

2001 CSEG ANNUAL REPORT

Canadian Society of Exploration Geophysicists
905, 510 - 5th Street S.W., Calgary, Alberta T2P 3S2



2001 EXECUTIVE

Randy Pelletier	President
J. Douglas Uffen	Vice President
Helen Isaac	Director of Educational Services
Kenneth V. Allen	Assistant Director of Educational Services
Fayda Khalek	Director of Finance
David Siegfried	Assistant Director of Finance
Larry Anderson	Director of Communications
Jocelyn Frankow	Director Member Services
Gary R. James	Assistant Director Member Services
Perry Kotkas	Past President

TABLE OF CONTENTS

Page No.

Executive Reports

President	II
Vice President	III
Director of Educational Services	III
Director Member Services	IV
The Recorder	V
Director of Finance	VI
Financial Statements	VII

Scholarship Awards	XVII
------------------------------	------

Committee Reports

CGC Representative Report	XVIII
-------------------------------------	-------

CSEG Achievements	XIX
-----------------------------	-----

Corporate Members	XX
-----------------------------	----

CSEG Bylaws	XXI
-----------------------	-----

E X E C U T I V E R E P O R T S

President

The past year, 2001, was our first year with the new title changes for some of the *Executive*. The bylaws were changed to allow for 2 year terms on the *Executive* and for title changes which reflect the positions more accurately. The result of this change is that the *Executive* has four more people to help with the work load and the new *Executive* member has a chance to learn the position for a year before taking it over. With those bylaw changes we also increased the dues to \$50.00, which is still a great bargain for the services the CSEG supplies. The theme of the *Executive* over the past year was to run the CSEG like a business. If you are running a business you have to have a handle on the Revenues and Expense, so each committee has been set up like a Business Unit with Financial Budget responsibilities and reporting responsibilities. Each of our committees must submit an **Annual Operation Budget**. If a committee needs funds from the CSEG they must present their request to the *Executive* for approval. Each committee must report their progress to the corresponding *Director* a minimum of once a month, which has been made easy with the advent of e-mail technology. The CSEG now has 34 committees which range from a one man liaison committee to large committees such as the convention. With the large number of committees reporting to the *Executive* it became obvious that there needed to be some proper **Operating Procedures** drawn up for both the *Executive* and the committees. We had developed the *Structure* and now the Process had to be formulated in order for the whole *Operation* to work. These *Operating Procedures* are in their final draft form and hopefully they will be finalized this spring.

The next step is to finalize the *Mandates* for all the committees. What was the purpose of the committee, originally, and what is their function. This will allow us to eliminate any duplication in duties and will crystallize the committees working responsibilities to the CSEG.

We've also appointed 3 new committees this year. The *Social Affairs Committee* is looking at 4 social events through the year that the average member can afford to participate in. These events will be things like Murder Mystery Nights, I-max night, the ZooGala, etc. Although we

currently have the *Doodlebug*, the *Doodlespeil*, and the *Ski-Spree*, they are not accessible to the average member and can be expensive. These new events would be one night social events. The *Outreach Committee* is just formulating itself. We intend to try to become a **National Society** instead of just a Calgary based Society. We have members back east who want to be involved and as well we have Universities that don't know we exist. This committee has the mandate to put together an attack plan to promote the CSEG at other functions in Eastern Canada.

The GPDC is the *GeoScience Professional Development Centre* which is being run by the U of C and we are one of the sponsors. This Centre is being developed to put on various courses for all levels of our profession with all the Computer Hardware and Software to bring that individual up to date. We hope that the Centre will be in full swing this coming year. Our Vice President sits on the board of this GPDC.

The **Master License Agreement** was finalized and ratified by the CSEG Executive and was rolled out to the members and industry in October. The CSEG is the Administrator and the original committee has been disbanded and new committee members put in place for the coming year. APEGGA has been asked to fund this document and they are currently studying our request.

If you have visited the CSEG office lately you will have noticed that the old cluttered store room has been cleaned up and we now have a reception area. Debbie Bradley is working with Jim Racette in our office part time and will be there to greet you.

It has been a great honour for me to serve as your president for the past year. I would like to thank the current **2001 - 2002 Executive** for their hard work and patience with all the changes implemented this year and I look forward to working with them again and the *new Executive members* for another year as past president.

RANDY PELLETIER

Vice President

It has been my pleasure to serve the society in this capacity this past year. I have had an opportunity to learn more about the workings of the society, our operating practices and the varied perspectives of our membership. It has been a year to observe, recommend and act where appropriate. I am thankful for Randy's guidance, perspective and stewardship of the society this past year. Collectively, the Executive has set the stage and laid the foundations for future growth.

The Executive tackled some difficult issues this past year. This year saw some personnel changes in the office. Such changes appear to the membership as a sudden event. The utmost of professionalism was and will always be exercised in such matters as it affects the society. An outline of some new committee operating procedures was rolled out this fall which caused some initial consternation and discord with a couple of committees. The procedures identified some minimal reporting requirements back to the Executive for the purposes of communication and Revenue Canada reporting. These differences have been resolved and the society is stronger for the input and perspective of those committees which had concerns. Our financial records are professionally kept now with the contracted services of an external accounting firm. This will permit the Executive in managing the society's capital on an asset and cash flow basis. The same firm is now handling the updates for our website which had been severely out of date. Commercial solutions to these issues heighten costs but the society is stronger and better for having these services professionally provided. Every effort was made to mitigate the financial impact and cost of these problem solving decisions.

There were some other milestones achieved this past year. The Master License Agreement (MLA) was completed and rolled-out to the membership. This document attempts to clarify the roles, responsibilities and duties of parties involved in the buying and selling of third party seismic data. The society has now raised the bar to a new level within the industry by publishing this document. The society is now offering a recommended standard for such industry transactions. The society is hoping that many corporations will embrace its use. Even in a perceived failure mode, should the document not receive wide industry endorsement, the society has fulfilled its mandate to educate and heighten awareness amongst its members and given all of us something to think about. The convention this year was guided by a progressive and creative group which immersed each of us in a bit of Greek culture and history. The energy and enthusiasm of the convention organizing committee should be commended for their efforts. A great convention was staged in May which was informative, educational, and fun! This year also saw the society support the initial start-up of the Geoscience Professional Development Centre (GPDC) at the University of Calgary. This PC based computer laboratory will be used to stage Continuing Education courses for member societies that require access to such instructional aids. A new committee was also commissioned this year as the society focused upon the creation of its own Outreach program. This committee will be responsible for heightening awareness of our discipline amongst high school and university students and their parents. The committee is also charged with the responsibility to engage and attract new members outside the Calgary market place and to serve our members overseas.

All in all, an exciting year. I look forward to serving the members in the upcoming year. I look forward to your comments and suggestions. Our society is a "happening" place.

