGS is the only college in Canada that offers surveying where enrolment is increasing.
- COGS anticipates not being able to hire an additional instructor for the school term 90/91. This will cause problems with the organization within the Survey Department and will affect the level of instruction that the students receive.
- All graduates of 89/90 have employment. Most are working in Ontario and Western Canada.
- 50% of the graduating class have been offered salaries in excess of \$30,000.

Respectfully submitted,
David A. Steeves
Chairman

D.O.T. LIAISON COMMITTEE

Committee Members: G. Crews (c), D. Wedlock

Date: August 30, 1990

The committee has met 3 times this year. Although surveyors recognize that boundary surveys and subdivision surveys are being conducted by the engineers of D.O.T., these same engineers do not confess to it.

Last years meeting with their liaison committee was a dismal failure, but it illustrated perfectly how difficult it will be to convince D.O.T. that their surveys are actually defining property boundaries and that surveyors should undertake these duties.

Our course is clear, and we hope to make significant progress before the annual meeting.

Glenn Crews,
Chairman

ATLANTIC PROVINCES BOARD OF EXAMINERS FOR LAND SURVEYORS

Report on the Activities of the Board for the year 1 July 1989 - 30 June 1990

The twelfth year of the Board's operation was again busy with a steady flow of inquiries, correspondence and personal meetings with candidates.

Nineteen examinations were written, eighteen of which yielded passing grades.

Eleven new candidates registered with the Board (1 from Newfoundland, 7 from New Brunswick and 3 from Nova Scotia), bringing the total to 166.

During the year, ten candidates received their certificates, namely:

Charlene Collette (#64) from Campbellton, N.B.
Allan Chafe (#65) from St. John's, NF.
Stephen Hartley (#66) from Fredericton, N.B.
Brian Pyke (#67) from Halifax, N.S.
Ronald Robichaud (#68) from Beresford, N.B.
John J. McLaughlin (#69) from Grand Falls, N.B.
Peter Brennan (#70) from Bristol, N.B.
Jeff Wood (#71) from St. John's, NF.
Derek French (#72) from Cornwall, P.E.I.
and Mark Macmillan (#73) from Halifax, N.S.

Four files have been closed due to inactivity. These candidates received and confirmed notification, while

letters to three others could not be delivered. Their files will be kept open for a further three years.

The Board met on 18 January 1990 in Edmunston, N.B. in conjunction with the ANBLS Annual Meeting. In addition to routine items, the Board dealt with a number of issues.

- The Chair changed from Newfoundland to Prince Edward Island with Ed Power assuming the position as Chairman for the coming three years.
- In response to the new CLS Syllabus, APBELS approved a revised syllabus which came into effect on 1 July 1990.

The following was incorporated:

- 1) Part I is retained as before.
- 2) - II/3 (Numerical Methods) is replaced by "Data Base Management Systems".
 - "Astronomic Positioning" was removed from II/4 (Geodetic Positioning) and added to II/6 (Advanced Surveying and Survey Astronomy).
 - II/5 become "Applied Photogrammetry and Remote Sensing" (formerly III/1).
 - II/10 is now "Land Use Planning, Environmental Management and Municipal Engineering".

Two new exams were added to part II, namely:

- II/11 "Geographic Information Systems".
 - 11/12 "Business: Law, Administration and Economics" (this was formerly exam III/7).
- 3) Part III was changed from 3 of 7 to 2 of 4, keeping III/2 to III/5 of the old syllabus.
 - 4) Part IV remains unchanged.
 - In order to maintain the concept of reciprocity, a syllabus review panel was established with John McLaughlin (UNB) as Chairman and Max Batten (NF) and Grant McBurney (NS) as members.
 - Upon recommendation of the out-going Chairman Max Batten, a panel was set up to explore with the member associations mandatory continuing education and the possibility for APBELS to provide a regional focus to this. Chaired by Harold Lively (NS), this panel consists of the Association Members (Brian Potter, P.E.I., Frank Shortall, NF, and Ed Smith, N.B.).

The financial situation of the Board is stable with a break even position for the year.



Respectively submitted,
Harold S. Lively,
October 9, 1990

THE PROFESSIONAL LIABILITY INSURANCE CORNER

BY: Gordon A. Webster, SLS, CLS

**Chairman Professional Liability Insurance
Committee, Canadian Council of Land Surveyors.**

The following column is a regular feature and will attempt to give examples of claims made against the CCLS insurance program. The examples will relate to problems incurred against the program anywhere in Canada and may or may not have resulted in settlement. Claims may be closed or open and the opinions given are that of the author. It is the intention of the author to maintain confidentiality in all examples.

On April 11, 1988 our insured provided the stake out for a residential dwelling. On May 27th of the same year the insured completed a surveyors certificate on the property a copy of which was provided to the owner on about May 31st, 1988. In early September of 1988 the surveyor became aware that there may be a problem with the location of the home.

When the surveyor became aware that there may be a problem he reviewed his file and it was determined that indeed the house had been staked incorrectly. Steps were taken to notify the insurer immediately.

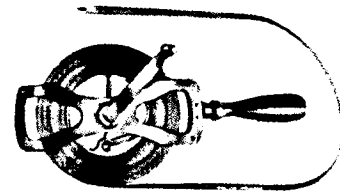
The plot plan, showing the proposed location of the dwelling, indicated an 11.0 foot sideyard to the outside edge of a 2.0 foot fireplace, which was on the side of the foundation. The field crew, which staked the basement, assumed the 11.0 feet to be to the face of the foundation thus the sideyard of the fireplace was 2.0 feet less than that indicated by the plot plan. The notes were checked when the staking crew had completed the field work, however it was assumed that the sideyard change had been authorized in the field and the change was not pursued any further with the field crew or the contractor. The insured was not aware of any special conditions or considerations, other than normal sideyard and setback requirements of the Municipality.

The insured was not hired directly by the owners of the home but by a contractor. The owner indicated, to our insured, that he was unhappy not only with the change in sideyard, but with many other mistakes made by the contractor and other

subtrades. His largest complaint seemed to be that the house was actually built too low. The insured was not involved in any aspect of the determination of the elevation for the house.

This claim points to the fact that even though the change appears to be minor, there are often other factors which may contribute to an unhappy owner and ultimately a claim. Had the owner been satisfied with all other aspects of his dream home, perhaps the incorrect sideyards would have been insignificant.

