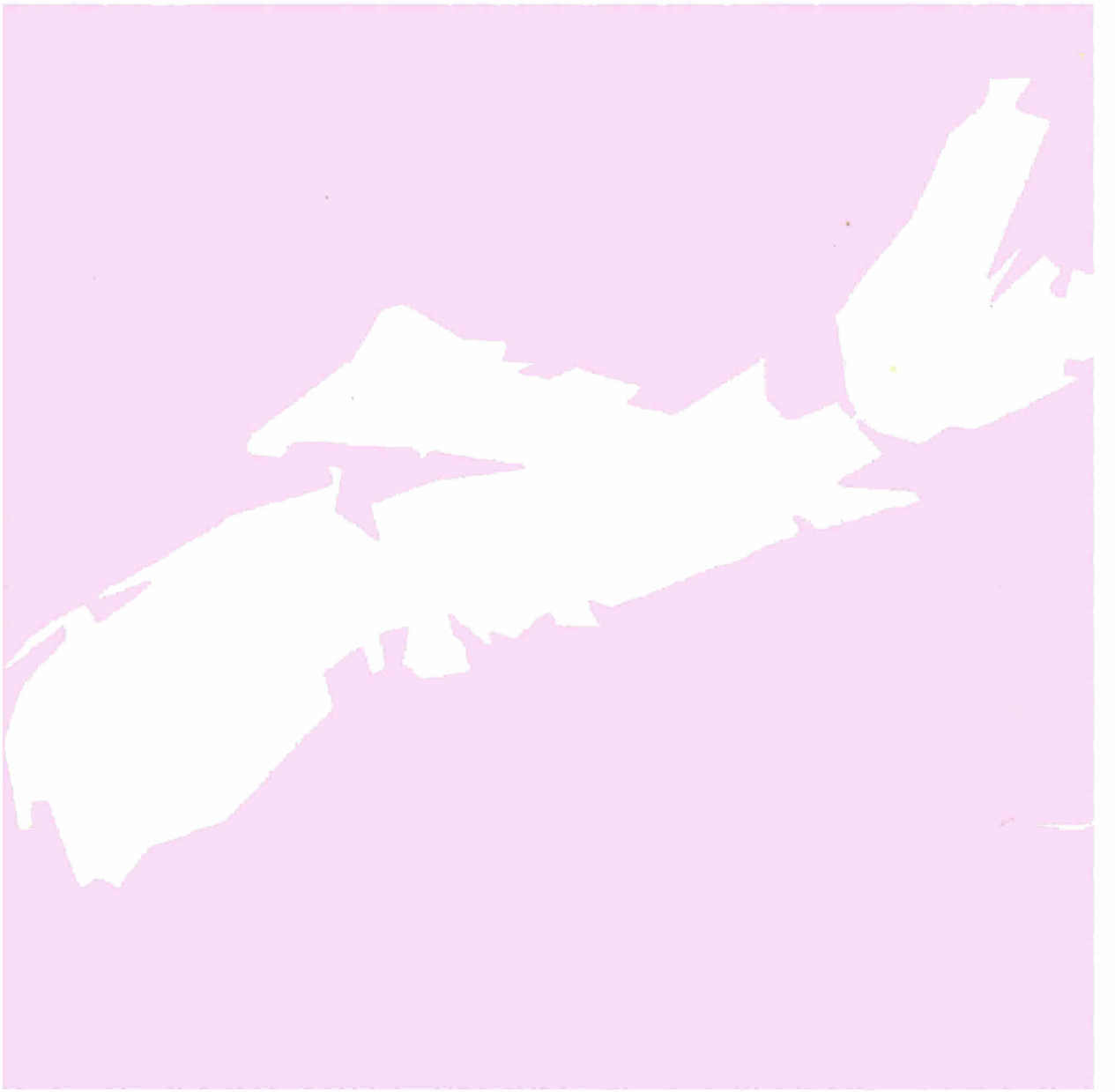
The NOVA SCOTIAN SURVEYOR



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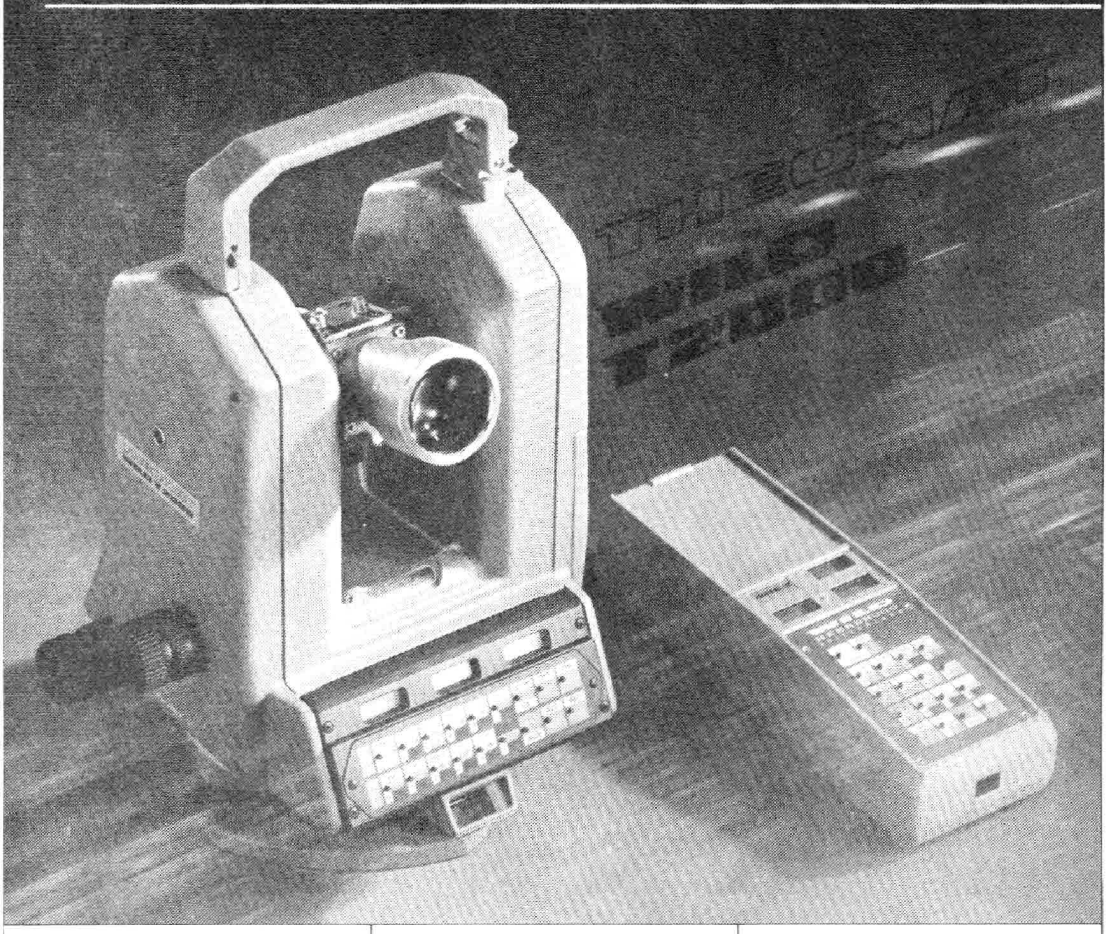