DOUG UFFEN, P. Geoph.
VP CSEG

Director of Educational Services

Technical Luncheons

Thanks to the high attendance at all of our lunches, the changes in ticket sale procedures initiated in 2000, the increase in 2001 of ticket prices and the use of our own powerpoint projectors, technical luncheons are now generating a profit for the CSEG. I would like to thank very much the luncheon speakers who gave such interesting and high quality talks in 2001:

- January:** Satinder Chopra, Scott Pickford, Adding the coherence dimension to 3D seismic data.
- February:** Konstantin Osypov, WesternGeco, Refraction tomography: A practical overview of emerging technologies.
- March:** Robert Tatham, SEG 2001 Spring Distinguished Lecturer, Breaking down barriers to effective use of multicomponent seismic data.
- April:** Brad Stelfox, Forem Technologies, Alberta's boreal forest: A landscape in transition - implications for sustainable landscape and landuse.
- June:** Oliver Kuhn, Geo-X, Beyond the odyssey.
- September:** Sam (Zandong) Sun, Imperial Oil, Reservoir monitoring and characterization for heavy oil thermal recovery.
- October:** Jonathan Fried, WesternGeco, Dynamic corrections for water velocity variations: A Nova Scotia case history.
- November:** Ken Allen, Allen Geophysical, Global warming/climate change and variations in solar activity: past, present and future?
- December:** Steve Maione, Scott Pickford, Discovery of ring faults associated with salt withdrawal basins of early Cretaceous age in the East Texas basin.

The following people and companies are gratefully thanked for their support:

- Lisa Eastman, Arcis Corporation, for handling the ticket sales.
- OYO Geospace Canada for their generous donation of the cut-away geophones used for the speakers' mementos.
- WesternGeco and Geo-X for lending their powerpoint projectors and saving us about \$1000 in A/V charges every month.
- Arcis, Capella Exploration Services, Conoco, Earth Signal Processing, Excalibur Gemini, Geo-X, Hampson-Russell, Jason Geosystems, Kelman Technologies, Koch Petroleum, Nexen, Paradigm Geophysical, Samson Canada, Seiscraft, Sensor Geophysical, Sigma Explorations, Talisman Energy and Technica for sponsoring tickets for students from the University of Calgary and SAIT.

Finally I thank the Assistant Director of Educational Services, Ken Allen, for all his work this year.

Continuing Education

The Continuing Education committee held a technically and financially successful forum on "New Technologies in Geophysics" in November, which was attended by about 100 people. The excellent speakers, Phil Bording, Rob Stewart, Norm Cooper, Jim McLellan, Graziella Grech, Ronald Hines, Hugh Lavallee, Tom Feigs and Satinder Chopra, gave us insights into the latest developments in Acquisition, Computation, Processing and Interpretation Technologies. Thanks go to Larry Lines for organizing this forum and to Barbara Young and Jim Thom for heading the Continuing Education committee.

A new Outreach committee was struck in the latter part of the year and will become active in 2002. Its mandate will be to better promote the CSEG across Canada.

Director of Educational Services, *cont'*

The new Geoscience Professional Development Centre (GPDC) at the University of Calgary held its first three courses in 2001 and has plans for a further seven courses in 2002. The main goal of the GPDC is to meet the training needs of post-degree, mid-career petroleum industry professionals by providing quality low-cost courses in a broad array of cross-disciplinary geoscience topics applied to petroleum exploration, reservoir characterization and exploitation. An important aspect of the courses will be to train geoscientists in the use of proven and emerging computer technologies to optimize data analysis, visualization and interpretation. The objective is to make high-end hardware and software available for training to individuals who would normally not have access to such technology. In 2001, the SEG Foundation contributed US\$20,000 towards the development of a computer laboratory, which will be established in early 2002. The CSEG was represented at the GPDC by Barbara Young, Jim Thom, Larry Lines and Helen Isaac.

HELEN ISAAC

Director of Educational Services, 2000-2002

Director Member Services

On behalf of myself and the Director of Member Services I would like to thank the members of the CSEG for their continued support of our Society. We would also like to add a special thank you to those members who have volunteered their time to the Doodlebug, the Doodlespiel, the Ski Spree, the Recorder and the Journal.

IN GENERAL:

The past year has been a year of growing pains and gains inside the executive committee and the social and publications committees have not been spared their share of this. With a full move to Directors and Assistant Directors for each unit of the executive we have been leveling out some bumps in the road. There have been many unofficial and a few official meetings with the various members who organize social events associated with the CSEG. A great deal of time on both sides has been lost over some bad press and miscommunication. In an effort to find a model where we can all work happily together, for the common enjoyment of our members and promotion of our organization, the President of the CSEG has appointed a task force to review and recommend how our CSEG Social events fit with a need to formalize our new operating procedures.

THE JOURNAL:

Our society continues to struggle with receiving enough papers to put together a reasonable issue of the Journal. With an ever increasing view to having a balanced budget the executive with the assistance of the Journal Committee Chair has looked in many directions over the past twelve months to find a workable solution to both the paper submissions and publication cost issue. Many thanks go to Ed Lalande for his continued patience and tireless efforts. A short review of activities on these issues is listed below:

PRODUCE AN ANNIVERSARY ISSUE OF THE JOURNAL USING PAST PAPERS:

After a review of possible papers it was felt that, with our member's propensity for taking new ideas and putting them into practice very quickly, some of the best written papers from the past would come across today as "common practice" or "Old Hat".

Ask the SEG for a special "Canadian" section in "Geophysics":

After review with the SEG at the annual convention it was determined that we already occupy a significant portion of that publication. (That's what we get for having the largest SEG section outside of the USA!)

In the spirit of Earth Sciences team work - team up with the CSPG and publish together:

This approach is in the final stages of review to see if it can work to the benefit of both Societies and their members.

THE RECORDER:

What can we say? WOW! Congratulations and many thanks to Satinder and Oliver. If the general comments around the industry and the letters to the editors are any indication, the continued improvements and changes to the Recorder over the past few years are very well received.

We must also thank the continued support of our advertisers. By the time they read this report they will have received the bad news that advertising rates have needed to increase. The good news is that they have not been changed for five years. On behalf of all of our membership I would ask you to continue your support. Through improvements in the format of our monthly publication we hope that we are presenting your companies in the best possible light. To those companies considering advertising let me point out that the "CSEG Recorder" offers the lowest advertising rates that I have encountered and goes directly to a concentrated audience of companies in the geophysical industry. It is well spent money.

THE DOODLESPEIL CURLING BONSPIEL:

Congratulations to the Doodlespiel Committee Members for another sold-out event in 2001. At the time of writing this report it sounds like 2002 will continue the tradition.

THE DOODLEBUG GOLF TOURNAMENT:

Tom Podivinsky and his crew rose to the challenge laid out before them by past committees. Well done! Unfortunately I had to miss the 2001 version of the Doodlebug. But some of those who did make it up to Jasper took great pleasure in letting me know what I missed. The Doodlebug committee has set up a web site over the past year and I would encourage our members to visit it for full details and a history of this great event. www.doodlebug.ca. 2002 will be the Doodlebug's 50th Year! I'm, looking forward to it.

THE CSEG SKI-SPREE:

34 years and counting. Another annual success story for our members! This family oriented event is held each February in Fairmont and the 2001 edition was another huge success. Congratulations to Mike Clement and his horde of helpers.

A NEW SOCIAL AFFAIRS COMMITTEE:

Greg Reid was appointed Chairman of a new Social Committee for the CSEG in 2001. The 2001 Executive felt that because the cost of attending the "Big 3" is sometimes not within the reach of our younger members, and the fact that these events always seem to sell out, there might be room for some more less costly one-nighter social events. This committee is currently putting together plans for a number of possible events. Please watch the Recorder and the web site for more details.

Finally let me take this opportunity to thank Jocelyn Frankow for her tutelage, and welcome the newest group of dedicated individuals have joined in to help all the 2002 committees.

