

SASKATCHEWAN LAND SURVEYORS' ASSOCIATION

Newsletter

President's Message to the Membership

By R. A. Webster, SLS, P. Surv., President

As my first opportunity to address the membership since the annual meeting two months ago, I would like to thank the membership for allowing me the honor of becoming the 89th President of this association. I would also like to welcome the new members of council, Jim Boyd, Rob Morrison and Roy Pominville. A special thank-you is extended to the retiring council members, Max Putnam, Rob Hillier and Bob Pattison.

These past two months have given me the chance to reflect and appreciate the hard work and dedication of all those who came before me. Our existence today is a result of their efforts. I only hope that I can follow in their footsteps.

Change seems to be the only constant today. We are adjusting to our new mandate in the second year of our act and regulations. Areas that required changes have been identified in our continuing education and have been referred to the committee for bylaw modifications. With the proposed rewriting of the Land Surveys Act and the Land Titles Act, our Lands Project committee will be very active working with government on changes that will have an affect on our daily activities.

Efforts continue to resolve the dispute with the Technicians and Technologists over the changes to our act. We have launched a combined effort with



the Engineers and Architects to express our views to the Minister of SPMC over the issue. The results and communications appear positive, but the issue remains unresolved. I plan to meet with the Minister before the fall session of the legislature and work towards a resolution of our problems.

On June 12th, a meeting of CISM, GIAC, CCLS and interested potential stakeholders was held in Ottawa. The discussions revolved around the creation of one single national body to represent the Geomatics sector in Canada. This is a

follow up to the actions of the Glengarry Group in

Continued on page 780

Inside This Issue

✓ Council Highlights	778
✓ Councillor's Report	782
✓ What's Happening	785
✓ Avoiding Anti-Trust Problems	786
✓ Historical Bearings	789
✓ Purchasing a Used Instrument	790
And Much More!!!	

Special Thanks to Our Advertisers:

Butler Survey Supplies Ltd.	791
Cansel Survey Equipment	781
J. P. Morasse Inc.	797

Council Highlights

by A. Carl Shiels, Executive Director



The Saskatchewan Land Surveyors' Association Newsletter is published by the Saskatchewan Land Surveyors' Association for circulation to its members.

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The opinions of the contributing writers may not be consistent with those of the Council of the Saskatchewan Land Surveyors' Association. Articles may be reprinted with appropriate credit given to the authors, unless it is under copyright.

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Office hours are from 9:00 a.m. to 5:00 p.m. on all regular business days.

1996/97 Council

President	Rob A. Webster
Vice President	Roy J. Pominville
Past President	Pat M. Maloney
Councillors	Wayne J. Adams Thomas W. Sansom Jim A. Boyd Robert J. Morrison
Executive Director	A. Carl Shiels
Executive Assistant	Candy Shiels
Newsletter Editor	Doug A. Bouck

97/98 - Meeting #8 - May 27, 1998

All members were present when the president convened the meeting at 11:10 a.m. and reported on his attendance at the ALSA annual meeting. Information from the President's Forum included:

- ◆ Title Insurance continues to be a concern in many provinces;
- ◆ There was a brief discussion of the idea of establishing an umbrella group to combine and/or coordinate the efforts of several national and provincial geomatics/survey associations.

One of the highlights of the ALSA meeting was the rejection of a proposal to introduce a mandatory continuing education program. Consideration is to be given to incorporating an educational component in the practice review program.

Vice President Webster reported on his attendance at the annual awards ceremony of the Association of Professional Engineers and Geoscientists of Saskatchewan.

SASTT Act

Council reviewed a copy of a letter from the Hon. Judy Bradley to counsel for APEGS and SLSA acknowledging the legitimate concerns of the three professional associations regarding the consequential amendments to their Acts. They also reviewed a proposed alternative to the consequential amendments which had been prepared by the Department of Justice and which had been accepted by all three professional associations. There had been no indication that SASTT was prepared to accept the proposal. It was agreed that this issue may require further follow up with the Minister responsible for the SASTT Act.

Public Member

The Executive Director confirmed that funding of an advertisement for candidates for public member had been approved by Sask. Property Management Corp. This matter was to be discussed briefly at the upcoming annual meeting.

SLSA Representative to The U. of C. Advisory Committee

Council noted that the three year term of L. W. McLeod was nearing completion and that a new representative needed to be appointed. An invitation for interested members to apply had been placed in the March issue of the SLSA Newsletter but there had been no response. It was agreed that the issue would also be raised at the annual meeting.

Plans Of Survey for Pipeline Rights of Way

Council reviewed a copy of a letter from an SLSA member to the Saskatchewan Department of Energy and Mines (SEM) regarding the problems created by the requirement to have DHT signatures on pipeline rights of way. Council also discussed the invitation from SEM to comment on proposed changes to the Oil and Gas Conservation Regulations. It was agreed that further discussions with SEM may be required on both of these issues.

L. L. Petterson/W. W. Stockton - Land Surveyor in Training Agreement

A Land Surveyor in Training Agreement between L. L. Petterson and W. W. Stockton, SLS, P. Surv. was approved. Some consideration was also given for the practical experience gained by Mr. Petterson during his previous membership as an SLS in Training.

Geomatics Future Meeting

An invitation was received to attend a meeting in Ottawa on June 12 to consider the formation of a national umbrella organization to address local, national and international issues related to the Geomatics Industry. It was agreed that members attending the annual meeting would be canvassed to see if any could attend on behalf of the SLSA.

Saskatchewan Association of Landscape Architects (SALA) - Title Protection Act

The Executive Director reported on a letter that had been received from the SALA requesting support for their proposed new Title Protection Act. He noted that SALA would be pleased to have whatever assistance SLSA could provide in helping them avoid the kind of pitfalls and problems encountered by the SASTT Act.

M. G. Radoux- Application for Admission

Council approved an application for admission from M. G. Radoux granting him Commission No. 279.

The Meeting adjourned at 4:00 p.m.

98/99 - Meeting #1 - May 30, 1998

The Meeting convened at 2:40 p.m. with all members present.

SLSA Representative to U. of C. Advisory Committee

In the absence of any other prospective candidates, Council was pleased to appoint P. M. Maloney as the SLSA nominee to the U. of C. Advisory Committee.

Year 2000 Annual Meeting

R. J. Pominville was asked to begin planning for the 90th Annual Meeting and, to mark the event, give consideration to holding the meeting at one of the provincial resorts.

L. N. Nicholson - Life Membership

With more than two thirds of the SLS's present at the annual meeting voting in favour of the nomination, Council confirmed the amendment of Article XIV, Subsection 1(4) of the Bylaws to include the name of L. N. Nicholson in the category of Life Member.

