



THE NOVA SCOTIAN **SURVEYOR**

Summer 1997

No. 155



*Conventional Lines Revised
See Page 18*

Principles of Boundary Determination Seminar

**Presented by
Alec McEwen**

**to
Surveyors from
Atlantic Canada**

April 1997

All Terrain Vehicles



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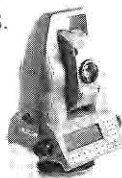
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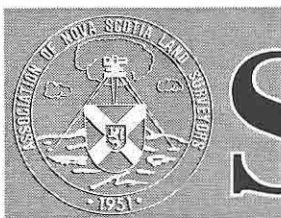
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CONTENTS

PAGE

Executive Director's Report	Robert A. Daniels . . .	2
SRD Manager's Report	James D. Gunn	5
The Technical Side: The Surveyor and the Internet	Chris Cothrun	6
Notices		10
Book Review - "The Surveying Handbook"	James F. Doig	14
Letters of Confirmation and the Use of Disclaimers	James D. Gunn	16
Conventional Lines Revisited	Alec McEwen	18
To Bid or Not to Bid	James P. Weidener .	20
CCLS Bulletin - May 31, 1997		22

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Letters to the Editor should be limited to one page.

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EXECUTIVE DIRECTOR'S REPORT

Robert A. Daniels, NSLS, CLS



It is the beginning of summer '97. I am led to believe that our members are busy in some parts of the province, while other areas are still slow. Hopefully, the upbeat economic forecasts will eventually find their way east. There is limited activity of the Sable Gas pipeline. If laterals are ever constructed to metro Halifax, the New Glasgow area or industrial Cape Breton, there should be opportunities for more land surveyors to provide services.

The Alec McEwen Seminar presented in April was well attended. It was very encouraging to see the large number of members who took three days from their busy schedule to attend. I have received a number of positive comments about the seminar. It became very clear that in most situations there are no easy solutions or strict guidelines to determining or resolving boundaries. The best source of information for evaluating boundary evidence may well

be the cases that have been decided by the courts. I would suggest that all members read the sample cases included in the material provided for the seminar.

Everyone should know that as of June 1, 1997, Surveyor's Location Certificates must be sent to the Survey Review Department. Jim Gunn has established a system of numbers for Surveyor's Location Certificates and the fee has been set by Council at \$3 each. The regulations dealing with this have been mailed to all members.

This office is receiving more questions concerning Title Insurance. Briefly, Title Insurance is an insurance policy that claims to provide protection against defects that may affect a property. It is intended to replace the need for Surveyor's Location Certificates and, eventually, title searches. There appears very little that we can do to prevent Title Insurance from being offered in Nova Scotia. However, in my view there are some flaws that members should be aware of:

1. Title insurance may be detrimental to the public registry system. Several types of documents such as "release of mortgage" will no longer be part of the public records, these documents will be under the control of the insurance company.

2. The public registry system is a key part of the province's economy. As a result of Title Insur-

ance, its use and number of records will decline.

3. Title Insurance on top of the errors and omissions insurance carried by lawyers and surveyors will not offer anything additional to the public.

4. Title Insurance offered in the US is highly regulated. There are no regulations in Canada. This will allow the industry to focus on profit and not the protection of the public.

5. The Surveyors Location Certificate and the Lawyers Certificate of Title identify problems with the property in advance of the purchase. This is true protection to the consumer.

6. Under Schedule B of a policy offered by First American Title Insurance Company, it is stated, "This policy does not insure against loss or damage (and the company will not pay costs, legal fees or expenses) which arise by reason of: Encroachments, defects, discrepancies or other matters that may be revealed by an up-to-date plan of survey and which are not shown on surveys provided to the Company or shown in the public records on date of Policy." The Insurance Company may omit this section under certain conditions.

There has been little activity with APENS. It appears that their legis-

Continued on Page 4



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Continued from Page 2

lation is stalled and may have to be resubmitted to government. We have not yet sent our new definition to government, but it will be submitted for the fall session of the legislature. At the present time we are waiting for proposed wording from APENS dealing with our definition and the memorandum of agreement.

Thanks to a number of members, we have been actively following the changes to the Planning Act and regulations respecting On-Site Sewage Disposal Systems. We have met with representatives of the Department of Housing and Municipal Affairs concerning Instrument of Subdivision. At this

time, they are recommending that the Instrument of Subdivision be removed. The regulations for On-Site Sewage Disposal Systems have been approved by the legislature, and a course is being prepared to provide training to those who wish to be involved in providing this service. We will attempt to keep our members informed on these issues.

The CCLS annual meeting is scheduled for June 28 - 29, 1997 in PEI. The directors will be reviewing the Actuary report on self-funded liability insurance. It is anticipated that the directors will make recommendations which will then be brought back to the provinces for comments, input and

possible support. I will be stepping down as the Nova Scotia director at that time. John Pope will be taking on the task for at least the next three years. I know John will be an excellent representative for Nova Scotia. ■

Web Sites

These are some World Wide Web sites which may be of interest:

Canada 411 (on-line directory)
<<http://www.canada411.sympatico.ca>>

ACSM
<<http://www.landsurveyor.com/acsm/>> ■

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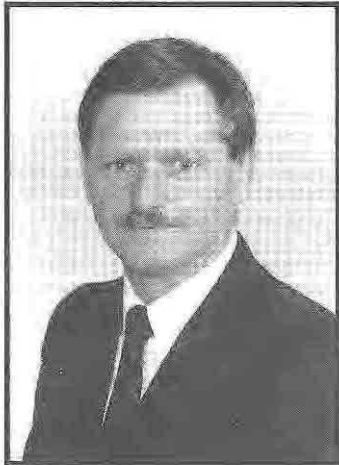
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SRD MANAGER'S REPORT

by Jim Gunn, NSLS, CLS



The big news from SRD is that Surveyors Location Certificates (SLC) now have to pass through the SRD inspection process. To the members, this means that they now have to purchase SLC Numbers from us, and also, they have to send copies of their certificates to us within 30 days. What the new regulations mean to us here at SRD is that we have to develop a system of issuing numbers and tracking and checking certificates to ensure compliance with the regulations.

