2004 Annual Report of the Society of Exploration Geophysicists

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(Executive Committee liaison officer listed in parentheses)

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Peter M. Duncan, president

I am pleased to report to the membership that fiscal year 2004 has been a year of growth for SEG—financial growth, growth in membership, and growth in sponsored programs. Growth for the most part is good, but it does set a precedent and in this case presents some very real challenges for the future.

SEG is not a business, or perhaps more correctly it is a "not-for-profit" business. Nevertheless, a healthy balance sheet is a necessity for SEG to continue to meet its objectives—"to promote the science of geophysics especially as it relates to exploration and research, to foster the common scientific interests of geophysicists and to maintain a high professional standing among its members."

The detailed financials to follow will show you that SEG has had a good year financially. SEG had a net income in 2004 more than 2.5 times that of the previous year. Operating reserves have increased by about $1 million since the end of fiscal year 2003. Cash flow for 2004 was positive by about $1.4 million, and total assets increased to about $13.2 million, up $1.2 million over year-end 2003. SEG has no long-term debt, owns its headquarters building in Tulsa, and is well placed to grow into the future while being able to fend off any short-term financial setbacks.

SEG *is* its membership. SEG had a net increase of about 1500 members in all categories this year. It is interesting to note that 45% of SEG members have been members for five years or less. SEG is in many ways a brand-new organization. We ended the year with slightly more than 20 200 members residing in 123 countries worldwide. We have 41 associated societies in 24 countries and 122 student sections in 32 countries. Student membership increased by about 1200 this year and continues to be supported by Halliburton's Student Membership Corporate Sponsorship program, which has been renewed through 2007. These students are the future of SEG.

During the last ten years, SEG membership in the United States has decreased steadily, while worldwide membership has increased to the point that the majority of members is now from outside the United States. The expense of providing member services, publications, and educational opportunities around the globe is daunting. Adapting SEG's governance structure to such a dispersed and diverse community is a real challenge. Even the question of an equitable dues formula that recognizes economic conditions faced by different parts of our community is difficult. This year's Executive Committee expended a great deal of time and effort confronting these issues with the help and encouragement of a very active Global Affairs Committee. Among other things, the committee will bring to the SEG Council a recommendation for a new dues structure beginning in 2005 to replace the Global Membership program started in 2002 and paid for by Apache Corporation since then. SEG is in the midst of a transition, and we can expect many changes in the next few years.

Publications of the Society are the vehicles by which we touch the largest number of our members. GEOPHYSICS and THE LEADING EDGE remain our points of greatest contact. Both journals are treasured by our members around the globe. Clearly, the Internet provides a new opportunity for communication with our far-flung community. SEG has invested significantly this year in hardware and software to support our Internet presence. We will continue to establish new programs that are supported by the Web. These include online journal and publication access, Web lecture and course broadcasts, eCommunities for technical discussions, online paper submission and online event registration, Web-based employment exchange, and much more. SEG has added staff in this area in the past year and will continue to invest more resources to this endeavor to realize the full potential of the medium.

Meetings, exhibitions, and technical conferences are the next most tangible activity of SEG for most members. SEG, as with our sister societies, continues to see a declining attendance at our flagship Annual Meeting and International Exposition, which was held in Dallas last year. This trend is important, because this one meeting accounts for nearly one-third of our annual revenue. SEG has moved to diversify its conference offerings this year, to add financial security and to better serve the global membership. SEG already has a revenue interest in the annual Offshore Technology Conference. In addition, we have taken a founding interest in the biannual International Petroleum Technical Conference (IPTC), a joint venture with SPE, AAPG, and EAGE. The first IPTC will take place in Qatar in November 2005. Operated by the Society of Petroleum Engineers (SPE), the IPTC is designed along the lines of the OTC and is expected to become a major exhibition in the Middle East. SEG also negotiated and signed a letter of intent to purchase a revenue interest in the very successful North American Prospect Exposition, beginning with the 2006 exposition. SEG provided sponsorship to the following international conferences: 5th Conference and Exposition on Petroleum Geophysics, Hyderabad, India; GEO 2004, Manama, Bahrain; CPS Beijing 2004 International Geophysical Conference and Exhibition, Beijing, China; and AGU/CGU/SEG Joint Assembly, Montreal, Quebec, Canada. In addition, SEG was the operator of the 2003 SEG/EAGO/EAGE International Geophysical Conference and Exhibition, Moscow, Russia.

