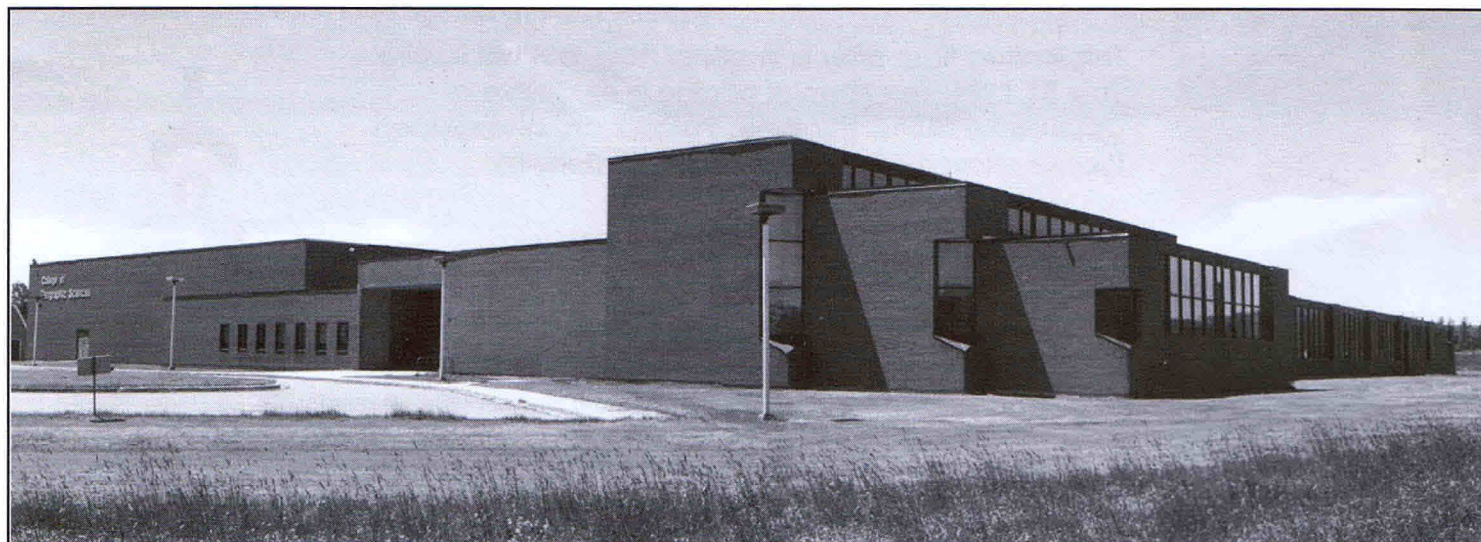


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Summer 1996

No. 152

College of Geographic Sciences 50th Anniversary



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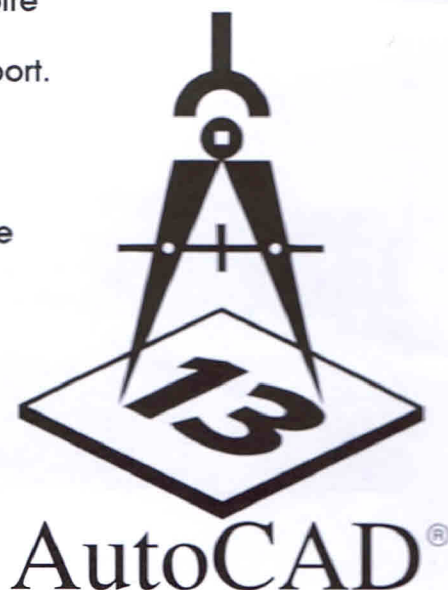
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THE NOVA SCOTIAN SURVEYOR

SUMMER 1996

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CONTENTS

PAGE

President's Report	<i>Philip M. Milo</i>	2
Executive Director's Report	<i>Robert A. Daniels</i>	4
SRD Manager's Report	<i>James D. Gunn</i>	5
From Major Church to COGS	<i>Philip M. Milo</i>	6
An Opportunity or Challenge? The NAFTA Agreement	<i>Robert R. Prescott</i> ..	13
From the Fieldbook		17
15 Years Atlantic Board	<i>Wolfgang Faig, James Doig, Angus Hamilton</i>	20
Safety Requirements and Training in Nova Scotia	<i>Robert A. Daniels</i> ..	26
The Development Officer and Latent Ownership	<i>James F. Doig</i>	28
Minutes of March 23, 1996 Special General Meeting		33

THE NOVA SCOTIAN SURVEYOR

Editor: Robert A. Daniels

Production: Kathy Alcorn
Norman Wade Company Limited

Circulation: Free of charge to ANSLS members. To non-members at a yearly rate of \$12.00 in Canada and the USA; \$16.00 for other countries, plus handling charges.

The Nova Scotian Surveyor is published three times a year. Address all enquiries to: Association of Nova Scotia Land Surveyors, 159 Portland Street, Suite 301, Dartmouth, Nova Scotia, B2Y 1H9 Canada. Tel: (902) 469-7962 Fax: (902) 469-7963 E-mail: ansls@atcon.com

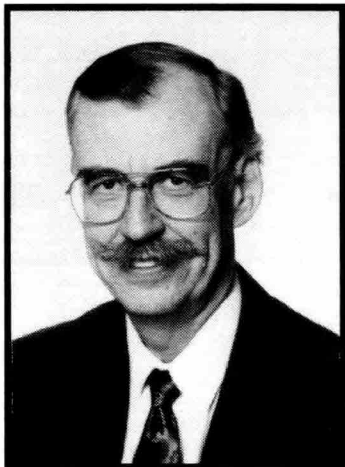
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PRESIDENT'S REPORT

Philip M. Milo, NSLS, CLS, B.Sc.



Greetings again. Here we are in mid-year, and I have been kept busy with meetings, travel, etc. I attended the Alberta annual general meeting in April. The most interesting new item there is a Limitations Act. This act covers professions in general and (by default) therefore covers surveyors. In effect, it means that liability is limited to 10 years. There is allowance for action within 2 years. It would therefore be possible for a mistake to be discovered almost 10 years after its commission and still have 2 years to bring action - for a total of 12 years. This is a vast improvement over our present situation. In my view, it is time for our association to get in touch with other professional bodies with a view to bringing in similar legislation in Nova Scotia.

A big concern in the western provinces and Ontario is title insurance. Again, this is something about which our association needs to be in touch with others

and probably should take preliminary action upon in the near future. We need to provide a valuable service and educate lenders, buyers, realtors and lawyers as to the value of our products.

Concern for new Engineering Acts is common across Canada. Many provinces have narrow definitions of surveying and are in various stages of dealing with present and anticipated changes necessary to their acts in order to fall in line with Engineering and Geoscience.

I am pleased to report that we have a team selected to deal with our negotiations with APENS this summer. I see no valid reason why our new definition cannot be presented to the House at the fall sitting. I look forward to useful and fruitful discussions with APENS.

The working group dealing with our new definition in relation to the proposed APENS act met on 13 June. APENS has a group ready to meet with us. By the time this issue is in your hands, I hope that our first meeting will have occurred. We are going forward with a positive outlook and hope that APENS will be approaching it in like manner.

I am finding that associations which include lay persons on Council are having positive results and, again, this is a topic about which we need to do some

research. I expect CCLS may become involved in providing background materials and possibly guidelines for such positions across Canada. It certainly is a trend and, I think, offers us an opportunity to raise public perception on how we manage our affairs.

A note on our convention. Our plans are nearing completion. We are tying in to the 50th anniversary of COGS. Errol Hebb is in charge of photos, etc, from past years and we are asking all who can to contribute identified photos for display. A trip with lunch, a technical session and a tour of COGS is planned for Friday, 18 October.

For those interested in purchasing 50th anniversary mementoes, these will be on sale during the convention and will include beer mugs, coffee mugs, key chains, shirts, etc.

A special package is being offered by the Pines for golf, both before and after the general meeting.

As most presidents find, my plans and goals for the year have been changed by circumstances. The focus is now on our new definition and the discussions with APENS. I hope this matter will be concluded by the time I write my next report. In the meantime, I hope I shall be able to attend a meeting in each zone before the convention. ■

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EXECUTIVE DIRECTOR'S REPORT

Robert A. Daniels, NSLS, CLS

Summer is finally here, I can now look out the office window and see occasional blue sky and the green trees. For those members who are working outside, this means mosquitoes and black flies. In my discussions with members, I am led to believe the work load continues to fluctuate. Hopefully, the positive economic reports will start to have an effect in this area before long.

There has been some activity with respect to the proposed Maritimes and Northeast Pipeline Project. This project is intended to ship natural gas from Sable Island to Boston. A number of survey consortiums responded to the request from West Coast Energy Inc. It appears all of the groups who responded met the qualifications and as a result they will have an opportunity to submit detailed proposals. This project will provide plenty of high level survey activity over the next few years and enable local surveyors to develop expertise in pipeline surveys.

There are several opportunities for our members to become involved in the development of subdivision regulations throughout the province. Earlier this year land surveyors served on committees to provide input into by-laws and regulations for the new Halifax Regional Municipality. At the present time, several of our members are participating in a similar process for the Cape Breton Regional Municipality. In the Municipality of Lunenburg, they are amending the regulations to deal with Stopping Site Distances. This is an ex-

cellent opportunity for our members in that area to provide input and influence government policy.

The Location Certificate regulations have been approved by government and are scheduled to come into effect on July 1, 1996. You should have received a new copy of the regulations by now. Keep in mind, there is no requirement to send the location certificates to the Survey Review Department at this time. There is a good chance there will be a motion presented at the annual meeting to have location certificates sent to SRD for inspection. A sticker and fee similar in nature to that which applies to certified plans may result.

The provincial government is reviewing the Planning Act. We have received a copy of the working paper and formed an ad-hoc committee consisting of Ken Robb, Harold Lively and David Roberts. This committee has reviewed the proposed changes and is preparing a submission to be sent to the NS Department of Municipal Affairs. The committee will request a meeting with representatives of the department to discuss the issues that are of interest to land surveyors. The government working paper has removed "Instrument of Subdivision". However, it is not clear if the minister will support this change. Our committee has several recommendations to present to the government on this issue.