We have decided that we would issue numbers in blocks of 50 and we would invoice the member for all 50 numbers at the end of the month in which they were issued. Having said that, we are prepared to issue fewer than 50 numbers if requested.

We have installed a new filing cabinet in our office and we will keep a maximum of 10 certificates per member on file at any given

time for inspection purposes. The remaining certificates will be destroyed. No record will be kept of the certificates as they pass through our process and no one, other than SRD staff, will have access to them.

The next few months will be very busy for us as we learn to adjust to these new regulations. We have received many calls already and we expect many more. Fortunately, most members are being very cooperative and supportive. But of course, there are others. Where were they when these regulations were being passed? We would like to know.

The 1997 field inspections have already begun. We are paying special attention to our field checks this year because our members are telling us that the field checks should be more rigorous. Our goal this year is 70 inspections so as to cover the province in a two-year cycle. Council has approved the purchase of a bar locator to assist us with our inspections. Also, to ensure a more thorough and complete inspection, the plan will be subjected to our systematic review process. If we feel it necessary, we will check field notes and research information.

As you can see, there are more demands on our time than ever before. Because of this we have found it

necessary to adopt a zero tolerance on overdue SRD accounts. We simply do not have the time to be sending reminders to members who continually allow their accounts to fall behind. Members who do not settle their accounts within a reasonable amount of time will lose the convenience of our present billing system and will be required to pay for their future purchases in advance. We regret the need for this policy but it is in fairness to the majority of members who settle their accounts in a prompt, businesslike manner. Sadly to say, it doesn't take very long working in this office to see that too many of our members could benefit from some organizational and business skills. But of course, the fact that you are reading this article suggests that you are probably not one of our problems. Have a good one! ■

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THE TECHNICAL SIDE: The Surveyor and the Internet

by Chris Cothrun, Service Technician, Ingenuity, Inc.

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This issue of the Technical Side we are going to depart from the usual discussion of instruments and instead discuss some of the useful resources available to the surveyor via the Internet. Even if you are not using the Internet at this time, peruse this article as you may discover some new area of interest.

I'm going to skip a technical discussion of the Internet itself. There are many books and magazine articles dedicated to all aspects of the Internet that give the subject a much broader coverage than I ever could. In this article I will assume you have a basic understanding of the common Internet terms such as the World Wide Web, Newsgroups and e-mail. If these terms aren't familiar to you, the local library or bookstore will have many books that explain these. I hope the information presented here might motivate you to take a closer look at what is available to those associated with the surveying profession. All the resources presented in this article are available to almost anyone who has Internet access or who subscribes to any of the on-line services.

Survey Information

What would be useful to a surveyor on a global computer network?

Surveyors have their very own newsgroup, titled sci.engr.

surveying. This is a discussion group where you can post a question or a comment that is made available to anyone who wants to access this newsgroup. They can then post a reply or post additional information related to your posting. Anyone can participate and contribute to the subject at hand.

For example, one "thread" or set of messages that follows a common subject, was started by a surveyor in England who wished to replace his unreliable summer help with a robotic total station. He related his demo experiences with various manufacturers' equipment. Other individuals contributed their opinions on the usefulness of the robotic or "one man" total station. Other discussion topics have included the use and misuse of least squares adjustment techniques, land ownership laws in various states and countries, and other topics of professional concern to surveyors.

There is also a mailing list for surveyors. The only difference between the mailing list and the newsgroup is the fact that the messages posted to the mailing list appear in your electronic mail box instead of your news reading program. Of course, the set of messages can differ but the topic is generally the same. To subscribe, send mail to majordomo@smultron.com with *subscribe surveying* as the subject of your message. You

should receive a confirmation message in your mailbox within minutes.

There are hundreds of worthwhile Web pages that relate to the surveying profession. Instead of listing them all, here are three that provide links to many more quality pages. From these you can find government pages such as the National Geodetic Survey home page, state association pages, and individual surveyors' home pages.

The first, <http://home.page.interaccess.com/~maynard/>, is run by Maynard H. Riley, PLS. He has some good information about the surveying profession along with an excellent selection of links to more web sites.

In addition to the surveying mailing list, Professor D.A. Whalström maintains a web site at <http://smultron.com/> that, along with some of his other interests, has several survey-related links.

Finally, as the name implies, <http://www.landsurveyor.com> has an extensive web site dedicated to the surveying profession. Here you can add your name to their professional directory, take a look at *Professional Surveyor Magazine* on-line, or follow their links to even more survey-related pages.

GPS Information

There is a large amount of GPS-related information on the Internet.



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MS-CAD Pro is a modern Windows based system which is *easy to use*. In fact, an average AutoCAD technician can be *computing, drafting, and producing maps with MS-CAD Pro within an hour or two of opening the package for the first time!*

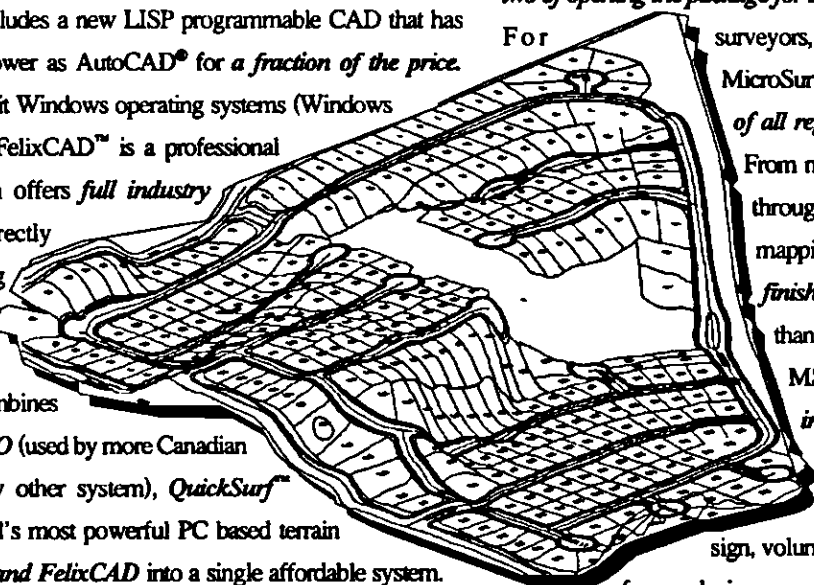
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surveyors, MS-CAD Pro includes all of the MicroSurvey functions *used by nearly 40% of all registered land surveyors in Canada.*

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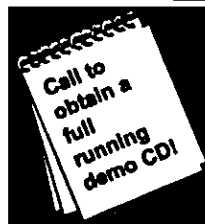
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The sci.geo.satellite-nav newsgroup generates a number of GPS-related messages every day. Most of these messages concern recreational-grade, C/A code-only receivers, but there is the occasional posting that is of interest to the surveyor.