This year's Executive Committee developed a meeting strategy. SEG has committed to sponsor and hold at least one non-North American meeting each year in which SEG has a financial stake. Our next international meeting will be in Cairo in May 2005. Supporting this burgeoning international effort may well mean opening an office overseas, and we have put money aside for that eventuality.

The real work of SEG is accomplished by hundreds of volunteers organized through our committee system. I encourage you to read through their various submissions later in the Annual Report to get a real sense of the richness and breadth of the activities that SEG fosters. We are told that people join and support an organization only if they believe in the values of the organization, if they find the time spent personally fulfilling, and if the effort is enjoyable. The reports to follow demonstrate on many levels just how true this is of SEG.

I commend the other members of this year's Executive Committee. These six gentlemen (Spies, Thomsen, Green, Schuster, Beasley, and Hill) went well beyond the extra mile to shepherd your Society for no more reward than a simple "thank-you" for a job well done. Please offer that thanks if the opportunity presents itself. For my part, working with them has been a real privilege and pleasure.

I also thank Executive Director Mary Fleming and her staff for their dedicated efforts to support the members and to do all it takes to keep the Society running smoothly. The staff has performed well this year and continues to respond energetically to the changing needs of the Society. There is no SEG activity, publication, or meeting that does not owe its success to our talented professional staff.

As president, I spent a great deal of time this year visiting members of the organization, both in North America and beyond. On your behalf, I have been to Mexico, India, Oman, Abu Dhabi, Dubai, Bahrain, China, Calgary, Cairo, Toronto, Denver, Dallas, Oklahoma City, Houston, Paris, and Sydney. That's a lot of travel in one year! Everywhere I have gone, I have been welcomed warmly by the geophysical community. It is both exciting and humbling to experience firsthand the diversity and talent in our global membership. Although there are cultural and language differences, it is also amazing how much alike our members are, no matter where they live.

Earlier this year, a large group of SEGers got together in Tulsa to set some long-term goals. They settled on striving to make SEG "*the* international society of applied geophysics." I believe we have made real progress along that path this year and have the resources, the skills, and the will to continue.

Craig J. Beasley, president-elect

The main job of the president-elect is to prepare to become president in the next year, and the best way to do that is to become immersed in committee activities and the various sections and affiliated societies. I began my activities on the Executive Committee as president-elect-elect. This is not a typographical error—because the president-elect does not officially begin his duties as president-elect until after the Annual Meeting. I wanted to get started at the Annual Meeting, so not yet being officially the president-elect and only having been elected to the position of president-elect, I find the term *president-elect-elect* is the most accurate, if not the most mellifluous, title. Fortunately, this state of confusion does not last long.

As indicated in my first President's Page in *TLE*, I spent most of the time I had on the convention floor talking with attendees about the meeting. This was a great introduction to the diversity of opinion that must exist in a society as large and diverse as SEG. I will refer you to the December 2003 issue of *TLE* for the complete rundown on this subject. That began a very interesting and rewarding year for me. Peter Duncan, our president, has implemented a portfolio concept for liaison among the Executive Committee, the various standing and ad hoc committees, and the SEG staff. Under this scheme, I became liaison to standing committees such as Honors and Awards, Advisory, Nominations, and others whose interaction with the Executive Committee is generally limited and prescribed by the Constitution and Bylaws. I had more active involvement with other committees, which I will detail below.

I met with the Constitution and Bylaws Committee at the Annual Meeting and had a stimulating discussion. I believe our governing documents are extremely important because they form the fabric for the culture of our Society. We should not change them in a capricious manner. However, as our world and our Society change and as we become a more global and diverse society, we must continually evaluate our governance. I charged the committee to reach out and study the constitutions of other societies for ideas that might apply as we face our future.