Motions From The Annual Meeting

Motion #1 - Expressions of Concern Regarding Geomatics Program at U. of C.

This matter was referred to the newly appointed SLSA representative to the U. of C. to obtain further background and to consult with representatives of the other three western associations. A letter would then be sent from the President of SLSA to the head of the Geomatics Engineering Department.

Motion #2 - (Did not pass so no action was required)

Motion #3 - Professional Assistance in Preparing a Cost Analysis

This matter was referred to the Practice Committee to investigate the options for, and costs of, such professional assistance.

Motion #4 - Review of Future Membership Numbers

M. A. Marien was invited to form an ad hoc committee to review this issue and prepare a report for Council.

Motion #5 - Education Committee to Review PDC Levels

This matter was referred to the Education Committee for necessary action.

Geomatics Future Meeting

No one had been identified as being able to attend the meeting on behalf of SLSA. (Note: Since the Council meeting, M. E. Putnam confirmed that he would be able to attend the meeting and report to Council.)

Practice Committee

Council accepted a letter of resignation from S. I. Hayward as chairman of the Practice Committee and were pleased to note that he had agreed to continue serving on the committee.

Next Meeting

The next meeting was set for Friday, July 3, 1998 at the SLSA Council Room in Regina.

The meeting adjourned at 4:00 p.m. ■

President's Message

continued from page 777

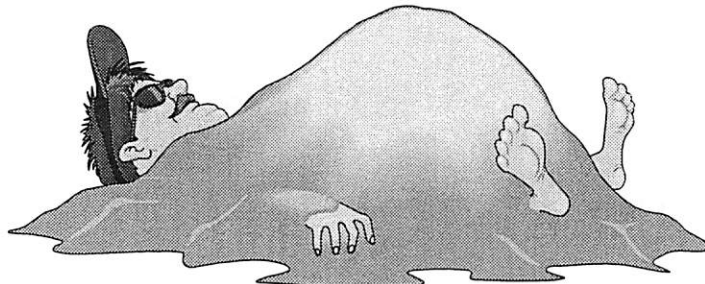
Calgary. I would like to thank Mr. Max Putnam for representing our association at the meeting.

Maureen and I had the opportunity to represent our association in Newfoundland on June 8th to the 12th. Along with their interesting business meeting we both became honorary Newfoundlanders in a ritual requiring kissing a cod and consuming screech. From my first visit to another association I can see first hand how important the continued dialogue of meetings and social events with other Land Surveyors across Canada gives perspective on our own association. Their issues, problems and solutions are very similar to our own.

A first meeting was held between the executive of the Saskatchewan Association of Rural Municipalities (SARM) and the executive of our association

and member representatives. This opening meeting was very informative for both sides. At a recent meeting of SARM, a resolution was passed that all surveys use GPS technology and the cost savings passed on to them. An open discussion of the technology and the requirements for legal surveys followed where we indicated that GPS is a tool and may not lower the survey costs. Additional meetings will be scheduled to continue the discussion and educate on the potential and limitation of GPS and the continued need for legal surveys. A possible joint lobby for a monument restoration program will be explored between the two organizations.

I hope everyone has a busy summer and I look forward to seeing you at the fall education seminar. ■



Are you looking for trouble?

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He knows that if your equipment isn't working, neither are you. And that's trouble. Stan has spent over 30 years on the road, being aggressive with the competition and strong on customer service. He leads a gang of experts in surveying, GPS, GIS, sales, rentals,

training and service. At Cansel, you will find the largest selection of surveying equipment and accessories in North America, all supported by the top professionals in the industry.

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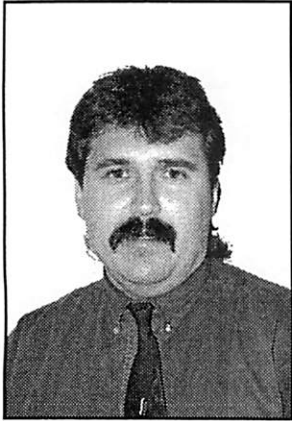
 Trimble

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Councillor's Report

By Wayne J. Adams, SLS, P. Surv.



"It's going to be a busy and exciting next couple of years"

The LAND Project

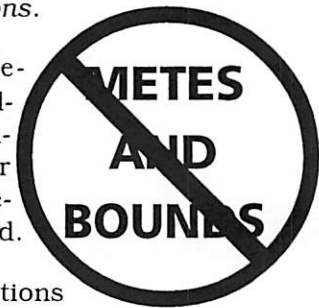
The Land Titles Automated Network Development (LAND) Project is a joint initiative between Saskatchewan Justice and SaskGeomatics Division (SGD) of Saskatchewan Property Management Corporation (SPMC). The Land Project was approved by the Treasury Board with a mandate to redesign and automate Land Titles' processes, through automation and the use of Geographic Information Systems (GIS) technology. Saskatchewan is now the only jurisdiction in Canada to have a totally manual, paper-based land registration system.

During the Design Phase of the LAND Project several key design concepts were developed specific to the Geomatic component. These are:

- The LAND Project will create two major distinct and independent business functions, Title processing and Plan processing.
- **Title processing** will maintain records of ownership and interests registered in relation to and against the individual land polygons.
- **Plan processing** within SaskGeomatics will maintain the SaskGIS Cadastral data base and Property Polygon Data Base. The Property Polygon Data Base is a complete, seam-

less view of the provinces current division of land into polygons.

- **Plan processing** will include the existing activities of the Chief Surveyor's Office and the Legal Surveys Branch of SGD.
- All Titles will be based on Polygons created from Plans of Survey or Survey Sketches prepared under the authority of a new *Land Surveys Act* and *Regulations*.
- Metes and bounds descriptions will not be allowed in the future. Instead a Plan of Survey or Survey Sketch will be required to subdivide land.
- Standards and regulations for Plan of Survey/Survey Sketch submissions will allow submissions in specified digital formats. Hard copy submissions will continue to be processed but will be minimized over time.
- All existing primary and secondary plans are to be scanned and stored in an Image Data Base.
- All original Field books are to be scanned and stored in an Image Data Base.