The negotiations with APENS are ongoing, their new act has received

first reading by the government. We are forming a joint committee with the aim of reaching a mutually satisfactory agreement with respect to their act, our definition and the proposed Professional Joint Practice Board. It is hoped to have the issues resolved by the fall sitting of the legislature. Our proposed definition received endorsement by the Canadian Council of Land Surveyors at their annual meeting in May.

The provincial government is reviewing the outdated Arbitration Act. Their proposed Commercial Arbitration Act is in the early development stages. We have responded to the government, offering support for the concept, as it may provide a more cost and time effective manner to resolve differences of opinion on the location of boundaries. There is some concern that this type of legislation may not be workable as there may be a conflict between provincial jurisdiction and Section 96 of the British North America Act.

I have been appointed by the Executive to remain as the Nova Scotia Director to CCLS. This is usually a three year appointment. The executive decided to make the appointment annually. The position is available to any interested member, subject to approval by Council.

We have finally become part of the information highway. As of June 15, 1996 we are on the Internet. We can be reached at ansls@atcon.com. ■

SRD MANAGER'S REPORT

by Jim Gunn, NSLS, CLS



This spring we revised the SRD Manual of Administrative Procedures to reflect the many changes in the Survey Review Department since it began operation in 1990. Copies of the new manual will be distributed to the membership in the near future.

The audited year-end report indicates that SRD had an operating surplus last year of \$1,282. This is excellent considering that we managed to renew some computer equipment at the same time. Our accumulated deficit is now less than \$2,000 and we expect it to disappear altogether by the end of 1996. Despite a strong showing in the fourth quarter, survey activity in Nova Scotia was down about 3% last year. This downward trend has persisted throughout the first five months of 1996. Let's hope for a turn-around soon.

The goals we had set for SRD this year surpass all previous targets. Together with the usual business of tracking plans, maintaining accounts and doing the odd comprehensive review, we also hope to complete 250 systematic plan checks and 70 field inspections. So far, we are on track with our objectives.

We are often asked about the type of problems we encounter in our checking processes. Some of the more common things (in no particular order) include:

- Not submitting plans to SRD within the time requirements.
- Not showing the evidence that was used to determine the boundaries.
- Not applying the common law rules of evidence when faced with a dispute between original monumentation and plan and deed measurements.
- Not accepting found evidence and/or not explaining discrepancies with previous surveys.
- Not removing or resetting damaged, deteriorated or disturbed monuments.
- Creating ambiguity by leaving more than one marker per corner or showing a corner on the plan in a location other than the location of the found evidence.

- Not enough information on the key plan.
- Not showing civic numbers when they are available.
- Not describing the type or limitation of title within party walls.
- Not using guide posts when they are required.
- Not leaving cut boundaries in a workmanship like manner.

Although any of the above items will draw comments from SRD, we will require a revision to be made to any plan or survey that contains a misclosure, contains misinformation, is missing vital evidence or is of a substandard or unprofessional appearance. We will also take issue with any member who consistently refuses to submit plans and payments within the allowable time requirements or refuses to respond to correspondence. SRD will investigate this behaviour to see if it is typical of the member's business practices. If so, SRD may recommend that the member undergo some form of business management training. Having said all that, most members of our association are doing an excellent job. The standard of surveying in Nova Scotia has improved dramatically over the last few years.



From Major Church to COGS

by Philip M. Milo, NSLS, CLS, B.Sc.

Major James A.H. Church, DSO, MC, RE, PLS, was the dynamic force which created the College of Geographic Sciences (COGS).

During the Second World War, he taught as a civilian instructor at No. 6 Vocational Training School (Canadian Army), Halifax. It was located on the grounds of the Technical University of Nova Scotia.

"Dr. F.H. Sexton, who had been appointed Principal of the Technical University of Nova Scotia on its founding in 1907 and who would remain so until 1947, was also Director of Technical Training for the Maritime Provinces. Sexton was instrumental in establishing a course in land surveying for veterans under the Canadian Vocational Training Program. He had had some exposure to survey training because TUNS had offered short courses in the discipline since 1912 or even earlier. A syllabus of training was drawn up and approved by the three provinces. Church was put in charge of the new venture which came into being on 1 November, 1945 as the Provincial Land Survey Course." [Doig, p.21]

"The surveying class was moved to Lawrencetown in the spring of 1946. Its first, though temporary, location was the Agricultural

Building on the Exhibition grounds; subsequently the class took up quarters over Hankinson's Store on Commercial Street in Middleton. Arrangements at this time were such that a student could join the course at any time and stay up to a year. [Robertson]" [Doig, p.22]

The Royal Canadian Legion, Branch 112, Lawrencetown, received its charter in 1947. It purchased a property in Lawrencetown having a building on a lot of some 1.7 acres. At a meeting in 1948, space to accommodate Church's fledgling school was discussed. The Branch decided to add a shed to the back of the Legion Hall. The Major moved his class into the new facility in 1949.

Major Church was aware of the bequest of Dr. James B. Hall. The Hall trusts provided for money to construct a vocational school. Also, provision was made for ongoing funding to provide maintenance.

The Legion again stepped forward to provide space for a new school. In November 1955, Albert Smith, Secretary, was instructed to write to E.K. Ford, Director of Vocational Education, giving the Department of Education title to the Legion property. The only requirement in return

for the gift of building and land was provision in the new building for suitable accommodation for meetings of its members and for the Ladies' Auxiliary. As a result, a new school was built on the site of the Branch. Classes were held in the new facility from 1958 to 1975.

Classes continued until 31 December, 1948, under the Nova Scotia Department of Labour. Apparently there was then a pause, during which the responsibility for the course shifted to the Nova Scotia Department of Education. Church was appointed to the Division of Vocational Education, at a salary of \$2,100 per year, on 1 September, 1949.

"Classes started up again in rather modest quarters in the Legion Hall at Lawrencetown, where they would remain for the next nine years. Rent, heat, light and janitor service amounted to \$40 per month [Ford] in an extension which had been put on the rear of the building. This room (about 40' long and perhaps 15' wide) became the location for Church and his class. Total costs then, for a year's operation, were probably not much different than those three years later when the *Public Accounts of Nova Scotia 1951 - 52* listed the expenditures for the Land Survey School at \$3971.83,

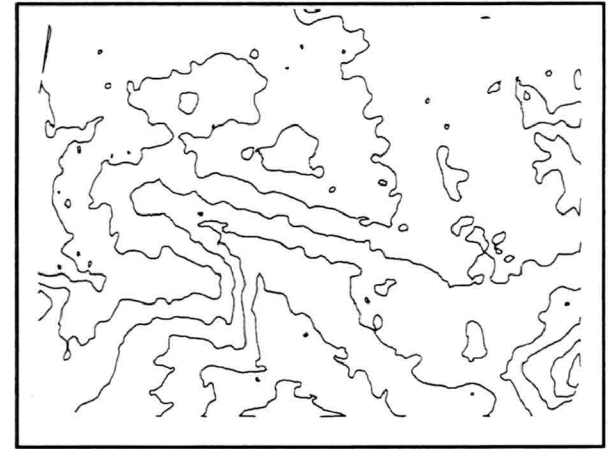


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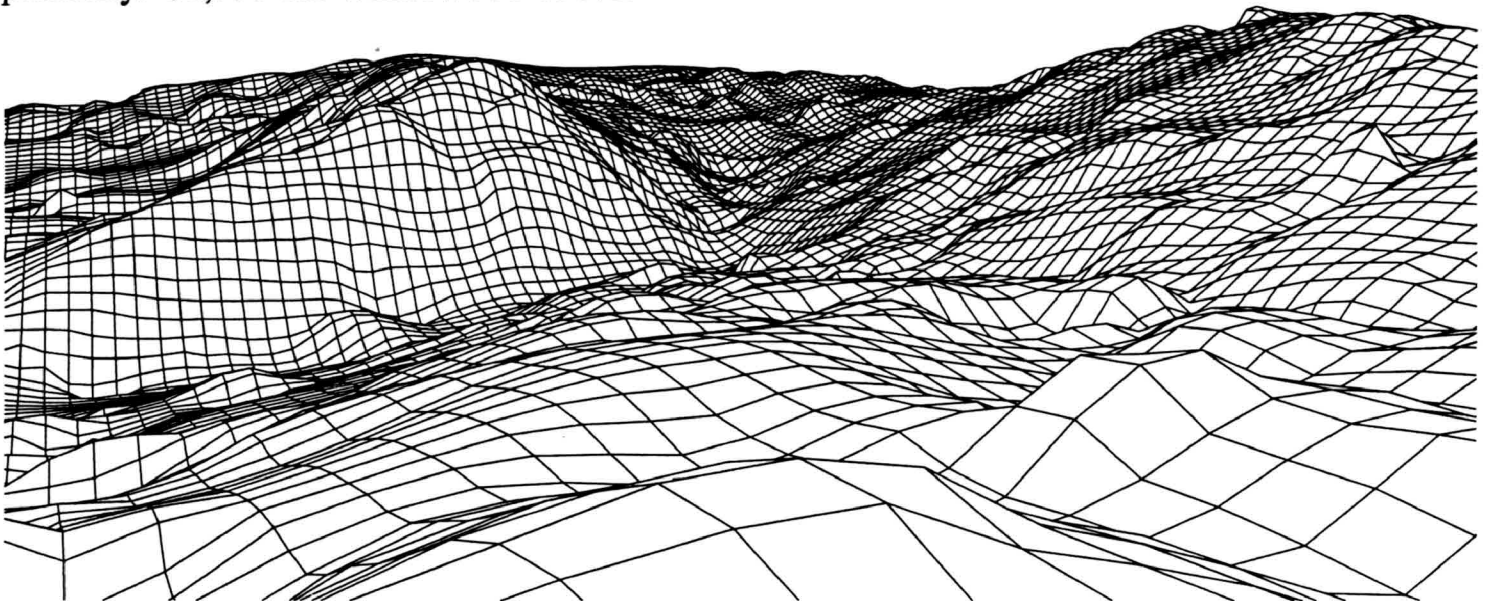
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which amount included the instructor's salary.