REPORTS TO BE INCLUDED:

- Ski Spree report reprint from APRIL 2001 recorder.
- Doodlebug Report: retrieve copy from www.doodlebug.ca
- Doodlespiel Report: Alan Richards to supply.
- New Social Committee Report: Greg Reid to supply.
- Recorder Report: Satinder to supply
- Journal Report: Ed to supply

GARY JAMES

The Recorder

The RECORDER has seen yet another busy and exciting year. In fact we may call it a milestone year and one of growth and all round quality enhancement. Concerted efforts were made to improve the conventional look, technical content, and the overall quality of reading material and bringing in more order and organisation to the publication. Based on the feedback from our members, today we can proudly say that our flagship publication - the RECORDER, is a high quality periodical that all CSEG members love to read and enjoy. Out of the 10 issues published last year, one Special Focus Issue on Inversion and two Special Issues focussing on 'Significant Developments in the Last Decade and Future Directions' were published. These 10 issues had 62 technical articles, and 12 semi-technical or articles of a general nature were published. In addition to this, 6 interviews with prominent geophysicists were also published. Apart from this, several new columns were introduced like 'Letters to the Editor', 'Technical Terms of the Month' and the 'Calendar'. We are certain this quantity was sufficient to whet the appetite of one and all within our membership.

All these features have required a high level of dedication and innovative contributions by the RECORDER Committee members, and this effort is greatly appreciated. Also, the authors who sent in their contributions by way of articles and photos or dedicated their time for interviews have a big share in the success of the RECORDER and so are gratefully acknowledged.

We will continue our endeavour to maintain the high quality of the RECORDER and ensure that it reaches the members in a timely manner each month. This will however, require support from members of the Society by way of submitting articles or news items and we are sure we can count on that.

GARY JAMES

It is usually said 'Everything has a price'. With all these new features coming onstream, the cost of publication of the RECORDER has also gone up to the extent that it is not being covered by advertisements, the only source of revenue. The advertisement tariff has not been increased for the last 5 years. The issue was debated and finally it was decided that the advertisement tariff be increased by 20 percent with effect from April 2002, to sustain the high quality of the publication, and this has since been approved by the CSEG Committee. This hopefully will help offset the enhanced cost of publication of the RECORDER.

Within the RECORDER Committee, in January 2002, Stephen Kearsy (GEDCO) replaced Cindy Gosse (Geo-X Systems) to look after the 'Tracing the Industry' column. Thanks to Cindy Gosse for volunteering her time and effort. Amy Wolf (Earth Signal) provides us news of corporate activity in the 'Grapevine' column and continues to do a good job. Vince Law (Conoco) continues to volunteer his valuable service as Advertising Manager. Jim Racette and Debbie Bradley are always available for help and liason apart from their organisation of advertising material and related things.

The RECORDER Committee enjoys a good and supporting relationship with Phoenix Press, our current printers - thanks to Rick Bussi and his crew.

A digital version of the RECORDER is available at www.cseg.org. Efforts are being made to have the back issues posted on the website.

**SATINDER CHOPRA
OLIVER KUHN**

Director of Finance

Once again the industry has shown it's vulnerability and 2001 turns out to be another challenging year. The CSEG continually strives to provide good services to its members in a cost-effective manner. Especially in times like these, we feel good about our decision to maintain enough reserves to operate for 2 years. Services need to be self-sustaining in order to conserve our reserve. The challenge is: what services does the CSEG provide that are seen as most important by the membership, and that are self-sustaining. The self-sustaining services are the Recorder, luncheons, and educational services like forums and courses. Other services like the Journal, the photo directory, and other special projects we fund are not self-sustaining. In reassessing our services last year, the decision was made to stop production of the Journal and improve the quality of the Recorder. The Recorder committee has succeeded with that mandate. However, they still face some challenges ahead. A bigger and better Recorder will have more costs associated with it. The Recorder relies on advertising revenue, which is sensitive to corporate mergers and industry downturns. The luncheons are consistently receiving large turnouts. The new procedure of paying for tickets in advance has helped recover some of the losses experienced in previous years. This couldn't have been achieved without the volunteer work of Lisa Eastman. Speaking of volunteers, we held a Volunteer Appreciation Night to acknowledge the people who put in that extra time and effort. We supported a New Technologies Forum, which had a great turn out. These information forums as well as the SEG Distinguished Lecture Sessions continue to be a success with our members. We have also

supported the Geosciences Professional Development Centre, which will benefit incoming geoscientists and other CSEG members. This is part of our educational efforts, but also part of our Outreach Program to attract new members.

Last year, I talked about allocating and building on reserve funds as part of our financial planning strategy. With the help of our auditor Matt Godfrey, the finance committee has set up 3 main reserve funds, the categories being: general, convention and special projects, and member services. The general fund is the 2-yr office operating expense. The convention and special projects is for particular years where we require more in "seed funds" in the case of a joint convention, or projects that we did not foresee and are for the betterment of the society. The Member Services Fund is also an operating fund for member expenses like the luncheon and recorder. These funds are presented in our newly formatted financial statements. We chose to change the format of the statements to make it easier for our members to read. Once again, I need to thank the finance committee for all their time and effort. They are Jan Hay, Mark Klingbeil, Jim Racette, and Dave Siegfried. I give special thanks to Dave Siegfried for all of his support. Good luck next year Dave!!

The following financial statements are for the year ending December 31, 2001, as audited by Matt Godfrey, C.A., Godfrey and Godfrey Chartered Accountants

FAYDA KHALEK

A U D I T O R ' S R E P O R T S

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Reports

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

Auditor's Report

CAMERA READY ART
HARD COPY TO BE STRIPPED IN

CAMERA READY ART

HARD COPY TO BE STRIPPED IN

SCHOLARSHIP AWARDS

The CSEG has been awarding scholarships for about the last 32 years and are proud to be entirely volunteer driven and non-profit. The Fund awards annual scholarships to Geophysics students from institutions across Canada, which offer courses leading to a career in geophysics. The CSEG provides stationary but all administration costs are borne by the volunteer's employer. All monies collected go to the students via their respective registrar's offices in order to directly offset tuition costs.

Between 1968 and 2001 the CSEG Scholarship Committee has awarded 545 scholarships to students at Canadian Universities. Calgary corporations and individuals have generously contributed a total of \$683,836.17 to the CSEG Scholarship Trust Fund during that time. An important component of the total is the interest generated by the memorial trust funds of Ted Popilchak, Chris Elms and Bob Won.

Candidates submit applications by July 15 of each year. The application must be accompanied by official transcripts, 2 letters of reference from professors and must be signed by a school official. Each committee member evaluates the candidates independently then the committee convenes in early August to select the winners. The number of available scholarships is determined by the amount of money that the committee has been successful in raising from generous corporate and individual donors.

The committee typically identifies 15-20 worthy recipients out of approximately 40-60 applicants and ranks them according to their academic standing, financial need, interest in Geophysics and extra-curricular activities. The committee strives to distribute the scholarships to the best students across the country. This year the committee awarded 20 scholarships totaling \$40,000.00 to students at 9 Universities. The CSEG scholarships (\$2,000.00) are sufficiently large to significantly offset the cost of the students' tuition. Twenty-one of the corporations and individuals approached in 2001 contributed generously to the CSEG Scholarship Trust Fund.

Awards posters are published annually which list the scholarship recipients, their school, the donors, the amount of the scholarships and information about the scholarships and how to apply for them. The posters and the scholarship application forms are distributed to university earth science departments across the country for display. The CSEG gets excellent nation-wide exposure through these posters. The scholarship donors also receive copies of these posters.