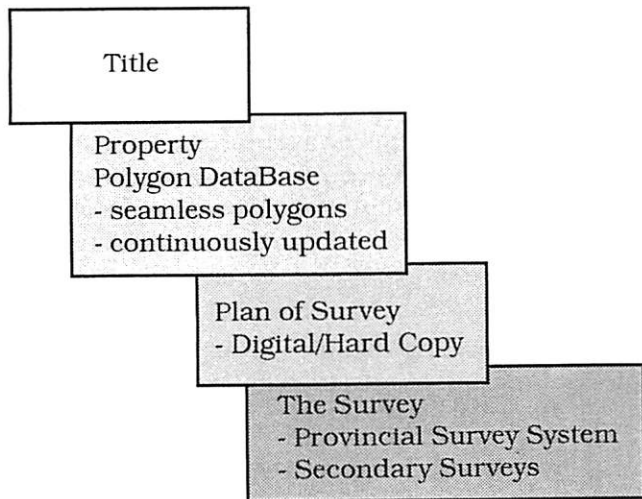


SaskGeomatics is currently responsible for administration of the *Land Surveys Act* through the Controller of Surveys. This includes maintenance and administration of the provinces' primary survey system and inspection and approval of all plans of survey intended for registration under the *Highways Act*. SaskGeomatics also has responsibility under the Provincial and Territorial Boundaries Acts for maintenance and administration of the inter-provincial and territorial boundaries.

The Chief Surveyor's Office currently has responsibility for examinations of plans of secondary surveys in Saskatchewan. This includes the inspection and approval of legal survey plans for subdivisions and consolidations intended for registration under the *Land Titles Act*. The Chief Surveyor's

Office is also responsible for the public distribution of legal survey plans and the provision of advice to the registrars on legal survey matters.

The merging of both activities will be called Plan Processing. Plan Processing will allow for an integrated approach to the examination and approval of all legal surveys and legal survey plans. The integrated approach is due to a new dimension in the new Land System, that is the Property Polygon Data Base (PPDB). All titles in the new land system will be based on polygons shown on the PPDB. Polygons on the PPDB will be based on plans or sketches of survey. The integrated approach will support Title processing and support the Geodetic, Legal and Geomatics Mapping systems in Saskatchewan. The following diagram illustrates the new relationship.



Plan Processing will operate as a provincial geomatics unit that officially accepts products delivered by industry, as a provincial function. Plan Processing will review Plans or Sketches for content, format and accuracy in terms of meeting standards and in terms of being compatible with the existing Provincial Legal Survey, Geodetic, SaskGIS Cadastral, and Property Polygon Data Bases. The output of the Plan Process Examination will be an approved Plan of Survey/Survey Sketch, an approved SaskGIS Cadastral data base revision and an approved Property Polygon Data Base revision. The official acceptance will include document acceptance and maintenance of the integrated provincial legal/geodetic/GIS framework, and updating of the seamless GIS Property Polygon Data Base for use by Land Titles.

The Land Surveys Act will require a complete rewrite or significant amendments in order to support the requirements of the new Automated Land Titles System.

Major issues to deal with will include:

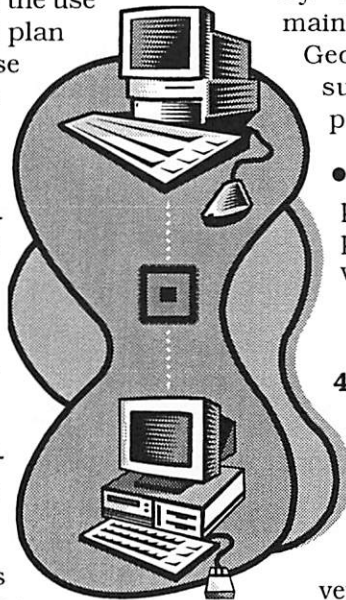
1. Integrating the duties, responsibilities, and authority of the Controller of Surveys and the Chief Surveyors office under one Provincial Geomatics activity.

- Controller of Surveys and Chief Surveyor: maintain two officials or merge into one.
- Primary Surveys and Secondary Surveys: maintain current separation or eliminate difference.
- Patented lands and unpatented lands: will unpatented lands still exist under the new LAND system.
- Cancelling plans, amending plans and correcting errors: authority moved from Master of Titles under Land Titles Act to Land Surveys Act. Must include correction for all types of plans and sketches. Need simplified procedures.
- Field Notes: hardcopy, digital, storage, etc.
- Develop procedures to correct water boundaries to reflect current conditions.
- Accretion issues: boundary problem/title problem.
- Investigate the feasibility of allowing banks of permanent reservoirs to be used as legal boundaries similar to the bank of natural waterbodies.
- Title: review impact respecting title referring to polygons rather than the traditional plan of survey.

- Survey of Roads: Authority for survey of roads in the north. Clarify overlap between Land Surveys Act and Highways Act.
- Vesting of Roads: review impact of vesting roads where the intent in the future is to create title to all land.

2. Consolidating responsibility and modernizing requirements, specifications and standards for all legal field surveys, preparation of plans of legal surveys, sketch plans, and submission of survey returns.

- Sketch plans: develop new sketch plans or equivalent which will replace the use of written legal descriptions in plan processing. Regulations on use and number of sketch plans allowed per quarter.
- Plan preparation: need to address all types of legal plans including those previously policed by the Chief Surveyor.
- Field Surveys: all types of field surveys, legal, control, methods, procedures etc.
- Land Titles Act sections 103-114 plans: maintain separation or create different groupings.
- Filing/registering plans: all plans will be treated as filed in the plan processing unit with no effect on title until proper documents are received by Land Titles.
- Easement/lease plans/sketches: when required, type of survey/plan/sketch.
- Signatures and Surveyors certificates on plans /sketches: requirement, digital, electronic signature.
- Plans/sketches required to create mineral polygons.



3. Establishing authority and responsibility for one integrated Provincial Geomatics plan processing unit to examine and approve all survey submissions and create the property polygon layers required to support Land Titles requirements.

- Plan/sketch approval/filing/registration: need to establish official approval of plan and registration process signifying that all requirements of the plan processing unit including creation of required polygon layers has been completed.
- New plan processing responsibilities: Officially accept documents from industry. Review plans and sketches and maintain integrated provincial Legal/Geodetic/GIS Framework. Create surface, subsurface and feature polygons for Land Titles.
- Planning Approval requirements: policing of requirements, plan processing unit or Sask Land Surveyor.

4. Defining specific regulations that can be made to carry out intent of the Act.

- Respecting survey methods
- Respecting surveys in unsurveyed territories
- Standardized procedures for preparing plans and sketches
- Standardized requirements for submitting plans, sketches, reports and other survey returns
- Standardized procedures for plan processing
- Standards of performance for plan processing
- Respecting preparation of revised Township Plans

- Definition of natural boundaries and the boundaries of reservoirs
- Respecting standards, specs. for the construction, installation and marking of monuments.
- Respecting integrated/control survey areas.

5. General improvements and modernization to accommodate new technology, the Automated Land Titles system and GIS activities.