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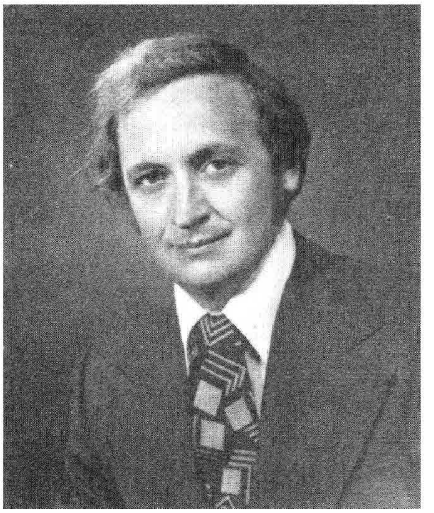
** C O N T E N T S **

Views, expressed in articles appearing in this publication, are those of the authors and not necessarily those of the Association.

**

** PRESIDENT"S PAGE **



Fellow Members:

I have reached the same conclusion as previous presidents - there isn't enough time to properly devote oneself to Association affairs and still fulfill obligations to ones employer and to the family. It is indeed fortunate that my office is only four blocks from the new Association office and that Howard doesn't mind working through his lunch hours to accomodate my almost daily visits. Cathy has been most cooperative as well and has cheerfully stayed to type rush letters for my signature. I think that it is this type of team spirit that has helped make the Association the successful organization it is today.

My wife, Gloria, and I had the pleasure of representing the Association at the thirty-second annual meeting of the Association of New Brunswick Land Surveyors held at the Lord Beaverbrook Hotel in Fredericton on January 21st to the 23rd, 1985. It was my first opportunity to attend the annual meeting of another association and I found it most interesting and informative. The New Brunswick Land Surveyors are going through the same changes as Nova Scotia in updating their Act. They found that it is not so much that their act is faulty as the fact that society and our relationship to the law has changed. Consideration must now be given to the Charter of Rights to ensure that individual rights are not violated. The major difference is that New Brunswick has decided to approach the problem of revision by amendments to their existing act rather than presenting a whole new act to the Legislature. This latter method leaves them less open to attack by other Associations who may see an opportunity to gain control of activities which were formerly under the domain of the land surveyors. Richard B. Stewart of Saint John is the new president of the Association of New Brunswick Land Surveyors.

Gloria and I were on the road again in February to attend the 93rd annual meeting of the Association of Ontario Land Surveyors in Kitchener. We enjoyed four very busy days of business meetings as well as an excellent social program where we were made most welcome. The POLARIS project was introduced to the members. This is a project whose aim is the modernization of the land registry system in Ontario. It is proceeding with the aid of improved legislation, microfilming of plans and documents, computerized title indices and property mapping similar to the method L.R.I.S. has carried out here. Their Insurance Advisory Committee reported that they have had thirty-seven claims made to date for 1984 and paid losses have been under $20,000. The membership of their association has declined from 701 last year to 686 this year in spite of the addition of nineteen new members. The proposed membership fees for 1986 are $690. The Ontario Land Surveyors are also concerned about the future and sponsored a panel discussion entitled "Where do we go from here?". Their continuing education committee is looking at a form of compulsory continuing education and the use of cassettes and video tapes. Robert J. Meisner, certainly no stranger to Nova Scotia was sworn in as the new president of the Association of Ontario Land Surveyors.

On the local scene, the council meeting held on February 16, 1985 is reported more fully further on in this issue by Kirk Hicks. Dot Lowe has submitted her resignation as "Production" of the Nova Scotian Surveyor after fifteen years of service. Her contribution has been invaluable and she will be missed by the many members who had the pleasure of working with her over the years. Production will now be handled by our regular office staff. Finally, I would like to welcome the two newest members of the Association: Dennis Prendergast and David Wedlock.

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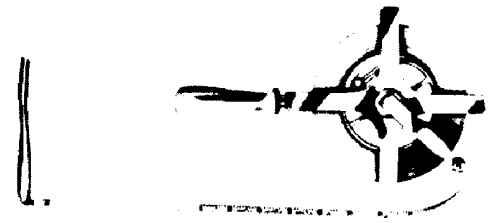

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** HIGHLIGHTS OF COUNCIL MEETING **

by H. Kirk Hicks

February 16, 1985

1. The meeting was held in the Board Room, Dartmouth Chamber of Commerece, 12 Portland Street, Dartmouth. Fourteen members were present with one absentee.

2. The minutes of the December 14 council meeting were approved.

3. There was discussion on the Long Term Plan and it was suggested that discussion of this topic be held at the Zone level.

4. John Pope reported on the Industrial Cape Breton Land Surveying Consultants Association saying that intercourse of information is the prime objective of the group.

5. A motion was passed allowing a maximum expenditure of $1.200 on microfilming of files for this fiscal year.

6. The By-Law Committee is to be advised by the Executive to draw up a By-Law dealing with mandatory liability insurance.

7. Vice President James Gunn reported that A.C.S.T.T.N.S. would like to be on the mailing list for the Nova Scotian Surveyor and to contribute to the publication.

8. The Executive Secretary's report was read.

9. A motion to remove the designation † (Survey Engineer) from the numerical roll was passed.

10. The financial statement ending January 31, 1985 was reviewed and accepted. It was noted that savings of $200/month in rent and $200/year in both taxes and printing costs have resulted from moving the office to Dartmouth.