Whatever arrangements were made on initial occupancy of the new lodgings, they were likely along the lines of those which prevailed once the extra space had been added to serve as a classroom. At the east end of the room, Church had his desk and a couple of bookcases; along the south wall by the windows, mounted on saw-horses and grouped in pairs, were draughting boards for students who sat on wooden draughting stools; the wall opposite the windows held two large blackboards; at the west end near the porch, were racks and hangers for transits, tripods, range poles, chains, coats, boots and whatever else was needed from time to time. An oil stove provided heat. Near Church's desk was a table just large enough to hold a typewriter and next to the desk were a couple of wooden chairs to accommodate visitors. These chairs were also used by students when called up to have written assignments gone over, and shortcomings (both those of the assignment and those of the individual) enlarged upon. These oral critiques were always fun for all but the current sufferer, though everyone was aware that his own turn would be coming.

Visitors, prospective students and Church's cigarette ash were always given careful and respectful attention. Seated at his desk with a cigarette centred in his mouth, he would work for considerable periods of time without really smoking but rather just letting the

cigarette burn away at its own rate. At least that was how it seemed. He most often wore a sleeveless knitted sweater over which the ash hung and grew. As the ash got longer, students' attention became more rivetted upon it. When at last the ash fell on his sweater front, he would brush at it with one hand and continue to work unperturbed. Student attention was then re-directed to projects at hand. At the blackboard he often performed in somewhat the same fashion; he would speak from one side of his mouth with a cigarette gripped in the other; the cigarette would burn, and the attention paid his commentary was in inverse ratio to the length of the ash.

The single room served for instructor's office, lecture theatre, student work space, instrument storage, cloakroom, and common-room for students to discuss past and anticipated social events. Thus there was often quite a hubbub. Periodically Church would tell everyone to quiet down; one of his favourite expressions on such occasions was to liken the place to a parrot's cage: "all s__t and jabber." However, no such injunction for quiet was ever needed when a prospective member of the next year's class turned up on the scene. Church's manner was always short and brusque: there were no promises of high salaries and high living; at some point the enquirer would be told in a variety of colourful expressions that only a "damn fool" or a "blithering idiot" would ever consider surveying as a means to making a living. But that being

obviously the case as witnessed by the enquirer's presence, the means were at hand to help such an unfortunate make something of himself. The recipe was that the virtually self-confessed wretch would have to buckle down to some real work for a change.

Other visitors, depending on the reason for their call, could provide some light relief as well. One afternoon E.K. Ford arrived unannounced and, on stepping into the midst of things, offered the opinion that the classroom was more than a little untidy. Church never turned a hair; he promptly declared that the conditions that Ford saw were those in which the students would find themselves when they finished the course and went to work; he was just giving them some on-the-job training in preparation. The two of them stared at each other in silence for a moment or two and then mutually found a safer topic to discuss. Both men were of medium height, though very different in appearance and behaviour. Ford was probably ten years Church's junior in age. Church was stout, his voice was resonant, and he had a rough and tumble appearance, while Ford was trim, slightly built and soft-spoken, with the air of an old-fashioned clerk about him. Neither, however, had had much experience in backing off from a good argument and each probably recognized that fact in the other.

Church was certainly an awe-inspiring figure to a boy or young man; probably few, if any at all, had ever met a person quite like

dence is one of the principal reasons the topic was emphasized in the curriculum rather long after positional astronomy had been superceded by other methods of survey control.

The entrance standards for the course, and the curriculum which Church taught, considerably exceeded the formal requirements of the time for licensing land surveyors in the Atlantic provinces. His students were almost invariably successful with formal examinations set and marked by provincial survey examining boards. The period spent with Church in his class was counted as apprentice time. So on graduation, followed by successful completion of the examinations and usually some further practical experience, his students were able to operate their own private survey practices, and many did just that. Others sought employment in and remained with federal, provincial or municipal government agencies or with established private companies. His graduates were always in demand; they had little difficulty in finding jobs. In a letter to his Deputy Minister dated 5 August, 1954, Darrell Mills wrote:

I am aware that Mr. Church is considered by many to be a bit of an individualist, but I consider him to have been and to be a most effective instructor of Land Survey. I base my judgement principally on the record of his students in the examinations set by the Department of Lands and Forests, on the opinions of students and graduates, on the record of employment of the gradu-

ates, and on observation.

A class beginning in September and running through until the following August did pose one problem: the graduate was coming into the market just as the autumn field season was beginning to wind down. Consequently, in 1951, the commencement date for the next class was shifted to January 1952. The class would then run through until the following December. This cycle held until 1958, when the survey program was lengthened to two years; entry would then be in September of one year with graduation in the spring two years thence, with a summer of practical employment in survey separating the two academic years. The two-year program of study in surveying, developed in 1959 in its essentials, would stand for a little over 20 years as the academic standard for the licensing of land surveyors in Nova Scotia." [Doig, pp.23-27]

My thanks to James Doig, author of *A Life Worthwhile* for allowing reprinting of these portions of his biographical sketch of Major Church.

I do not propose to repeat the whole story, but rather to invite those graduates who have their own stories to send them in to the Association office for inclusion in future issues of "The Surveyor". While looking ahead - as the Major always did - it does no harm to look back over the last 50 years and recount some of the highlights of our experiences at what

is now the College of Geographic Sciences.

My own recollections as a student include an instance or two where I was the object of the Major's colourful comment. His "Mylo - here a minute" was sufficient to make me quake. I recall drawing the monthly star chart for the Halifax paper. The Major came along to inspect my rather inadequate draughting. He had just set fire to a carelessly loaded pipe of tobacco, the burning ends of which fell unheeded onto my drawing, resulting in several scorched spots and burnt holes. His reaction, "That looks like the devil - do it again." Oh well, it wasn't that good anyway!

COGS' present facilities opened in April of 1975. Over the years, the school had changed its colloquial name from "Major Church's School" to the "Survey School" and in 1986 became formally named the Nova Scotia College of Geographic Sciences. It now has the word 'Campus' added as it has become one campus of the Nova Scotia Community College system.

Many new courses and modern equipment have enabled the College to maintain the reputation begun by the Major. The present instructors' efforts to work with industry's requirements, new technology, and a hands-on approach to teaching permit COGS to continue to boast "The best employment record in the Maritimes".

Survey students are no longer the only students. In fact, they ceased



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him before. His manner, coupled with the fact that he was in complete charge of things - fully lord and master of the classroom - clearly made him a force to be reckoned with. There were no other classes and no other teachers or instructors to turn to; it manifestly behooved one to do precisely as one was told. Older students - and there were normally at least one or two in each class who were several years beyond the average age - were perhaps not as overwhelmed by his methods as were the younger ones, but they equally perceived that they were in circumstances that brooked no nonsense.

The older students began earlier than the younger ones to appreciate and admire Church's capacity with language. His reproofs could be (and usually were) blunt, earthy and descriptive. One the other hand, he would take plain statements of fact and show by precept and example (one of his favourite expressions) how such could be improved and made more arresting through the use of appropriate words and phrases. This sort of approach, he was fond of declaiming, "would lend an air of verisimilitude to an otherwise bald and unconvincing statement." Occasionally he would confide to his class, with a pleased look on his face at having so far escaped the consequences of his own maxim, that anyone over 60 should be buried whether he were dead or not.

His capacity in written work was no less accomplished than his speech. He would write for leng-

thy periods during which words flowed from his pen without, seemingly, the need for conscious thought. His letters were more circumspect, of course, than comments he might offer in the classroom or in conversation. Nevertheless, the secretaries in the Vocational Education Division always kept a sharp eye out for his correspondence. Memos which contained uncommon turns of phrase were shared around among the ladies before those to whom they were addressed ever saw them. One that got rather wider circulation than usual described a particular piece of equipment as "useless as mammary glands on a boar pig."

Church's training aims with the Vocational Education Division continued to be those which he had established earlier in discussions with Dr. Sexton:

(1) The development of surveyors well and truly grounded in the basics of their profession in contradistinction to the journeyman who might become an adept instrumentman but destined to remain such from lack of initiative and the faculty for critical analysis which result from a knowledge of the fundamentals of his craft.

(2) At no time was it expected that we would turn out experts in twelve short months, but we did hope to give the student such training, both theoretical and in the field, as would permit

him to learn from his own experience the limits of accuracy possible with the working tools of his profession, viz.: the level, compass and chain, engineer's transit reading to 1 minute of arc, and also such modifications of the standard of accuracy as might be permissible on any particular type of work.

(3) It was expected that the more thoughtful student so grounded would improve his technique, judgment and dependability, with experience largely proportionate to the class of company in which fortune might place him. [Church, 1948]

He maintained these aims during the time he was responsible for the survey and other training programs. His successors did the same, the necessary changes being made to adapt to new equipment and new techniques.

Church laid a heavy emphasis on positional astronomy - the determination of direction, latitude, and approximate longitude from solar and stellar observations. He asserted that "once the student has grasped the principles involved in the transition from plane to spherical trigonometry and acquired the techniques of making solar and stellar observations, his self reliance is enhanced to a remarkable degree." Other instructors found this to be the case too. In fact, the extent to which skills in field astronomy built self confi-

to be in the majority many years ago. However, the 50th Anniversary is certainly of particular interest to survey graduates, as it is their 50th. A trip to COGS, lunch, a technical session and a tour are planned in conjunction with the Annual Meeting of the Association of Nova Scotia Land Surveyors this October. One of the main reasons for booking our Annual Meeting at the Digby Pines Resort Hotel is to highlight the 50th Anniversary of the College. I invite all past graduates to send along pictures

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to make up a collage of photos. Please identify the persons and occasion of the photo. A permanent display could be made up and mounted in the College. If sufficient interest is expressed, a display of material specific to surveying could be mounted in the association office in Dartmouth.

Reference:

Doig, James F., A Life Worth-while: A Biographical Sketch. Published by Geographics Press, Lawrencetown, NS, 1990. ■

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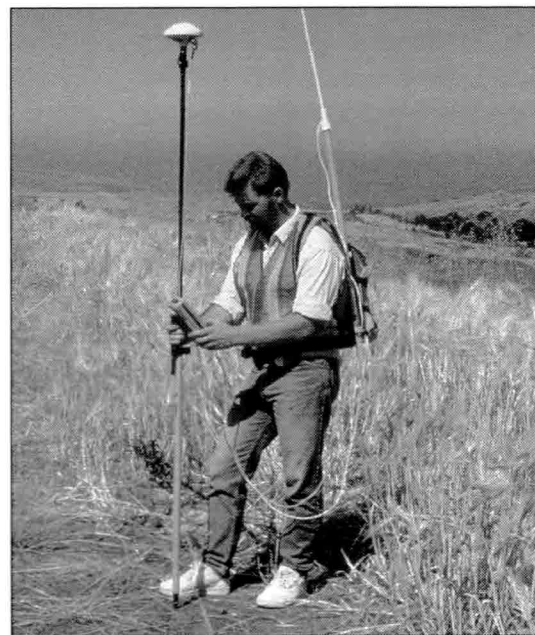
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An Opportunity or Challenge?