- Hierarchy of evidence: field notes, plan/sketch, GIS map
- Resurveys and Restorations: review existing sections
- Archiving of information (hardcopy)
- Standards for re-establishment of boundaries from witness monuments
- Acknowledge the need for maintenance of the legal survey infrastructure and the requirement for legal surveys.
- Move present requirements respecting Reference Surveys from Highways Act

to the Land Surveys Act so Property Services at Highways do not have to be involved. (No effect on title)

- Assurance Fund: for survey errors.
- Statute of Limitations: respecting surveyors' responsibility for errors.
- Liability: Government versus practitioner. Practitioner for survey errors and Government for coordinates (cadastral base).
- Re approval and confirmation of monuments: review feasibility of having a provision that would allow corners to be officially accepted to govern from a particular date thereon where the cost of making corrections is exorbitant and the effect on adjacent property boundaries is negligible.
- Authority: clarify meaning of "Minister may direct", "Lieutenant Governor may make regulations", and what power the official officer (Controller of Surveys/Chief Surveyor) under the Act has.

SaskGeomatics will be working closely with the LAND Committee in all aspects of the Legislation. It's going to be a busy and exciting next couple of years. ■

What's Happening

Next Council Meeting: Monday, September 8, 1998 in Saskatoon in the Wedgewood Room at the Willows Golf & Country Club.

OLD PEOPLE NEVER DIE...

OLD ACADEMICS never die, they just lose their faculties.

OLD ACCOUNTANTS never die, they just lose their balance.

OLD ACTORS never die, they just drop a part.

OLD ANTHROPOLOGISTS never die, they just become history.

OLD ARCHERS never die, they just bow and quiver.

OLD ARCHITECTS never die, they just lose their structures.

OLD ATOMS never die, they just decay.

OLD BANKERS never die, they just lose interest.

OLD BANKERS never die, they just want to be a loan.

Avoiding Anti-Trust Problems

By Al Pagan, P. E., L. S. Reprinted from "CE News", May, 1998, with permission. Copyright 1998 by Civil Engineering News, Inc. (telephone 770-499-1857). All rights reserved.

...surveyors took what they felt were steps to enforce the agreement, going so far as to threaten non-compliers...

I attended a seminar in January in order to meet part of the requirement that I acquire 24 continuing education units to maintain my land surveyor license in New Jersey.

The seminar, Professional Responsibility, Contracts, and Liability for Land Surveyors in New Jersey, was presented by M. J. Steensland Jr., a district court judge from Dothan, Ala. One subject on which the judge spoke addressed potential problems that can border (and actually encroach) on the criminal in the practice of land surveying. The presentation discussed two recent anti-trust actions that affect land surveyors.

FLORIDA ANTI-TRUST

During the 1990's, surveyors met and discussed the need for increased fees for boundary surveys. A committee was appointed for the purpose of developing a minimum fee schedule. It met and agreed to propose a minimum fee of \$300 or 5% of the selling price of the land for mortgage surveys. After the committee's work was done, a meeting of surveyors was held and, by a show of hands, it was agreed to raise prices to the level recommended by the Fee Committee. Later, these surveyors took what they felt were steps to enforce the agreement, going so far as to threaten non-compliers and initiate disciplinary complaints with the Florida Department of Professional Registration.

That, in a nutshell, was what caused the state to claim that fees paid for surveys were higher than they would have been if competitive pricing had prevailed.

According to Judge Steensland, the case is presently being resolved by many of the defendants, including the Florida Society of Professional Land Surveyors, with an agreement that they pay fines of about \$10,000 each.

ARKANSAS ANTI-TRUST

The circumstances in Arkansas were very similar. Five land surveyors met at land surveying meetings and entered into an illegal conspiracy - or so it was alleged - to restrain trade and fix prices in violation of the Sherman Anti-Trust Act. In addition, one of them was charged with mail fraud for sending a letter advertising a meeting at which fees were to be discussed.

That case was resolved when the Northwest Chapter of the Arkansas Society of Professional Surveys pled guilty to illegal price fixing and was assessed a \$60,000 fine.

legal price fixing and was assessed a \$60,000 fine.

AVOIDING ANTI-TRUST ALLEGATIONS

Steensland went into some detail regarding activities that must be avoided by both individuals and professional associations in order to avoid anti-trust allegations. Certain types of discussions with competitors are taboo. Unless you want to be in-

...even a casual setting can be viewed as a conspiratorial liaison by suspicious investigators or prosecutors

investigated by prosecutorial lawyer types, you must avoid:

- ◆ Discussing current prices charged
- ◆ Discussing specific business practices
- ◆ Discussing details about negotiations on contracts
- ◆ Revealing the number of clients you service
- ◆ And, according to Judge Steensland, "Above all, do not discuss or make agreements regarding discounts or promotional allowances, arrangements to divide territory, agreements concerning bids, or whether to extend credit or to do business with a particular customer."






It is clear that even a casual setting can be viewed as a conspiratorial liaison by suspicious investiga-

tors or prosecutors. Don't think that just because you know someone very well, nothing can go wrong. You never know what other kinds of activities your friend may be involved in (or if he might sometime need to deflect a probe of his activities). So spoke the judge.

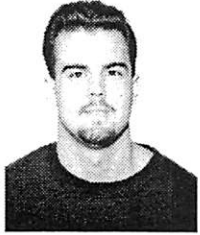
Association activities are more likely to appear illegal than things you might do as an individual. Membership policies are fertile ground for aggressive investigators trying to make names for themselves. Obviously, membership in a society should be open to all people who practice a particular profession and it must be based on criteria that are related to legitimate enterprises.

I must admit to having some sympathy for the plight of those Florida and Arkansas surveyors. While it has been said that ignorance of the law is no excuse, it can be a legitimate reason for certain behaviour. ■

More Sites to see...

-  History of Geodesy
http://www.noaanews.noaa.gov/lb_images/theb/baseline1.htm
-  Alphabetical list of Bills - Government of Sask.
<http://www.legassembly.sk.ca/bills/>
-  Canadian Legal Information Centre
<http://www.lia.org/ca-home.htm>
-  Canada Centre for Remote Sensing (interesting satellite imagery)
<http://www.ccrs.nrcan.gc.ca/ccrs/imgseru/datholde.html>
-  CompareNet - the Interactive Buyers Guide
<http://www.compare.net>

SLSA Welcomes New SLSIT's



Lee Anders Andersen resides in Saskatoon and is employed at Tri-City Surveys. He was born in Meadow Lake and attended the U of C. He has received his Bachelor of Science in Geomatics Engineering. He is also an Engineer in Training. If you can recall, Lee appeared in the *SLSA Newsletter* (issue 41, p. 646, December, 1996). He is pictured with Larry McLeod, receiving the SLSA U of C Award.