There are also two GPS/Geodesy e-mail discussion groups that specifically cover the use of GPS for high-precision measurements. The Canadian Space Geodesy Forum (CANSPACE) is an international list that not only brings you questions and answers about GPS, but has daily postings of the GPS satellite constellation status and reports on solar flare activity. You can subscribe to the CANSPACE list by sending the message SUB CANSPACE *your name* to <listserv@unb.ca>. You can find archives of the list and information on subscribing at <<http://degaulle.hil.unb.ca/Geodesy/CANSPEACE.html>>. You can also subscribe to the GPS tech mailing list by sending a message to <gpstech-request@cotopaxi.stanford.edu>.

The World Wide Web contains an ever-increasing number of sites dedicated to GPS information. I can only present some of the major sites I know of here. Most of these have links to other sites containing GPS information.

<<http://www.utexas.edu/depts/grg/gcraft/contents.html>> contains introductory interactive lessons on several aspects of geography. Several of their lessons are of interest to surveyors, with topics such as a Geodetic Datum Overview, a Coordinate Systems Overview and a Map Projections Overview. Of particular interest to

the GPS surveyor or anyone interested in the fundamentals of GPS is their GPS Overview at <<http://www.utexas.edu/depts/grg/gcraft/notes/gps/gps.html>>. This page presents the viewer with text and figures illustrating GPS satellite signals and how those signals are used to produce a position. The overview also illustrates GPS error sources, dilution of precision principles and differential measurement techniques.

For information straight from the source, the US Coast Guard Navigation Center maintains the Navigation Information Service at <<http://www.navcen.uscg.mil/>>. The Department of Defense Notice Advisories to Navstar Users, GPS constellation status and precise ephemerides are all available here for viewing or downloading.

If you want to know what the Russians are up to with the GLONASS system, you can visit their page at <http://mx.iki.rssi.ru/SFCSIC/SFCSIC_main.html>.

The University NAVSTAR Consortium posts their own technical reports on the use and testing of various GPS receivers. Their page can be found at <<http://www.unavco.ucar.edu/>>.

The US National Geodetic Survey maintains pages at <<http://www.ngs.noaa.gov/index.html>>.

For more complete coverage of the GPS resources available, see Richard Langley's excellent article in the November 1995 issue of *GPS World*.

Other Information

What else would be of interest to the surveyor on the Internet? I found several items that some of you might find useful.

The surveyor seems to be on a convergent path with GIS technology. The comp.infosystems.gis newsgroup brings together professionals from all aspects of the emerging GIS technology. Here you will find topics from technical questions for specific GIS platforms to discussions on the applications of this technology.

Most surveyors use CAD programs, with the predominant being AutoCAD. Two AutoCAD-based newsgroups, <alt.cad.autocad> and <comp.cad.autocad>, generate a number of AutoCAD-related messages every day.

You can browse numerous AutoCAD pages from the links at <<http://www.wit.edu/ATC/ACADLINK.htm>>, including the AutoDESK home page at <<http://www.autodesk.com/>>.

The Hewlett-Packard 48 series calculator has become one of the more popular survey data collection platforms along with being a convenient programmable field calculator. There are several newsgroups dedicated to the HP 48, with a broad cross-section of users contributing to the discussion. Most of the message traffic is in the <comp.sys.hp48>, but my news server also showed the newsgroups <comp.sources.hp48> and <comp.sys.hp48.d>.

Conclusion

One of the Internet's most compelling features is the chance for everyone to contribute and interact. If you have access and are willing to, you can contribute your experience and expertise to the discussions and even to the World Wide Web. However, this necessitates a note of caution: *Information posted in newsgroups, mailing lists or on the WWW can be incorrect.* These are usually corrected by more knowledgeable persons, but you should always

check any source of information.

Finally, take a look at our Web pages at <<http://www.ingenuityinc.com/>>. This article exists there in hypertext so you can browse the links presented instead of typing them into your browser. We also have some of the other Technical Side articles up, more survey-related links and the usual information about our company. Even if you don't visit our pages, feel free to mail me at <cothrun@ix.netcom.com> with comments.

Barring Internet access, you can contact us through the usual methods: fax us at (702)739-8143 or mail us at The Technical Side, 1562 Linda Way, Sparks, NV 89431.

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More information is on the World Wide Web.

Our home page is: <http://www.unb.ca/GGE/>

NOTICES ...

Subdivision Regulations

The Provincial Subdivision Regulations have been amended as of June 10, 1997. The amendments came as a result of new On-Site Sewage Disposal Regulations, which are also effective June 10, 1997.

You may wish to obtain a copy from the NS Department of Housing and Municipal Affairs.



Lunenburg County Registry of Deeds

The Lunenburg County Registry of Deeds has moved. The Department of Housing and Municipal Affairs opened a new office in Bridgewater on Monday, March 3, 1997. It will contain the Southern Nova Scotia Land Information Centre, the Lunenburg County Registry of Deeds and the Regional Assessment Office.

For further information, please contact Joan Plunkett, Acting Registrar of Deeds at (902)543-5095.



Notice to Contractors

The following is a notice sent out to contractors by the Halifax Regional Municipality Department of Community Planning & Development:

On March 8, 1997, the *Lot Grading and Drainage By-law* came into force for that area of the Municipality which was formerly incorporated as Halifax County Municipality. As a result of the enactment of this by-law, the *Building By-law*, also applicable to the former County areas, was amended. **The effect of the amendment is that the by-law now allows the placement of the footings and foundation at the Preliminary Permit stage.** Formerly, only the excavation work and placement of the footing were permitted at the Preliminary stage.