Again the importance of proper plan interpretation is a significant factor to this claim. In addition proper procedures and checks to note differences between plot plan and field notes is a necessity. Had the change in sideyard been confirmed with either the field crew or the contractor perhaps the inconvenience of this claim could have been avoided.



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TEST YOUR SURVEY SAVVY

By: James Gunn, NSLS, CLS

Why not take a few minutes and test yourself on our SRD trivia quiz. You will find the answers on the following page. No peeking!

1) Which of the following people are considered to be notable pioneer Surveyors in North America?

- a) Samuel Holland
- b) Joseph DesBarres
- c) Adam Smith
- d) all of the above
- e) a and b only

2) The 66 foot surveyor's chain was first introduced by:

- a) A Surveyor named Aaron Rathborne around 1500
- b) An astronomer named Edmund Gunter in 1620
- c) J.B. Johnson in his book "The Theory and Practice of Surveying"

3) The following community claims to be exactly half way between the equator and the north pole.

- a) Centerville, New Brunswick
- b) Ajax, Ontario
- c) Stewiacke, Nova Scotia
- d) Goose Bay, Labrador
- e) All of the above

4) Convergence refers to the difference between:

- a) Grid north and Astronomic North
- b) Astronomic North and Magnetic North
- c) True North and Astronomic North
- d) The angle of the sun as observed from different points on the earth at the same time.

5) Which of the following comments best describes the Compass rule of adjustment?

- a) Corrections are applied in proportion to the length of the sides of the traverse.
- b) It is not an appropriate adjustment in most situations.
- c) Most of the error is assumed to be in the distances and not in the angles.

6) When using a 100' tape that is known to be 0.2' too long overall, what measurement should be used to lay out a 50' lot?

- a) 49.8
- b) 50.2
- c) 49.9
- d) 50.1

7) The march of the compass refers to:

- a) An annual trek of surveyors in Helsinki, Finland to commemorate the advent of modern geophysics.
- b) The annual change in magnetic declination at a given point.
- c) The popular shift favouring grid over magnetic reference.
- d) None of the above.

8) At what do most steel tape manufacturers standardize their tapes?

- a) 68 deg.F at 0 lb. pull
- b) 50 deg.F at 10 lb. pull
- c) 68 deg.F at 10 lb. pull

9) Scale factor refers to:

- a) The error introduced to a map during photocopying.
- b) The factor used to adjust a distance to best suit the ellipsoid.
- c) The ratio between a unit on the map and a unit on the ground.

10) Two points are on a hill with a grade of + 8%. Station 0+75 has an elevation of 100', what is the elevation at 2+25?

- a) 112'
- b) 88'
- c) 108'
- d) 92.5'

11) In 1979 LRIS Summerside introduced what is known as ATS 77 to the Maritimes. This adjustment was intended to:

- a) Replace NAD 27
- b) Anticipate NAD 83
- c) Serve as an interim adjustment until NAD 83 arrived
- d) All of the above

12) In 1940 a maple tree was blazed at a point 5' above ground. It had grown at rate of 1' per year until 1960 and at a rate of .5' per year since. Where is the blaze today?

- a) 40' high
- b) 35' high
- c) 30' high
- d) none of the above

13) Twenty chain mapping is closest in size to:

- a) National Topographic 1:50 000
- b) 1:10 000 resource mapping
- c) 1:2 000 line map
- d) 1:1 000 line map

14) Through which Canadian City does the agonic line run? (no difference between magnetic, grid or astronomic north)

- a) Dartmouth, N.S.
- b) Thunder Bay, Ont
- c) Kelowna, B.C.
- d) Edmonton, Alta

15) What approximate width is depicted by a 3 degree Modified Transverse Mercator Zone (M.T.M.)

- a) 240 km
- b) 120 km
- c) 500 km

16) A rectangular footing measures 30' on one side and 40' on the other. What is the length of the diagonal? (no calculators)

- a) 45'
- b) 47'
- c) 50'

17) How many acres are in a square mile?

- a) 1,234.57
- b) 640
- c) 1000

18) Two points are separated by 138' on a slope of 12 degrees. Which of the following formulas is used to calculate the horizontal distance?

- a) $HD = \sin 12/138'$
- b) $HD = 138'/\sin 12$
- c) $HD = 138' \times \cos 12$
- d) $HD = 138' \times \tan 12$

19) Which of the following is false?

- a) feet X .3048 = Meters X 3.28084 = feet
- b) 10 000 sq. m. = 1 Hectare = 2.47 acres
- c) The 10 000 in (b) is missing a comma.
- d) SI and FIG share the same country of origin.
- e) 66 cents per litre = \$3.00 per gallon

20) What makes Meades Ranch in Osborne County, Kansas special?

- a) It is the origin of the NAD 27 geodetic datums for North America.
- b) It is the birthplace of a surveyor named George Washington.
- c) It was the site of a historic meeting of U.S. and Canadian politicians to set the common boundary along the 49th parallel.

Answers to the SRD trivia quiz

1) Adam Smith is known as the father of Modern Economics, therefore, the answer is (e). 2) the answer is (b), Rathborne devised a forerunner to the Gunter's chain that he called the "decimal chayne" featuring ten links to the pole; 3 (c); 4 (a); 5 the correct answer is (a); (b) best describes the transit rule and (c) best describes the Crandall or least squares adjustment. 6 (d); 7 (b); 8 (c); 9 (b); 10 (a); 11 (d); 12 (d) the blaze is still at the 5' level of course; 13 (b) 20 chain mapping has a ratio of 1:15,840; 14 (b); 15 (a); 16 (c); 17 (b); 18 (c); 19 (c); 20 (a).n



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THE GREENING OF LAND SURVEYING

By: Brian Ballantyne

All through school and university I had been given maps of life and knowledge on which there was hardly a trace of many of the things that I most cared about that seemed to me to be of the greatest possible importance for the conduct of my life. I remembered that for many years my perplexity was complete; and no interpreter came along to help me. It remained complete until I ceased to respect the sanity of my perceptions and began, instead, to suspect the soundness of the maps. (1)

1. Let me start with an If-Then proposition. IF we accept that there are severe ecological problems related to land use, and IF we accept that the land surveyor is by definition, tradition and training an expert in the demarcation and use of land, THEN we can reasonably argue that the land surveying profession should have a land ethic. It is difficult to quibble with that proposition; the two IF conditions are self-evident.