Mark E. Knott was born in Owen Sound in Ontario and is currently employed with Focus Surveys in Regina. He attended at the University of New Brunswick. He has obtained his survey technician certificate, and Bachelor of Science in Survey Engineering. He was employed during the summer months from 1991 - 1994 by the Department of Energy, Mines and Resources, Geodetic Division, as a Survey Assistant.

SIAST Graduation Plaque Award

Congratulations goes to Mr. Garth Jason Arkell, recipient of the SLSA Graduation Plaque Award for overall proficiency in Geomatics Engineering Technology at SIAST.

The following books are available for the cost of mailing them: (take as many as you like)

- The Elements of Style Third Edition
- Errors in Composition Revised Edition
- Professionals Changing Urban Patterns
- Writing a Technical Paper
- Technical Writing Second Edition

SaskTel T-shirt Winner

At the Annual Meeting, Sasktel held a draw, the prize being a SaskTel T-shirt. The winner of this prize is Phil Hicke. Congratulations, Phil!

Acts and Regs Available on the Web

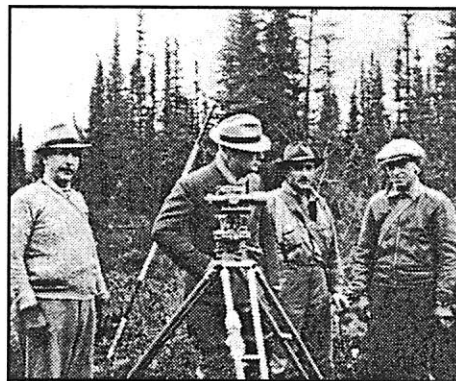
Acts and Regulations (Regs) are available for viewing with a one year subscription to the Queen's Printer. The subscription allows the public to view and print the chapters of Acts and Regs that have been amended. For surveyors, this could prove to be a great convenience. Instead of waiting for the association to compile and mail updates, the surveyors could simply refer the updated table of contents and print their own copy of Acts and Regs from the Website, hole punch it, and place it into the SLS Handbook. A surveyor would not even need to wait until the SLSA mails out an updated Table of Contents of the Handbook, he may simply do a word search on the Acts and Regs in question, and pick out all excerpts pertaining to land surveyors and land surveys. Simply contact the Queen's printer by phone, e-mail, fax, or on their Website and order a subscription (\$95.00 per year). If any SLS's decide to go this route, please notify the SLSA office so that your name may be taken off the updates list.

Historical Bearings

by John H. Webb S.L.S.(LM), C.L.S.



Donald Alpine Smith (1880 - 1963)
D.L.S., S.L.S., BA. Sc.



Manitoba-Saskatchewan boundary, 1941; looking south from the northeast corner of Section 36-42-30 W. P. M. Left to right: Commissioners H. E. Beresford and D. A. Smith, with Edward Gauer and F. C. Lamb, SLS.

The report of "Committee on Repository and Biography" 1964 covering the demise of Mr. Smith can be found on page 22 in the 1964 Saskatchewan Land Surveyor's report of proceedings.

After attending University of Toronto he obtained his Commission as a Dominion Land Surveyor in 1909. The Federal Government sent him to British Columbia in charge of a survey party on subdivision surveys in the B.C. railway belt on Shuswap Lake along with other well known surveyors such as A. O. Wheeler, E. W. Robinson to name a few.

He then settled in Regina, obtained his Commission as a Saskatchewan Land Surveyor in 1911, went into private practice and was in partnership with H. G. Phillips S.L.S.

From 1914 until 1918 he was overseas with the 5th Canadian Infantry Battalion and then the Canadian Engineers where he was in charge of surveying many trenches and front line installations. Returning from World War I he maintained his pri-

ivate practice until 1936 when he joined the Saskatchewan Government service as Supervisor of Surveys. In 1940 he was appointed Controller of Surveys, Department of Natural Resources. He held this position until 1946 when he again returned to private practice until his retirement in 1955.

Mr. Smith was made a Life Member of our association in 1958 and served our needs as President three times - in 1920, 1926 and 1948 and was always active in the affairs of the organization.

I had the privilege of knowing Mr. Smith and worked for him during the summer of 1948 (my two weeks holidays from the Government) placing many special survey monuments in and around Regina. Mr. Smith was one of the most respected and best known land surveyors in Western Canada.

The association file on Mr. Smith contains a most interesting article by him titled "My first survey party" and well worth reading for historical content about early surveys. ■

Purchasing a Used Instrument: Total Stations

By Chris Cothrun, Ingenuity, Inc. Reprinted as seen in the MSPS Minnesota Surveyor, Spring, 1998, with permission from the author.

Topcon GTS-302 Total Station - Extra Battery, Tripod, Prism, Pole 2 years old. \$3,500
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Great deal? Good opportunity? Making that break from working for someone else? Forming your own company and looking for the most economical way to get started?

Someone may have approached you with a deal that looks too good to pass up. You'll probably have questions about the condition of the instrument and how to decide whether it is worth the asking price. We'll assume you are purchasing the instrument from a private party. Many of these considerations change if you are purchasing a used total station from a known instrument dealer.

You'll want to chance to evaluate any instrument you are considering for purchase. What should you look for? First, take a look at the exterior condition of the instrument. An accumulation of dirt and grime might indicate that the total station hasn't been well cared for or serviced recently. Look beyond any surface dirt for scratches or marred parts that might indicate the instrument has been damaged or abused. Also, it should be determined whether the instrument is a current product.

You need to do a basic function check of the total station. First, the mechanical checks. Make sure the tangents lock properly and don't have tight spots through the whole range of their motion. The telescope and standards shouldn't have any tight spots or play in their motion either. The optics should be clean and free from scratches and chips. If you look back through the telescope from the objective end you shouldn't be able to see any condensation or dirt on the optical surfaces. Turn the total station on and go through the basic angle and distance measurement functions. If available, check the compensator or tilt display to ensure it is working correctly.

Always check the instrument adjustment. If some things you've found in your above inspections make you question the instrument condition, you should double some angles to determine if the instrument is close to being in adjustment. If possible, take the instrument to your local instrument shop to get the adjustment and instrument condition thoroughly checked. They should be willing to exam-

...the instrument
appears to be
worthwhile.
Now what about
the price? How
much is the
instrument worth?

ine a prospective instrument for a nominal charge. Their technician can give you a complete evaluation of the instrument's condition and possibly its service history. They can also let you know if the instrument is a current product. This gives you a better picture of what you are purchasing and makes determining a fair price easier.

Every instrument comes with one or more batteries, charger, lens cap, sunshade, tool kit, rain hood, operation manual and other accessories. Obviously the batteries and charger should still be around, but what about the rest of the accessories? And speaking of the batteries, what kind of shape are they in? If the instrument is more than three years old, the batteries may need to be recelled. If the batteries have been recelled, they should have a sticker or a recell date on them.