11. Zone reports were given.

12. There was discussion on the Board of Examiners Representative on the N.S.L.S.I. Advisory Board.

13. The Department of Transportation card system was discussed and all members should be urged to use the system.

14. The Annual Meeting for 1985 will be held in Truro at Keddy's New Hotel on November 14, 15, and 16.

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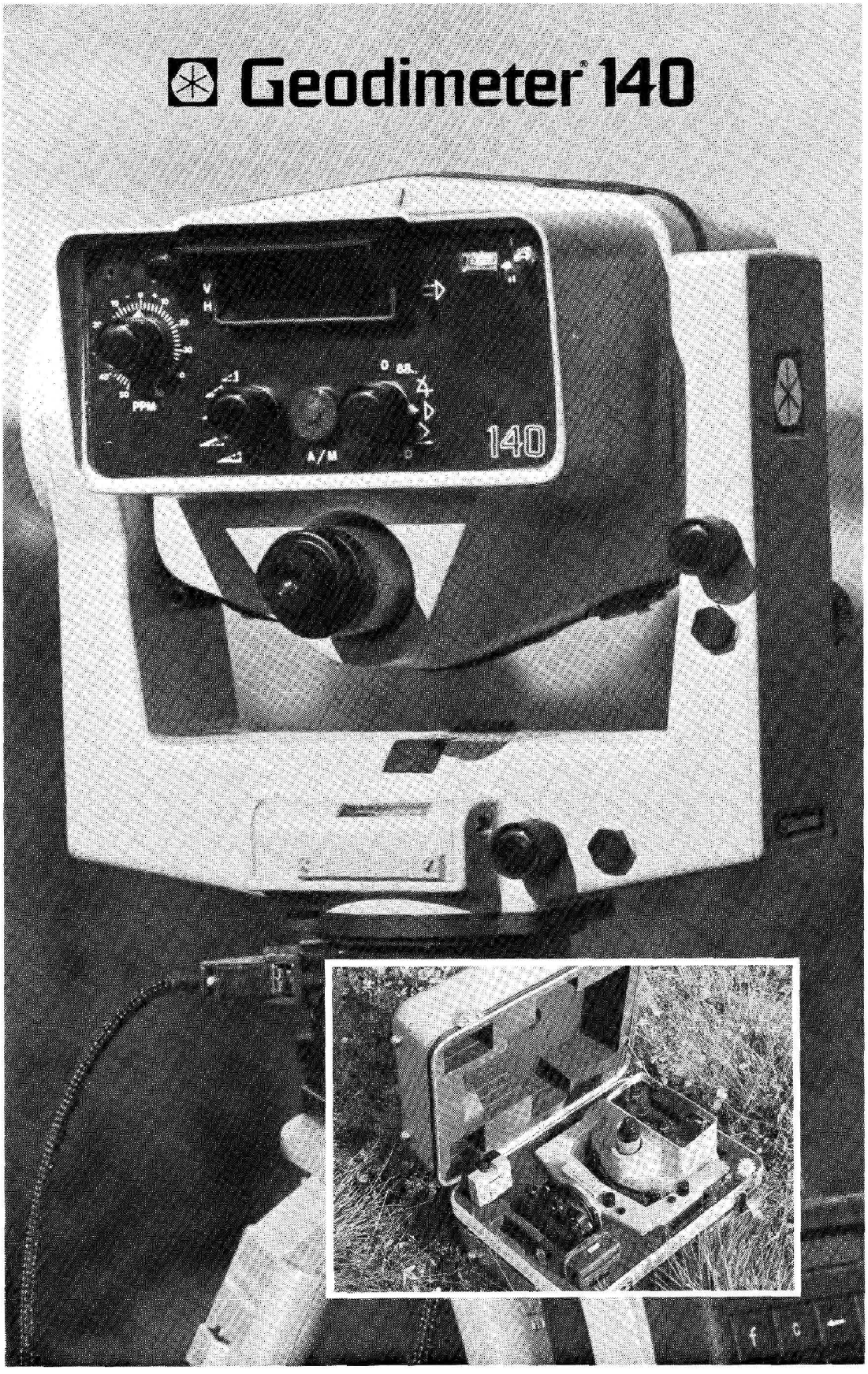

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** NOTES FROM THE ASSOCIATION OFFICE **

by H.K. Wedlock, N.S.L.S.
Executive Secretary

Your executive will soon be calling for volunteers to serve on the many committees outlined in our organizational chart. We would appreciate a note from members stating what committee or committees on which they would be willing to work.

Final exams under the "Old System" are scheduled for May 6, 7, 8. Supplementary exams will be arranged if necessary before the June 30, 1985 deadline. All Technical Papers must be in before June 15 in order to allow marking time before June 30.

If you haven't read the article written by Marcellin Chaisson in the last issue of "Terravue", make a point to read it. Well done Marcellin!

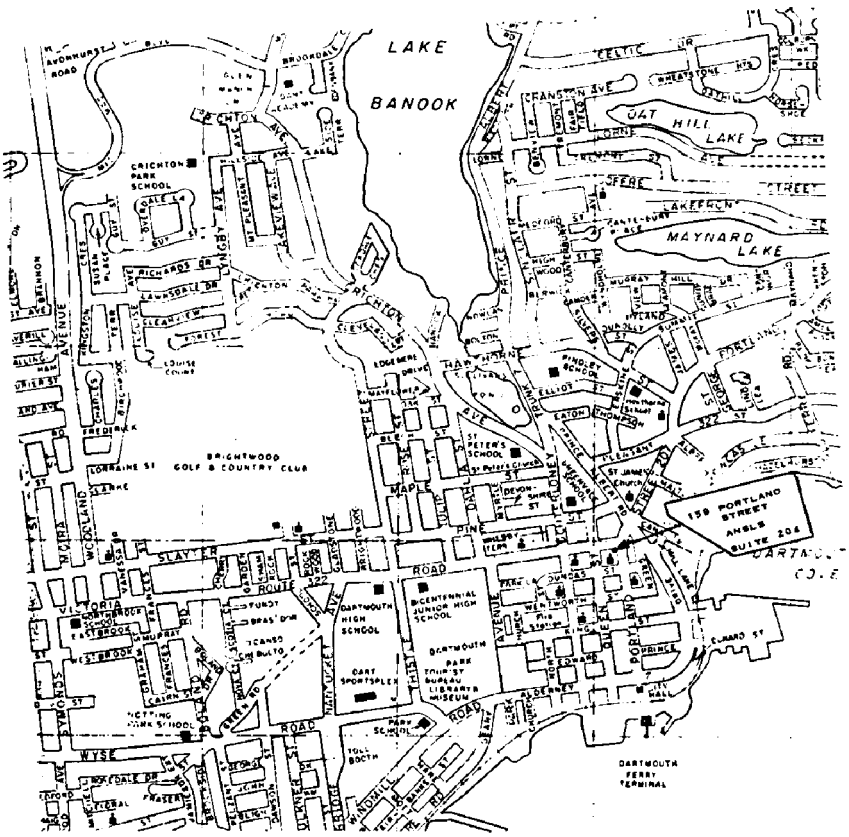
Congratulations to Shelagh Rayworth (Mrs. Walter) on making headlines in the Saturday, March 16 edition of the "Novascotian" where recognition of her community work in her home town of Amherst was lauded.