My most active involvement, although not a committee involvement, has been with the SEG Foundation Board and Trustee Associates. I have attended several of their meetings and have always been impressed with the diligence they apply to their responsibilities. I refer you to the report from the chairman of the Foundation Board for the details of their activities and would like to highlight the new and creative initiative by the Foundation for a major gift campaign. This initiative is particularly appealing because if consummated with AAPG, it will be a joint initiative between the SEG and AAPG Foundations, which I believe is a first for us.

I have also been the liaison with the International Association of Geophysical Contractors (IAGC). IAGC differs from SEG in that IAGC is a trade association and concerns itself with the business affairs of its members, whereas SEG is a scientific and professional society. But of course, our interests overlap significantly. If our contracting constituency is not healthy, this impacts SEG in tangible ways, so we work together in our areas of common interest. In my discussions on the Annual Meeting floor that I mentioned above, I estimate that more than half of the people were from companies represented by IAGC. The dialog with IAGC has been a positive force in highlighting the wishes of this important community and has resulted in important additions to our Annual Meeting. I look forward to continuing this dialog in my presidential year.

Our Executive Committee has been particularly active on all fronts, as I am sure you can see from the reports herein. It has been a pleasure to serve with this group, and the bar has been set high for executive committees that follow. We will strive to meet the challenge next year.

Brian Spies, first vice president

It has been a great pleasure and privilege to serve as first vice president this year. The Executive Committee and SEG staff members, along with the vast array of volunteers who serve on committees, continue to work to position SEG as the preeminent professional society for applied geophysics anywhere in the world.

The global thrust has been championed by the Global Affairs Committee (GAC), chaired by Mariangela Capello, which held a strategic planning exercise in Houston in February to discuss the value proposition: What value can SEG bring to geophysicists around the world with a wide variety of background, interests, and demographics? GAC prioritized the needs of geophysicists around the world and determined that the key ingredients were empowerment of local sections, representation, targeted education, outreach, and affordable dues. An outcome of these recommendations was the creation of the Ad Hoc Dues Committee on dues restructuring, which developed recommendations for a geographic dues structure based on a member's ability to pay, separated from voting rights. These recommendations will be presented to the SEG Council at the October Annual Meeting. GAC was also instrumental in facilitating a combined Council/GAC feedback session preceding the SEG Council meeting, at which adequate time could be allocated to discuss strategic issues affecting SEG members around the world.

As first vice president, my responsibilities included liaison with four other committees—Interpretation, Mining and Geothermal, Gravity and Magnetics, and Technical Standards.

The Interpretation Committee, which represents the largest component of SEG membership, is closely allied with its AAPG equivalent and thus is a natural conduit between the geophysical and geologic disciplines. Hans Sheline describes the accomplishments of the committee in his annual report. They include a series of important publications on interpretation, some of which are published jointly with other societies.

The Mining and Geothermal Committee, chaired by Dick West, is a small but very active group, working on a two-year cycle to highlight mineral and geothermal exploration at every second SEG Annual Meeting. For this year, in Denver, they have organized a strong technical program of interest for the mining and geothermal community and an exciting series of field excursions.

The Gravity and Magnetics Committee, under the stewardship of Guy Flanagan, ran a well-attended workshop, *Enhanced Seismic Imaging and Interpretation with Gravity and Magnetics*, at the 2003 SEG Annual Meeting that brought together key seismic processing and interpretation experts. The committee also supports the "Meter Reader" column in THE LEADING EDGE, edited by John Peirce, and has organized three technical sessions for the 2004 Annual Meeting.

The Technical Standards Committee, chaired by Alan Faichney, has worked closely during the year with the European Petroleum Survey Group (EPSG) to agree on a freely accessible platform-independent database that defines standard coordinate reference systems and transformations between them. The database was adopted by SEG at its July meeting and will be archived on the SEG Web site. The committee is working on modifications to the Shell Processing Survey (SPS) format for seismic surveys.