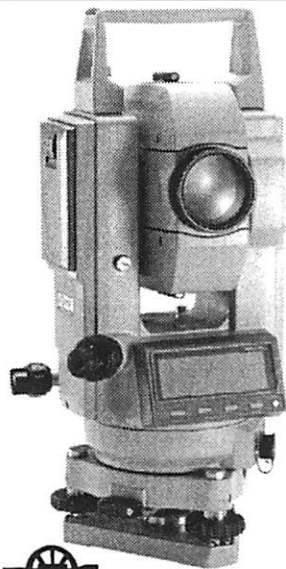
Depending on the seller, you may wish to investigate whether the instrument is stolen. Obvious signs are a seller who has no idea what the instrument is or what it is worth and someone who gets nervous when you ask for serial numbers. A seller who is concerned about having the instrument evaluated at the local service shop should not be trusted for multiple reasons. Unfortunately, most stolen instruments leave the area where they are stolen, so you should check with the instrument manufacturer before pursuing a purchase from an unknown seller.

So, you've checked everything out and the instrument appears to be worthwhile. Now what about the price? How much is the instrument worth? Obviously, there is a number of variables involved. First is the age of the instrument. If it has been out of production for more than five to ten years, parts may be harder to obtain, reducing the serviceability. Is there a local shop that can perform most of the service on the instrument without sending it out of town? The condition of the instrument will also determine the selling price. Consider any maintenance or repairs the instrument may need when negotiating the price. Market conditions have

also changed in the last several years. The average new total station price has dropped several thousand and this drop has been reflected in the pricing of used instruments. So you want hard numbers? I've seen used total stations go for between \$3,000 and \$6,000, depending on the factors mentioned above. Prices can also vary by market area.

You now have a basic checklist to cover when evaluating an instrument. We haven't covered every item you may need to check, but these are the major ones. The adjustment checks have been covered in previous articles; refer to them as necessary. Hopefully that instrument will be the deal that was too great to pass up and just the thing to get your fledgling business off the ground.

As always, we welcome comments, inquiries and future article topics for The Technical Side. Feel free to contact us at The Technical Side using any of the following methods. By mail: The Technical Side, 15662 Linda Way, Sparks, Nevada 89431; by fax 702-359-6693; by E-mail: ccothrun@ingenuityinc.com; or our website: http://www.ingenuityinc.com. ©1998, Ingenuity, Inc. ■



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Starting on the Right Footing

Reprinted as seen in the AOLS Quarterly, Winter & spring Issue, 1998 presented the Public Awareness Committee of the AOLS

Buyers of new homes generally shop carefully, looking for value and for features that will fit their lifestyle and expectations. Few realize how building codes, municipal zoning and land use bylaws have determined the size and shape of the new homes they are looking at and what activities have gone on before construction began.

Before the design of the building begins, and before all the materials, windows, doors and fittings can be ordered and the tradesmen contracted, the architect or builder must have a knowledge, not only of the size and area of the lot being built on, but of the zoning requirements and the municipal requirements for set-back from the road and from the sidelines of the property. They must know how the land is to be graded so that the building can be set at the correct height for proper drainage and must take into consideration such things as the location of the hydrants and poles on the street so that the position of driveways, and hence the position of garages, can be determined.

On occasion, builders have a certain style of building in mind for a development, in which case a whole subdivision can be designed so that the lots will exactly accommodate that particular style of building. In the case of commercial or industrial buildings, apart from other bylaw concerns, provision must also be made for a prescribed number of parking spaces, for snow storage around the edge of the parking area and for driveways, lighting, landscaping and fences.

Essentially, the size, shape and location of most buildings and ancillary improvements are controlled by the location of the boundaries of the building lot, the boundaries of any easements affecting the lot and the municipal and building code requirements for clearance or set-back from those boundaries.

Because of these constraints, and the direct and usually close relationship between the building walls and the set-back from property lines, it follows that the initial marking out for the excavation for buildings and the provision of construction control for foundation walls, column lines and caissons is best undertaken by those who are trained,

equipped and licensed to investigate and determine the location of the boundaries of land and the location of any easements, road widenings or restrictions that might effect the land. This is the work of the Ontario Land Surveyors, professionals who are licensed and authorized by law to establish and confirm boundaries and whose work is regulated under the Surveyors Act of Ontario.

While some builders or contracted technical firms will occasionally lay out buildings, they do so at some risk, having no assurance that they have positioned the boundaries of the building site accurately.

On the other hand, prudent builders hire Ontario Land Surveyors to search the title of the building lots at the Registry Office for easements and restrictions, reset property markers that have been destroyed during construction of roads and services, stake out the building footprints for the location and depth of the excavations and provide grading certificates and final as-built surveys. The latter surveys, usually required for mortgage approval and often referred to as "Surveyor's Real Property Reports", can only be provided by licensed surveyors.

Presently there are about 450 Ontario Land Surveyors across the province providing survey services to the public. The profession is governed by the Association of Ontario Land Surveyors which requires that each surveyor carry professional liability insurance and that each surveyor be reviewed regularly through a peer review process. The Association provides ongoing education and technical support to its members and maintains Complaints and Discipline Committees and a Compensation Fund to protect the public interest.

Editor's Note: This article is presented by the Public Awareness Committee of the AOLS as part of a series designed to inform the public of the role of the Ontario Land Surveyor. It is intended to be reprinted and distributed to local or regional media, related professional groups such as relators or lawyers and to clients, by the membership to further this purpose. For more information or a digital copy of this article please contact Sarah Cornett, Secretary to the Public Awareness Committee, at the AOLS office, ext. 23. ■

BUMPER STICKERS

Cover me. I'm changing lanes.

I brake for no apparent reason.

I'm not as drunk as you think I am.

Forget about World Peace...visualize using your turn signal.

Horn broken. Watch for finger.

He who laughs last thinks slowest.

Lottery: A tax on people who are bad at math.

Change is inevitable, except from a vending machine.

Time is what keeps everything from happening at once.

Born free...Taxed to death.

The more people I meet, the more I like my dog.

Laugh alone and world thinks you're an idiot.

I get enough exercise just pushing my luck.

Sometimes I wake up grumpy; other times I let him sleep.

Work is for people who don't know how to fish.

Women who seek to be equal to men lack ambition.

If you don't like the news, go out and make some.

No radio - Already stolen.

I took an IQ test and the results were negative.

Where there's a will, I want to be in it.

OK, who stopped payment on my reality check?

Time is the best teacher; unfortunately, it kills all its students.