The NAFTA Agreement

by Robert R. Prescott, LS

As seen in "Metes and Bounds", a publication of the Texas Society of Professional Surveyors, April 1996

The acceptance of the North American Free Trade Agreement (NAFTA) by the respective governments of Canada, Mexico and United States provided for a standardized approach to business and commerce for all three countries. The intent of the agreement is to promote commerce between our countries and create a world class trading block that can help us compete in an increasingly globalized economy. Part of the agreement provided a way that professionals in each of the countries could mutually recognize each other. While the mechanism provided the framework, the professions will determine what will be acceptable as far as the scope of practice, requirements, and the development of common standards. The surveyors of Canada, Mexico and the United States will eventually face developing a Mutual Recognition Document (MRD) which will be the basis for recognizing a surveyor licensed in one country to practice in another country.

In order to develop the MRD, there must be some recognized organizations that promote, regulate and represent the profession. Both Canada and the United States have organizations that do these things. The foundation for

licensure is the same in both countries; that is, for the profession to provide protection to the public. Both Canada and the United States use the three areas of education, examination and experience in order to insure that an individual is minimally qualified to practice land surveying in a particular jurisdiction. Both the states and provinces regulate the profession through state or provincial statutes. However, the model used in each country is different.

At this point, we have not identified the organizations that represent the surveying profession in Mexico. The rest of this article will devote its attention to issues that surround the development of an agreement between Canada and the United States. We should recognize that many of the issues facing the reciprocal practice of surveying between the United States and Canada will also face us in our negotiations with Mexico.

The US model has two organizations that oversee the different areas required for insuring that an individual is minimally competent to practice. For education, the organization that oversees the accreditation of schools and col-

leges providing surveying education is the Accreditation Board for Engineering and Technology (ABET). This is a national board that reviews on a recurring basis the physical plant, equipment, staff qualifications, course content and associated programs of an educational institution providing this education. For examination, the organization that oversees the development of the examinations is the National Council of Examiners for Engineering and Surveying (NCEES). The organization represents and provides a common place for discussion of licensing issues for the state licensing boards. The state boards, through state statutes, provide the regulation, discipline, and oversight of both applicants applying for licensure and the licensed practitioner. The administration of the state boards is in the hands of the government. While licensed practitioners make up the board that oversees the profession, they have limited authority in the regulation of the profession beyond their review of applications and review of discipline cases. Both the national and state professional associations and societies provide for promotion of the profession and representation of the individuals that make up the profession. Association mem-

bership is not required in order to practice. The power of these organizations rests in the collective ability of their membership to influence the various bodies that regulate and oversee the profession. It should be recognized that neither ABET or NCEES are organizations of individuals; they represent other groups. The professional associations and societies are the only organizations that licensed practitioners have direct representation and direction over in the US.

The Canadian model is more streamlined. The organization that oversees accreditation of schools and colleges providing surveying education is the Canadian Council of Land Surveyors (CCLS). They do the same things that ABET does in the US. CCLS is a member organization made up of the provincial professional associations. CCLS can also provide membership services to the members of the provincial professional associations which those organizations may be prohibited by charter from providing to their members. The provincial professional associations are chartered by the government to provide all the services that the state licensing boards provide in the US. They also provide many of the services that the professional associations and societies provide in the US to their individual members. These associations are an independent extension of the provincial government that report on their activities to the provincial parliament through a lay member of their governing council. In order to be licensed and

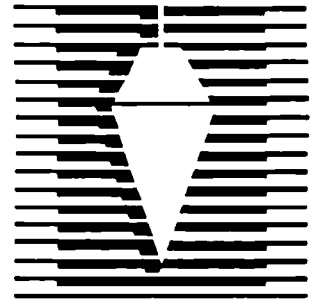
practice in a province, one must be a member of the provincial professional associations. There is no organization in Canada like NCEES. In Canada, the licensed practitioners have direct representation in the organizations that license and discipline individuals and promote and regulate their profession. The definition of surveying in the US varies widely from state to state. In some states it is closely aligned with the definition of engineering, while in others the emphasis is more on surveying and mapping. The Canadians take a very broad view of surveying and mapping, using the word "Geomatics". This describes the functions of surveying, mapping, charting, photogrammetry, GIS, LIS, hydrography and remote sensing as those activities of the surveying profession.

The requirements for licensure again vary widely in the US. In the area of education, the requirements will vary from no requirement for additional education beyond a high school diploma to the requirement of an accredited BS degree where the major is in surveying. All of the provincial associations require a BS degree in surveying in Canada. In the area of experience, the requirements for time and type of experience will again vary widely in the US. The general rule for acceptance of experience is that it be *experience acceptable to the board*. In Canada, gaining experience is called *Articling* (*read that as indenturing*) and is more structured in terms of what type of work exposure and supervision

is required of the person being articulated. The minimum amount of time that one can gain their experience in Canada is 18 months with the norm being 24 months. If one has not completed their experience within 4 years, their application is reviewed and the applicant can be questioned as to their seriousness about becoming licensed. The examination process in the US is probably more standardized than in Canada because of the influence of NCEES. NCEES prepares most of the examinations in the US, with each state doing only a small portion of the total examination. In Canada, the provincial associations are responsible for the total preparation of their examinations.

What are the issues that an agreement must address? Perhaps the foremost issue will be one of equal access to each others' markets. With the current state of affairs, it is far easier for the Canadians to presently enter our market and become licensed in the US. The requirement of citizenship will restrict Canadians from presently entering our markets in many jurisdictions. Once we have executed a NAFTA agreement, this restriction will no longer be valid. In theory, it is possible for a US citizen to currently enter the Canadian marketplace, but from a practical sense, few, if any, current US practitioners will have the time to spend articling to meet the requirements of the Canadian system. The Canadian surveyors are, in general, better educated and have stricter education requirements than the US sur-

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veyors. They have had these requirements for over a generation, thus most of the current Canadian surveyors can easily satisfy most, if not all, of the jurisdictional educational requirements in the US. Their broad approach and definition of surveying and mapping also makes them well prepared to provide services in our marketplace.

What kind of things should the agreement contain? Scope of practice will be hard to define from the US perspective because of the wide variance throughout the fifty states. For the Canadians, their standardized approach to their definition of *Geomatics* will be easy. The agreement will likely require that a surveyor's work that is challenged in a particular jurisdiction be dealt with in that jurisdiction (discipline). The Canadians have what could be called an enforced peer review process, whereby a certain number of projects that have been filed in the previous year in the registrars', clerks' or recorders' office are randomly subject to review in the following year. We have no such system. Canadian regulations require that surveyors who are directly providing services to the public (private practice) must carry error and omissions insurance. There are no such regulations in the US. What kind of impact will US surveyors have on the Canadian insurance system? Finally, there is a language issue. There are at least three languages that are used in both the US and Canada (English, French and Native Indian dialects). What will be the re-

quirement for someone coming from one jurisdiction to another where there is a language difference? The agreement will have to define how things like these will be agreed upon. Once we have developed and agreed on the MRD with Canada, then we have the task of getting the states and provinces to ratify the agreement.

The question of who will negotiate for the profession must be answered. In Canada, the organization that will be representing the profession will be CCLS. In the US, most likely both ABET and NCEES will have an interest in the negotiations, since both organizations are a part of the process in education, licensure and regulation of the profession. The question to be answered by surveyors is what organization speaks directly for the surveyor at the national level? It is not ABET or NCEES. All too often, our profession looks the other way when confronted by opportunity and challenge. Usually one does not come without the other. We have ignored issues in the past that have had the potential of presenting opportunity and challenge to the way we operate. Two instances are very apparent. The first is the Brooks Bill, with its promise of Quality Based Selection (QBS). We had to work over 12 years before we became a part of the Brooks Bill process. The second is GIS and GPS, where surveyors will probably end up with a minor role in each because we have not acted when the opportunity called upon us.

Part of our problem is our own

unwillingness to take a larger view of our profession beyond the current way we practice. Have you asked yourself where you want to be in 5 or 10 years and how you are going to get there? If we do not step forward and take a leadership role in the definition of our profession, then someone else who may have little or no interest in surveying and surveyors may define our destiny for us and we may not like the results. Someone once said it is rare when someone wants to do something *for* us, most of the time they want to do something *to* us.

We cannot control the actions of organizations that we have no input into (ABET and NCEES), but we can demand that the leaders of our state and national organizations take a leadership position and make ourselves heard on this issue. To do otherwise allows others to define what the surveying profession will be in the future.

Bob Prescott is New York's representative to the NSPS Board of Governors where he serves as Chair of the Board of Governors. ■



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ate for Council, please prepare a short biography accompanied by a photo (if possible), and contact your zone Councillor with the information.

ANNOUNCEMENT

This is to advise our members that David Steeves, CLS, NSLS, P.Eng., has been appointed as the Regional Manager, Northern Region, of the Land Information Services Division, Department of Municipal Affairs. Mr. Steeves is responsible for the Land Information Centre in New Glasgow as well as the Registry Offices in Pictou, Truro and Amherst.

David has 23 years experience in geomatics in both government and private industry and is a Past President of this association. We congratulate David on his new position and look forward to working closely with him in the future.

RETIREMENTS

On behalf of the members of ANSLs, we would like to congratulate Gerald Pottier and Wayne Hardy on the occasion of their retirement from the NS Department of Natural Resources. They should be able to enjoy a more relaxed lifestyle after many years of fine service to the provincial government and this association. ■

!!!