As the only non-North American member of the SEG Executive Committee, I am well aware of the difficulties of governance of a professional society that tries to be truly global. Problems of increasing barriers to travel, visa restrictions, currency exchanges, affordability, time zones, and regional and parochial interests present real challenges to the operation of the Society. However, my experience as I come into contact with SEG members around the world is that SEG is really my extended family of friends and colleagues with similar interests yet surprisingly varied backgrounds from which I grow as a person and as a professional. Thank you, SEG.

William H. Green
Second vice president

What is the mission of SEG? In short, to promote the science of geophysics and to be of service to its members whose profession is the application of applied geophysics. You could play games with words and meanings, but I think you would still arrive at "to promote the science and be of help to the members." It appears that the Society is accomplishing its mission. The membership is at a record high and is continuing to grow.

We are a global society. You have heard that quite a bit in the last few years and definitely a lot in the last two years. A few of you even said you have heard it until you are sick of hearing it. The fact is, we are. Given what we do, where we do it, and who does it, it is what we should be.

SEG does a fair number of things to accomplish its mission—meetings, publications, continuing education courses, etc. The relative value of any of these activities depends on your individual needs and wants. In this brief statement, I am going to address only one area—one that is of importance to us, the members, and to the Society as an organization. That activity is meetings.

For the members, meetings provide an opportunity for valuable technical, professional, and personal exchange. For the Society, they are a major source of income. Although many members think dues and publications sales produce most of the Society's income, it is the meetings that generate the majority of our operating income. The Annual Meeting is the largest single source of income. Your Society is involved in a fair number of meetings every year, and the requests for additional meetings and involvements continue to grow. These meetings range from those we control and operate to those in which we have only a

token presence. However, what we have been lacking has been an overall meetings strategy—a plan that would take into account present obligations, upcoming possibilities, and future directions.

At the beginning of my term, Peter Duncan asked me to put together an overall meetings strategy and a committee to oversee its execution. An overall strategy for meetings has been developed, and we are staffing that committee.

As we have already noted, we are a global society. In the past, most of our meetings have focused on North America. This is changing as we seek diverse meeting locations that will serve more of our membership. To focus experience on addressing this area, an ad hoc committee, cochaired by two former SEG presidents, Walt Lynn and Brian Russell, was established to generate an international meetings strategy. Their report and recommendations are among the committee reports in this year's annual report. It is the centerpiece for our initial meetings strategy. I thank both Lynn and Russell and their committee for taking time from their busy schedules to accomplish this task.

The International Meetings Committee's work was folded into the results of discussions with many groups and individuals concerning our meetings needs. The recommendations for an SEG meetings strategy are listed below. However, before listing the recommendations, it should be noted that we are also a society of a profession whose members are increasingly less involved in resource hunting and more involved with geotechnical evaluation. This means that to retain a vital and growing membership, we will need to increase our involvement in meetings and support of this area. Although not specifically stated in the recommendations below, it is stated in the strategy document that we should encourage the investigation of a greater commitment to geotechnical meetings.

Below are recommendations for an SEG meetings strategy:

Level 4 and Level 5 meetings
(Meetings that we operate and/or have significant financial involvement in)

The SEG Annual Meeting remains the major focus meeting of our Society. As the primary revenue source for the Society, it will continue to receive a primary focus and whatever effort is necessary to keep it viable and healthy.

SEG should implement a long-term strategy and plan to hold at least one Level 4 or Level 5 international meeting (i.e., outside the United States and Canada) every year. Each conference should be budgeted to make a modest profit (5–15%) while bearing the full costs of planning and running the meeting, including overhead, staff, and travel. With complete project accounting now implemented in Tulsa, this should be straightforward. It is likely that at least one additional staff member, preferably with international-meeting experience and foreign-language skills, will be needed.

A poll from the 2003 Annual Meeting indicated significant interest in having SEG host meetings outside the United States and Canada. In order of interest, these areas are Europe, South America, Asia, the Pacific Rim, and the Middle East. Selecting each of these areas suggests a five-year rotation for international meetings. A four-year rotation could be obtained by alternating between Asia and the Pacific Rim.

Other, more specific, locations exist for international meetings. These include India, North Africa, Indonesia, East Europe, and West Africa.