Beauty is in the eye of the beer holder...

Why is 'abbreviation' such a long word?

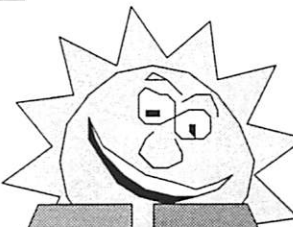
How can I miss you if you won't go away?

Be nice to your kids. They'll choose your nursing home.

Ever stop to think and forget to start again?

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and pleasant

SUMMER



Annual Meeting Memories



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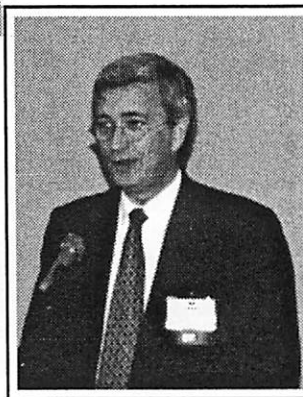
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FROM LEFT TO RIGHT: T.W. SANSON; W.J. ADAMS; R.P. PATTISON; R.J. HILLIER; M.E. PUTNAM; R.A. WEBSTER; A.C. SHIELS; P.M. MALONEY

Bill Schwartz received his Life Membership Certificate.



Murray Radoux was commissioned.



The Honourable
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Gwen Maloney hands over the pendant to Maureen Webster

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Shakespeare's Survey

By Andrew Gibson, OLS (Ret), as seen in *The Ontario Land Surveyor Quarterly*, Winter & Spring, 1998, with permission

The Scene - A cottage somewhere in Metropolitan Toronto, belonging to William Shakespeare, who has been conveniently reincarnated.

SHAKESPEARE - (outside the cottage) - Hark! What noise is this, deep in the hedge, so to disturb my quiet contemplation? Mayhap a wild boar rooting, or a unicorn, seeking to skewer me, on his built-in spit. Of such ferocious beings have I oft-times heard...To arms, to arms! (pick up a cudgel)

SURVEYOR - (from the hedge) - Prithee, good chainman, hold thy bob upon the point and not full half an ell this side, as is thy usual custom. A murrain upon thee, upon thy forbears, and on such ill-shapen simple-minded progeny, as thy careless ways shall vouchsafe thee. Verily, were thy brains gunpowder, thou couldst not blow thy nose (emerges from hedge and confronts Shakespeare) Good morrow, sire.

SHAKESPEARE - Is't human? That glaring eye, that forehead bathed in sweat, and caked with dust! Perchance it is not flesh, but a fiend from lowest depths of Hell, sent to torment me. Or is it but a consequence of yestere'en's wassail. But in its dexter hand it holds an axe. I will speak softly, lest I should enrage it, and be smote in twain. Good morrow - wherefore art thou in my hedge?

SURVEYOR - Why, on your behalf, grey-bearded bard. Seek you not a mortgage?

SHAKESPEARE - True, and to this end, I lately crept to King and Bay, and interviewed a lawyer who fixed me with a legal eye, and drearly intoned "at eight percent".

SURVEYOR - Legal, Eagle, and Hawke, QC?

SHAKESPEARE - Even so.

SURVEYOR - I am engaged at their command, to circumscribe your ground and ascertain that this, your cottage, is thereby enclosed, and does not sit upon another's land. In brief, I am a land surveyor. Hast thou a copy of a survey?

SHAKESPEARE - A land surveyor! Oft-times have I seen thee, or thy fellows at their rites mysterious, hallooing and waving, squatting at thy camera. "North a hair!

South a hair!" Truly I

expected men in white to come and pick thee up. What need I with a land surveyor? This

I cannot clearly understand but that it

will be costly, I am most amazing sure. How much?

"OFT-TIMES HAVE I SEEN THEE,
OR THY FELLOWS AT THEIR
RITES MYSTERIOUS, HALLOOING AND WAVING,
SQUATTING AT THY CAMERA.
'NORTH A HAIR! SOUTH A HAIR!'
TRULY I EXPECTED MEN IN WHITE
TO COME AND PICK THEE UP."

SURVEYOR - Fifty dollars.

SHAKESPEARE - Fifty dollars! O woe is me, I am undone! Nibbled at on every side, a premium here, and there a fee, and here a sales tax, like a pig among piranhas.

SURVEYOR - It must be done. The lawyers must be sure that not the smallest tittle of thy house hangs over on thy neighbour.

SHAKESPEARE - But whence the fifty dollars? Is't possible that this my plot, mere fifty by a hundred, has been in course of time, so lost to human recollection, so mislaid among the dusty records, that to retrace it such a labour is required? There has been no change since it was new. Think you that these my bony arms, by stealthy midnight toil, have moved it over? In truth there was a survey, but mislaid now these many years. I cannot find it.

But doubtless in the public records, where such expensive and contentious work is filed, there you will find it.

SURVEYOR - We have no records, as a body.

SHAKESPEARE - No records? What foolishness is this? Tell me truly now!

SURVEYOR - Hold! Let not thy tongue outrace thy understanding. Records we have. Each enterprise must keep them and display them, to his fellows, on request, and for a fee.

SHAKESPEARE - There's not a venture in this world, jewellers, janitors, or junkmen, that does not do as much. Each keeps its records. It needs no dusty law, with fine, imprisonment, or both, to so ensure. And yet it is not mete that those whose work has weight of civil law, whose monuments define the limit between me, and you and him and our lady Queen, should keep such records as do others, every man his own. You asked me, 'do I have a survey?' I have none. How will you proceed?

SURVEYOR - You paint too black a picture. True, there is no register, to tell the surveys done, by

whom, and when. But there are remedies. Mayhap your neighbour has a survey. I can ask.

SHAKESPEARE - He is a surly fellow, jealous and suspicious. Besides, he works at night, and if disturbed at noon, is like unto a ravening beast. He'll greet thee, not with a sketch but with a cleaver.

SURVEYOR - Or perchance I can discover, which surveyor did this work, and for a fee, can see his notes. Or, if that should fail, then there's a chance that in the Registry Office, there's an instrument, and sketch attached thereto. If this should fail, then I may discover bars, stakes or pipes or crosses etched on concrete curbs, which do define your corners. If that should fail, I may be forced to resurvey the entire block, and thus ensure that every owner has no more, nor less, than deed dimensions, or just proportion - and so I will at least complete your survey.