First, there is little debate that various ecological crises exist. In Canada alone we clear-cut old growth forests, destroy wilderness, contaminate groundwater, allow urban sprawl to pave over irreplaceable farmland, degrade rare and sensitive areas. Indiscriminate land use, known as "development", is often the culprit. Even traditional residential subdivisions are a problem; single-family housing on suburban land uses an enormous amount of energy and is evaluated solely on the basis of the developer's profit, not on whether they can be sustained over the long-term.(2) While the population within the developed world has increased only three-times since 1900, our effects on the environment have increased 50-fold, as measured by per capita energy consumption.(3) We consume land and resources at an alarming rate.

At the same time the land surveyor is an expert in the use of land. As a member of a professional group, land surveyors hold themselves out to the public as possessing a special skill derived from training and education.(4) From road design and layout, to subdivision draft plans and demarcation, to surveys in support of logging, mining and oil exploration

operations, to the draining of wetlands, land surveyors are an integral part of the "development" process. At one time the land surveyor was the foremost expert in land use as the estate manager - "surveyor" is derived from the French for "overseer". As recently as the last century the land surveyor in Ontario was expected when surveying for the Crown to identify swamps, rivers, creeks, springs, mill sites, lakes, minerals, soil quality, timber, flora, fauna, and anything else that might be important.(5) The surveyor had a good knowledge of the land and therefore tremendous power in deciding land use.(6) Despite abdicating much of their responsibility for stewardship of the land during this century, the entire profession remains predicated on the land, and the surveyor is often the first on the scene. The radical environmental group Earthfirst! regards land surveying as such a significant part of the development process that their first rule in impeding development is to "pull up the survey stakes".(7)

So let's accept that there are significant land use problems, and that the land surveyor is an expert in land use. My position, then, is that the land surveyor has both an opportunity and an obligation to be an environmentalist. This means that the role that the surveyor now plays, within a world that increasingly insists upon developing sustainability, must be questioned. Environmental ethics is now an area where pure ethics and old - fashioned self-interest converge.(8) Adoption of a land ethic simply means not doing what is wrong for the land; it does not necessarily mean not doing what is wrong for us (although the two are often related). It is ethically wrong to adhere to the doctrine that land is merely a commodity to be bought and sold; E.F. Schumacher, author of Small is Beautiful, has eloquently pointed out that the living world is more than simply a quarry for exploration. Land and the creatures on it must be regarded as ends in themselves.(9)

The issue then is whether land surveyors have adopted either an explicit or an implied land ethic?(10) This shall be answered by examining their Code of Ethics, their training, and their practices.

2. The Code of Ethics of the Association of Ontario Land Surveyors (AOLS) is conspicuously lacking in any mention of concern for the land. Sections one through six are unimpeachable but deal with only: standards, the client, the surveyor's practice, fellow surveyors, identification, and the cost of a survey. Section 3 is particularly revealing because it stresses that accuracy is the most important quality to be maintained in the practice of surveying. The only mention of the land comes in the introduction:

A survey is a permanent record that affects all those who subsequently deal with the land and, as well, all those dealing with land contiguous to the surveyed parcel, so that reliance must necessarily be placed on the survey by those who have had no opportunity of judging the man who made it.

Even then the concern is more for the relationship between surveyors and the public, and not for the relationship between the surveyor and the land. Only the public, legislation, education, the client and money are presumably areas in which ethical conduct must be adhered to.

Contrast this with the Code of Ethics adopted by the International Bar Association. Although fees, relationships with clients, and confidentiality are all mentioned, in at least two of the 20 sections a lawyer's responsibilities to the Court and to the administration of justice are stressed. In section 6 "A lawyer shall always maintain due respect towards the Court" and in section 17 "a lawyer shall never forget that he shall put first...the interest of his client and theadministration of justice". The purpose of the lawyer is to make the law work.

In a similar vein the purpose of medical doctors is to ensure the health of the community. The Code of Ethics of the Canadian Medical Association lists seven principles of ethical behaviour for all physicians, the first of which is to consider the wellbeing of the patient. It then interprets the physicians's responsibility to the patient in 21 sections. Other responsibilities are to the profession and to society, but by virtue of the extent of the interpretation and the order of presentation it is obvious that the patient is the primary target for ethical conduct.

Shouldn't the land surveyor treat the land as his patient, and while engaged in the process of development do it the least damage and show it the utmost respect? Their Code of Ethics is silent on this question.

3. If a land ethic is not stressed by the Association is it then taught to the budding surveyor at the university level? Not if the comments of faculty at the University of Toronto are any indication. One professor has told his class that a land surveyor is not being paid to be an environmentalist. Another faculty member refers to people who question development as "those who like bugs and frogs" and "as terribly hung up on anti-population". He also asks "what makes those people tick?" and dismisses their legitimate concerns by observing that "people will

hop on any bandwagon". A third professor has written that the purpose of surveying is to secure the optimal use of land and resources to meet social and economic needs." What happens when economic needs themselves are the problem, as in paving a wetland? From opinions such as these it is obvious that a land ethic is certainly not stressed by the faculty; in fact the environmentalist is denigrated.

What then of the University of Toronto curriculum? Of the 34 half courses offered by the Centre for Surveying Science in the 1989-90 academic year, not one touches on responsibility towards land. Admittedly, professional ethics as espoused by the AOLS are dealt with in the Professional Affairs course, but as we have seen these make no mention of a land ethic. The two or three courses in land planning merely encourage development. None of the surveying courses condemns excessive survey practices, such as cutting line, that needlessly destroys vegetation. In fact, the only required course in the past few years which dealt even briefly with a land ethic - Regional Land Use Planning - was cancelled in 1988. Perhaps it questioned current development practices because it was taught to the surveying students not by a land surveyor but by a geographer.

4. The final area of inquiry is whether land surveyors work in a manner that is compatible with a land ethic despite not being exposed to such an ethic at either the university or professional levels. Some typical development projects would seem to indicate otherwise. Take the Rouge Valley in the City of Scarborough, for instance. Until most of it was recently declared a park, it had been scheduled to be degraded into an expensive residential subdivision. The developer was interested in constructing houses that would have sold for more than one million dollars each, in order to attract more millionaires to Scarborough. This makes no sense in a watershed that was identified by the World Wildlife Fund and by the Carolinian Canada program as an endangered natural habitat. The Rouge Valley is one of the last large tracts of undeveloped land in Metropolitan Toronto. The developer insisted that the land was too valuable to be conserved for the environmental people.(12) No doubt a land surveyor would have agreed with the developer, had the latter been successful, and would have played a pivotal role in laying out the subdivision. And all is not lost for the development people; there are still plans to locate a garbage dump in the valley.