For clarification purposes, the following outlines the procedure you are now to follow:

1. In areas serviced by a central sewer system, a Lot Grading Plan must now be submitted with your Building Permit application. As has been the practice, construction must stop after the footing has been placed to allow the Building Inspector to complete the mandatory footing inspection. When the Inspector has approved the footing inspection, then you may proceed to place the foundation structure.

2. Once the foundation is in place, a Surveyor's Location Certificate must then be submitted to the Building Inspector. When satisfied that the foundation is situated within the required yard clearances and / or, where applicable, the lot grading has been approved by municipal Engineering staff, the Building Inspector may then issue the Building Permit. This permit will allow work to proceed on the preparation of the foundation for backfill.

Please note that the mandatory prior to backfill inspection will not be completed until the Building Permit is issued.

Effective immediately, the process which has been in place in the Bedford and Dartmouth jurisdictions has also been changed to be consistent with this procedure.

The Municipality believes that this change in procedure is one that will benefit builders in streamlining the permit process and we look forward to working with you in this regard.



FIG Reports

The following reports from the International Federation of Surveyors (FIG) can be obtained through the association office:

- FIG Annual Review
- The Bogor Declaration
- Report of the UN Inter-regional Meeting of Cadastral Experts

Additional copies are available from the FIG Bureau, 12 Great George Street, London SW1P 3AD, United Kingdom. Fax: 011-44-171-334-3719 or e-mail: <figw@rics.co.uk>

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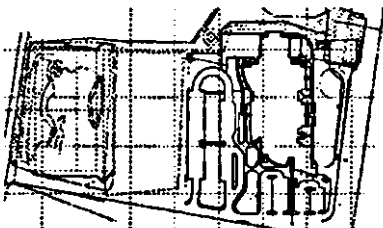
civilcad. Surveying and Civil Engineering design at your fingertips.

civilcad-Canada, your Canadian Agents for the acclaimed surveying and civil engineering software **civilcad**

In addition to purchase assistance, **civilcad-Canada**, will provide technical support, training seminars, and long term support services.

civilcad software is written and designed by Bloomfield Computing Services, part of the Topcon Corporation. **civilcad** forms an integral part of Topcon's strategy to provide leading surveying solutions.

Engineers and Surveyors require their design software to provide value, performance and an ability to deliver time and productivity savings in the work place. **civilcad** is the answer.



civilcad is comprised of three modules:

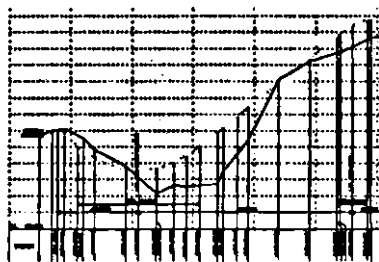
- Survey Module
- Roads Module
- Drainage Module

civilcad includes a number of programs within the main modules which feature sub-division design, road

design, detail survey, road reconstruction, volumes, drainage and sewer design, as well as a drawing editor.

The software encompasses CAD graphical facilities allowing survey information to be collected, processed, and then integrated with land information and cadastral data.

civilcad licenses are held by private businesses, surveying and engineering companies and government authorities. **civilcad** software allows quick and easy adoption by the new user. For years the **civilcad** software package has been the nucleus of many surveying and civil, engineering businesses, with licensees using the extensive range of options to enhance their design productivity, and provide a valuable competitive edge!



Bloomfield Computing Services (BCS) is completing the final development stages of **civilcad** release 5.4. This version is a multi-platform release for use in Windows 95, Windows NT and DOS. **civilcad** for Windows 95 is currently in Beta release with full distribution expected this summer.

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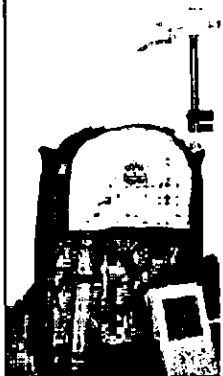


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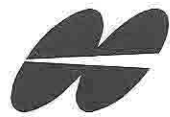


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BOOK REVIEW

by James F. Doig

The Surveying Handbook, by Brinker, R.C. and Minnick R., eds., Chapman & Hall, 29 West 35th St., New York, NY 10001, 1994, ISBN 0-412-98511-X, pp. 967, \$134.95 CAN, \$99.95 US.

The word handbook in a title frequently invokes the picture of a multiplicity of close-packed numerical tables accompanied by short explanations and the odd example. Not so here. The essence of The Surveying Handbook is narrative with appropriate photos, diagrams, equations and examples. There are tables, to be sure, but these are rather brief tabulations of data rather than just columns of numbers.

This latest edition results from technological change during the past decade and the constructive criticism that followed the book's first appearance. The aim, however, remains unchanged: "to provide surveyors and others with suitable information outside their specialty field."

Some earlier material has been rewritten; some has been reorganized. Three new chapters have been added: Instrument Adjustments, Water Boundaries and Geographic Positioning Systems. More material has been added on boundary law and the place of the land surveyor in litigation. More appears also on land and geographic information systems. Three chapters of the first edition (Charges, Contracts and Liability; Slopes and Earthwork; and Business Management) are gone. The new edition runs to 35 chapters and four appendices.

How much of this book — American in origin and thrust — is useful to the Canadian surveyor? The short answer is about 75%.

"... [It] is easy to read, comprehensive, authoritative, and up to date."

The two portions that have no relevance in other jurisdictions are the 70-page chapter on the survey of US Public Lands and the 29-page appendix that reproduces Standards and Specifications for Geodetic Control Networks in the United States.

The 32-page chapter Plane Coordinate Systems is primarily concerned with state systems in terms of NAD27 and NAD83. Much of its material, however, is useful for it demonstrates the practical application of conical and cylindrical map projections for the control of surveys over large areas.

Material on boundary law is relevant where it relates to principles drawn from the common law. Much advice and commentary on litigation and courtroom behaviour is also worthwhile, despite procedural differences in the Canadian justice system.

One of the difficulties in dealing with technological change, and the practical limitations of space, is how to present the essentials of practices that are no longer in common use but

which may have their place in special circumstances. Those coming most readily to mind are the use of compass, plane-table and stadia. The first of these is the subject of a 10-page chapter. The other two are treated in a single 30-page chapter on the plane-table. There, stadia is offered as "the planetable approach without the planetable," a rather neat way of describing the technique.