The committee is comprised of 3 people who have committed to sit on the committee for 3 years. Each volunteer serve as the Junior Trustee in their first year, Senior Trustee in the second and as Chairman in their final year. In 2001, the committee members were:

Junior Trustee,	Atul Nautiyal,	AEC Oil & Gas;
Senior Trustee,	Mike Perz,	Geo-X Systems Ltd.;
Chairman,	Joe Stuhec,	PanCanadian Energy

The 2001 Scholarship committee would like to congratulate the following recipients of a 2001 CSEG Scholarship.

Katarzyna Czarnecki	University of Calgary
Darren Hinks	University of Calgary

John Zhang	University of Calgary
Garnet Knopp	University of Calgary
Brooke Berard	University of Calgary
Shauna Oppert	University of Calgary
Ulrich Theune	University of Alberta
Yajun Zhang	University of Alberta
Pavlo Cholach	University of Alberta
Zuzana Dobiasova	University of Alberta
Jonathan Winsor	Memorial University of Newfoundland
Kimberly Pike	Memorial University of Newfoundland
Rob Moucha	University of Toronto
Amy Daradich	University of Toronto
Doug Angus	Queen's
Todd Noble	Queen's
Andrea Letkeman	University of Manitoba
Eileen Blackmore	University of Western Ontario
Karl Kappler	University of Victoria
Jamin Cristall	University of British Columbia

The 2001 CSEG Scholarship Committee would like to acknowledge the generous contribution made by the following corporations, individuals and trust funds.

PanCanadian Energy
 Rozsa Petroleum Ltd.
 Matrix Geoservices Ltd.
 Sigma Explorations Inc
 Olympic Seismic Ltd.
 Veritas GeoServices
 Intercontinental Seismic Surveys Ltd.
 Suncor Energy Foundation
 Millennium Seismic Ltd.
 Hampson-Russell Software Services Ltd.
 Talisman Energy Inc.
 Earth Signal Processing Ltd.
 Apoterra Seismic Processing Ltd.
 Geo-X Systems Ltd.
 CGG Canada Services Ltd.
 Canadian Hunter Exploration Ltd.
 Canadian Natural Resources Limited
 Input / Output of Canada Inc.
 Sensor Geophysical Ltd.
 Larry Lines
 GEDCO
 Ted Popilchak Memorial Trust Fund
 Chris Elms Memorial Trust Fund
 Bob Won Memorial Trust Fund

Your 2002 CSEG Scholarship committee will consist of:

Chairman,	Mike Perz,	Geo-X Systems Ltd.;
Senior Trustee,	Doug Neilson,	PanCanadian Energy;
Junior Trustee,	to be named later.	

C G C R E P R E S E N T A T I V E R E P O R T

I am pleased to provide a report to the CSEG on the activities of the Canadian Geoscience Council (CGC) and my involvements over the past year. In the past, there have been concerns over the relevance of the CGC to CSEG members. I believe and hope that readers will concur that the CGC has a very important role to play for our Society and all geoscientists in Canada.

The CGC is a council of more than 20 organisations, which include learned societies, technical and professional associations, government geological surveys and representatives from academia. The CGC executes its business with a board of 9 volunteer directors elected by the Council and assisted by a part-time executive director based in Ottawa. The CGC maintains a website (www.geoscience.ca) which contains more detailed information about the council and links to member organizations.

The CGC's **mission** is to ensure the effectiveness and influence of the geosciences in Canada to the benefit of all Canadians in terms of quality of life, economic prosperity and improvement of the natural environment.

The CGC does this by: *Initiating, Coordinating & Communicating.*

Initiating actions include: the Promotion of new large-scale collaborative projects that bear on minerals and petroleum explorations such as:

1. NEPTUNE - the CGC supports Canada's participation in this joint US/Canada project which will place a fibre-optic connected network of observatories on the Juan de Fuca plate, including sensors of smoker activity on the mid-ocean ridge;
2. The International Continental Drilling Project (ICDP) - the CGC encouraged Canada to join, so as to assist a joint international effort to drill gas hydrates in the Mackenzie delta;
3. The Integrated Ocean Drilling Program (IODP) - the CGC supports this planned successor to the Ocean Drilling Program (ODP) which will bring new geological targets within reach of the drill, including passive continental margins, and the seismogenic zones of destructive plate margins;
4. The Census of Canadian geoscientists - the CGC conducted this survey within the entire range of Canadian geoscientists. These demographic data are available to all CGC member organizations. Further analyses are in progress, including the identification of capacity gaps in different sectors.

Coordinating activities undertaken by the CGC among geoscientific organizations include:

1. The organization of meetings that bring together disparate groups, for example the recent GAC NUNA conference on the future of mineral deposits in Canada
2. Direct communication to Canadian geoscientists through Electronic Bulletins distributed regularly using our Listserve (approx. 1000 members)
3. CGC's website (www.geoscience.ca)
4. Publication of articles in trade journals

Communicating the importance of the geosciences has focussed on enhancing public awareness of geosciences. The CGC is directing its energies at three target groups:

- (1) Politicians and policymakers in government: The CGC has recently appointed an Executive Officer (Dr. Tim Aston) in Ottawa who is registered as a lobbyist.
- (2) The general public: The CGC is in the process of developing a series of position papers and "backgrounders" for media distribution to enhance public awareness and allow rapid response when an issue becomes topical
- (3) Future generations of earth scientists: The CGC has provided long-term support for the Canadian Geoscience Education Network (CGEN) and the EdGeo program of teachers' workshops. It is also actively supporting GEOSCIED IV, an international conference to be held in Calgary (2003) that is devoted to the promotion of science education in schools.

What are CGC's long-term goals?

The CGC would hope to become the acknowledged national leader in developing geoscience policy in issues of broad concern to Canadians. It would like to be the first call for those in government and the media seeking independent advice and information on geoscience aspects of national issues. The CGC vision includes recognition by all Canadian geoscientists as their leading advocate of the "effectiveness and influence of the geosciences in addressing the needs and desires of the people of Canada."

Realizing CGC's Vision

The following steps are being taken to attain these goals:

1. Establishment of an office in Ottawa
2. Hiring of a full-time Executive Director who is dedicated a geoscientific champion
3. Increase direct communications with individual Canadian geoscientists
4. Promote a flagship annual public event
5. Broaden CGC membership (more employers' organizations, provincial professional geoscientist associations, more chambers of mineral resources, other learned and technical associations broadening out to oceanography, soil science, meteorology...)
6. Maintain an energetic Board of Directors
7. Encourage a strongly supportive membership to increase financial support to realize these goals.

In my role as CGC representative, I have attended CGC council meeting on your behalf and communicated the above message to both the CSEG executive and the general membership (luncheon presentation). In June of 2001, I was elected to become the Issues Director of the CGC. In November I was also asked to act as interim Financial Director. This involvement with the CGC executive hinders my role as CSEG representative. I am pleased to announce that Susan Eaton has been appointed by the CSEG executive to become my replacement. I have enjoyed my brief tenure as your representative and look forward to working with Susan and the CSEG executive in my role as CGC Director.