I am familiar with many examples of destructive development in the Mississauga, Oakville and Burlington areas in which land surveyors played an integral role. These include the straightening of Snake Road in rural Burlington which illustrates the phenomenon of land surveyor as pawn of the civil engineers - the disciples of the "Doctrine of Straight - Edge Development". From design and engineering surveys to demarcation of the widenings the surveyor was an accomplice in straightening a road through a ravine ecosystem. His advice was never offered; let alone his concerns, criticisms or objections.

Land surveyors' role in the development process can be condemned outside southern Ontario as well. In Sarawak, for instance, the Penan indigenous people only know that the Malaysian government has decided to clear-cut their old-growth rainforests when the surveyors appear. The Penan have never ceded their lands, yet their culture and very means of survival stand to be eliminated within one generation.(13)

5. The bottom line of this analysis then is that a land ethic is lacking in the Code of Ethics, in university courses and attitudes, and in land survey practices. Given the pressing need, how then to install such an ethic in land surveyors? First, incorporate a land ethic into the Code of Ethics. Explicitly state that the land surveyor has a responsibility towards the health of the land in much the same way that a physician has a responsibility to a patient's health, and a lawyer has a responsibility towards the administration of justice. Administer an oath of environmental responsibility to prospective land surveyors just as a Hippocratic Oath is sworn by medical students. At the very least the inclusion of an explicit land ethic and oath would encourage an ethical climate within the profession.(14) There are precedents for such an ethic within the development industry. The second-largest logging company in British Columbia, Fletcher Challenge Canada, introduced an environmental code of ethics last year, assigned a vice-president in charge of environmental affairs, and put a moratorium on logging in the Stein Valley.(15)

Of course, both the oath and land ethic are meaningless without an understanding by land surveyors of their environmental responsibility. Otherwise the Code of Ethics is mere public relations, and the oath simply lip-service. This is where the university could contribute. The role of the university is, after all, to inform and to criticise the world, not merely to serve as a credentials factory by churning out land surveyors(16). the Surveying Science

programme must include courses with an ethical or metaphysical component alongside its traditional science and technical courses.(17) There should be courses in the implications of environmental change, in ecology, in the geography of energy, in ethics and technology, in environmental law, and in rural land use.(18) All of these courses are now offered at the University of Toronto and most are offered at the Erindale College Campus, so there should be little problem in making them a compulsory part of the curriculum.(19) At the same time, the AOLS should offer continuing education programmes in land ethics and in alternative surveying practices.

These measures should help in changing attitudes towards land. But what of surveyors' behaviour? I suggest a number of solutions. First, land surveyors should reject any development that is not sustainable over the long term, such as urban sprawl, destruction of prime agricultural land and watershed ecosystems, and resource exploration in sensitive wilderness areas. Then they could become involved in areas of wilderness protection by working with groups such as the Nature Conservancy of Canada; they could assist native peoples in demarcating land claims; they could participate in long-range land use planning; they could promote energy-efficient building construction. In a best-case scenario they could advocate for new forms of land tenure.(20) At the very least the surveyor would be surveying in the true sense of the word, and not merely measuring.

We can look to surveyors in Iceland for inspiration. In almost all fields there is a patch where the hay cannot be cut because of a curse or the presence of spirits. The farmer simply tells the surveyor where the untouchable parts are and the surveyor lays out the road elsewhere.(21)

Finally, land surveyors should form their own public interest group to work with lay people, the universities, the development industry and government in promoting sustainable land uses.(22) Lawyers and physicians have set examples. The former have established both Lawyers for Social Responsibility (LSR) with 2000 members and the Legal Education Action Fund (LEAF). The latter have formed Canadian Physicians for the Prevention of Nuclear War, with 11, 000 members. What of an organization dedicated to education, policy and advocacy called Land Surveyors for Sustainable Development (LSSD)? The potential is unlimited.

6. Land surveyors are wanting in environmental ethics, both in instruction and in practice. I have suggested a continuum of solutions to enable the surveyors' associations, the training institutions and

the individual land surveyor to respond to this challenge. These range at the very least from the adoption of a Code of Environmental Ethics and the cessation of destructive land use practices, to campaigning for land reform and establishing a public policy group.

What is needed is a different value system among land surveyors as they diversify into sustainable development. Preoccupation with measurement and technology must end, whether it is G.P.S. or G.I.S. As citizens of this planet we are now being forced every day to make tough choices about the way we live; I suggest that these tough choices be extended to the land surveying profession.

Land surveyors could be in the vanguard in searching for a simpler, more frugal, life. Given the average Ontario Land Surveyor's salary last year of \$66, 000, land surveyors can certainly afford to change their ways; they cannot afford not to. Let's put the land back into land surveying.

* Brian Ballantyne is a Master's candidate in Land Surveying at the Centre for Surveying Science, University of Toronto - Erindale College, and presented this paper at the CISM/CGU '90 Congress in Ottawa on May 23, 1990.