The 33-page chapter Land and Geographic Information Systems deals initially with general principles and illustrates them by reference to structures in a number of countries. The primary focus when it comes to detail is, of course, on systems within the United States of which three (in counties of Kansas, West Virginia and Ohio) are summarized as case studies.

Canadians often — and with good reason at times — make a great deal of the difficulties associated with the mouse being in bed with the elephant. But in some matters we have great advantage. In the U.S.A. there are about 82,000 local agencies below state level that make decisions with respect to land use. Hence the promotion of standard policies is a great deal easier in Canada since much of the decision-making lies with the federal government and the governments of the ten provinces.

A book of this kind must furnish directions for further reading. On the whole the Handbook does this quite well. There are, however, a few thin spots and three chapters (Angle Measuring, Traversing and Planetable)

don't supply either notes, to identify particular sources, or references, to point to detailed coverage. Chapter 1, a very brief overview of the surveying profession, tells the reader, "Booksellers specializing in surveying are listed in Appendix 3." But the list consists solely of two professional associations that offer publications and two magazines that carry topical articles. This blemish, however noticeable, is of little real significance when one tallies up the large number of comprehensive references between the book's covers.

And speaking of covers, the inside ones — front and back — carry useful tables of metric conversion, important numbers in surveying, abbreviations, and commonly used symbols.

Written in plain language, The Surveying Handbook is easy to read, comprehensive, authoritative, and up to date. The contributing editors and authors — 38 in all, in nearly the same number of different locations — took on an enormous task and did it well.

Following so closely upon its first appearance, the second edition of this encyclopedic work, is a good testimonial to its worth. It will be a useful addition to college, university and large-office libraries.

★★★★★

Quotation

"I suffered only two financial disasters: Once when I lost a law suit and once when I won one."

- Benjamin Franklin

OBITUARIES

JAMES W.P. GRANT NSLS #414

James Grant, 47, died on Tuesday, March 25, 1997 in Cape Breton Regional Hospital. Born in Meaghers Grant, he was the son of the late Perry and Marguerite (Day) Grant. Jim received his commission as a Nova Scotia Land Surveyor in 1973 and worked for John Pope before opening his own company. He was an adherent to Sydney River United Protestant Church.

Surviving are his wife, Judy (Cann); daughter, Melissa and son, Ryan, both at home; sisters, June (Mrs. Everett Robinson), Fall River; Judy (Mrs. Merlin Kerr), Sharon Stoddard, Meaghers Grant; Linda Sullivan, Spryfield.

We extend our deepest sympathy to his family.

ALEXANDER C. MACKAY LIFE MEMBER # 58

Alexander Mackay, 85, died suddenly on Monday, May 26, 1997 at his home in Sutherlands River. Born in Sherbrooke, Quebec, he was the son of the late Dr. Malcolm and Verena (Caswell) Mackay. Alexander came to Nova Scotia to work in the gold mines at Montague and Goldenville. He was an active member of the Sutherlands River Presbyterian Church, belonged to a number of societies and was an enthusiastic gardener and beekeeper.

He is survived by daughter, Mary Katherine Mackintosh, Lower Sackville; sons, Alexander H, Basking Ridge, NJ; Dr. John W., Montreal; Dr. David, Saint John, NB; several grandchildren; sister, Margaret Calhoun, Kirkland, Que.

Our sincere condolences go out to his family.

Letters of Confirmation and the Use of Disclaimers

by Jim Gunn, NSLS, CLS - CCLS Professional Liability Insurance Committee Member

What do letters of confirmation and disclaimers have in common? Probably nothing except for the fact that both topics surfaced during our discussions on contracts at the recent CCLS Loss Prevention seminars. Some of the points raised are certainly worth a closer look.

Letters of confirmation are letters written to your client immediately following their request for your services. A good letter of confirmation will simply repeat the client's instructions and set out the terms of your employment. It is handled in a very friendly, efficient and professional manner. Anyone who has had occasion to hire a lawyer in the last few years probably knows what a letter of confirmation looks like. More than likely, the letter arrived the very next day and there may have been an extra copy to be signed and returned. Surveyors would be well advised to get into the habit of sending these letters to their clients.

A letter of confirmation may not be as good as a written contract, but in most cases it gets the job done just fine. And with the convenience of today's fax machines, many letters of confirmation can be issued, signed and returned within minutes. Your clients will appreciate this professional courtesy and you will take comfort in having the instructions in writing. Even if you were the one who did the writing.

The other topic that raised everyone's interest at the Loss Prevention seminars was the use of disclaimers. Until recently, I was of the opinion, like many others, that a surveyor could not use a disclaimer

to limit his or her liability to a third party. The common law rules are clear: we are liable to our client under contract law and to any third party under tort law. This is true of course, but for one thing; the nature of common law is that it is always changing. The whole field of tort law is extremely young, having had its beginning in Scotland in 1932 with the case of *Donoghue v. Stevenson*. The case involved a bottle of ginger beer which was purchased for a friend. The friend drank it and discovered the decomposed remains of a snail in the bottle. The friend, being a third party to the transaction, sued the manufacturer and won. Other courts followed this ruling and tort law was born.

But now, we have a case in Ontario where a professional person (A.D. Little) provided a geotechnical report to his client in which he disclaimed legal liability to any third party who may rely on the report. The disclaimer was challenged in court by a third party who did use the report and consequently sustained damages. But the court upheld this disclaimer and the court of appeals agreed with its decision. The exact wording of this disclaimer is definitely worth noting.

"Any use which a third party makes of this report, or any reliance on or decisions to be made based on it, are the responsibility of such third parties. Arthur D. Little accepts no responsibility for damages, if any, suffered by any third party as a result of any decisions made or actions based on this report."

Another case, referred to as *P. Clifton Burgoyne*, was brought to our attention by Jeff Brown, the lawyer who assisted with the Loss Prevention seminar in St. John's, Newfoundland. This was a Nova Scotia case in which an appraiser successfully limited his liability with the following disclaimer:

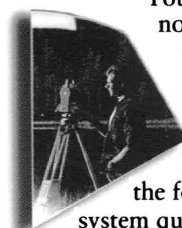
"... under no circumstances whatsoever, shall the Appraiser personally, be held liable for any loss or damage that may occur to any person or persons by reason of their reliance upon this Appraisal Report."