This year Councillors in Zones 1, 4, 5 and 6 will be retiring. Anyone who wishes to let their name stand as a candid

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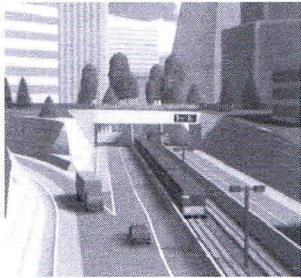
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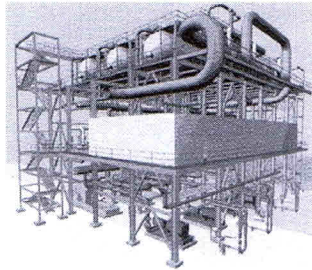
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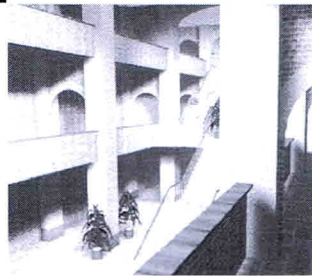
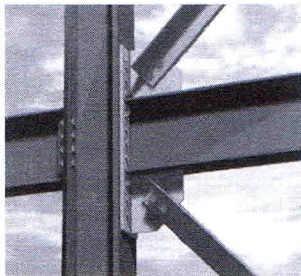
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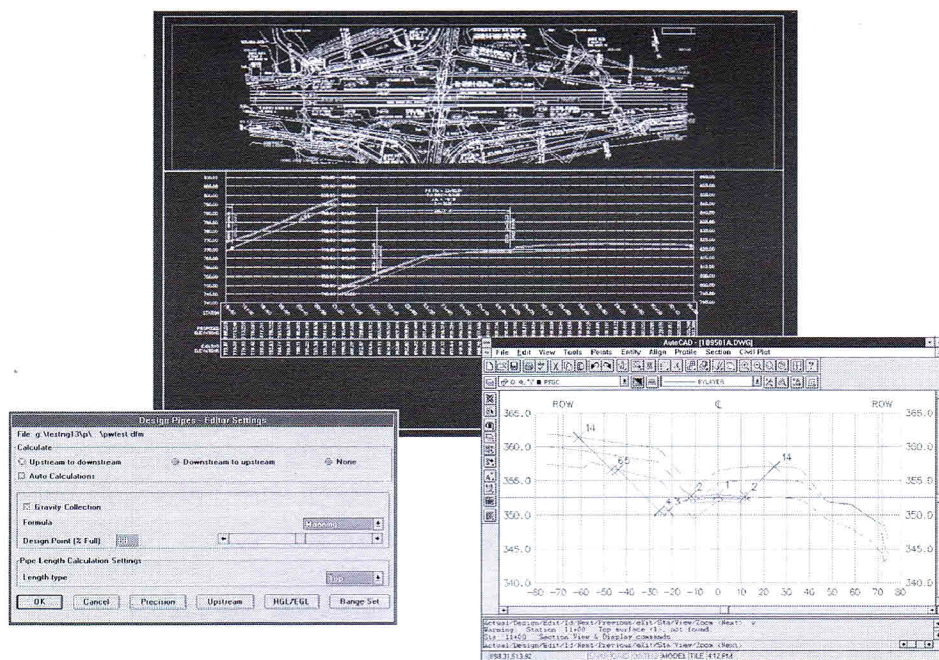
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15 Years Atlantic Board

The Atlantic Provinces Board of Examiners for Land Surveyors: Fifteen Years in Operation

by Wolfgang Faig, James Doig, Angus Hamilton (1994)

Introduction and Overview

The Atlantic Provinces Board of Examiners for Land Surveyors (APBELS) was established by the four associations of land surveyors in the Atlantic Provinces to ensure that all applicants for commissions have a satisfactory academic level of achievement.

Getting a certificate from the Atlantic Board is the first step for anyone wishing to qualify for a commission as a land surveyor in any one of the four Atlantic Provinces: Newfoundland, Nova Scotia, New Brunswick and Prince Edward Island. To receive this certificate, applicants must either pass examinations in all the subjects of the Board's syllabus or show that they have passed equivalent examinations at an accredited institution.

The Board had its first formal meeting in 1978 and, after 15 years, it is alive and well. In this brief report, the steps in getting the Board established are described, its working procedures are outlined, and the evolution of the syllabus is presented.

The Board is composed of three representatives from each of the four Atlantic Provinces and two faculty members from the Depart-

ment of Geodesy and Geomatics Engineering (formerly the Department of Surveying Engineering) at the University of New Brunswick. One of the provincial representatives is a member of that province's board of examiners, one is directly appointed by the Council of the Association, and the third representative is a land surveyor appointed by the provincial government on recommendation of Council.

The APBELS certificate enables a candidate to take up articling in any of the member associations. The only additional academic qualification required is an examination on the statute law of the province in which a commission is sought.

Genesis: The Establishment of the Board

In 1974 the Association of New Brunswick Land Surveyors (ANBLS) established an Education Implementation Committee whose members were Walter Murphy, Douglas Morgan and Edward Allen, with John McLaughlin as Chairman. This committee contacted education committees in the other Atlantic Provinces and, informally, agreed to request that the Land Registration and Informational Service

(LRIS) commission a study on the training and qualifications of land surveyors and survey technicians and technologists in Atlantic Canada.

Willis Roberts, Executive Director, LRIS, asked Dr. R. J. Love, M.A., D.Ed., LL.D., to conduct such a study, and on May 30, 1975, Dr. Love submitted his report. In his report Dr. Love concluded that an Atlantic Federation of Surveyors, Technicians and Technologists would be the most effective way of meeting the needs of the region [Love, 1975]. Recognizing the problems inherent in such a proposal, however, he said:

Much care and thought must be given to changes in local organization. Local and provincial interests must be considered and the professional pride of membership in the provincial organizations which now exist must be maintained.

He identified two possible types of organization:

A new organization of Atlantic survey personnel can be organized with provincial and regional chapters or groups taking the place of the present associations.

Memberships would be in the Atlantic association.

or

The present associations can be kept and federated for purposes of setting standards and examinations and the granting of certification. This is the type of organization which appears to have a good chance of success.

At the end of his report, almost as an afterthought, Dr. Love added an alternative proposal for the structure:

It would be possible for each Association to agree by resolution to form a Joint Examining Board and avoid the formality of forming the Atlantic Association. This might be feasible as an intermediate step, but it is not recommended.

He went on to suggest the composition of a Board of Examiners for Surveyors:

(a) The Head of the Surveying Engineering Department of the University of New Brunswick, or his designate,

(b) A member of the Council from each of the Provinces,

(c) Two representatives of government chosen in rotation from New Brunswick, Prince Edward Island, Nova Scotia, and Newfoundland.

The report listed the proposed duties of the Board:

(a) name examiners for each subject,

(b) assess fees for examinations,

(c) set the time, place and nature of the examinations,

(d) recommend to the Council those who are to be certified,

(e) keep accurate records and provide transcripts to students and authorized persons when required

(f) set the honoraria for setting and marking examinations.

Copies of the report were distributed to all ANBLS members prior to the annual meeting in January, 1976, and, at the meeting, Dr. Love presented the highlights of the report. The meeting approved a resolution:

Be it resolved that the members of the Association of New Brunswick Land Surveyors adopt the report for the 'Proposals for Training and Qualification of Land Surveyors, Survey Technicians and Technologists in Atlantic Canada' prepared by Dr. R. J. Love; and that the said report be adopted in principle, only.

At the same meeting Walter Murphy was authorized to continue as representative on the Joint Committee on Survey Admission Standards in the Atlantic Provinces.

Thereafter it appears that things moved rather slowly. The minutes of the ANBLS summer business meeting on August 4th and 5th, 1977, record that:

The proposed new educational requirements, as recommended

by the Atlantic Provinces joint education committee, were discussed in some detail. While there was general support for the committee's recommendations, concern was expressed for the need to have a strong technicians organization in place and the difficulty in providing meaningful professional calibre employment for university graduates.

Needless to say, the Board did not evolve from a federation of the associations as recommended by Dr. Love but it did evolve as a joint venture of the associations. Its membership differs only slightly from Dr. Love's suggestion, and its duties are virtually identical with those that he proposed.

At the ANBLS annual meeting in January, 1978, an Education by-law was presented and adopted. At the same meeting an Atlantic Provinces Board of Examiners for Land Surveyors by-law was presented and adopted.

The first meeting of the new Board was held on July 10, 1978. At this point, ANBLS was the only association whose members were subject to the Board's syllabus and examinations.

Acceptance did not come as smoothly in Nova Scotia as it had in New Brunswick. Members of the Association of Nova Scotia Land Surveyors (ANSLS) voted in favor of accepting the APBELS standards and system, but the new regulations that would give effect to these arrangements required approval of Cabinet. Consequently there was a delay while

matters came under further scrutiny at this level. In the event, a schedule of credits for graduates of the surveying program at the Nova Scotia Land Survey Institute in Lawrencetown was established, and the ANSLs fully accepted APBELS structure as of July 1, 1980.

Acceptance by the Association of Newfoundland Surveyors (ANLS) came three months later, on September 30, 1980.

The Association of Prince Edward Island Land Surveyors (APEILS) maintained observer status for several years beyond this point. For all practical purposes, however, candidates from PEI were already working at the level of the APBELS syllabus. This was because arrangements had been in place for several years whereby PEI candidates followed the syllabus of the New Brunswick Board, with minor alterations being made as necessary. Formal acceptance of the APBELS structure by the APEILS came on July 1, 1986.

The 'Modus Operandi' of the Board

The Board meets at least once a year, on a rotational cycle, at the same time and place as the annual meeting of one of the land surveyors' associations. For a quorum there must be at least one member present from each province. Interim meetings are held from time to time by teleconferencing.

The chair of the Board is appointed for a three year term and

rotates among the members from the four provincial associations. The chairs to date are listed in the Appendix.

The day-to-day operations of the Board are handled by the registrar who also acts as secretary and treasurer. The registrar looks after registrations and evaluation of credits; communicates with candidates, Board members, and examiners; keeps the candidates' files; organizes examinations; and prepares the certificates for signature by the chair. Dr. Wolfgang Faig has been registrar since the Board was established.

The Board has approved four regional institutions, each of which is responsible for certain specific examinations; namely, the Cabot Institute of Applied Arts and Technology (formerly the College of Trades and Technology) in St. John's, NF; the College of Geographic Sciences (COGS) (formerly the Nova Scotia Land Survey Institute) in Lawrencetown, NS; the University of Prince Edward Island (UPEI) in Charlottetown, PEI; and the University of New Brunswick (UNB) in Fredericton, NB.

Examinations are scheduled for the first week in February and the first week in September. Any Board member is entitled to supervise the exams, which enables the candidates to write in their home provinces.