We have back issues on hand of the Nova Scotian Surveyors in stock, also case reports at a cost of $7.50. We are missing some issues of the Surveyor in the years 1963-73. Two bound copies are also among the missing - we would appreciate any information leading to the recovery of these copies.

More frequent Board of Examiners meetings are being held this year in an attempt to keep up to the Technical Papers submitted and article time completion - all rushing to beat the June 30 deadline, which incidently cannot be extended.

Since my report to our President, we now have another new member, #553, John J. DeLorey, Linwood. John is married and has a three month old daughter. Congratulations John and welcome to the Association.

We have on hand several case reports, Vol. 1-17; 1970-77 by J. Doig priced at $7.50 each. Every surveyor should have a copy of this hard copy edition.



** LETTER FROM THE EDITOR **

The new staff of the Nova Scotia "Surveyor" has taken on the responsibility of producing this high quality periodical with much enthusiasm and resolve.

The materials which the membership wish to present in the "Surveyor" will be directed through our association office.

Besides the fine material which we receive from our regular contributors, we are interested in contributions from other members. Material of a historical and technical nature are of particular interests to the readership and anyone wishing to contribute should feel free to make their intentions known.

Contact the Editor day or night for your input into the "Surveyor".

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Home: 1-902-564-1801

or write: Box 44, Site 12
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All articles, letters, etc., send to the Association office; our new address is described and displayed in this issue.

** LIBYA, ANYONE **

OR

GEODETIC DOPPLER SURVEYING IN THE DESERT

by James B. Gillis, N.S.L.S., C.L.S.

How many land surveyors from this part of the world would be willing to pack their bags and head off on a new surveying project in the desert of North Africa?

Of the people to whom I have talked about this in the last couple of years a surprising number have expressed an interest in doing just that, but for various reasons not many felt that they were able to do so. I, along with some other Nova Scotian surveyors, felt interested enough to give it a try.

This is a brief account of some of my experiences and thoughts as a surveyor on what has been called the largest geodetic survey contract ever undertaken by a private company.

I was initially approached by the Geodetic Manager of Aero Service Corporation at the Canadian Institute of Surveying Conference in Ottawa. He was introduced to me by Ian McMillan, a representative of JMR Instruments, the doppler satellite receiver manufacturers, as someone looking for survey staff for a vast geodetic project about to begin in Libya. My initial reaction was totally negative. We had an interesting discussion of the proposed project, but I felt that the positions available were more suited to those with greater flexibility in their work and life styles. Returning home after the convention, I found that my mind kept wondering back to the project, but could I realistically consider leaving a land surveying practice that I had spent several years building, for a year and a half of wandering like a Nomad about the North African desert? After much soul searching and consultation I came to the conclusion that I should try this endeavour, at least for an initial term. After some correspondence, telephone calls and another meeting with the Geodetic Manager, I accepted the position of Doppler Party Chief for a seventeen month contract.

As is often the case with projects of this size, there were several delays before we actually arrived in Libya. We spent a few weeks in London at the office of Aero's parent company, Western Geophysical, where we were given a brief familiarization course on the Magnavox 1502B satellite receiver, and where we prepared some small scale maps for use. As well, we attempted to place lines of latitude and longitude on landsat imagery which we were to use as navigational aids. The imagery was produced on sheets of about 30" by 50" at a scale of 1:100,000. My initial thought was that the imagery would be hard to use as there was relatively poor resolution at that scale, and some of the scenes were close to ten years old. In the coastal inhabited regions this proved to be true, but we also were able to acquire some old 1:50,000 army topographic maps which were reliable in all but the built-up areas. They covered almost all of the coastal part of the country, and proved very useful. Of the rest of the country, about 90% was unmapped except at a scale of 1:1,000,000 or smaller, and while those maps proved useful for logistical planning they were not suitable for navigation. We did become quite adept at using the satellite imagery. After we became familiar with the use of it, we found it invaluable in navigating through much of the country. However, we found the scale to be a little too large for efficient use, and I feel that imagery on the same size format, but at a scale of 1:250,000, would have been better.

Shortly after our arrival in Tripoli, all project staff who had, until then, been staying at the Western Geophysical compound or in hotels moved to our own newly built compound in the southern outskirts of the City. We spent a couple of weeks working in our downtown office preparing the equipment and familiarizing ourselves with the area and its customs, or at least as much as we could in that short period of time.

It was then that we made our first trip out of the City and into the countryside, a sort of reconnaissance and familiarization trip of a couple of days' duration. We experienced our first dealings with military roadblocks and checkpoints without any serious problems. A few days later we were out again, this time to reoccupy three existing first order doppler stations to enable us to provide positioning information for a new first order station which we were establishing on the western side of Tripoli, the Libyan capitol. We were living in tents and as this was the middle of January, the coldest part of the year, it was a little uncomfortable. Our station, which had been positioned about six years before, turned out to be in a military zone. It was, in fact, a tank firing range. That night we stood outside for awhile, drinking tea and watching the gunnery practice going on about half a mile away, and went to sleep to the sound of bursting artillery shells and machine gun fire.

Shortly thereafter we began surveying in earnest. The Libyan authorities had decided some years previously to provide themselves with enough control points over the entire country to support the preparation of 1:100,000 mapping for the entire nation, with larger scale production in areas where it would be required. To this end they had contracted first and second order traversing, levelling and doppler positioning. The first order doppler work, consisting of some fifty stations, along with a fair bit of triangulation and traversing had already been completed. The vertical control (first and second order levelling) had been awarded to a Polish company. The remaining traversing, consisting of several thousand kilometres of line and the second order doppler positioning, consisting of some six hundred and sixty doppler points was to be done by my company, Aero Service Corporation of Houston, Texas. My responsibilities related to the doppler satellite survey.