However, Mr. Brown suggested that the word "personally" may not be appropriate for a company or partnership. But, in this instance, it was effective because Mr. Burgoyne acted in his individual capacity.

Of the two disclaimers shown here, the wording in the A.D. Little disclaimer certainly seems to suit the land surveyor best. It does not attempt to limit the surveyor's liability to his client but does take issue with a third party relying on the surveyor's work. A prime example of this is when a person uses a location certificate that was prepared for a previous owner. This is the sort of thing that happened to A.D. Little. He prepared a geotechnical report on a property for the vendor, who in turn made it available to the purchaser. The purchaser relied on the report, sustained damages, and tried to sue A.D. Little. This disclaimer worked for A.D. Little and it may work for us. ■



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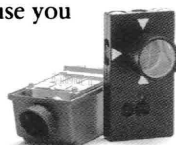
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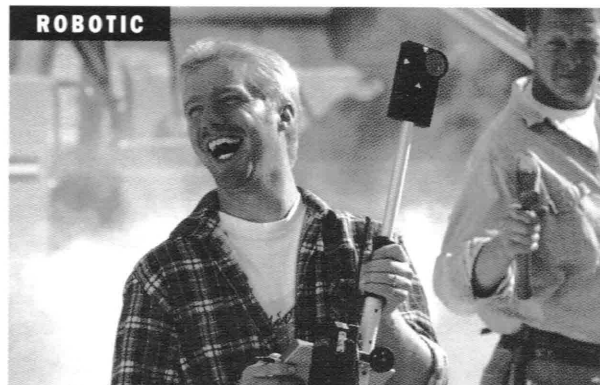


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Conventional Lines Revisited

by Alec McEwen, LL.M., Ph.D., NLS, CLS

Professor Norman Siebrasse's recent article "The Doctrine of Conventional Lines", published in *University of New Brunswick Law Journal*, vol. 44, offers a well-researched and provocative treatment of a topic in which many land surveyors, in the Atlantic Provinces especially, are greatly interested and may become involved.

Yet there are some aspects of the article that may mislead. These include: (1) the circumstances under which the location of a line that is agreed to by adjoining owners becomes the legal boundary separating their lands, (2) the use of a conventional line as a means of reducing surveying costs, (3) whether or not undiscoverability of the true boundary is a prerequisite for the creation of a conventional line.

Agreement

It is generally true that if two adjoining owners intend voluntarily and honestly to settle the boundary between their properties, the line to which they agree becomes a legal boundary that binds not only those owners but their successors in title. The boundary thereby established is known in Canada as a conventional line or conventional boundary. In England and the United States it is referred to as a boundary by agreement.

The owners' agreement may be expressed in either spoken or written words, or implied from conduct such as the construction and joint acceptance of a boundary fence. The agreement must not result from a collusive attempt to transfer

a portion of land from one owner to the other, for two reasons. First, the *Statute of Frauds* requires a transfer of land to be in writing. Second, even a written transfer may contravene planning legislation that prohibits the severing of land unless it receives official subdivision approval. In theory, a conventional line represents the true boundary, not a new boundary, but provided it has been established and agreed to in good faith, a conventional line will remain binding even if the true boundary is subsequently discovered to be in a different location.

Expense

There is not significant judicial support for the view that one of the aims of a conventional line is to reduce the cost of determining boundaries by avoiding expensive surveys. In *Davison v. Kinsman* (1853), 2 N.S.R. 1, Chief Justice Haliburton referred to the era of early settlement in Nova Scotia when surveyors were few and many settlers were too poor to afford their fees. Those remarks, however, were in the nature of historical background, and they had no bearing on the issue before the court. Indeed, the facts of that case show clearly that the four brothers from whom the plaintiff and defendant derived their titles were not only able to employ but did employ a surveyor to subdivide and mark the upland portion of the lands to be partitioned, and that the same surveyor also prepared a plan of the remaining marsh portion. In *A.G. Ont. v. Booth* (1923), 53 O.L.R. 374, Justice Middleton stated that "the true line could not be

located without expense which no one desired to incur". But that comment was irrelevant to the issue, because the boundary uncertainty arose from the faulty descriptions of two adjacent Crown timber licenses, and even if their common boundary could be re-established in its true location, it would not prevail against a conventional line that was created in good faith and had remained undisputed for 50 years.

Discoverability

Although dispute is not a prerequisite for the establishment of a conventional line by neighbouring owners, they must have genuine doubt or uncertainty, coupled with an honest intention to re-establish the boundary in its correct location. If, for example, one owner is fully aware that the agreed line departs from the true boundary it will not be a conventional line, because the agreement purports to transfer land and may therefore be contrary to conveyancing and planning legislation.

Even honest agreement, by itself, may not be enough to create a conventional line. As remarked by Justice Bliss in *Woodberry v. Gates* (1846), 3 N.S.R. 255, the agreement between owners should arise "not hastily, nor inadvertently, nor ignorantly, but with a full and formal purpose of putting an end to all doubts and disputes between them."

An agreement to establish a conventional line presupposes that the owners have made at least some prior effort to discover their com-

mon boundary, and that their ignorance of its location does not amount to casual disregard of the possibility of available evidence. This was precisely the point in the Ontario case of *Bea v. Robinson* (1977), 18 O.R. (2d) 12, where Judge Boland stated that "when parties do not know the location of the line because they have made no inquiries or other attempts to discover it, that is not an uncertain boundary that can be varied by agreement. In the case at bar ... it was possible to determine the true boundaries". Since a survey made in 1975 showed that nine years earlier the parties had constructed a fence approximately four feet west of the true boundary, the strong inference was that they built it not from genuine uncertainty but rather as a convenience, perhaps with the desire to avoid the cost of a survey at that time.

The Surveyor's Role

Although a conventional line can

provide a useful, extrajudicial procedure for settling disputes and removing uncertainties, its actual application should be treated carefully by owners and with an awareness of possible legal implications. A land surveyor can assist neighbouring owners in this process by, for example, pointing out conflicts in their respective deed descriptions, or by confirming the absence of original boundary monuments. If the owners are still satisfied that sufficient doubt or uncertainty exists, they may then instruct the surveyor to run the line in the location that they believe to be their common boundary. The surveyor's plan should contain a statement signed by the owners or their authorized agents, to the effect that the portrayed line represents the conventional line with which they are in agreement. The surveyor might also be well advised to add a disclaimer to the plan, stating that the line was established in accordance with the owners' instructions and

does not necessarily coincide with the true boundary.