R. C. (BOB) MUMMERY

C S E G A C H I E V E M E N T S

Past Presidents

1950	*J. O. Galloway
1951	*C. M. Moore, Jr.
1952	*L. I. Brockway, *N. J. Christie
1953	*W. R. Ogilvie
1954	*R. J. Copeland
1955	*R. D. Holland
1956	*R. B. Ross
1957	*G. J. Blundun
1958	F. A. Hale
1959	H. J. Kidder
1960	*M. B. Dobrin
1961	P. I. Bediz
1962	P. J. Savage
1963	R. H. Carlyle
1964	C. J. Chapman
1965	*R. A. Boulware
1966	J. Hodgkinson
1967	E. A. Fulmer
1968	G. E. Longphee
1969	*W. Blair
1970	L. R. Baxendale
1971	R. O. Lindseth
1972	J. K. Morrison
1973	W. N. Rabey
1974	J. H. Harding
1975	J. R. Pullen
1976	W. D. Evans
1977	R. J. McCaffrey
1978	E. F. Mahaffy
1979	L. R. Hatlelid
1980	P. D. O'Brien
1981	A. E. Wren
1982	D. A. Carswell
1983	V. A. A. Nielsen
1984	J. R. Hume
1985	L. C. Fichtner
1986	J. D. Boyd
1987	R. L. Comer
1988	R. M. Lundberg
1989	*A. J. Ferworn
1990	N. E. Rutherford
1991	B. H. Russell
1992	R. J. Brown
1993	W. E. Davitt
1994	G. G. Taylor
1995	B. T. Korchinski
1996	D. Hampson
1997	R. Stewart
1998	N. Shaw
1999	D. Pruden
2000	Perry Kotkas
2001	Randy Pelletier

Honorary Members

Dr. George D. Garland	Dr. Ron M. Clowes
*Dr. J. Tuzo Wilson	Dr. Douglas W. Oldenburg
Norman J. Christie	Dr. Roy Hyndman
*Dr. Milton B. Dobrin	Dr. Larry Lines
A. E. Pallister	Dr. Zoltan Hajnal
Dr. Roy O. Lindseth	Brian Russell
Dr. David W. Strangway	Robert Comer
Peter J. Savage	
R. H. Carlyle	
*Dr. Ernest R. Kanasewich	
Robert Boulware	
Dr. A. Easton Wren	
Sudhir Jain	
Dr. Charlotte Keen	
Dr. Peter Gretener	
Dr. Gordon West	

Meritorious Service Awards

Harry J. McGrew
 *Cecil A. Collins
 *Dr. Milton B. Dobrin
 Alexander H. McKee
 Peter J. Savage
 *Percy Smith
 Dr. Roy O. Lindseth
 John Hodgkinson
 *Jack W. Bowden
 *Hal W. Godwin
 J. K. Morrison
 W. N. Rabey
 Dr. A. Easton Wren
 Mary C. Colberg
 A. Vern Street
 *Alan J. Ferworn
 Jack R. Pullen
 Sudhir Jain
 *Bill Blair
 Harold Acheson
 Bud St. Clair
 William D. Evans
 Earle F. Mahaffy
 Jack E. Setters
 Peter I. Bediz
 William C. Stroup
 Ernie K. Shaw
 Bill Davitt
 Ray Prudholme
 George Blundun
 Valerie A. A. Nielson
 Duncan A. Carswell
 P. Dennis O'Brien
 Judi MacDonald
 Dale Kary
 D. K. Bruce Fenwick
 Lloyd Hatlelid
 Larry Fichtner
 Don Simpson
 John Boyd
 Art Baptie
 Bob Comer
 Dan Hampson
 Nancy Shaw
 Ralph Lundberg
 Murray Olson
 George Kostashuk
 Robert Grigg
 Neil Rutherford
 Ken Duckworth
 Melvin E. Best
 Brian Russell
 Don C. Lawton
 Jim Brown
 John Pierce
 Gregg Milne
 *Ernest Kanasewich
 Doug Uffen
 Michael Enachescu
 Elaine Honsberger
 Dave Siegfried
 Penny Colton
 Norm Cooper
 Barry Korchinski
 George Fairs

*Deceased

CSEG Medal

Ted Rozsa
 Roy Lindseth
 Greg Davidson
 Dave Robson
 Dr. Robert R. Stewart
 Hugh Stanfield

Donald Chamberlain
 John Boyd
 Garry Kelman
 Brian Russell
 Dr. Don Lawton

C O R P O R A T E M E M B E R S

Apache Canada Ltd.
 Ace Explosives ETI Ltd.
 Allen Geophysical Consulting Ltd.
 Allied Seismic Ltd.
 Aguila Exploration Consultants Ltd.
 Anadarko Canada
 Anderson Exploration Ltd.
 Apoterra Seismic Processing Ltd.
 APL Oil & Gas (1998) Ltd.
 Archean Energy Ltd.
 Arcis Corporation
 Atkin Geomack Consultancy Ltd.
 Austin Powder Ltd.
 Beau Canada Exploration
 Bertram Drilling Corp.
 BP Canada Energy Ltd.
 Burlington Resources Canada Energy Ltd.
 Canadian Forest Oil Ltd.
 Canadian Hunter Exploration Ltd.
 Canadian Natural Resources Ltd.
 C & C Systems
 Century Exploration Limited
 CGG Canada Services Ltd.
 Chevron Canada Resources
 Compton Petroleum Corporation
 Conoco Canada Limited
 Data Trek Exploration Ltd.
 Destiny Resources Services Corp.
 Eagle Surveys 2000 Inc.
 ECL (Canada) Ltd.
 Eclipse Seismic Processors
 Enerplus Energy Services Ltd.
 EOG Resources Canada Ltd.
 Explosives Limited
 ExxonMobil Canada Ltd.
 GEDCO
 Geophysical Service Incorporated
 Geotech Exploration Services Ltd.
 Geo-X Systems Ltd.
 Geo-Search Data
 Gulf Canada Resources Ltd.
 Hampson-Russell Software Serv. Ltd.
 Hunt Oil Company of Canada, Inc.
 Husky Oil Operations Limited
 Iexco Canada Inc.

Impact 2000 Inc.
 Imperial Oil Resources
 Input/Output of Canada Inc.
 Intercontinental Seismic Surveys
 Kelman Technologies Inc.
 Koch Petroleum Canada, L.P.
 KPS Group (Canada) Ltd.
 Landmark
 Lornel Consultants
 Lynx Information Systems
 Marathon Canada
 Matrix Geoservices Ltd.
 Mitcham Canada Ltd.
 Murphy Oil Company Ltd.
 Northrock Resources Ltd.
 Olympic Seismic Ltd.
 Outsource Seismic Consultants Inc.
 Oyo GeoSpace Canada Inc.
 PanCanadian Petroleum Limited
 Paradigm Geophysical (Canada) Ltd.
 Petro Canada Oil & Gas
 Pulse Data Inc.
 Request Seismic Surveys Ltd.
 Rozsa Petroleum Ltd.
 Samson Canada Inc.
 Scott Pickford, A Core Laboratories Company
 Sensor Geophysical Ltd.
 Sercel Canada Ltd.
 Sercel Inc
 Seisland Surveys Ltd.
 Shell Canada Ltd.
 Sigma Exploration Inc.
 Solid State Geophysical Inc.
 Statcom Ltd.
 Summitt Resources Ltd.
 Sun Microsystems
 Suncor Energy
 Synterra Technologies Ltd.
 Talisman Energy Inc.
 Taurus Exploration Ltd.
 The Wiser Oil Company of Canada
 Time Seismic Exchange Ltd.
 Veritas DGC Inc
 Veritas GeoServices

C S E G B Y L A W S

The original Bylaws were registered with the Registrar of Companies on August 8, 1977. Amendments to the bylaws were approved by extraordinary resolutions on December 13, 1977 and April 13, 1978. These amendments were registered on September 18, 1978.

Further amendments were recommended and accepted by the Executive on August 24, 1980, January 12, 1984, October 2, 1986 and April 6, 1989 and subsequently registered. The most recent amendments were approved by the Executive on May 28, 1992 and ratified by the membership at a General Meeting October 13, 1992.