Libya is a rather large country by world standards covering an area of 1,800,000 sq. km, which is roughtly the size of Canada's three prairie provinces. Except for a green belt of about 10-100 km wide along the mediterranean coast the land is made up mostly of vast sand, gravel and rock deserts. Roads and towns are constantly being built and improved, but much of the country, especially as one moves southward, consists of vast uninhabitable areas. Supplies are difficult to come by even in the populated places. The economy, and in fact the development of the country itself is completely oil dependent or oil related. The country is largely dependent on foreign labour and expertise, and, as most people have heard, is controlled by military strongman Colonel Muammar Gadhafi, who has been in control since shortly after the ouster of King Idris in 1969.

The doppler stations which we were to survey were laid out on an approximately fifty kilometre grid over the entire country. Exceptions were made where for one reason or another greater density was required, or where there was already enough existing control to enable certain areas to be skipped. For vehicles we had Chevrolet one ton suburbans and one ton trucks, as well as five ton GMC diesels. All vehicles were equipped with four wheel drive. The crews on the doppler survey found that the one ton trucks were totally inadequate owing to their small size, and after several months each crew was given a five ton truck instead. These proved to be much better.

The survey equipment for each crew consisted of one Magnavox 1502B satellite surveyor, a T-3 and an NA2 level along with assorted accessories such as tripods, barometers, stopwatches, programmable calculators, etc. We also carried our tents, sleeping bags, stoves, cooking utensils, monument building materials and personal gear. All in all it was quite a load.

After the first couple of months when we were working within a few hundred kilometres of Tripoli, a mobile base camp was set up consisting of a kitchen trailer which also had washing facilities, a large dining tent and several other smaller tents for storage and sleeping. This camp was the supply depot and rendezvous point for the four mobile doppler crews. A crew would be away from five to eight days on the average, during which time they would usually complete one to three stations. The establishment of a station consisted of locating the station within five kilometres of a set of pre-determined geographic coordinates, constructing a concrete monument, three reference marks and two azimuth marks, and making observations on polaris and

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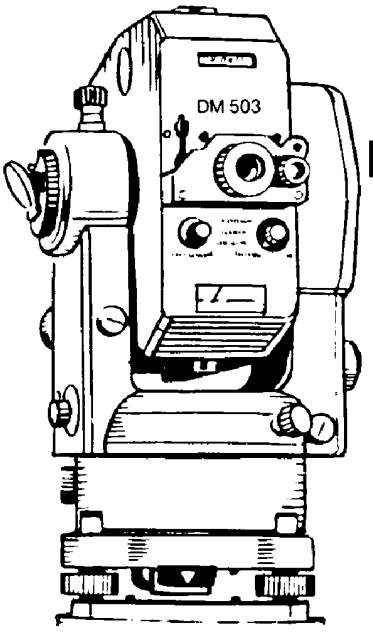

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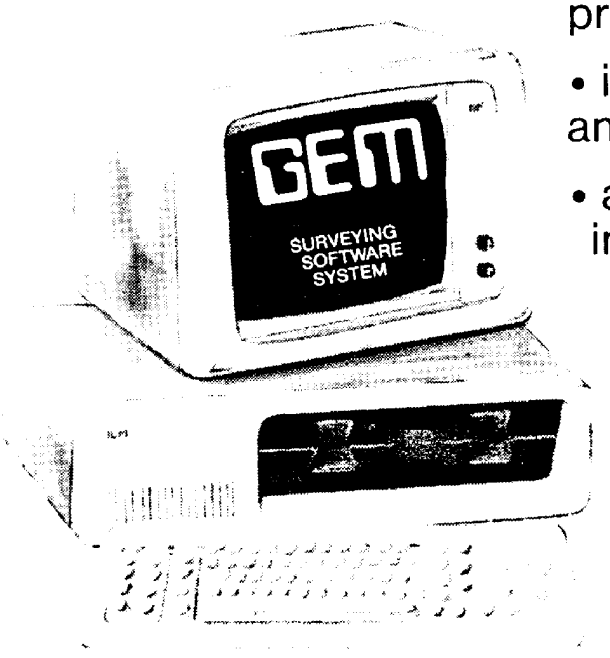

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the azimuth marks to second order standards. About 30% of the stations also involved up to ten kilometres of spirit levelling. In many cases the most difficult part of the exercise was reaching the area of the proposed station. Sand dunes, almost impenetrable lava flows, mountains and various combinations of rough terrain regularly taxes the vehicles to their limits and frequently beyond them. Mechanical breakdowns happened with alarming frequency, and our mechanics did their best to keep the crews moving with the limited resources which they had. The operation of the doppler receivers was also interrupted by electrical and electronic breakdowns and after a period of time we became quite adept at troubleshooting the breakdowns of the satellite receivers. Once a familiarity was acquired with the idiosyncrasies of their operation and breakdowns, a good deal of time was saved by the use of our radio communication to diagnose and remedy operational faults.

I mention our radio communication as the most essential logistical item of our equipment. Without the powerful single sideband transceivers our task would have been just about impossible. Each vehicle was equipped with one. Although we did experience breakdowns with the radios as well as everything else, the fact that we could usually communicate with other Aero Service personnel somewhere within the country at some point during the day enabled the crews to work fairly independently and efficiently.

The accuracies which we achieved from the satellite receivers were considered somewhat better than should be expected based on conventional doppler survey theory. We were required to establish the monument positions to an absolute accuracy of one metre vertically and one and a half metres horizontally. In order to accomplish this we determined that the standard deviation of each position surveyed could not exceed one-third of the allowable error, either vertically or horizontally, because three times the standard deviation (three sigma) gives a mathematical reliability of 99.7 .

At any one time we usually had four receivers collecting data on known first order points and up to four receivers establishing the locations of new second order stations. The mobile crews were required to collect data from a minimum of seventeen satellite passes before moving to the next station. The data collected from the satellites was recorded on cassette tapes and forwarded along with the other station data to Tripoli where the information was transferred to nine track tape and processed on a mainframe IBM computer. The program which we used was called "Magnet". It was developed by Magnavox, the manufacturers of the satellite receivers which we were using. The program appeared to be "the state of the art" in post processing as it did not require any atmospheric observations to be taken and it could simultaneously process the data from up to ten sights. It uses the semi-short arc translocation method, and, as might be expected, achieves better accuracies if ten stations are simultaneously processed than if a lesser number were used.