The Board monitors finances and makes recommendations to the constituent associations that support it financially through a small

annual levy from each member. This levy started at two dollars and increased to three in 1992.

The Syllabus and the Candidates

The initial syllabus followed very closely the format and content of the Canada Lands Surveyor (CLS) syllabus. However, the syllabus and the references have had to be revised periodically and they now differ significantly from the CLS syllabus. The first notable difference was the introduction of Municipal Engineering in 1982 at the request of the associations.

In 1990 a major shift in the requirements for the CLS commission called for a new CLS syllabus. The CLS Board of Examiners made presentations to APBELS with a view to streamlining the path from provincial land surveyor to Canada Lands Surveyor; the rationale being that there was an increasing need for the latter, especially with native land claims and increased coastal and off-shore activities. The CLS Board envisioned that the regional boards would adopt schedules I and II of the 1990 CLS syllabus; this would mean that a provincial land surveyor would only need to complete the five CLS examinations of schedule III (Government Structures, Acts and Regulations, Property Rights Systems, Native Government Issues, and Off-Shore Management) to obtain a CLS commission. After long discussions, APBELS retained its four-part syllabus.

Part I, which essentially had been dropped by the CLS Board, places the minimum prerequisite at the high school diploma level, rather than at the technician/technologist level. Although it is very difficult and time consuming to obtain the APBELS certificate without formal post-secondary education, there are a few success stories of candidates that started well below the technician level. As it is specified in some of the provincial acts, it was decided to keep an avenue open for applicants without post-secondary credits. All the other examinations from CLS schedules I and II are incorporated into parts II, III, and IV of the Board's 1990 syllabus. It should be noted, however, that two are among the electives; these two are clearly marked in the syllabus so that candidates with CLS ambitions can select them. The current syllabus is listed in the Appendix.

Furthermore, the 1990 APBELS syllabus retained its examinations specific to the region in Municipal Engineering and Land Economy. Therefore the holder of the APBELS certificate who has taken the part III electives, Oceanography and Hydrographic Surveying, and Cartography, only needs the previously mentioned five examinations for a CLS commission.

In the spirit of reciprocity within Canada, APBELS accepts candidates with surveying degrees from institutions accredited by CCLS without a line-by-line evaluation of courses. Credits for the appropriate land surveying programs

at the Cabot Institute, COGS, and courses at UNB which have not led to a degree are well defined.

While a university degree, such as the B.Sc.E. in Surveying Engineering (Cadastral Surveying option) from UNB fulfills all APBELS requirements, many candidates with a diploma from the Cabot Institute or COGS choose to enroll as non-degree students at UNB. This enables them to take courses that will meet the Board's requirements and it also gives them an opportunity to earn a certificate in UNB's Cadastral Surveying Certificate program.

Any candidate whose file has been dormant for more than three years is contacted and asked about future intentions. Unless there is a demonstrable continuing interest, the file will be closed. If a candidate cannot be contacted, the file remains open for another three years.

As evident from the figures provided in the Appendix, during the Board's existence, almost half of the registered candidates have obtained their certificates (98 out of 207), while one fifth of the files (42) have been closed due to inactivity.

Reflection

In the pursuit of a high national standard and recognition for the land surveying profession, this first regional board has pioneered a common and cooperative approach to the evaluation of educational background and specific

knowledge without interfering with the provincial jurisdictions and rights of its member associations.

APBELS has proven over the years that cooperation within the region can be very successful and cost-effective. For a modest investment of money and Board members' time, Atlantic Canada has achieved a highly respected common entrance standard for the land surveying profession. This is a proud achievement and a credit to all those who have contributed as Board members, as examiners, and as members of the four associations.

While apprehension and obstacles had to be overcome and compromises had to be made, the accomplishment of APBELS is manifested in the many professionals who successfully completed its program, received their certificate, and now play a prominent role in the land surveying community in Atlantic Canada.

Reference

Love, R. J., *Proposals for Training and Qualifications of Land Surveyors, Survey Technicians and Technologists in Atlantic Canada*. A study conducted for the Land Registration and Information Service, Council of Maritime Premiers, 1975. ■

15 Years Atlantic Board - APPENDIX**Syllabus: effective July 1, 1990****Part I**

- 1 Basic mathematics
- 2 Statistics
- 3 Physics
- 4 Computer programming
- 5 Introduction to earth sciences
- 6 Plane surveying
- 7 Basic photogrammetry
- 8 Written and graphic communications

Part II

- 1 Advanced mathematics
- 2 Least-squares estimation and data analysis
- 3 Data base management systems
- 4 Geodetic positioning
- 5 Applied photogrammetry and remote sensing
- 6 Advanced surveying and survey astronomy
- 7 Survey law
- 8 Cadastral studies
- 9 Land economy
- 10 Land use planning, environmental management and municipal engineering
- 11 Business: law, administration and economics

Part III

(Candidate has to take two of the following)

- 1 Geodetic networks and gravity field
- 2 Engineering and mining surveying
- 3 Oceanography and hydrographic surveying
- 4 Cartography

Part IV

- 1 Survey systems
- 2 The surveying profession

Note: CLS candidates need to take III/3 and III/4**Examinations administered by the respective provincial boards:**

Regulatory processes (or equivalent)
Project
Oral

Chairs

1 July 1978	10 July 1978 (Interim)	Angus Hamilton	UNB
10 July 1978	27 October 1983	William McLellan	New Brunswick
27 October 1983	15 November 1986	James Doig	Nova Scotia
15 November 1986	18 January 1990	Max Batten	Newfoundland
18 January 1990	12 November 1992	Ed Power	Prince Edward Island
12 November 1992		Charline Collette-Boissonnault	New Brunswick

Key Dates

30 May 1975	Report on the Proposal for the Training and Qualifications of Land Surveyors, Survey Technicians and Technologists submitted to the Land Registration and Information Service.
10 July 1978	APBELS established; W. Faig appointed Registrar; syllabus approved; full ANBLS and partial ANSLs recognition.
November 1978	1st registered candidate.

January 1980	Credits for NSLSI graduates approved.
1 July 1980	Full recognition by ANSLS.
30 September 1980	Full recognition by ANLS.
15 November 1980	Quorum established: minimum representation is one per province.
December 1980	10th registered candidate.
March 1981	1st certificate issued (D. F. Woolnough, NS).
1 July 1982	Municipal engineering included in syllabus.
September 1982	50th registered candidate.
November 1982	APBELS representation on CCLS examination committee.
May 1983	10th certificate issued.
October 1983	Credits for Cabot Institute graduates approved. Three year rotation for Chair approved.
1 July 1986	Full recognition by APEILS.
February 1987	Examiner pool established at Cabot Institute, COGS, UNB, UPEI.
April 1987	100th registered candidate.
June 1987	Policy for closing files approved.
April 1988	APBELS fully accepts graduates from CCLS accredited programs.
August 1988	50th certificate issued.
March 1989	150th registered candidate.
January 1990	Panels installed for Syllabus Review and Continuing Education.
1 July 1990	New syllabus approved (in response to new CLS Syllabus).
December 1993	200th registered candidate.

Statistical Data (as of 31 December, 1994)

Province	Registrations	Certificates	Files Closed	Active
NB	85 (6 F)	46 (3 F)	17 (2 F)	22 (1 F)
NF	34	13	7	13
NS	81 (3 F)	34	17 (2 F)	30 (1 F)
PEI	7	4	1	2
		1*		
TOTALS	207 (9 F)	98 (3 F)	42 (4 F)	67 (2 F)

(6 F): Six of the candidates were female.

* Originally from Nova Scotia.

SAFETY REQUIREMENTS AND TRAINING IN NOVA SCOTIA

by Robert A. Daniels, NSLS, CLS

Effective January 1, 1996 all contractors or suppliers of service who bid on government-funded construction projects must have a Certificate of Recognition (COR) from the Nova Scotia Construction Safety Association (NSCSA) in order to qualify for tendering purposes. At the present time, there is no formal requirement for third party sub-contractors to be certified. However, many of the large contractors and construction companies are now making it a requirement for their sub-contractors to have a COR. It may be in your best interest to become certified by the NSCSA in the event that it becomes a requirement to work for some of your clients. It is anticipated that more companies will make safety certification mandatory for their contractors.

There are two classifications of companies to be considered in order to receive a COR.

1. Owner/Operator: This consists of a single land surveyor and one assistant. This type of operation can receive a COR by completing the following:

- Taking two NSCSA courses
 - Owner/Operator Certification Course
 - Interactive Safety Orientation (Owner/Operator Orientation)
- An owner/operator must en-

sure that they and their employees have received the appropriate training to meet the obligations outlined by the Occupational Health and Safety Act. Depending on the type of work and the environment of the work, training may include, but not be limited to:

- First Aid
- WHMIS Generic
- Confined Space Awareness
- Any other that may pertain to the work being done

- Conducting an internal safety audit and submitting the results to NSCSA.

2. Larger Companies: This type of organization can receive a COR by completing the following:

- Taking four NSCSA courses
 - Principles of Loss Control (Safety Basics)
 - Leadership for Safety Excellence
 - Principles of Loss Control Audit
 - Safety Orientation

- The owner or management of larger companies must ensure that they and their employees have received the appropriate training to meet the obligations outlined by the Occupational Health and Safety Act. Depending on the type of work and the environment

of the work, training may include, but not be limited to:

- First Aid
- WHMIS Generic
- Temporary Workplace Signing
- Confined Space Awareness
- Any other that may pertain to the work being done
- Passing an annual safety audit carried out by NSCSA.

If the requirement for a Certificate of Recognition by NSCSA becomes necessary to work on projects, then land surveyors will have to take the proper training. Due to the cost of the courses, it may be beneficial for ANSLs to become an associate member of NSCSA. This will cost \$2000/yr, but will result in significant savings to members taking the courses. At the present time, the cost for courses for non-members is \$250 (per course/per person/per day). With ANSLs as an associate member, the cost would be \$50 (per course/per person/per day).

For further information contact:

NS Construction Safety Assn.
5450 Cornwallis Street
Halifax NS B3K 5Y2
Tel: 1-800-972-3888 or
902-423-0066
Fax: 902-423-7522

The government of Nova Scotia is amending the Occupational Health and Safety Act. Those who attended the presentation given by department safety officers at the zone meetings last year will recall that there are certain safety requirements under the act which have to be met. These include: someone with first aid training at each job site; a first aid kit at each job site; proper protective equipment, ie. hard hat, steel toed boots, safety glasses, etc. Proper training in special instances may also be required to ensure you are not in violation of the Occupational Health and Safety Act. This may be training related to:

- cutting trees near power lines
- working on public roads

- working in confined areas
- working in elevated or unstable areas.