It is most important that third parties receive notice of the existence of a conventional line agreement. One method would be for the two owners to execute cross quit claim deeds, incorporating or referring to the surveyor's plan, which are then recorded in the local registry office. A theoretical objection to this procedure is that a quit claim is redundant to the extent that the conventional line follows the true boundary, and that it represents possibly unlawful transfers of land to the extent that the line departs from that boundary. In most situations, however, the discrepancy between the conventional line and the true boundary will be in the form of a narrow strip of land, and it could be disregarded by a court in accordance with the legal maxim *de minimis non curat lex* (the law is not concerned with trifling matters). ■

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TO BID OR NOT TO BID ...

James P. Weidener, PSM

To bid or not to bid, that is the question. Whether 'tis nobler in the mind to suffer the slings and arrows of outrageously low fees, or to take arms against the practice, and by opposing, end bidding?

Apologies to Shakespeare! But the question is valid – if you are in business, you have to decide how you will compete. Will you engage in direct fee competition or will you take the moral highroad and pass those "opportunities"? Can you afford not to bid? Before I offer advice, there are some issues to consider.

If yours is a new business, you probably have to "out-bid" your competition to gain market share. Obviously you have little else to sell. And your costs will be low in any event. If you have other attributes at work – experience, specialized knowledge, better facilities, personal contacts, etc. – you will be better served by concentrating on those clients that value these attributes above price. Mature firms seldom have to engage in bidding if they have kept on the cutting edge.

Whatever your choice, you should understand that there is also an ethical consideration. One's professional approach is likely to change when price becomes the major criterion for selection on a project. In such a case, one tends to

represent his own best interests over those of the client. While it is possible to reduce price by hiring less qualified personnel or by acquiring less accurate equipment, for example, this would not be in the best interest of the client and will lead to increased cost in other areas.

You should also note that price is seldom the only factor. A principle in win-win negotiating is the realization that not everyone wants the same thing. Some people buy a Chevrolet because it offers economy, simplicity and availability. Some will buy a Mercedes because it offers quality, prestige and luxury. Your clients are driven by these same things – you have to align yourself with the proper clientele. And it is

far better to market clients than projects.

Additionally, many clients do not equate a higher price with better quality. Quality is a given. If you reduce your fees at the expense of quality, you reduce your ability to stay in business to continue to serve the client in the future.

Still further, we are often our own worst enemies. While the professional societies rail against bidding, their individual members often bid against each other and their sub-consultants. This gives a clear message to our clients that bidding is acceptable.

Finally, it must be said that qualification-based selection processes are not always fair. Individual biases of the selection committee are often evident and politics will always be with us. Many times a project is "wired" for a certain firm. One has to be selective to survive. If you compete in this arena, you must begin competition long before the RFP is issued.

In all, bidding is not a course I would recommend, although it can be profitable if you work at it. Rather, I suggest that you build up your expertise, quality, reliability and service. Concentrate on repeat and referral work. Be selective.

You can double your hit rate by cutting your proposals in half – declining on that half that you could easily predict

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losing anyway. In the end, however, if you do not intend to bid, you have to have the spine to refuse.

If you are going to bid, go after common work with low cost facilities and watch the scope of services like a hawk. Serve the client well, but do not overdo it. Provide exactly what your contracted for, not more. The next project does not depend on what you gave away on the last one, so there is no reason to do it.

If you do not want to bid, just say "no". That said, you still have to avoid "pseudo bidding" by avoiding common pitfalls, such as the following:

Never, ever enter into an hourly-to-an-upset contract unless the cap is high enough to cover any contingency. Such an arrangement gives every advantage to your client and you can only lose. Lump-sum and cost-plus fixed-fee contracts are much fairer.

Don't quote fees casually. Those, "Just give me an idea, I won't hold you to it" fees will always come back to haunt you. Discuss fee only when you have fully addressed the scope and after all the other items are discussed and resolved.

If you have to reduce fees in negotiation, do so only in exchange for another valuable concession. A lower fee should equate to reduced scope or a more favorable schedule, etc.

Be businesslike. If you go to the trouble of negotiating a contract, you should not ignore the terms therein. Do not provide services beyond the contracted scope without a supplemental agreement for additional fees. Demand that you be paid as scheduled. Do not hesitate to stop work.

Put everything exceptional in writing immediately.

In the end, the value you bring to your client is what determines your fee. Value is far different from price. If your involvement in a project is perceived by your client as valuable, your fee will not be an issue. Look to bring value to the table.

James P. Weidener, PSM, is past president of ACSM and is a principal in the firm of Weidener Surveying and Mapping in Florida, and has authored numerous technical papers and articles. ■

Annual Review is a First for FIG

Developing strong links with international agencies such as the United Nations, furthering the debate on liberalisation of trade in services, and contributing to the Bogor Declaration on Cadastral Reform are just some of the achievements made by the International Federation of Surveyors (FIG) in the last 12 months. These, together with a wide range of other activities, are highlighted in the first FIG *Annual Review*, published in November 1996.

The 12-page document sets out the aims and objectives of the 200,000-member organization and puts the year's work into context. It brings together reports from FIG president Professor Peter Dale, secretary-general Roy Swanston, congress director John Leonard and the chairmen of the eleven FIG technical commissions. The *Annual Review* not only outlines the achievements of the past 12 months but looks forward to 1997. It contains accounts for the

year-to-date and a list of key contacts.

The work of the organization since October 1996 includes:

- Contributing to discussions with UNESCO on the ISCED classification system used for educational programmes.
- Discussing a formal memorandum of understanding with UNCHS which will act as a framework for future joint activities.
- Participation in Habitat II in Istanbul in June.
- Production of a number of new publications dealing with liberalisation in trade services; land tenure, land management and land information systems; and CPD.
- Identifying locations for a permanent office for FIG.
- Debate by the FIG commissions of a wide range of surveying-related issues through seminars and conferences held at locations all over the world.