Committees such as Research and D&P should consider opportunities for rotating and/or mirroring meetings and workshops outside the United States.

Levels 1–3 Meetings
(No control and little financial involvement)

Meetings of Level 3 and below should be dealt with on a case-by-case basis as requests arrive. The guiding philosophy for considering these meetings should be to view them as a means of building better relationships with local and regional groups, as fits our primary strategy. These meetings do not require many resources of SEG. However, the impact of showing an interest and a "face" could forge stronger ties to a local or regional group. In this sense, we should view requests for involvement in Level 3 and below favorably if this action is in concert with our overall strategy for a region and area.

Level 3 meetings should have an SEG representative in attendance to promote membership and services (especially books, journals, and education). If a staff member cannot attend a Level 3 meeting, then an SEG member should be asked to perform the promotion duties.

Level 1 and 2 meetings do not require many resources of SEG and should be approved automatically provided that SEG sponsorship is in accordance with SEG's mission to promote geophysical technology. Sponsorship of conferences organized by commercial companies (i.e., not other geoscience societies) should be considered very carefully so as to not compromise the ethics and reputation of SEG.

A year can pass quickly, and it has. It was a pleasure to work with the other members of the Executive Committee and with the SEG staff.

Leon Thomsen, vice president

This year, President Peter Duncan assigned to each officer a coherent portfolio of committee liaisons; mine was centered around education. The chairmen of the committees on Continuing Education, Distinguished Lecture, Geoscience Center, Scholarships, and Student Sections/Academic Liaison will provide separate reports. You will see from these reports that the educational activities of the Society are both intense and

broad. Of particular note are the efforts of these committees to better serve our increasingly global membership.

We coordinated this activity loosely through meetings of the chairmen, who thus comprised a so-called Education Supercommittee, held exclusively via teleconference. This style of meeting is perhaps less effective than face-to-face meetings but is more efficient because of the elimination of travel. As SEG's leadership is drawn ever more broadly from members living around the world, this style of meeting will inevitably become more common.

A further education activity is of special interest. In conjunction with the Research Committee, a research workshop on distance learning of geophysics will be held October 12 at the 2004 Annual Meeting in Denver. It is titled *Unconventional Computer-Aided Geophysical Education (UNCAGE)*. It is a research topic because nobody really knows how to do it. If you read this in time, come along and see where we stand on this important issue.

Stephen J. Hill, secretary-treasurer

This report presents excellent news, challenging news, and trends. First, the excellent news. The 2003–2004 fiscal year was outstanding. Results for the year ending June 30, 2004, include unaudited revenues of $8 930 565 and expenses of $8 277 756. In addition, we set aside $250 000 for long-term building improvements. From these figures, the revenues minus the expenses are $652 809. The estimates for the 2004–2005 fiscal year are not as heartening. We anticipate revenue of $8 808 702 coupled with expenses of $9 168 587, resulting in a projected loss of $359 885.

While we can pause to applaud our 2003–2004 "profit," it is the anticipated 2004–2005 "loss" that is worrisome. I will now review the areas of the largest, negative changes from 2003–2004 to 2004–2005. Following good accounting practice, we assume $0 in income from unrealized gains. (The unrealized gains are the appreciation in our stock and bond investments—"unrealized" because we have not converted those stocks and bonds to cash.) This conservative assumption in unrealized gains decreases our income by $276 898. If the markets would smile on us in 2004–2005 as they did in 2003–2004, our income would approximately balance our expense, as one might hope for an organization that exists to serve its members.

There are other project areas that are expected to have a decrease in their net (defined as revenues minus expenses.) We project the 2004 SEG Denver Annual Meeting to have a decrease in its net of $256 000, primarily because of increased benefits to delegates and additional location costs.

Speaking of meetings, the 2003–2004 year had the benefit of income from two international meetings. Cairo 2005 was approved after the budget was finalized.