All mobile crews moved at their own speed, meaning that as they completed all the survey requirements at one station they moved on to another. There was no requirement that certain stations be occupied simultaneously, except the fixed first order stations which served as the control points for the project. In most geodetic doppler surveys, all or some mobile stations are occupied simultaneously in order to provide continuous overlapping of data and, therefore, continuity from one station to another in the processing. On this project it was not considered necessary due to the software being used.

Our astronomic observations were made to second order (first class) standards of the U.S. Coast and Geodetic Survey. This meant sixteen sets of readings in both positions on polaris and both azimuth marks using a Wild T-3. The calculations were done on the spot using programs run on HP-41 hand-held calculators. The results were checked in the field and also computed again at the office in Tripoli.

In the cases where levelling was required, forward and backward runs were made to third order standards using a Wild NA-2 and two unmatched rods with steel turning plates. We had little trouble obtaining the desired accuracies even in winds of up to 50 kilometres per hour.

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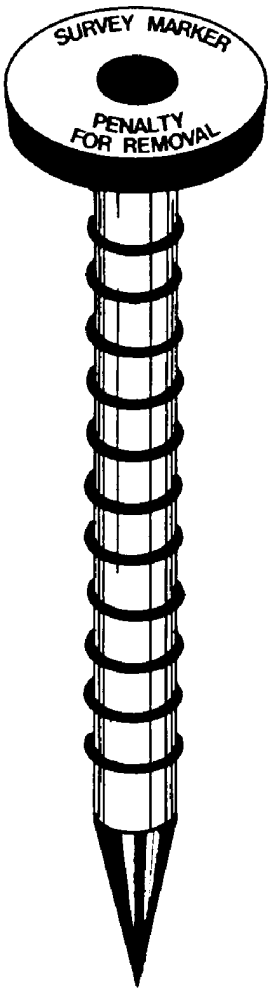

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I found both the work and Libya to be very interesting, though also very frustrating at times. Many of us had the opportunity to visit ancient Roman and Greek ruins and such second world war battle fields as Tobruk where there are large cemetaries and memorials to the men of various nationalities who gave their lives in the bitter back and forth struggles of the North African campaign. Along with the recognized attractions there are unmarked minefields still in existence and abandoned artillery shells and live bombs were occasionally encountered. Finding human bones and abandoned vehicles in the desert can be a little disconcerting as well. As may be imagined, the constant heat of the summer months and hot sandstorms of the spring season tend to annoy most of us not used to that sort of weather, though one does learn to tolerate such things. Owing to the nature of the work, the living conditions, and the logistical problems involved, there was a very high turnover of personnel. The project was originally scheduled to be completed in about two years, but has gone beyond that date. The difficult terrain, lack of spare parts for rapidly deteriorating vehicles, and the difficulty in finding and retaining experienced and reliable personnel are the major reasons for the delay. Working in many nations of the world such as Libya obviously presents a different range of problems than we are used to dealing with in this country. To learn enough about the customs and manner of doing things in these nations can be very rewarding on a project such as this.

At the time of my contract completion my position was Supervisor of Doppler Operations. As such, part of my duties included liaising with various civilian authorities, as well as with the military commanders in different areas. I say quite honestly that in almost all cases I found them to be both straightforward and very helpful. Many people with whom I have talked find this surprising, but I can attest to the fact that these people, unless given a reason to withhold their support or cooperation, enjoy meeting foreign nationals and will generally do all in their power to help out. Military and political confrontations are best avoided if possible, as one never knows what might happen in the heat of such an occurrence. Aside from such instances. however, there is little danger other than that which is caused by the climate or the terrain.

While employed on this contract I developed an appreciation of the very broad horizons which are open to surveyors around the world, as well as a particular interest in North Africa. Based on this knowledge, I would certainly hope to find myself working overseas again, and I would recommend to others that they consider such an endeavour if the opportunity should arise.

* * * * *

Career Opportunities

Nova Scotia

Department of Education

A Career in Modern Technology

Technical programs related to surveying, mapping, scientific computer applications, land-use planning, and environmental resource management are available at N.S. Land Survey Institute.

Programs are at the post-secondary level. Some are suitable for those who wish to acquire technical skills for the first time; some are designed for those who wish to enlarge and improve on earlier training and experience.

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Lawrencetown
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University of New Brunswick

Fredericton, N.B.

** FROM THE FIELDBOOK **

by Marcellin S. Chiasson (#355)

At election time, do you ever think your vote is not important?

Think again -

In 1645, one vote gave Oliver Cromwell control of England.

In 1649, one vote caused Charles I of England to be executed.

In 1776, one vote gave America the English language instead of German.

In 1845, one vote brought Texas into the Union.

In 1868, one vote saved President Andrew Jackson from impeachment.

In 1876, one vote changed France from a monarchy to a republic.

In 1876, one vote gave Rutherford B. Hayes the Presidency of the United States.

In 1923, one vote gave Adolph Hitler leadership of the Nazi Party.

In 1941, one vote saved Selective Service just before Pearl Harbour.

- Property Appraisers' News
Property Appraisers
Association of Florida

* * * * *

Do you have some associates or friends (non-surveyors) who have close ties to our Association? Why not encourage them to join as Associate Members which entitles them to attend our Annual Meeting and to receive all publications of the Association but not vote on the election of Officers or any business of the Association - All that for 25% of the Annual Membership Fee!

* * * * *

Nice to see Sheiligh Rayworth (wife of Walter - #399) being recognized for her community efforts in a recent issue of the Nova Scotian - Congratulations.

* * * * *

Congratulations also to Justice F.B. William Kelly (this writer's former boss) who got appointed to the Supreme Court of Nova Scotia.