The publication of the *Annual Review* marks the end of the first year of the UK administration of FIG. Commenting on the launch, FIG president Peter Dale said: "Through this new publication we are able to give a flavour of what FIG has achieved over the past year and demonstrate that the surveying profession worldwide has both breadth and depth. We also aim to show that FIG commissions are actively responding to the challenge of leading the development and expansion of the profession in an evolving world market."

More information on the work of FIG is available from bureau director Jane Woolley. Tel: +44-171-334 3796. Fax: +44-171-334-3719. E-mail: figjw@rics.co.uk. ■



Canadian Council of Land Surveyors
Conseil Canadien des Arpenteurs-Géomètres



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● **BULLETIN** →

May 31, 1997

This Bulletin is an official document of the Canadian Council of Land Surveyors. Feel free to distribute it by whatever means appropriate to the members of the member associations of CCLS. Also available in a digital format.

Interim Actuarial Study Received

The Canadian Council of Land Surveyors' Executive Committee has received an interim actuarial report from the firm of Normandin Beaudry. The firm's principal, Andre Normandin, presented his findings at a joint meeting of the CCLS and AOLS (Association of Ontario Land Surveyors) executives on Sunday May 25.

The Canadian Council of Land Surveyors await the final report in the next two weeks which it will be considering at the upcoming annual general meeting in Prince Edward Island. It is expected that a number of recommendations will be acted upon there.

Clarification Letter from Jardine Insurance Services

Jardine Insurance Services Canada, the broker for the CCLS Professional Liability Insurance program, have written a letter to the member insureds, at the request of the CCLS Board of Directors, outlining that under the two-year renewal option, the minimum 75% retained premium has been waived in the second year.

This waiver, negotiated at the request of the CCLS Executive, means that insureds will not be financially penalized should they decide to make a change at the end of one year. This is particularly important if the actuarial study shows that a better program can be arranged for the member insureds by June 1, 1998.

88th Annual General Meeting of the Alberta Land Surveyors' Association

The 88th Annual General Meeting of the Alberta Land Surveyors' Association was held on April 16-19, 1997, at the Crown Plaza Hotel in Edmonton.

The meeting began with President Bill Dabbs hosting the visiting delegates at the Annual Presidents' Meeting. Participants included the presidents of a number of provincial associations, as well as representatives from CCLS, ACLS, CIG, the Western Federation of Professional Surveyors and the President from the Montana Association.

A Professional Development Day was held with a workshop on copyrights, entitled "*Intellectual Property Issues for Land Surveyors*", being presented. This was followed by an interesting seminar on "*Forensic Anthropology and Historical Issues*".

A number of motions were passed at the business meeting and are highlighted as follows:

- Bylaws Amendments
 - Term of Secretary/Treasurer extended from 2 to 3 years.
 - Article students are registered as Associate Members without application for additional fees.
- Examination and Training Regulation
 - Removed residency clause for article students.
- Various motions passed to amend the Manual of Standard Practice.
- Motion passed giving the Vision 2000 Committee direction to establish a broad-based steering committee to organize a self-funded workshop.

Also, as part of the business session, I, on behalf of CCLS, gave the NAFTA presentation. The presentation was well received, but resulted in only limited discussion from the membership.

The meeting was well attended with 189 members (153 active) registered, as well as many guests, exhibitors, students, and the like. Total attendance was in excess of 300.

Stan Longson was elected President and Alex Hittel as the new Vice-president. As always, the social events were excellent and Jane and I would like to thank Bill and Carol for their wonderful hospitality.

John Holmlund, ALS
Alberta Director

Copyright - It's Not Too Late

If you have not yet completed your copyright questionnaire, it is not too late.

The directors will be considering the results of the questionnaire and your comments at the Annual Meeting in Prince Edward Island (June 28-29).

The purpose of the questionnaire is to determine what types of effort CCLS will put into this and other related issues.

Final results will be published in a future issue of Bulletin.

The 44th Annual Meeting of the Association of Newfoundland Land Surveyors

The 44th Annual General Meeting of the Association of Newfoundland Land Surveyors was held in St. John's beginning on May 8th with an ice breaker and ending on May 10th with the President's Dinner and Dance. Representatives from most of the other provinces (all except Québec and PEI) attended the business and social events.

This year, Newfoundland is celebrating its 500th anniversary since discovery and the ladies (plus Barry George) thoroughly enjoyed themselves during the planned accompanying persons events, as well as on their own during free time. Most of you have probably heard of Thelma and Louise; well, we had Rita and Shirley, and wouldn't want it any other way - so glad you enjoyed yourselves and come back anytime. The entertainment at the various social functions was provided by well-known Newfoundland musicians and comedians much to the delight of guests and members alike.

As usual, I'm sure the business sessions proved to be somewhat entertaining to the "come from aways". The items that one would anticipate to be routine were not and those that were predicted to be controversial were received quite passively. A new proposed Quality Assurance Program was again rejected by the members, continuing to make Newfoundland one of the only provinces whose members' works are not critiqued by anyone, anywhere. The only other topic of significant interest was a proposed new annual fee schedule fashioned, to a degree, after the New Brunswick system that will be submitted to the membership for approval at our next AGM, or earlier if possible.

Life membership and the criteria for its recognition was discussed in detail and the percentage of our membership that will be in a position to achieve this status over the next decade is of an ever-growing concern. At present, life members do not pay annual fees and a few continue to practice full-time. It was the general consensus of opinion by those present that the fundamental prerequisite for the awarding of life membership should be mandatory retirement. The incoming Council will be looking at this over the next year to develop either a bylaw or a regulation to cover life membership in the future.

Our incoming president is John Berghuis, son of the late Peter Berghuis recipient of the Champlain Award in 1994. I'm sure John will represent our Association with distinction over the coming year and we all wish him well.

That about wraps it up for AGM '97. So until next time, we in Newfoundland wish all the other surveyors across the country all the best and hope you have your most successful year ever.

Max Sullivan, NLS
Newfoundland Director

Clarification

Traverse PC will continue to offer its Data Collection Module for free when TPC Handheld is purchased. The advertisement on page 4 of the Spring issue of *CCLS Focus* had said the offer expires December 31, 1996. ■