In addition to the "meetings" categories, other categories of services to our members also will experience increased costs. In increasing our Web offerings with an online version of the *Encyclopedic Dictionary of Applied Geophysics*, fourth edition, and Annual Meeting abstracts, our publication expenses will increase by $157 000, through predominately one-time conversion expenses. Through increased postage and printing charges, providing *TLE* to our membership will increase by $46 000. Because it will be SEG's turn to sponsor two Distinguished Lecturers, our expenses in that category will increase by $54 000. SEG's sponsorship of the Virtual Student Expo costs $22 000. Our contribution to GeoScienceWorld costs $16 000. We will invest $68 000 in additional staff travel, to assist in representing SEG worldwide.

The year-to-year comparison also reveals long-term trends. As our industry converts from the influence of major corporations to smaller companies and independent entrepreneurs, a smaller fraction of the Executive Committee has its expenses borne by employers. In addition, as SEG increases its international footprint, we find increased travel expenses for SEG volunteers and SEG staff.

The changes in our industry are becoming more evident in SEG's finances. Over the long haul, I foresee a decrease in U.S. membership, accompanied by decreased visibility of U.S. companies. Under our current dues structure, this will decrease SEG's dues income (which is 12% of the total SEG income) and sponsorship income by U.S.-based companies. The decreased U.S. base, along with increased travel restrictions to the United States, will decrease the attendance at the U.S.-based Annual Meeting and the Annual Meeting income (which is one-third of SEG's income.) With our increased international footprint, SEG's cost of worldwide visibility will continue to increase. With that will come increased travel and mailing costs.

SEG has been responding to these challenges. Counterbalancing the decreased U.S. employment, SEG continues in its efforts to be *the* international society. To meet the needs of a membership with increasing geographic distribution, SEG continues its aggressive investment in the Internet as the glue to make the Society a community. Recently, eCommunities was implemented so that members can share and disseminate information all over the world. In addition, SEG invested in new telephone hardware to reduce those Internet costs and to provide less expensive teleconferences. To better serve its geographically diverse community, SEG has increased its emphasis on non-U.S.-based meetings with a supplementary goal of diversifying the base of meetings income. To better determine the costs of providing SEG services, the SEG finance office is now in its second year of project-based accounting.

The constantly changing landscape of our brand of geophysics will continue to provide financial challenges and opportunities for SEG.

Gerard Schuster, editor

During my first year as SEG editor, GEOPHYSICS editor Web site **http://utam.gg.utah.edu/edhelper** was established at the beginning of 2004 to provide educational information about editing. GEOPHYSICS editors (now numbering about 60) can access this Web site to learn more about their duties, including nuggets of editing wisdom distilled from our collective experi-

ences. We also have a GEOPHYSICS newsletter that is distributed to the editors every six months or so. The purpose is to promote a spirit of community, update us on the state of our journal, report interesting stories, and act as a forum for editorial interaction. The first copy, dated January 2004, can be seen at **http://utam.gg.utah.edu/edhelper**.

SEG has become an organization with more than 50% of the membership residing outside North America. A consequence of this international flavor is that English is a second language for many authors of GEOPHYSICS manuscripts. This means that a growing number of manuscripts need special editing to correct significant problems with style and grammar. To address this problem, we formed a SWAT team to improve the style and grammar of manuscripts that have worthwhile technical content but have significant problems with writing style. This team is composed of former chief editors and one associate editor, Steve Arcone, Bob Hardage, Ken Larner, Larry Lines, Franklyn Levin, Mike Schoenberger, and Sven Treitel. The idea of a SWAT team was originally suggested by Levin.

Two new sections in GEOPHYSICS were created in 2004 to serve the dynamic needs of GEOPHYSICS readers: "Geophysical Software and Algorithms" and "Annual Meeting Selection." "Geophysical Software and Algorithms" aims to capture elegant, well-documented algorithms of educational and research value to geophysicists and make them available to the wider community. For example, a short paper will describe the algorithm or data and the program/data will be stored at an accessible Web site. This section's associate editor is Joe Dellinger, who was awarded Life Membership in 2001 and has a long history of algorithm design and strong leadership in computing issues. "Annual Meeting Selection" was created to alleviate a growing problem—the paucity of industry papers submitted to GEOPHYSICS. Gérard Herman, past editor of GEOPHYSICS, is this section's associate editor. In conjunction with the Technical Program Committee, he identified the top papers from last year's Annual Meeting. The authors of thirteen of the top papers were invited to submit to GEOPHYSICS. These papers will be modified slightly, and most will be published in GEOPHYSICS. They will be the length of a short note in most cases.