Bylaws of the Canadian Society of Exploration Geophysicists

(Hereinafter referred to as "the Society")

ARTICLE I - NAME

The society shall be called the "Canadian Society of Exploration Geophysicists" and may also be referred to as the "Society" and have the alphabetic abbreviation of CSEG.

ARTICLE II - MEMBERSHIP

Section 1 - Classes of Membership

Membership in the Society shall consist of Honorary Members, Active Members, Student Members and Corporate Members.

Section 2 - Honorary Membership

Honorary Membership may be granted by the Executive Committee to any person who in the unanimous opinion of the Committee on Honours and Awards and the Executive Committee is considered worthy of such honour by reason of unusual service to the Society or outstanding work in the field of geophysics. Honorary members shall be elected for life and shall enjoy all privileges of the Society. They shall be eligible to hold any office, to vote on all matters submitted to the membership, and to petition the Executive Committee on any matter.

Section 3 - Active Membership

Active Membership may be granted to any person engaged or interested in the geophysical profession.

Section 4 - Corporate Membership

Corporate Membership may be granted to any Company having an active interest in supporting the objectives of the Society. Corporate members shall enjoy all privileges of the Society except that they shall not hold office nor shall they endorse applications for any class of membership, nor vote on any matters.

Section 5 - Student Membership

Student Membership may be granted to any Student having an active interest in supporting the objectives of the Society. Student members shall enjoy all privileges of the Society except that they shall not hold office, nor shall they endorse applications for any class of membership, nor vote on any matters.

Section 6 - Election to Membership

An applicant for election to Active membership shall submit to the Society an application together with dues for one year. The application shall be endorsed by three Active or Honorary Members of the Society in good standing who are personally acquainted with the applicant. All applications for membership in the Society must be approved by a majority of the Executive Committee. When an applicant has been approved, the Secretary shall notify him in writing. He shall receive all available issues of the Society's Journal for the year for which he makes his initial payment of dues.

The Executive Committee shall publish the names of all new members in the next issue of the CSEG Recorder following approval of their applications.

The Executive committee may waive the requirement of references from members of the society for Geographical or other reasons, if the applicant is otherwise eligible and furnishes other satisfactory references. Active and

Associate Members of the Society of Exploration Geophysicists and of the European Association of Exploration Geophysicists may apply for membership in the Society and the requirement of endorsement by three sponsors shall be waived.

ARTICLE III - ETHICS

Membership of any class shall be contingent upon conformance with the established principles of professional ethic.

Any member may for the good of the Society be suspended or expelled from the Society at any time as set forth under ARTICLE IV of the Bylaws.

ARTICLE IV - RESIGNATION AND EXPULSION OF MEMBERS

Section 1 - Resignation of Members

Any member of the society may resign at any time by submitting his resignation in writing to the Executive Committee. Any member who so resigns shall cease to have any rights in the society and shall cease to incur further indebtedness to the society. Any person who has resigned under this section may be reinstated by majority vote of the Executive Committee subject to the payment of any outstanding dues and obligations which were incurred prior to the date when he ceased to be a member of the Society.

Section 2 - Expulsion of Members

Any member who, after being granted a hearing by the Executive Committee, shall be found guilty of a violation of the established principles of professional ethics, shall be asked to resign from the Society by unanimous vote of the Executive Committee. The decision of the Executive Committee in all matters pertaining to the interpretation and execution of the provisions of this section shall be final.

ARTICLE V - OFFICERS AND THEIR DUTIES

Section 1 - Officers

The elected Officers of the Society shall be:

- 1.1 President
- 1.2 Vice President
 - 1.1 2.1 Director of Finance
 - 2.2 Director of Communications
 - 2.3 Director of Educational Services
 - 2.4 Director of Member Serv

Positions 2.1 through 2.4 are 2 year terms, the first year as "Assistant Director", and year 2 as "Director". Elections will be held annually where the positions 2.1 through 2.4 would be called "Assistant Director" for those newly elected officers.

Additionally, the officers shall appoint a Journal Editor and a Recorder Editor for a period of two years.

1.3 Section 2 - Election of Officers

All Officers of the society shall be elected annually from among the Active or Honorary Members of the Society in good standing, by means of a secret ballot in the following manner:

There shall be a Committee on Nominations consisting of the President who shall be Chairman, and the two most recent available Past-Presidents. The Committee shall nominate one or more candidates from among the Active or Honorary Members of the Society in good standing, for each office or post to be filled, having first secured the consent of all candidates nominated.

The report of the Committee on Nominations shall be mailed to each member in order that additional nominations may be solicited before the closing date for nominations. Such additional nominations shall have the consent of the candidates nominated, shall be signed by at least five members of the Society, and shall be submitted to the Secretary. Nominations shall be closed on the 1st day of November prior to the Annual Meeting.

Election shall be by secret ballot, mailed to each member of the Society after the closing date of nominations, and not later than the 15th day of

November prior to the Annual Meeting. Only those ballots postmarked not later than December 31st and received by the 4th day of January prior to the annual Meeting shall be counted. The President shall cast his vote only when necessary to break a tie. Each Member voting may cast one vote for each Officer, and the candidate receiving the greatest number of valid votes cast for an office shall be declared elected to that office.

The President shall appoint a Committee of three tellers who shall be responsible for obtaining the ballots from The Director of Communications and counting them not later than the 7th day of January prior to the Annual Meeting. The Chairman of the committee of Tellers shall report the results of the election to the President who shall immediately advise all candidates.

The newly elected Officers shall attend a meeting of the council immediately prior to the Annual Meeting, and shall be installed in their offices at the Annual Meeting, at which time they shall assume their duties.

The Officers shall hold office for a nominal period of two years, and no member shall be eligible for election to the same office for more than two consecutive terms.

In case of a vacancy in any office, other than the President's, the Executive Committee shall select a successor to serve the remainder of the incumbent's term of the vacant office.

Section 3 - Duties of President

The President shall preside at meetings of the Society and of the Executive Committee and Council. He shall appoint such Committees as are required for the purposes of the Society, and shall delegate members to represent the Society. Jointly with the Director of Communications, the President shall sign all written contracts and other obligations of the Society. He may, at his option, serve on, and may be chairman of, any committee. The President may delegate in writing such authority, as is required, to other Officers. In the temporary absence of other Officers, he shall assume their duties or delegate them.

Section 4 - Duties of Vice-President

The Vice-President shall assist the President in his duties and shall assume the office of President in case of a vacancy in that office, and shall assume the duties of President for such period or periods as that Officer for any reason may be unable to perform his official duties.

Section 5 - Duties of Director of Educational Services

The Director of Educational Services shall be responsible for arranging the technical and the continuing education programs of the Society including the technical luncheons and the continuing Education committee; shall have authority to appoint such assistants as he may require; shall perform other duties as directed by the Executive Committee.

Section 6 - Duties of Director of Communications

The Director of Communications shall maintain a complete list of the membership of the Society; shall keep minutes of all meetings of the Society and Executive Committee; shall mail advance notices of meetings to all members; shall notify the members by mail of proposed amendments to the Constitution; shall transact any other business ordered by the Executive Committee. The Director of Communications shall have custody of the seal and shall be responsible for its safekeeping; and shall see that the seal is affixed to all documents requiring the seal of the Society. The Director of Communications shall also be responsible for the Website Committee.