It is the responsibility of the employer and employee to ensure they have proper training for their own protection. You should obtain a copy of the Occupational Health and Safety Act to ensure you are in compliance with the requirements. ■



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The Development Officer and Latent Ownership

by James F. Doig

latent, adj., lying hidden though in existence.

The Penguin Canadian Dictionary

latent, adj., potential but not obvious or explicit.

Collins English Dictionary

In 1994 two applications to consolidate lots within the City of Dartmouth under city subdivision regulations, made it clear that the development officer was correct in refusing an application where he had reason to believe there might be an owner of a portion of the land who had not joined in the application for approval respecting it.

In one instance, the city surveyor had concluded that infilling had occurred along portions of the water boundary of lands to be consolidated, and that the Crown was the owner of the infilled areas. The applicants' surveyor, on the contrary, held that no infilling had taken place. In the other instance, the city surveyor and the surveyor for the applicant found themselves unable to agree on the location of the street line of the lots to be consolidated. In both cases, the development officer decided there was a potential owner who had not joined in the application for lot consolidation.

The Shoreline

In 1993 the City of Dartmouth wished to convey two parcels of land surplus to civic requirements,

which lay west of a street line and east of two abutting lots, to the adjacent lot owners. The City also wanted to consolidate the parcels with the existing lots, each of which was bordered to the west by Lake Charles.

The lot owners engaged a surveyor (K.W. Robb) to prepare a plan of survey to show the existing lots and the parcel of surplus land that would be consolidated with each. The plan was circulated to various City departments as part of the normal procedure for subdivision approval.

After examining the plan, the City surveyor (J.C. MacInnis) reported that portions of Lake Charles bordering each lot had been infilled, as evidenced by 1964 aerial photographs of the shoreline. (The infilling appeared to amount to about 600 sq. ft. on one lot and about 700 sq. ft. on the other; a wharf had been constructed in one instance and a boathouse in the other.)

The City surveyor further advised that the infilled portions of the lots could not, therefore, be included in the current subdivision-consolidation process. Because of the provi-

sions of the Water Act, each infilled portion would have to be excluded from its abutting lot and identified as lands of Her Majesty the Queen.

This situation was made known to the lot owners at some point between mid-December 1993 and mid-January 1994. Their surveyor did not agree with the City's position relating to infilled lands and their ownership, and so advised the City.

On 28 Feb 1994 the Development Officer formally stated the City's position:

Part 7(a) of the Subdivision Regulations reads as follows:

A final plan of subdivision submitted for the approval of the Development Officer shall be accompanied by:

a) a request in writing of the owner or owners of the land shown on such final plan...

Since the infilled lands belong to Her Majesty the Queen, I cannot approve the subdivision request pursuant to Part 7(a).

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The Development Officer went on to outline the three options which had earlier been communicated to the applicants for resolving this problem:

1. Obtain a letter from the Crown that the Crown has no interest in the infilled portion of the lake.
2. Apply for a grant and upon receipt of the grant, apply to have the consolidated lot approved.
3. Show the infilled area as lands of HMQ and apply for approval to consolidate the original lots with the surplus portions of the street.

The lot owners rejected these options and appealed the Development Officer's decision to the Nova Scotia Utility and Review Board.

At the Board's hearing in June 1994,¹ both parties were given the opportunity to present evidence and arguments based thereon. In its written decision in July the Board stated:

When dealing with a refusal of a development officer to approve a subdivision plan, the Board is guided by the provisions of Section 115 of the Planning Act ... Section 115(3) requires the Board to determine whether the

proposed plan complies with the Subdivision Regulations. Section 115(5) places a restriction on the Board by only permitting the Board to allow the appeal in situations "where and only where" the plan of subdivision is in accordance with the Subdivision Regulations.

The Board found from the evidence before it that the final plan of subdivision met all the subdivision regulations with the exception of Section 7(a). This is the part that stipulates that the final plan must be "accompanied by a request in writing of the owner or owners of the land shown on such final plan."

The City's position was that infilling had occurred; hence there was an owner of affected land who

had not made the request necessary for the subdivision plan to fully meet the regulations.

The Board said it was not within its jurisdiction to determine whether or not infilling had occurred. The crux of the matter was whether or not it had been proper for the Development Officer to rely on the opinion that there was another owner of a portion of the land included in the proposed plan of subdivision. The Board ruled:

To the extent that [the Development Officer] relied on the opinion that there was a potential problem regarding the possibility of another owner, he was correct in refusing to approve the plan of subdivision until the ownership question was resolved. In this regard, he offered the Appellants three options to rectify the situation.

The Board finds that the proposed plan of subdivision does not comply with the subdivision regulations and will not comply with [them] until such time as the matter regarding the possibility of another land owner is resolved.

As a result, the Board could not allow the appeal, because of the restrictions imposed by Section 115(3) of the Planning Act, and confirmed the decision of the Development Officer.

(Having made its ruling, the Board went on to say that it had considered reconvening the hearing to obtain evidence from "a responsible representative of the Crown regarding the Government's posi-

tion on the matter" of the ownership of infilled shoreline. However, the Board concluded that the "actual existence of the land and its potential ownership is not within the jurisdiction of the Board to determine.")

The Street Line

In January 1994 the owner of two adjoining properties in the City of Dartmouth made application to consolidate the lots in order to construct a building on the land. He engaged a surveyor to prepare the final plan of subdivision. The location of the street line on Prince Albert Road was the source of the subsequent difficulty. The City surveyor (J.C. MacInnis) and the applicant's surveyor (K.W. Robb) placed the line in different locations, the distance between the two amounting to about one foot. On further discussions and considerations, neither surveyor was able to agree with the other's placement of the street line.² Mr. Robb, at the City's request, showed on his final plan the City's version of the street line as well as his own.

The Development Officer refused the subdivision-consolidation application because of non-compliance with Section 7(a) of the City subdivision regulations. The additional owner was the City of Dartmouth, and the claim to ownership was based upon the location of the street line for Prince Albert Road.

On refusal of his application, the applicant appealed the Development Officer's decision to the Nova Scotia Utility and Review Board.³

At the hearing before the Board, Mr. Robb argued that if a plan certified by a surveyor states there is only one owner of the land involved, the Development Officer has no right to refuse the plan based on Section 7(a). The position of the City was that where the City was claiming ownership of some of the land, it would be improper for the Development Officer to grant approval without the City's written request.

Mr. Robb further argued that if the City's position were upheld it would "open the floodgates and everyone who had a minor dispute about an adjoining boundary would be able to delay and perhaps prevent approval of a plan of subdivision." The Development Officer testified that he did not recall any instance in his 16 years in his position that any neighbour had done this. Mr. Robb also interpreted Section 7(a) as meaning that a "written request is only required from an owner whose name appears on the plan" and that the Development Officer is "in effect changing the boundary lines" set by the surveyor when he insists that there be a request from an additional owner.

In its decision the Board stated:

The Board does not interpret s. 7(a) in the same manner as Mr. Robb. In the Board's opinion s. 7(a) is referring to the land shown on the final plan of subdivision and not to any named owner on the plan. ... The Board does not believe that this decision will open the floodgates. The Development Officer requires some proof of ownership,

not just the word of an adjoining owner. If, as in this case, there is evidence from another surveyor which shows that a portion of the land claimed by the applicant is also claimed by another person, then the Development Officer must refuse approval until the ownership issue is resolved.

The Board noted that this appeal was somewhat analogous to the situation first reported above, and rendered the same judgment, to wit: The Board may only allow an appeal where the plan of subdivision is "in accordance with the subdivision regulations." The decision of the Development Officer was confirmed.

The owner of the two lots, however, appealed the Board's decision to the Nova Scotia Court of Appeal.⁴ The Court of three judges reviewed the record, heard arguments of counsel for the parties, and summarized the Board's decision:

The Development Officer was correct in refusing the application where there was a potential owner of the land, who had not joined in the application for approval respecting it.

The Court then ruled:

The appellant has failed to satisfy us that the Board erred in law or in jurisdiction in affirming the decision of the Development Officer. The appeal is dismissed with costs which are fixed at \$1,000.00 plus disbursements to be taxed.

Comment

In recent years, surveyors have been concerned and unhappy with some decisions made by development officers. In some cases surveyors believed - dare it be said? - that development officers had been trespassing upon the surveyor's preserve.

Early in 1996, members of both associations met to discuss their concerns with each other. It quickly became apparent that development officers had no interest in questioning surveyors' decisions about boundaries. They were much concerned, however, about situations in which different surveyors held conflicting opinions about the location of a boundary, where there was potential for the creation of under-sized lots when the disputed boundary was subsequently adjudicated. Discussion will continue between the two associations on the effect of boundary location on the subdivision approval process.

Meanwhile, the circumstances of the two Dartmouth cases reported above demonstrate some important principles to which development officers must give attention in the course of their duties.

First of all, it seems appropriate to draw attention to a point earlier made by the Review Board: before invoking Section 7(a), a

development officer must have some basis for believing, some evidence of ownership, that there is a potential owner who has not given approval to the subdivision application. The development officer cannot act by whim or caprice.

Second, development officers owe a duty not only to their employers (normally municipal corporations) but as well to members of the public with whom their duties bring them into association. For a refresher on this point see "Rescued From Limbo," *The Nova Scotian Surveyor*, Fall 1994, No. 147.

Third (and setting aside for the purposes of this observation, any consideration of the Crown's possible interest in the first matter re-

ported above), the City of Dartmouth is involved in each case twice. First, it appears as the "enforcer" of the municipal subdivision-consolidation regulations; second, it is there as an owner of some of the land affected by that process. The City's first role does not cancel out the rights and interests that stem from its second role.

Given these considerations, it is not too much to say there is a striking similarity between the responsibilities of a surveyor and those of a development officer. Neither can properly adopt an adversarial stance in the discharge of their respective duties, or take the view they have a duty solely to their employer or to the person who has retained them. Development officers, as these decisions make clear, can no more pass over the possibility of a latent owner than can surveyors consider only their client's deed description to the exclusion of others.