FOOTNOTES

1. Schumacher E.F., A guide for the perplexed (London:Sphere Books, 1977), p.9.
2. Peter Jacobs, professor of landscape architecture, University of Montreal, addressing a 1988 conference on sustainable development sponsored by the Ontario Association of Landscape Architects; as quoted in Globe & Mail, March 5, 1988.
3. Michael M'Gonigle, Chairman of Greenpeace Canada on C.B.C. Radio phone-in show Cross-Country Checkup, March 1990.
4. Woods M., A professional outlook. Legal principles and practice of land surveying (Ottawa:Surveys and Mapping Branch, Department of Mines and Technical Survey, 1961), pp. 76-82.
5. A typical example of Instructions to Surveyors is noted in Sebert I., The land surveys of Ontario 1750-1980. Cartographica, v.17, n.3, pp. 65-106.
6. Weir C., The surveyor - A member of the land management team. Canadian Surveyor, v.35, n.3, September 1981.
7. Foreman D. Now's the time: This generation will make or break the earth. Mother Jones, v.15, n.3, April/May 1990, p.41.
8. John Lier of the Department of Geography and Environmental Studies, California State University speaking at the Association of America Geographers annual meeting on April 20, 1990.
9. Schumacher E.F., Small is beautiful (London:Sphere Books, 1973), P.88.
10. In general the issue is "whether experts owe their primary loyalties to their own institutions or...to the general community and its common good": McDonald M., Ethics versus expertise: The politics of technology. Ethics and technology (Wall & Thompson, 1990), pp. 119-124. For instance, the existing ethical codes of the Canadian accounting profession are silent on the question of to whom their ultimate duty is owed:Brooks L., Accountants need better ethical guidelines to serve public interest. University of Toronto Research Highlights, October 1989.
11. Tyrie A., Remote sensing at Erindale College. O.L.S. Quarterly, v. 30, n.2, Spring 1987.
12. De Baeremaeker G., Saving the Rouge Valley. World Wildlife Fund - Working for wildlife, Fall 1987.
13. C.B.C. Radio Ideas, March 9, 1990.
14. Bayles M., Professional Ethics, (Belmont CA: Wadsworth, 1981).
15. Watt K., Woodsman, spare that tree!. Report on Business Magazine, March 1990, pp. 48-55.
16. Illich I., Deschooling society, (New York:Harper & Row, 1971) p.1.
17. Neil Sterrit of the Assembly of First Nations, speaking at the Association of American Geographers annual meeting on April 20, 1990 urged universities to expand their curriculum to include the study of aboriginal peoples' political institutions and value systems. In the same vein, E.F. Schumacher stresses that the task of education is to understand the world in which we live and make our choices; it is a metaphysical and not a scientific task: 1973, op. cit., p. 83.
18. The courses are, respectively, ESE 1206F, JBG 230Y, GGR 333S, REL 224S, ESE 1002F, and GGR 330Y.
19. Here is a precedent for such a proposal; almost 10% of the curriculum in Australian land surveying programmes is taken up with courses in ecology: Forester B. & Williamson I., Past and future trends of surveying in Australia. Canadian Surveyor, V.39, n.4, Winter 1985.
20. As suggested by I. Stirling. Cadastre in New Zealand - Today and tomorrow. FIG XVIII - Volume 7, Cadastre, International Congress of Surveyors, June 1986.
21. Wallis R., You might see ghosts on a chilly Iceland eve. Sunday Sun, 1986.
22. For this idea I am indebted to Court Gwisdek, fellow environmentalist, cyclist and University of Toronto student.

PRICE QUOTING

BY GLENN CREWS, N.S.L.S.

More and more surveyors are being pressured to give quotes for professional land surveying. A caller will sit by the phone with his list of surveyors and a plan in hand. He tells you that he wants his lot surveyed and he wants to know the cost. Each of us know that he is calling other surveyors; and the knowledge that other surveyors will give a fixed price pressures us to do the same. Any surveyor that will only provide an estimate is regarded with suspicion. The caller believes that the surveyor will charge the high end of the estimate. This sort of suspicion is developed and encouraged by ourselves. If one surveyor can provide a fixed price, why can't you?

In our Code of Ethics, Article IV, section 2b, it states that a surveyor shall not enter into any competitive bidding practice. I believe that any time a caller asks for a price, we are bidding against the next surveyor on his list.

Section 2c allows for a "fixed cost price" when all major factors are known. Some surveyors believe there is a suitable defense for quoting prices. They simply look at the L.R.I.S. information, available in their offices, and they know the general shape of the property, the number of surveys conducted in the vicinity, and any recorded documents which relate to that property. But, there is still the matter of field evidence. This seems like a major factor to me. The surveyor can't know what evidence is on the ground. The caller may tell him that there is a bar here or a wooden post there, but what of the adjacent properties. The caller would not know of that evidence, or the lack of it. How does a surveyor determine the time and cost for a crew to search out and locate field evidence, when he doesn't know what evidence is there? Of course, if the surveyor does a boundary survey and is asked to quote a price to subdivide it, he can. This is what section 2b refers to.

As we continue to practice competitive bidding, there will be less acceptance of an estimate, because if you don't provide a quote, the next guy will. If we don't recognize the problems we're creating now, and do something, inevitably, quotes will become the standard business practice, and we will nickel and dime each other into the poor house.

We are supposed to assess fair and just compensation commensurate with the complexity and liability potential of the services performed. How do some surveyors know the amount of this compensation before completing the survey? We are presenting ourselves as tradesmen by this practice and not professionals. While tradesmen are trying to be professionals in their work, we're trying to be tradesmen in ours, and I guarantee you that nobody will try to stop us.

We could provide a loose estimate, and encourage the caller to bring their documents to our offices. Personal contact gives the CLIENT a better understanding of the possible difficulties you will face, and a better impression of his surveyor and our profession.

Our Survey Review Department will eventually be investigating survey practices and will have to deal with this issue. It would be desirable to have our council prepare a letter of interpretation for the members. This would let some members know they should stop the practice, or the rest of us know we should start.



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The Grumbler

By David A. Atwell

In idle conversation recently, a friend of mine mentioned that during his college days he had belonged to a fellowship which had as one of its officers, a **grumbler**. It occurred to me that it would be a good office to have in any association. Therefore I offer the proposition that every association, and especially the National Organizations, amend their constitutions and add the office of **Grumbler**. To assist in implementation, I offer the following guidelines and suggested wording:

Sample wording

1. There shall be elected from among the members, an officer who shall have the title, "**Grumbler**".
2. Duties of the **Grumbler** shall be to grumble. The elected officer shall complain about anything and everything. The **Grumbler** shall not under any circumstances offer agreement with any idea or action either orally or written. Particular attention shall be given to actions of the officers and directors, and to any program undertaken by the society. The **grumbler** shall vigorously attack any programs which appear to offer advancement of the organization or its expressed goals.

3. Grumbling shall be perpetual and almost non-stop. Particular emphasis shall be applied after a program or activity has begun. Stronger emphasis shall be applied whenever there is a sensitive issue at hand.
4. The **Grumbler** shall never under any condition, express a productive thought or constructive idea.

Rationale for having the office

1. This office is desirable in order to consolidate the grumbling. With a designated grumbler, others could turn their attention to constructive activities, thus creating more opportunity for the **grumbler**.
2. Other officers and the membership in general would always be assured that there would be grumbling and would therefore be relieved of that responsibility.
3. The source of grumbling would be known. Low mumbling and clandestine meetings would be unnecessary.

Conclusion

The skeleton of the job description is provided and can be expanded to fit as needed. Each organization can make whatever minor adjustments are needed to have the office fit within the framework of their particular constitution. With this document, there should be no further need for assistance from the writer of this document.