The main transition to online reviews of GEOPHYSICS was carried out successfully by the GEOPHYSICS staff and Herman during 2002–2003. The chief benefit is that the review cycle time has been cut almost in half, with an average time of 125 days for the 2003–2004 period. However, there is a trade-off with online reviewing: Cycle times are faster but manuscripts are not as thoroughly edited as in the past. Online editing requires an online editor program, which is not inexpensive. To rectify this problem, we are negotiating with Adobe for a gift of its PDF editor Acrobat 6.0. This will partly fulfill the needs of the associate editors and upgrade our capabilities for fully editing submitted manuscripts. The next step is to discover an economical means for getting online editing capabilities in the hands of all reviewers. We are exploring different strategies.

The final tally for papers submitted to GEOPHYSICS in 2004 is given in Table 1. For the year 2003–2004, 159 papers have been returned to authors or have completed the first round of review in an average of 125 days, the shortest time on record for GEOPHYSICS. Another record low is the 161 days between acceptance and publication, which is probably because of the rapid/convenient online submission capabilities. The hard work of the staff and editors these past two years is now paying off extremely well. The total number of papers submitted for publication in GEOPHYSICS from July 1, 2003, to June 30, 2004, is 266; 249 papers were submitted in 2002–2003. These numbers suggest that GEOPHYSICS is moving in the right direction to improve its status as the world's leading journal in exploration geophysics.

However, a recent concern is the relatively low impact rating of GEOPHYSICS compared to leading pure-science journals in the earth sciences. We will address this issue in the coming years and hopefully improve our impact rating with innovative solutions.

Total number of papers submitted for publication in GEOPHYSICS July 1, 2003–June 30, 2004: 266

Table 1. Origin of papers submitted for publication in GEOPHYSICS by country.
July 1, 2003–June 30, 2004

USA	97
China	25
Canada	24
United Kingdom	15
India	13
Australia	10
Norway	10
Netherlands	9
Germany	8
Korea	7
Mexico	6
Switzerland	5
Israel	4
Italy	4
Brazil	3
France	3
Saudi Arabia	3
Sweden	3
Hungary	2
Ireland	2
Taiwan	2
Argentina	1
Bulgaria	1
Denmark	1
Egypt	1
Greece	1
New Zealand	1
Portugal	1
Russia	1
Syria	1
Turkey	1
Venezuela	1
Total	**266**

Table 2. Origin of papers submitted for publication in GEOPHYSICS by employer.
July 1, 2003–June 30, 2004

Universities	169
Research institutes	46
Service companies and manufacturers	23
Governments	14
Oil companies	9
Consultants	4
Mining	1
Total	**266**

Table 3. Manuscript handling statistics.

Year submitted July 1–June 30	Average number of days required for first review
1991–92	172
1992–93	157
1993–94	184
1994–95	182
1995–96	211
1996–97	186
1997–98	205
1998–99	214
1999–00	212
2000–01	211
2001–02	178
2002–03*	130
2003–04*	125

* First reviews have not been returned for all papers.

Table 4. Manuscript handling statistics.

Year published July 1–June 30	Average number of days between acceptance and publication
1991–92	176
1992–93	181
1993–94	178
1994–95	210
1995–96	N/A
1996–97	N/A
1997–98	180
1998–99	177
1999–2000	202
2000–01	208
2001–02	213
2002–03	195
2003–04	161

Reports of the Standing Committee Chairmen

Advisory
Walter S. Lynn, chairman

The Advisory Committee, which consists of the five most recent SEG past presidents, has met three times this year, once during the 2003 SEG Annual Meeting in Dallas and twice in conjunction with Honors and Awards Committee meetings in Denver and via phone. The group has also provided comments and discussion during the year through e-mail. The primary purpose of the committee is to provide advice and feedback to the SEG president and Executive Committee regarding issues of continuity, strategic planning, big-picture budgetary items, revenue generation, and institutional memory. The committee serves as a sounding board for the SEG president and may address membership concerns that come to its attention.