* * * * *

Troy Parker, 12 year old son of our President, has a question for us:

"If hockey players got Athelete's Foot and Astronauts get Mistle Toe, what do Surveyors get?" - (Square Feet)

* * * * *

From The Vendors AND Purchasers Act, S.N.S., Chapter (V-2), we have:

Rules of Evidence Respecting Land Contract

1 In the completion of a contract of sale of land the rights and obligations of the vendor and the purchaser shall, subject to any stipulation to the contrary in the contract, be regulated by the following rules:

(a) recitals, statements and descriptions of facts matters and parties contained in statutes, deeds, instruments, conveyances or statutory declarations, any of which are more than twenty years old at the date of contract, unless and except in so far as they are proved to be inaccurate, shall be sufficient evidence of the truth of such facts, matters and descriptions;

Some people apparently like the little tid-bits I gather at the Registry from time to time like the description in the Timber Agreement in Port Hood Registry Book 32, at Page 649, which states:

> "excepting thereout, however, a certain piece beginning on the lower side of the road leading to Angus McAulay's farm and running all the way below the Vendor's farm until it reaches the top of the hill above the Wash Brook where the Bear tore the blanket or at a point directly opposite the said road leading from Angus McAulay's farm to the Vendor's House, -----"

* * * * *

From the National Law Magazine, we have this story:

> "An Ontario Judge, commenting on the evidence in an indecent assualt case:
>
> > "To ask the court to believe that this assault took place in a Ford coupe is ridiculous. Even if the girl has been willing, there isn't enough room. I had a Ford coupe and I know.'"

* * * * *

Sister Marguerite Bourgeoys opened the first school in Canada in the Province of Quebec between the years 1653 and 1700. For the young couples starting out in life, she had the following recipe for love:

> " 1 pound of faithful love
> 1 pound of perfect confidence
> 1 pound of honesty
> 1 pinch of independence
> 1 dose of interest in each other's affairs
>
> Mix all these with one pint of oil of good understanding and add one loving kiss. Mix in the form of perfect contentment and bake in a warm fire hot enough to last through life."

* * * * *

Here are new publications from the Public Legal Education Society of Nova Scotia (P.L.E.). Most are available from local book stores:

- Speaking of the Law - Program Kit
- Trial and Error and Our Legal History ($1.95)
- Social Assistance Information For Advocacy Workers in Nova Scotia ($1.95)
- Advocacy Guide for the Physically Handicapped ($1.95)
- Women and Equality and Will The Charter Make A Difference.

The P.L.E. is located at 1127 Barrington Street, Halifax, Nova Scotia, B3H 2P8, Telephone: (902) 423-7154.

* * * * *

We understand Dot Lowe, our part-time stenographer, will no longer be involved in the preparation of this publication. I, along with many of the past presidents, wish to thank Dot for her contribution to us and our Association - "Merci".

* * * * *

St. Matthew 5:3-10

"3. Blessed are the poor in spirit: for theirs is the kingdom of heaven.
4. Blessed are they that mourn: for they shall be comforted.
5. Blessed are the meek: for they shall inherit the earth.
6. Blessed are they which do hunger and thirst after righteousness: for they shall be filled.
7. Blessed are the merciful: for they shall obtain mercy.
8. Blessed are the pure in heart: for they shall see God.
9. Blessed are the peacemakers: for they shall be called the children of God.
10. Blessed are they which are persecuted for righteousness' sake: for theirs is the kingdom of heaven."

* * * * *

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** UNREPORTED DECISIONS **

Reprinted from the March 1984 to June 1984 issues of "Nova Scotia Law News" with permission of the Nova Scotia Barristers' Society.

* * * *

NOTE

Readers of this service will doubtless have noticed that the bulk of the decisions carried here have had a very direct connection with property boundaries, easements, rights of way or survey procedures. It will probably always be thus.

However, on occasion there are cases unrelated to boundary law which should be brought to the attention of surveyors. One such, in our April 1984 issue, involved professional misconduct--repeatedly failing to answer correspondence relative to complaints.

In this issue there are two cases involving the production of documents. The decisions reported may come as a surprise to many. It is probably safe to say there will be more like these in future.

A short and very helpful article on this topic was published in the June 1984 issue of Nova Scotia Law News (Vol. 10 No. 6). The title and author--"Discovery of Experts in 1984" by John P. Merrick, Q.C. It is recommended reading for all surveyors.

* * * *

EXPROPRIATION

Determination of ownership--lands bordering street

Re Bridgewater, S.BW. 0857, Grant, J., March 27, 1984. S186/3

The town of Bridgewater applied to determine the ownership of certain lands it had expropriated bordering a street which was to be widened in order to construct a sidewalk. It was found that the claimants had not acquired possessory title to these lands and that the width of the street should be 50 feet; the street was not restricted to the present travelled way.

PRACTICE

Discovery of documents--engineering research documents

Central Mortgage and Housing Corporation v. Foundation Company of Canada Limited et al., S.H. 15704, MacIntosh, J., April 26, 1984. S186/7

It was found that certain documents prepared by engineers retained by the plaintiff and by sub-consultants retained by the engineering firm, which did not involve the plaintiff's solicitor and which were independent research separate from the litigation, were not privileged and should be produced. The sole or dominant purpose of the communications was not for litigation.

Discovery of documents--medical documents prepared for litigation

MacLean v. Lloyd's of London et al., S.T. 02166, Richard, J., May 16, 1984. S184/8

The plaintiff, who had lost his pilot's license because of health reasons, had brought an action against the defendant insurer. He now applied for an order for the production of a medical report resulting from a physical examination of the plaintiff by a medical doctor retained by the defendants. It was found that the dominant purpose of the report was for litigation and that the report was therefore privileged. The application was dismissed.

REAL PROPERTY

Adverse possession--disputed driveway

Rosee v. Llewellyn et al., S.H. 39450, *Llewellyn et al. v. Attorney General of Nova Scotia et al.*, S.H. 39661, MacIntosh, J., February 24, 1984. S185/12

Boundaries--determination

Dubin v. Freeman, S.K. 1303, Glube, C.J.T.D., April 2, 1984. S186/7

Boundaries--adverse possession

Richards et al. v. Gaklis et al., S.T. 01847, Clark, J., April 17, 1984. S186/16

It was found that the defendants had acquired certain blueberry growing lands by adverse possession but that they had no colour of title giving them a right to the wooded portion of the land in dispute, which was used by the plaintiffs as owners. The plaintiffs were awarded damages for trespass and cutting of trees in this portion.

Boundaries--adverse possession

Beck et al. v. Attorney General of Nova Scotia et al., S.H. 39875, Rogers, J., January 17, 1984. S183/13

The boundary line between the lands of the plaintiffs and the lands of one of the defendants was determined as defined in a certain deed. In addition it was found that the same defendant had acquired certain lands by acts of possession over a period of more than thirty years. As a result the plaintiffs were not entitled to include these lands in a certificate under the *Quieting of Titles Act*.

Easements--doctrine of lost grant

Ernst et al v. Attorney General of Nova Scotia et al., S.LB. 0394, Grant, J., May 3, 1984. S186/20

The owners of three pieces of property to which there was no access except by the disputed right-of-way were found to have a right-of-way through the defendants' lands both by the doctrine of lost grant and through prescription.