– *The Professional Surveyor*



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BOOK REVIEW

A Life Worthwhile: A Biographical Sketch of Major James A.H. Church, D.S.O., M.C., by James F. Doig, NSLS, CLS, Geographics Press, P.O. Box 10, Lawrencetown, Annapolis County, N.S., B0S 1M0, ISBN 1-895251-00-1, pp.44, limited edition, not for resale.

It is most fitting that Jim Doig would be the one to write this tribute to the memory and work of Major James Church. Jim was exposed to the profound influence of this man for many years and based much of the information on personal experience. He is also an accomplished writer and has the ability and interest to take on a project like this and to do it well.

If the achievements of Major Church were to be recounted in a single paragraph, it could not be done better than by John Wightman in the brief foreword at the beginning of the book. To listen to those who knew the Major and who studied under him, one is often left with the impression that surveying was only a small part of the education that he bestowed upon them.

As one would expect, the book begins with the Major's early years which were portrayed as anything but pleasant. He was orphaned in India at age five and then raised by strict Presbyterian aunts in Scotland before graduating as a mining engineer and emigrating to Canada in 1907.

The author's military knowledge and background is evident as he details the Major's career through the sketchy records and accounts of the first world war. A good portion of the book is dedicated to the Major's distinguished record that included a swift rise through the ranks as well as a Military Cross for courage and leadership.

The book chronicles the post war years and the depression that saw the Major married and relocated to Lawrencetown, Nova Scotia. It is interesting to note that the Church family moved from Alberta to Nova Scotia in search of a more favourable economy and climate.

The second war provided the Major with a teaching position in Halifax which would evolve over the years into Major Church's Survey School, then, the Nova Scotia Land Survey Institute and finally, the College

of Geographic Sciences. Interestingly enough, there are two reasons mentioned in the book for locating the school in Lawrencetown, one was because the Technical University in Halifax was too crowded and secondly, because there was too much artificial light in the city for stellar observations. Of course, if you were paying attention, the real reason is written between the lines: the school moved to Lawrencetown because that's where the Major wanted to live.

As one would expect, the book dwells to some extent on the Major's particular style of teaching, and his "blunt, earthy and descriptive" vocabulary and writing styles. The 1954 photograph on the front cover was taken by candid cameraman Ivan Macdonald and has captured the major in an all too familiar pose, complete in every detail right down to the dangling cigarette ash.

This is a pleasant no-nonsense account of a no-nonsense person, perhaps just the way Major Church would have liked it. From the very beginning of this short story (44 pages in all) the reader gets a feel for why the title "Major" stayed with the man well beyond his military service. One also gains insight as to why so many people in the surveying profession are proud to regard the Major as their mentor. The booklet was written primarily for Major Church's extended family, now for the most part in Ottawa and Montreal, and for those who were members of his survey class twenty five or more years ago. The printing is in a limited edition.

The book has obviously been a labour of love and it will be well received by everyone who has either known or been influenced by Major Church. Those of us who have not had the benefit of knowing the Major first hand are especially indebted to Jim Doig for this biography.



Jim Gunn

A LIFE WORTHWHILE

Major J.A.H. Church was the founder and first Principal of what is now the N.S. College of Geographic Sciences.

A copy of the account of his life and work has been put in the hands of each member of the Association.

Council directed this be done because Major Church's accomplishments are part of the survey heritage of this province.

When *A Life Worthwhile* was printed some copies were turned over to the Church family, now located primarily in Ottawa and Montreal, as well as to the Village of Lawrencetown for distribution to residents and deposit in the school and regional libraries. Additional copies were made available to the Association and to the College of Geographic Sciences at the cost of printing them. Copies will not be on sale to the public at large.

The account was written primarily for Church's extended family and for students of his successive survey classes from 1945 or thereabouts until he retired in 1963. Many of these individuals will receive their copy through the Association arrangements.

There are other of Jimmy Church's students who are not members of our Association or who are no longer members of one category or another. A copy awaits each of these who wishes to write:

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So please pass the word.

BOOK REVIEW

The Maps of Canada: A Guide to official Canadian Maps, Charts, Atlases and Gazetteers, by N.L. Nicholson and L.M. Sebert, Published by William Dawson & Sons Ltd., Kent, England, 1981, ISBN 0-7129-0911-7 and Archon Books, Connecticut, U.S.A., ISBN 0-208-01782-8, pp. 251, 48 figures, 29 tables. Copies are available from the Association of Canadian Map Libraries National Archives of Canada, Ottawa, Ontario, K1A 0N3 at \$25.00.

No better statement of the book's theme can be found than that in its Preface:

"There is a reasonably abundant literature about Canada's map-makers whether it be in the form of biographies, the journals of the early explorers or accounts of the activities of the later surveyors and cartographers. But there has long been a need for a comprehensive survey of their products, i.e. the maps themselves. This we have attempted to produce.

It is abundantly clear that the web of mapping and charting of Canada is very complex but it is easy to justify for it is simply the result of a small nation in terms of population trying, frantically and desperately at times, to produce adequate maps of a federated state which covers half a continent. It is surely in this context that the present population density of 2.3 people per square kilometre has meaning, and when mapping in the modern sense began officially the density of population was much lower.

Thus while the pages that follow are a guide through the maze of official map and chart series produced in Canada they also demonstrate the tenacity, flexibility, ingenuity and innovativeness of those responsible for the work."

In all of this the authors have succeeded admirably while presenting their material in the following chapters:

An outline of the mapping of Canada
Systematic mapping before 1890
The three-mile sectional maps of the Canadian West
The one inch to one mile series
The 1:50,000 series
The two-mile and 1:125,000 series

The four-mile series and the 1:250,000 series
The eight-mile series and Canadian aeronautical charts
The 1:25,000 series
Maps of the Chief Geographer's Office
Federal thematic maps
Hydrographic charts
Important provincial map series
Atlases
Projections, spheroids, datums and reference systems
Map printing methods and map accuracies
Geographical names on Canadian maps.

Following the chapters are eight appendices:

Significant dates in the evolution of Canadian mapping
Minimum dimensions of features on topographic maps
Contour intervals and type specifications
Map coverage of the provinces and territories
Federal and provincial bilingual and metrication policies
Map scales and equivalents
General maps
Availability of official maps, charts and atlases

As just one example of the detail in **The Maps of Canada**, one encounters particulars of the two most active publishers of reprints of old county atlases. One thus knows that Mika Publishing of Belleville has issued a reprint of that very useful atlas of Pictou County.