Section 7 - Duties of Director of Finance

The Director of Finance shall collect all dues and other money receivable and shall make disbursements authorized by the Executive Committee. He shall report upon the condition of the Treasury at the Annual Meeting and at other times upon request of the Executive Committee. The Director of Finance shall, with the approval of the Executive Committee, appoint an auditor or auditors who shall audit the books of the Society and its committees. The Auditor's Report shall be delivered to the Executive Committee by January 31st, of the current year. The Auditor's Report shall cover the financial year of the Society, hereby defined as January 1st to December 31st, and shall be delivered to the Executive Committee before January 31st following the end of the financial year. The Director of Finance shall be responsible for updates to the existing

budget, and prepare a budget for the ensuing year. It shall be presented to the Executive Committee by December 31st of the current year.

Section 8 - Duties of Director of Member Services

The Director of Member Services shall be accountable for the Recorder and Journal Committees and shall perform other duties as directed by the Executive Committee.

Section 9 - Duties of Assistant Directors

The Assistant Director is to act as an understudy to the incumbent, as well as assist that individual with his or her duties as deemed necessary.

ARTICLE VI - COUNCIL

Section 1 - Designation of Council

The Council of the Society shall consist of the Officers, the Officers-elect, the immediate Past-President, the Section Representatives to the Society of Exploration Geophysicists, the Section Representatives from the Society Sections as described in ARTICLE XV, and the Journal Editor, and The Recorder Editor.

Section 2 - Powers of Council

The Council shall be the governing body of the Society and except as otherwise herein provided, shall have full control and management of the affairs and funds of the Society.

SECTION 3 - MEETINGS OF COUNCIL

A meeting of the Council shall be held at the call and under the chairmanship of the President immediately before the Annual Meeting of the Society. At this meeting the Council may review the reports from the Officers and committees, and the activities of the Society for the past year. The Council shall conduct any necessary business and issue instructions or recommendations to any Officer or committee, except as otherwise herein provided. All committee chairmen may attend this meeting with the privilege to speak but not to vote.

At the call of the President or a majority of the Council members, and after written notice to all Council members, the Council may meet at any time.

A quorum at any meeting of the Council shall consist of two-thirds of all Council members.

Unless otherwise provided by the Bylaws, all actions by the Council shall require a majority vote of the members present.

ARTICLE VII - EXECUTIVE COMMITTEE MEETINGS AND DUTIES

Section 1 - Designation of Executive Committee

The Executive Committee shall consist of the Officers, the immediate Past-President, and the Section Representatives to the Society of Exploration Geophysicists.

Section 2 - Powers of the Executive Committee

When the Council is not in session the Executive Committee shall have full authority, subject only to prior instructions by the Council, to exercise all powers of the Council.

Neither the Executive Committee of the Society, nor any of its members, shall have the power to borrow money, or expend money in excess of those funds in the Society's current accounts, unless approved by a three-fourths vote of the members present at any general meeting of the Society membership called on due notice and for that purpose.

Section 3 - Meetings of the Executive Committee

Meetings of the Executive Committee shall be held monthly insofar as possible, at the call of the President. A quorum at any meeting of the Executive Committee shall consist of a majority of the members of the Executive Committee. All actions of the Executive Committee shall require a majority vote of the members present, except as otherwise herein provided.

Section 4 - Duties of the Executive Committee

The Executive Committee shall transact all business of the Society not otherwise herein specifically provided for. It shall elect all members to the Society; shall authorize all expenditures; shall authorize the use of the seal; shall direct investments of the Society funds; shall establish and supervise publications; shall approve and recommend all proposals for special assessments; shall have the power to review all actions and appointments by the Officers.

Section 5 - Remuneration of Executive Committee

No Officer of the Society shall receive any remuneration for his services unless specifically provided for in the Bylaws.

ARTICLE VIII - SOCIETY MEETINGS

Section 1 - Annual Meetings

The Annual Meeting shall be held before the end of March at a time and place designated by the Executive Committee. An Annual Report, including the reports of Officers and committees, shall be prepared by the President and distributed to all members prior to the Annual Meeting.

Special meetings may be called at any time by the President of the Society, or by a majority vote of the Executive Committee.

At Annual and Special Meetings, those attending shall constitute a quorum, provided that the entire voting membership has been duly notified at least one week in advance of the meeting.

Section 2 - Technical Meetings

Meetings of the Society shall be held periodically at dates to be announced by the Executive Committee. The Executive Committee shall determine the time and place of meetings, and the nature of the technical program and entertainment.

ARTICLE IX - DUES AND FINANCE

Section 1 - Dues

The annual dues for an Active Member or Student Member of the Society shall be set from time to time by and at the discretion of the Council, but shall not exceed \$50.00 (including G.S.T.), which amount shall include the cost of one subscription to the Society's Journal/Recorder.

Honorary Members shall not be required to pay dues and shall receive the Journal/Recorder and other publications without charge.

The Executive Committee shall set the annual dues for a Corporate Member of the Society, but in no case shall be less than \$50.00.

Section 2 - Payment of Dues

Annual dues shall be payable in advance on January 1st of the calendar year. Notice of dues payable shall be mailed to each member by the Director of Finance in November of each year. Dues paid by applicants for membership during November and December will be considered in payment of the following year's dues.

Any Active Member or Student Member, who fails to pay his dues by July 1st, shall lose his membership in the Society. Notice of forfeiture of membership shall be mailed to a delinquent member at least ten days before July 1st.

A member who has forfeited his membership under the provisions of this Article may be reinstated by majority vote of the Executive Committee, subject to the payment of any outstanding dues and obligations which were incurred prior to the date when he ceased to be a member of the Society.

No person who has ceased to be a member of the Society shall have any claim to any property or assets of the Society.

Section 3 - Audit

The books and accounts of the Director of Finance shall be audited as covered under Article V, Section 7 of these Bylaws.

Section 4 - Inspection by Members

The books and records of the Society may be inspected by any member at any Annual Meeting or at any special meeting called for financial purposes.

ARTICLE X - PUBLICATIONS

Section 1 - Editors

The Executive Committee will appoint three editors; A Journal Editor, a Recorder Editor, and a Website Editor. The Journal Editor will be responsible for the technical content of the society's publications. The Recorder Editor will be responsible for the publication of the Society's Recorder. The Journal Editor and the Recorder Editor will report to the Director of Member Services and will sit on the committees of the society's publications. The Website Editor will be responsible for all content on the CSEG Website and will report to the Director of Communications.

Section 2 - CSEG Recorder

The CSEG Recorder shall be the medium for publishing notices of meet-

ings, notice of amendments to the Bylaws, and the names of new members. All members of the Society shall be presumed to have due notice of all Society matters published in the CSEG Recorder.

Section 3 - Journal of the CSEG

The Journal shall be published at intervals designated by the Executive Committee.

Original papers, reviews, abstracts, notes, or letters containing information deemed by the Editor to be of interest to the members of the Society shall be published in the Journal. The Editor shall be the sole judge of whether such material is to be published. The Journal may be published as an inclusion of the Recorder or as a separate publication.

The Executive Committee shall set the subscription rate of the Journal. A portion of the annual dues of each dues-paying member shall be set aside for the payment of his subscription to the Journal.

Section 4 - CSEG Website

The CSEG Website shall, in conjunction with the Recorder, be a medium for publishing notices and informing members. The Publications Editor shall be responsible for the content and the direction of the Website committee in updating the society's website of all events designated by the Executive Committee and the Office Manager as well as all the advertising to be posted on the website.