Ownership dispute--building on another's land

Logan v. Smith et al., S.SN. 02297, Burchell, J., May 10, 1984. S188/3

The defendants had built a summer cottage on land which they believed they owned but which was claimed by the plaintiff. It was *held* that because of various errors in describing the lands in the past, the defendants did not have paper title to the disputed lands, that they did not have possessory title because the periods of possession were not long enough and some of the acts of possession were inadequate, and that the plaintiff was entitled to a declaration that his title was superior to that of the defendants. Since the lands included a beach and road which had been

in public use, a declaration affecting public rights could not be given without joining the Attorney General. The plaintiff was granted an injunction subject to the condition that the defendant had the right to remove the dwelling from the property within a period of five months. No damages were awarded to the plaintiff because improvements to the building site offset any loss through cutting of trees.

Restrictive covenants--right to injunction

Berrigan v. Higgins et al., S.H. 46964, MacIntosh, J., April 30, 1984. S186/18

On an application for a declaration that a certain restrictive covenant in a subdivision could not be enforced by the respondents, it was *held* that the subdivision fulfilled the requirements of a valid building scheme but that most of the respondents had lost their rights to enforce the restrictive covenants against further subdivision of the land by acquiescing in granting releases to the subdivision of certain lots. One respondent who had never acquiesced was entitled to enforce the restrictive covenant by way of injunction.

* * * * *

The following letter was received April 8th and printed for members information. Your cooperation in completing the enclosed form would be appreciated. Additional forms may be obtained from Bedford Institute.

March 28, 1985

Association of N.S. Land Surveyors
5450 Cornwallis Street
Halifax, NS B3K 1A9

Dear Sir:

The Canadian Hydrographic Service has many thousands of Bench Marks across Canada and cannot possibly inspect them more often than every several years. Therefore by way of the attached forms we are requesting the assistance of the surveyors, engineers, etc. who use these BM's to help us keep their desciptions up to date and to provide us with information about damaged, destroyed or displaced BM's so that we can plan efficient field programs to rectify the problems. Feel free to distribute the forms to other agencies or individuals and if additional forms or further information is required please contact the Tidal Section directly at the address given on the form.

Canadian Hydrographic Service Bench Mark Books can be obtained from:

Hydrographic Chart Distribution Office
Department of Fisheries and Office
P.O. Box 8080
1675 Russell Road
Ottawa, Ontario K1G 3H6
Canada

Yours truly,

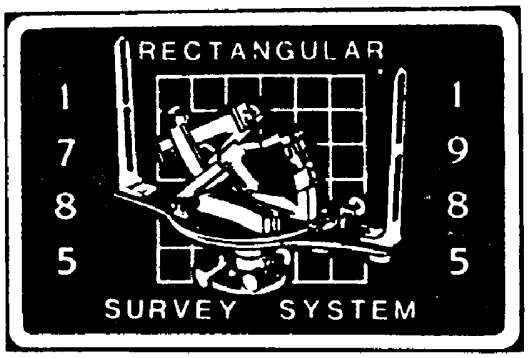
S.T. Grant, P. Eng, C.L.S.
Regional Tidal Officer

STG/rw
Atts.

** OBITUARY **

Kenneth R. Mitchell (1919-April 3, 1985)
5 Clearview Crescent
Dartmouth

Ken received his license in 1949 and transferred to the retired category in 1982. He was well known in the engineering field and will be greatly missed by all who knew him.



In honor of the 200th Anniversary of the Rectangular Survey System (1785-1985), the Land Surveyors Assoc. of Washington Ladies Auxiliary proudly offers a solid brass belt buckle, (3 1/4" x 2 1/4"), highlighting a Solar Compass superimposed on a township grid, to commemorate this occasion.

The belt buckle is distinctively handmade and hand finished of solid brass by the ANACORTES BRASS WORKS of Anacortes, Washington. The Ausiliary offers these buckles as a scholarship fundraising activity. All belt buckles are numbered in the order of receiving your order. The cost per buckle is $12.50 plus $2.50 shipping and handling.

Make your checks payable to LSAW Ladies Auxiliary.
Mail to: Delores DeMeyer
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Thank you for giving us your support. Please allow 4-6 weeks for delivery.

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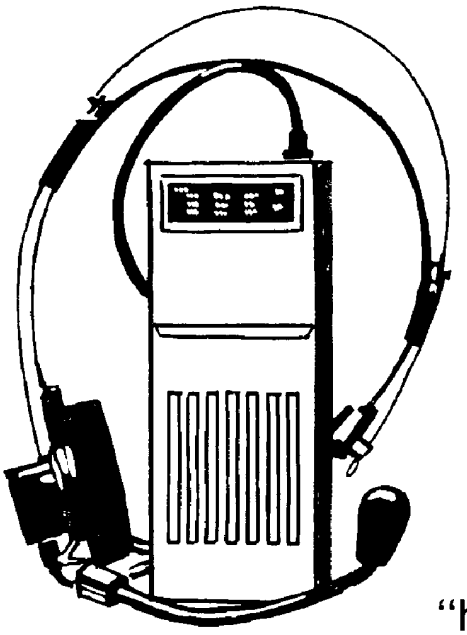

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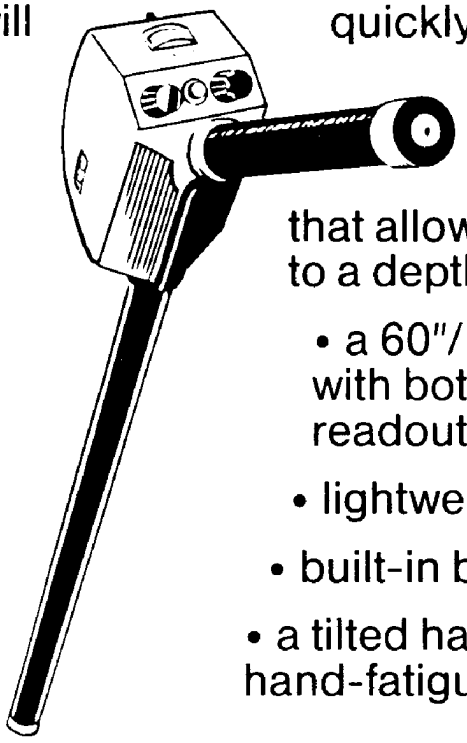

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