But both the situations outlined above occurred in Dartmouth, a municipality where regulations require all owners of lands affected to consent to any subdivision application. How might a development officer fare — given a latent owner — in a municipality where no such requirement exists? Might your decision be different if you were the latent owner?

(We may have a report on one response to these queries in the next issue — Ed.)

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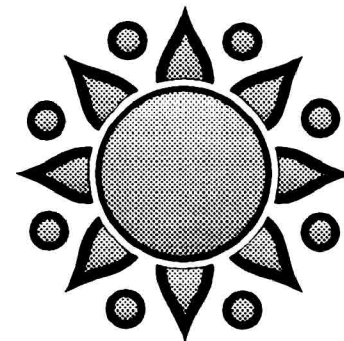
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Notes

1. Appeal by Ian Fair and Leslie Fair and Director of Veterans Land Act from a decision of the Development Officer for the City of Dartmouth (NSUARB PL-94-13).
2. The Board's written decision does not go into detail on the reasons for the different positions the surveyors adopted for the street line. The root of the problem appears to be that the street line had to be scaled from plans of 1921 vintage. A description of the method used

to reconstruct street lines is given in "Official' Street Lines - City of Dartmouth" by J.C. MacInnis, The Nova Scotian Surveyor, Winter 1996, No. 151.

3. Appeal by John P. Hackney from a decision of the Development Officer of the City of Dartmouth (NSUARB PL-94-26).
4. John R. Hackney and the City of Dartmouth, C.A. No. 112333, 16 May 1995. ■



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MINUTES
Special General Meeting
Saturday, March 23, 1996
Ramada Renaissance Hotel, Dartmouth, NS

Present:

48 members

John Young (Boyne Clarke)

David Coles (Boyne Clarke)

President Phil Milo called the meeting to order at 12:30 pm.

Phil Milo introduced John Young and David Coles of Boyne Clarke, who have worked with the APENS Liaison Committee (Ken Whalen (C), Phil Milo, Jim Doig, Ken Robb, Bob Daniels) with respect to both the new APENS act and the new definition of surveying.

President Phil asked that discussion time on the first motion be limited to one hour. Murray Banks was appointed Parliamentarian.

Ken Whalen gave some background history regarding the new definition.

- A new definition was presented and approved at the 1990 annual meeting. The definition was sent to government, but legal advice indicated that a court case had been won based on what was currently in place and that the members would be better served by keeping things as they were. The definition was withdrawn from government.
- APENS is currently revising their act, which includes a new definition of engineering. ANSLS feels that traditional areas of practice for surveyors would be lost with the new APENS definition.
- The definition being presented today is similar to what was approved in 1990, but additions include "principles". Surveyors use principles of various disciplines (planning, scientific, engineering, legal) in their work. The APENS act seems to indicate that engineers want engineering principles exclusively under their jurisdiction, but surveyors want

to continue to use those principles they have traditionally used in their profession.

- The new definition is in two parts: the "practice of surveying" and the "practice of professional land surveying". The first can be done by anyone. The second can only be done by members of ANSLS.

It was moved by Ken Whalen, seconded by Robert Daniels that section 2 (1) (j) of the Land Surveyors Act

"professional land surveying" means the advising on, the reporting on, the supervising of and the conducting of surveys to determine the horizontal and vertical position of any point and the direction and length of any line required to control, establish, locate, define, or describe the extent or limitation of title:

be rescinded

the following will become Section 2 (1) (j) of the Land Surveyors Act

"practice of surveying" means:

- (i) the determination, establishment or recording by any means of the horizontal or vertical position of points or natural or artificial features on, over or under the surface of the earth,
 - (ii) the determination of the form of the earth,
 - (iii) the survey of positioning networks by satellite or other means,
 - (iv) the practice of professional land surveying,
- and includes the application of mathematical, scientific and engineering principles related to

surveying, the preparation of maps, plans, systems and documents, and reporting, planning, investigating, designing, commissioning, composing, evaluating, directing or supervising, managing, acquiring, processing, interpreting or advising on any of the matters referred to in sub-clauses (i) to (iv).

the following will become Section 2 (1) (k) of the Land Surveyors Act

"practice of professional land surveying" means:

- (i) the survey of land to determine or establish boundaries, including subdivision thereof,
- (ii) the survey of land to determine or establish the boundaries of any right or interest in land or under the surface of land or water or in air space,
- (iii) the survey of air space or water space to determine or establish boundaries,
- (iv) the survey of land to determine the location of any thing relative to a boundary for the purpose of certifying the location of it,
- (v) the survey of lakes, rivers, watercourses or other bodies of water to establish or determine the boundaries of them,
- (vi) the survey, by any means including photogrammetric, electronic or astronomic methods of land, water or air space for the purpose of preparing plans and documents connected in any way with the boundaries of or the laying out or establishing or determining any right or interest in land, water or air space,

and includes the application of mathematical, scientific, legal and engineering principles related to surveying, the application of provincial or municipal specifications for road construction or drainage systems, the preparation of maps, plans, systems and documents, and reporting, planning, investigating, designing, commissioning, compos-

ing, evaluating, directing or supervising, managing, acquiring, processing, interpreting or advising, on any of the matters referred to in sub-clauses (i) to (vi).

Sections 2 (1) (k) (l) (m) (n) of the Land Surveyors Act will be relettered appropriately.

There was some discussion regarding the following:

- The definition of the word "boundaries". Several members felt more clarification may be appropriate.
- Is there a conflict between clause (v) and the Environment Act?

John Young and David Coles both recommended the definition be kept as general as possible with respect to these two issues.

- The option of having the definition cover surveys not only in the present, but in the past and future as well.

It was moved by Ken Robb, seconded by Jack Kaulback that the motion be amended as follows:

Under "practice of surveying" add the words "in respect to the past, present and future" at the end of clause (iv) to read: "... of professional land surveying, in respect to the past, present and future," (amendment underlined)

Ken Robb said this should be added in order to affirm surveyors' right to determine and work with any and all boundaries.

The question was called. Motion carried.

It was moved by Harold Lively, seconded by Marcellin Chiasson that the motion be amended as follows:

Under "practice of surveying" replace the word "other" with "any" in clause (iii), to read: "... satellite or any means," (amendment underlined)

After discussion regarding the use of the word satellite, the question was called. Motion carried.

It was moved by Carl Hartlen, seconded by Peter Lohnes that the motion be amended as follows:

Under "practice of surveying" delete the words "satellite or" in clause (iii), to read: "... networks by any means,"

Carl Hartlen said that the word "satellite" should be deleted in order to achieve consistency in the wording of the whole definition, and that the words "any means" state the intent of the clause.

Peter Lohnes spoke to the motion saying that in this section we are defining the practice of surveying and that more detail can follow in subsequent sections.

After some discussion, the question was called. Motion defeated.

There was considerable discussion regarding potential changes in wording for interpretation purposes.

- John Young explained that "professional land surveying" is a subsection of the "practice of surveying".
- Peter Lohnes suggested "practice of surveying" be substituted for "survey" in the second part of the definition.
- It may be appropriate to incorporate a definition of "surveying" in the regulations.
- Harold Lively suggested that APENS may have concerns with clause (vi) if it included drainage plans.
- Ken Robb stated it is not the intent to have surveyors prepare drainage plans for subdivisions. However, they should be able to use pre-designed criteria for simple drainage patterns. There is no intent to have surveyors do "pure engineering".
- Jim Doig indicated the "blue book" was prepared for the public's information and use. The new

amalgamated city will probably prepare a similar document.

- Forbes Thompson stated that the court cases did not restrict land surveyor from using pre-designed criteria.

No further motions for amendment were made.

The question was called. Motion carried unanimously. (A copy of the definition, as amended, follows these minutes as Appendix A).

It was moved by Peter Lohnes, seconded by Bob Daniels that **the following section be added to the Land Surveyors Act:**

This Act binds Her Majesty in right of the Province and Her Majesty's corporations, agents, officers, servants and employees.

Peter Lohnes spoke to the motion saying that no act is binding on the Crown unless specifically stated in the act, and this motion seeks to change our act so that it is binding on the Crown.

Bob Daniels noted that the main focus is on the Department of Transportation and Communications and ANSL's efforts to bring their surveys up to a certain standard, and also to have their staff surveyors supervise and certify DOT & C surveys. He said that APENS also has a similar clause included in their proposed new act.

After some discussion, the question was called. Motion carried.

At 2:30 pm, it was moved by Doug MacDonald that the meeting be adjourned.

Robert A. Daniels, NSLS, CLS
Executive Director



Appendix A

NEW DEFINITION

(Approved as amended at the March 23, 1996
Special General Meeting)

(a) "practice of surveying" means:

- (i) the determination, establishment or recording by any means of the horizontal or vertical position of points or natural or artificial features on, over or under the surface of the earth,
- (ii) the determination of the form of the earth,
- (iii) the survey of positioning networks by satellite or any means,
- (iv) the practice of professional land surveying, in respect to the past, present and future,

and includes the application of mathematical, scientific and engineering principles related to surveying, the preparation of maps, plans, systems and documents, and reporting, planning, investigating, designing, commissioning, composing, evaluating, directing or supervising, managing, acquiring, processing, interpreting or advising on any of the matters referred to in sub-clauses (i) to (iv).

(b) "practice of professional land surveying" means:

- (i) the survey of land to determine or establish boundaries, including subdivision thereof,
- (ii) the survey of land to determine or establish the boundaries of any right or interest in land or under the surface of land or water or in air space,
- (iii) the survey of air space or water space to determine or establish boundaries,
- (iv) the survey of land to determine the location of any thing relative to a boundary for the purpose of certifying the location of it,
- (v) the survey of lakes, rivers, watercourses or other bodies of water to establish or determine the boundaries of them,
- (vi) the survey, by any means including photogrammetric, electronic or astronomic methods of land, water or air space for the purpose of preparing plans and documents connected in any way with the boundaries of or the laying out or establishing or determining any right or interest in land, water or air space,

and includes the application of mathematical, scientific, legal and engineering principles related to surveying, the application of provincial or municipal specifications for road construction or drainage systems, the preparation of maps, plans, systems and documents, and reporting, planning, investigating, designing, commissioning, composing, evaluating, directing or supervising, managing, acquiring, processing, interpreting or advising, on any of the matters referred to in sub-clauses (i) to (vi).