ARTICLE XI - COMMITTEES

Section 1 - Appointment of Committees

The President may at any time appoint committees for such purposes, as he may deem fit to further the purposes of the Society. Except as otherwise provided in the Bylaws, the term of all committees appointed by the President shall expire September 15th of each year.

Section 2 - Duties of the Chairman

The Chairman of each committee may appoint additional members as he sees fit and shall be responsible, along with the executive committee, for succession planning for that committee. He shall prepare a report of his committee's activities which report shall be submitted to the President no later than December 31st of each year, and which shall be included in the Annual Report of the Society for the year.

The Chairman of each committee in which expenditures of funds are made shall close all committee books by December 1st of each year unless operations require otherwise, in which case, as soon as possible after planned events, reserving only such funds as are required to cancel unpaid current obligations, and those required to maintain the continuity of the committee, and shall deliver the books and remaining funds to the Director of Finance. The Chairman shall also prepare and submit to the Director of Finance by December 31st, a budget for the following year.

ARTICLE XII - HONORS AND AWARDS

Section 1 - Committee on Honours and Awards

The Committee on Honours and Awards shall consist of the three most recent available Past-Presidents of the society. The senior member of the committee shall retire after the Annual Meeting. The current Past-President will serve as Chairman. In the event a committee member cannot serve for any reason, the President shall appoint a successor for all or part of the remaining term.

Section 2 - Procedures for Honours and Awards

The Committee on Honours and Awards shall review suggestions for new honours and awards. It shall recommend to the Executive Committee three months before the Annual Meeting, but no later than DECEMBER 1st, the candidates for all established honours and awards of the Society, and for election to Honorary Membership, explaining the basis for its recommendations.

The Executive Committee members shall consider all such recommendations and shall vote on them before the last day of December prior to the Annual Meeting. Unanimous action by those voting shall be required for approval of the recommendations of the Committee on Honours and Awards.

ARTICLE XIII - ASSOCIATED OR AFFILIATED SOCIETIES

The Executive Committee/Council may arrange for association or affiliation of the Society with any duly organized groups or societies.

The terms of association or affiliation must provide that the society shall have the right to dissolve such association or affiliation at any time, subject only to the payment of any sums it may legally owe the association or affiliated group or society.

ARTICLE XIV - REPRESENTATIVE TO OTHER SOCIETIES OR ORGANIZATIONS

Section 1 - Representation on Council of the SEG

The Society may be represented on the Council of the SEG as follows:

One Section Representative if among its members there are not more than 75 Honorary Members and Active Members of the SEG in good standing, two Section Representatives if more than 75 and not more than 150, three Section Representatives if more than 150 and not more than 300, four Section Representatives if more than 300 and not more than 450, five Section Representatives if more than 450 and not more than 600, and extending the formula in the same manner, a section shall have one additional Section Representative for each additional 150 Active Members.

The President of the Society shall serve as Section Representative to the SEG. However, if the Society is entitled to two representatives, the President shall serve on the Council of the SEG for two years, and if entitled to three representatives the President and immediate Past-president shall serve on the Council of the SEG. If entitled to three representatives the President, the immediate Past-president and previous Past-president shall serve on the Council of the SEG. If the Society is entitled to more than three Section Representatives to the SEG or in the event that any duly-appointed Section Representative is unable or ineligible to serve on the Council of the SEG, the Executive Committee shall appoint Section Representatives to the SEG for one-year terms to the additional or vacant posts to be filled.

Section 2 - Other Societies

The Executive Committee/Council may provide for representation of the Society on the governing bodies of other societies or organizations with which arrangements have been made for association or affiliation.

ARTICLE XV - SECTIONS

Section 1

Upon petition of 20 Active Members of the Society in good standing residing within appropriate distance of a central point, or sharing a common interest or problem, the Council may authorize the formation of a Section. The Council may decline to authorize the formation of a Section when in its judgment such an organization would not be compatible with the interest of the Society.

Section 2

The Section shall adopt Bylaws, which must be approved by the Council of the Society and shall be consistent with the Constitution and Bylaws of the Society. The Bylaws of the Section should include provisions that provide for its orderly dissolution and automatic disposition of its funds in the event the Section can no longer function in compliance with its Bylaws.

Section 3

The President of each Section shall represent that Section on the CSEG Council as Section Representative. The term of office of a Section Representative shall be one year. If a Section is entitled to two or three Section Representatives, as prescribed by the Constitution, the Past-President and the prior Past-President of the Section shall fill these additional posts, respectively, serving additional terms. A Section Representative must be an Active Member in good standing. When a Section President, Past-President or prior Past-President is not eligible or otherwise is unable to serve on the Council, or when a Section is entitled to more than three Representatives, the Executive Committee of the Section shall be responsible for the selection of Representatives for one-year terms to the vacant or additional posts to be filled.

Section 4

In the event a Section Representative does not attend a Council Meeting an alternate or proxy who is an Active Member of the Society in good standing will be seated with the privilege of voting if he has been authorized by the Executive Committee of his Section and if the President and Secretary of the

Society have been notified in writing prior to the roll call of the Council Meeting.

Section 5

If a Section Representative ceases to be a member of the Section he represented or is unable to perform his duties, the Executive Committee of the Section may appoint an Active Member of the society in good standing to fill the incumbent's term.

Section 6

Each Section shall provide the Director of Member Services of the Society with the names of its current Officers and the current version of its Bylaws. Annually each Section shall furnish the Director of Member Services with a count of the number of Active Members of the Society on the Section roster. For the latter purpose, the Section should count its members in good standing just prior to the date of renewal of annual Section Dues. In the event a Section does not provide its membership count to the Director of Member Services at least 30 days prior to the Annual Meeting, no more than one of the Representatives from the Section shall have the privilege of voting at the meeting of the Council.

Section 7

A Section will be designated as an inactive Section if the Section does not hold at least two technical sessions a year, or is unable to elect a full slate of Officers.

Section 8

An inactive Section will be designated a defunct Section by Council action if the Section is unable to regain active status in the one-year period following the date the Section is declared inactive.

Section 9

The Council may at any time dissolve affiliation with any Section for reasons it deems good and sufficient.

ARTICLE XVI - STUDENT SECTIONS

Section 1

Formation of a Student Section may be authorized by the Executive Committee, providing a petition is submitted by ten or more graduate or undergraduate students in residence and faculty advisor. Membership in the Society is recommended but not mandatory for the petitioners.

Section 2

A Student Section shall adopt Bylaws, which are consistent with the Constitution and Bylaws of the Society. The Executive Committee shall approve their Bylaws before affiliation is granted.

Section 3

The Executive Committee or Council may at any time sever the affiliation with any Student Section.

ARTICLE XVII - AMENDMENTS TO THE BYLAWS

Section 1

Amendments to these Bylaws may be proposed by any five members of the Society, by any Officer of the Society, or by a constitutional committee appointed by the President.

Section 2

Any proposed amendment shall be reviewed by the Executive Committee, and, together with an expression of the Executive Committee's views thereon, shall be submitted to the Society of Exploration Geophysicists (SEG) in Tulsa, Oklahoma for approval. Upon approval from the SEG, the proposed amendments shall then be submitted to the entire membership of the CSEG. A three-fourths majority favourable vote of all Active and Honorary Members present in person at a general meeting, of which notice specifying the intention to propose the amendments as an extraordinary resolution has been duly given, shall be required for ratification of the amendment.

All amendments shall be reported in the CSEG Recorder.

ARTICLE XVIII - INTERPRETATION

In these Bylaws and in all amendments thereto, the singular shall include the plural, and the masculine shall include the feminine wherever the context will so permit and the circumstances require.