To put things plainly, the surveyor or survey office which is without this reference work is playing in the bush league as far as an understanding of Canadian mapping is concerned.

At the time of writing, L.M. Sebert was a member of the Topographical Survey of Canada, following upon a distinguished career as a military mapper; the late N.L. Nicholson was chairman of the Department of Geography, University of Western Ontario.

J.F. Doig



OBITUARY

DR. JAMES LAMBKIN RYAN REG. NO. 49

James L. Ryan of Halifax died Tuesday, January 23, 1990 at the Victoria General Hospital, Halifax.

Dr. Ryan was born in Halifax, the son of Captain Michael and Maria Frances (O'Brien) Ryan.

Dr. Ryan was a graduate of the Nova Scotia Technical College with a Bachelor of Engineering and Saint Mary's College with a Bachelor of Science. In 1937-38 he was an Assistant Lecturer in Mathematics and Engineering at Memorial College, Newfoundland. Subsequently he worked for a short period with the Airways Division of the Department of Transport and the Water Power Bureau of the Department of Mines and Resources.

In 1943 Dr. Ryan joined the Faculty of the University of Saint Mary's College, becoming Dean of Engineering in 1947, a position he held for more than 30 years. He lectured principally in Descriptive Geometry, Surveying and Drafting to first, second and third year Engineering students. In the years 1937, 1938, 1943, 1944, 1945, 1946, 1947, 1948, 1949 he was the Instructor for the Summer Survey Camp for Saint Mary's in association with the Nova Scotia Technical College Survey Camp.

In 1944 he was called out on temporary duty with the Royal Canadian Engineers, Active Force, with the rank of Captain working on surveys of Department of National Defence properties.

Dr. Ryan received his P.L.S. in 1950 and was granted Life Membership in the Association of Nova Scotia Land Surveyors in 1977. He received the degree, Doctor of Letters, Honoris Causa, from Saint Mary's University in 1972.

He is survived by his wife, the former Margaret Dockrill, Halifax; a sister, Sister Eileen, Mount Saint Vincent Motherhouse, Halifax; several neices and nephews, grand neices and grand nephews.

He was buried, after a funeral service at St. Lawrence Church, Halifax on January 26, 1990 in Gate of Heaven Cemetery.

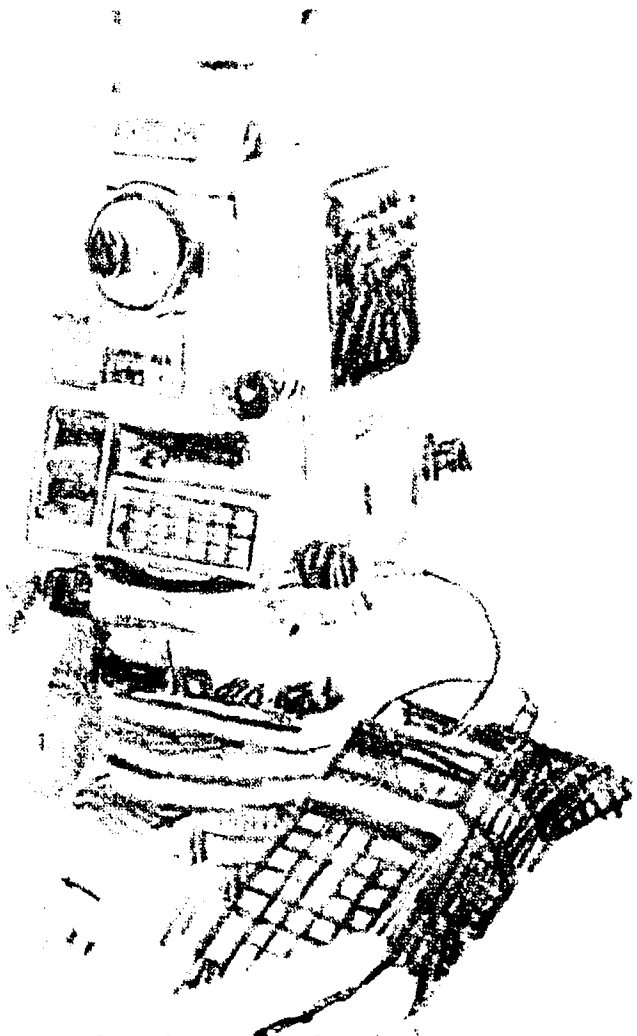
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OBITUARY

**ROY MONTROSE SCHOFIELD
REG. NO. 10**

Roy M. Schofield of Greenwich, Kings County died Tuesday, July 10, 1990 at Eastern Kings Memorial Hospital, Wolfville.

Mr. Schofield was born in Gaspereaux, Kings County in 1904 and received his education in Kings County schools. After completing high school he became interested in land surveying and spent several years with the late Charles F. Whitman, P.L.S. on various surveys before taking a course in surveying from the Nova Scotia Technical College, receiving a Diploma in April 1929. He received his P.L.S. in July of that same year.

Following approximately one year with the Legal Surveys Division of Energy Mines and Resources in Ottawa he accepted a position with the Crown Lands Division of the Nova Scotia Department of Lands and Forests. He was appointed Director of Crown Lands in 1961 and held that position until he retired in 1964.

Mr. Schofield was a charter member and past secretary of the Nova Scotia Provincial Land Surveyors Association and was granted Life Membership in the successor Association of Nova Scotia Land Surveyors. He was also a past secretary of the Nova Scotia Forestry Association.

Roy Schofield and his wife Nita operated Schofield's Flowers in Dartmouth for twenty years. He was a keen woodsman and enjoyed hiking, fishing and hunting as the seasons permitted.

He is survived by his wife, the former Nita Russell; three daughters, Frances (Mrs. Robert Myra), Myrna Iverach, both of Dartmouth, and Brenda (Mrs. P. Berube) of Alberta; a brother Laurie Schofield, N.S.L.S. #144 of Hantsport; seven grandchildren, including Glenn Myra, N.S.L.S. #584; and three great-grandchildren.

He was buried after a funeral service on July 13, 1990 in Gaspereaux Cemetery.

OBITUARY

**HAROLD BURLING SMITH
REG. NO. 308**

Harold B. Smith of South Berwick died Saturday, September 1, 1990 at Blanchard-Fraser Memorial Hospital, Kentville.

Aged 67, Mr. Smith was born in Smithville, Inverness County, Cape Breton, the son of Edward and Jane (Johnston) Smith.