SHAKESPEARE - Bear with me, as I examine these melancholy choices. First, how many firms exist, who could have done this work? Perhaps forty, but it is true, that does not include those after hours surveyors, not listed in the Yellow Pages. Mark

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MORASSE

though, there are a few, long founded, which do dwarf their smaller brothers. Yet I have ascertained, they did not do this work. Indeed, I do concede, that such a list involves a Herculean work, and is in practice oft abandoned. Too many calls, and messages to leave. And truly, it is not always pleasant, thus imposing, cap in hand, on other firms. Impatient words must often strain the bonds of courtesy. And such a search, if it be fruitful, is often subject to a reasonable charge. This latter pill, however just, is often swallowed with many a grimace, and there are some who do refuse such remedies. But I babble - I should not thus discuss our several survey ills, with any but my confreres, lest it should tarnish the image in the public eye that all surveyors seek of grave, judicious men, majestically worn by weight of evidence.

SHAKESPEARE - Image, schmimage. The very word, to unconforming ears has overtones of undeserving, self puffed dignity. Leave it, I pray you, to the morticians in their slumber rooms. Seek no other image than that which all unsought shall follow from efficient probity. But as to the next of your alternatives, I have been to Sixty Richmond East, the Registry of Deeds. A veritable Madhouse! A holocaust of lawyers and their clerks, all looking for the very abstract, which I did need. Truly, did I have to search, I would employ a burglar, to let me in at dead of night.

SURVEYOR - It is true that such a labour, in search of that which probably is not there, is frequently foregone.

SHAKESPEARE - As for the next choice, to find the bars and other marks which shall define this land, there I can help you. Look you - at this corner, there's a bar. You can be sure of its exactitude, for my neighbour tells me, that he planted it himself. And at this other, such a sight as to gladden a surveyor's heart. Not one bar, but three, within the compass of six inches!

SURVEYOR - Such wondrous luck, if it persists, will put me out of business, but I thank you for this knowledge.

SHAKESPEARE - But should it not suffice, you must, for this my tiny plot, survey the neighbourhood? Did you but know the measurements, got when this development was new, then would it be a little task.

SURVEYOR - My fee of fifty dollars will not change, if I should take a week.

SHAKESPEARE - Now tell me does this obtain, throughout the entire province - this sad oblivion of surveys made, and records set at nought?

SURVEYOR - Alas, yes. Indeed, a rural survey is often beyond my diligence to track down.

SHAKESPEARE - Sometimes I idly watch the life that teems on the surface of some rustic stream. Hast seen the little bugs, that crowd together in a little space, furiously swimming, without collision or advancement? They are called whiligs. Henceforth shall I call them land surveyors.

SURVEYOR - That you are a wit, I am half convinced. You would not scoff, did you but know, what great things are planned in my profession. A longer training and syllabus most comprehensive. There's even talk, that our ills will vanish, were a course at university prescribed for all surveyors.

**"...SUCH A SIGHT AS TO
GLADDEN A SURVEYOR'S HEART.**

**NOT ONE BAR, BUT THREE,
WITHIN THE COMPASS OF
SIX INCHES!"**

SHAKESPEARE - A talisman, a talisman.

SURVEYOR - And that's not all. A most exacting scrutiny obtains, on many of our surveys. Furthermore, it is envisaged, that in course of time, a system of coordinates, such as there is in Europe, and in many of our neighbour states, will be devised, to tie our vast provincial lands together, and impose a system on our ancient township fabric.

SHAKESPEARE - To use thy quaint vernacular, I dig coordinates, from talk I had with Fermat, who gave it to Descartes. But is this not a monumental labour?

SURVEYOR - Decades hence, I've heard it said.

SHAKESPEARE - Again I say, a talisman, a talisman! Though much to be desired. But look you - is it politic to teach a palsied man to play piano?

Nay - first cure the ill that plagues the entire body, then work to make the fingers dexterous. In such a case is your profession.

SURVEYOR - It must be owned that were there but a list, a simple abstract, it would suffice. Then could we make an end to lack of knowledge, and its attendant do errors, doubts and conflicts, arising from our cursed guessing game. They do demean us as a body, and bring us into disrepute, notwithstanding earnest talk, concerning ethics, status and the like. But how to start it, and maintain it?

SHAKESPEARE - Tell me this. What is the profit, every year, of all your body?

SURVEYOR - Three million dollars, to be conservative.

SHAKESPEARE - Your good repute, the public confidence, which should reward such conscientious workmen, this is in danger. 'Tis prodigal to lose it, not to save it.' Yet me thinks the fee would be repaid, in no long time, in savings from new spades.

SURVEYOR - I will think on it, and the means, to implement this necessary course, and if I can enlist the help of others. I thank you for your interest, but must proceed, on this my ill-starred survey. Back to the hedge! Go to the car, my neolithic helper, and bring the spade. We seek originals, as sought Crusaders the Holy Grail. Onward and downward! Farewell!

SHAKESPEARE - Farewell, each man to his trade. I to the pen, surveyors to the spade. ■

On the Lighter Side

Reprinted with permission from the Empire State Surveyor, May 1998

New Virus Alerts-Immediately scan your computer for the following viruses!

PAUL REVERE VIRUS: This virus doesn't horse around, warns you of impending attack. Once if by LAN, twice if by C.

POLITICALLY CORRECT VIRUS: Never identifies itself as a "virus", but instead refers to itself as an "electronic microorganism".

GOVERNMENT ECONOMIST VIRUS: Nothing works, but all your diagnostic software says everything is fine.

NEW WORLD ORDER VIRUS: Probably harmless, but it makes a lot of people really mad just thinking about it.

FEDERAL BUREAUCRAT VIRUS: Divides your hard disk into hundreds of little units, each of which does practically nothing; but all of which claim to be the most important of your computer.

GALLUP VIRUS: 60% of the PC's infected will lose 30% of their data 14% of the time (plus or minus a 3.5% margin of error)

TEXAS VIRUS: Makes sure that it's bigger than any other file.

ADAM AND EVE VIRUS: Takes a couple of bytes out of your Apple.

CONGRESSIONAL VIRUS: The computer locks up and the screen splits in half with the same message appearing on each side. The message says that the blame for the gridlock is caused by the other side.

AIRLINE LUGGAGE VIRUS: You are in Dallas, but your data is in Singapore.

FREUDIAN VIRUS: Your computer becomes obsessed with marrying its own motherboard.

PBS VIRUS: Your program stops running every few minutes to ask for money.

ELVIS VIRUS: Your computer gets fat, slow and lazy, then self destructs only to surface at shopping malls and service stations across rural America.

NIKE VIRUS: Just does it.

KEVORKIAN VIRUS: Helps your computer shut down as an act of mercy.

JIMMY HOFFA VIRUS: Your program can never be found again.

STAR TREK VIRUS: Invades your system in places where no virus has gone before.

HEALTH CARE VIRUS: Tests your system for a day, finds nothing wrong and sends you a bill for \$4,500.00.