He was a veteran of the Second World War who, after demobilization, attended "Major Church's School." On graduation from Church's third post-war class, he was commissioned as a Nova Scotia Land Surveyor on December 14, 1948.

Following a period of survey practice in New Glasgow, Mr. Smith joined the Legal Surveys Division of the federal Department of Energy, Mines and Resources, Ottawa.

In 1963 he returned to Nova Scotia, took up residence near Kentville and there practised land surveying until his retirement a few years ago.

He is survived by his wife, the former Isabel Armstrong of Middleton; five sons, Eric, Kingston; Donald, Montreal; Michael, Guelph; David, Dartmouth; and Roderick, Sackville; and a daughter, Colleen (Mrs. Stephen Orr), of Mount Albert, Ontario.

A memorial service was held in Berwick on September 6, with interment of ashes at Berwick Cemetery.

UNSPOKEN WORDS – THE CONVERSATION WITH THE CLIENT

Compiled by

Knud E. Hermansen, P.L.S., P.E., Ph.D., J.D.

Over the years I've heard a lot of expressions that have a different or additional meaning on subsequent investigation. The following are a small sample:

"Just a small lot" – Hell's half acre

"It's pretty property, you'll enjoy surveying it" – With the gorges, rock outcrops, tall trees, lush vegetation, swift streams...

"Place is wide open" – Brush was cleared out and put on the boundary line.

"I know where all the corners are" – Marked them last week.

"The last surveyor didn't know what he was doing" – Surveyor refused to place the corners where I wanted them.

"I just need the one corner set" – You can find and set the other ones later.

"I have a good description of my property" – My great-grandfather personally knew all the people the deed describes as bounding my land.

"It's good title, bought from the government by my grandfather" – Parcel was bought at a sheriff's sale.

"I know where every pin is" – Out back of the garage but don't worry I've replaced them all with posts back when I bought the property fifteen years ago.

"No one has ever moved that pipe" – I've had my dog tied to it for the last 10 years.

"That's the boundary" – Why else would they put a fence up there.

"You don't have to do a lot of work" – Just go over and tell my neighbor he's on my side of the line, then maybe he'll believe me.

"I'd sneak by my one neighbor if I were you, he's mean" – I don't want you to talk to my neighbor, he's the reason I'm getting this survey.

"How much will it cost?" – Will it cost over \$50?

"How soon can you survey my property?" – I need it by tomorrow to close. Don't expect my payment as fast.

"Those old surveyors worked hard and were good" – They were fast and cheap.

"I just want what is mine and I don't want what is not mine" – I know what land is mine and you'd better mark it that way if you want to get paid.

"Price is not important" – I'm really mad at my neighbor and the attorney said a survey shouldn't cost more than \$400 tops.

"You say the deed calls for a stone? Try looking one more time tomorrow" – I'll take care of that tonight.

"That bill is a little higher than I expected" – I'm not going to pay that much money.

"The corner was right over there" – or perhaps over there or maybe it was right here...

"I remember a witness tree being here" – I cut it down myself for firewood.

"I just want the survey done for peace of mind" – I'm having a terrible fight with my neighbor and I'll get a lot of peace of mind as soon as you show him where the boundary is.

"You wouldn't mind if I helped you" – I'd like to keep my eyes on you. Since I make up one-third of your crew, my bill should be reduced by one-third.

"I've got good title" – You don't need to spend all that time in the courthouse.

"Could you give me an idea of what the survey will cost" – So I can call another surveyor and compare prices.

"Gee, I wonder what happened to that corner" – After I knocked it out with my plow.

"Are you the surveyor surveying the Jone's place?" – Have I got a bone to pick with you.

"I wouldn't put that stake there, the kids will pull it out" – And I'm going to encourage them to do it.

"Would you mind if I replaced those pins with something a little bigger" – OK Joe, swing the crane over here.

"We've got a lot of wildlife on our property" – Especially rattlesnakes, copperheads, wild dogs, kids...

"Nice day for a walk" – Mind if I come along?

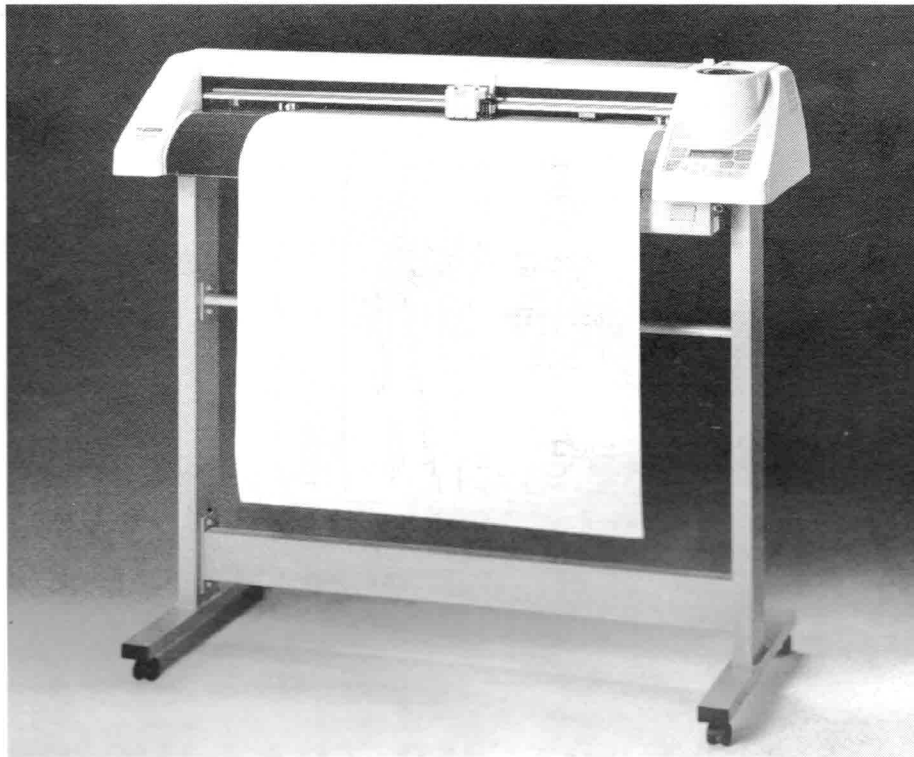
"Thanks for the estimate, I'll get back in touch" – When Hell freezes over. There is no way I'm paying that price.





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