Seventy-Fourth Annual Meeting
Terry Young, general chairman

The SEG International Exhibition and Seventy-Fourth Annual Meeting will be held October 10–15 in Denver, Colorado, with the theme *Reaching New Summits*. The Steering Committee consists of Betty Jones Green, vice general chairman; Scott MacKay, Technical Program chairman; Carmen Comis, Exhibitors Committee chairman; Ray Vogler, Special Programs chairman; Bob Kidney, arrangements chairman; Sarah Shearer, Applied Science Education Program chairman; Chuck Diggins, International Showcase chairman; Ricki Hoekstra, Spouse Program chairman; and Terry Young, general chairman.

The first meeting of the 2004 Denver Steering Committee was a joint session with the 2003 Dallas Steering Committee on the final day of the 2003 Annual Meeting in Dallas. The 2005 Houston general chairman, Keith Matthews, and Technical Program chairman, David Monk, participated in this joint meeting as well as in several subsequent meetings of the 2004 Denver Steering Committee, which have been held in Denver about once every six weeks. SEG Meetings and Marketing staff members Jim Lawnick, Steve Emery, and Kristi Smith have traveled to Denver for these meetings.

The 2004 Denver Steering Committee approached its planning responsibilities with the philosophy, "If it ain't broke, don't fix it." The committee reviewed the outcomes of the 2002 SEG Annual Meeting in Salt Lake City and 2003 Annual Meeting in Dallas and decided to retain what was successful and to change what wasn't. The biggest issue was the Wednesday Night Gala, which did not attract the anticipated attendance in Dallas. The Denver committee considered dropping the gala altogether. After assessing options that had been most successful in recent SEG annual meetings and that fit best with the venues available in Denver, the committee chose to emulate a Wednesday Night Gala that was popular the last time the annual meeting was held in Houston—an evening of eclectic musical entertainment, food, and beverages, in a museum setting. The Denver Museum of Nature and Science will be the venue for the Wednesday Night Gala at the 2004 SEG Annual Meeting. The museum, which will be open for a private viewing by SEG delegates, features such exhibitions as prehistoric journey (dinosaurs), space odyssey (Mars), gems, minerals, and treasures of ancient Egypt. Buses will shuttle back and forth from the convention center and hotels to the museum.

Unlike recent years, admission to the Wednesday Night Gala in Denver will be included in the cost of meeting registration. Registrants will redeem a voucher to obtain their admission tickets. Time is being set aside during the gala to give special recognition to meeting sponsors and to conduct a prize drawing for those attending the program.

Another important issue that received a lot of attention from the 2004 Denver Steering Committee is the Icebreaker. Feedback from recent annual meetings included concern about adequate food and beverages at the icebreakers. In addition, the lack of restaurants in close proximity to the Dallas Convention Center made it difficult for people to dine conveniently after the Icebreaker. The Icebreaker in Denver will be two hours instead of three, and a larger budget will provide more food and beverages for the event. There are many excellent restaurants in the vicinity of the Colorado Convention Center, and with the conclusion of the Icebreaker at 8 p.m. instead of 9 p.m., delegates will have the opportunity to enjoy dinner afterward.

The Applied Science Education program has been moved to Wednesday morning to avoid conflicts with other meeting events and to allow broader delegate participation. Robert Bakker will present an informative and entertaining program on dinosaurs as an outreach event to local students and teachers. Participants also will be given tours of the exhibition. Another feature of this year's Applied Science Education program is a resource fair for teachers on Sunday afternoon. Those attending will also be given a taste of the Icebreaker.

With ongoing mergers and acquisitions, the potential base for fund-raising continues to shrink. Hence, Ray Vogler has tried some new approaches to solicit donations for this year's meeting. In addition to the material that is generally sent to past contributors, Vogler sent 2000 letters to potential donors.

He also organized face-to-face solicitation visits in Calgary, Denver, and Houston for which he was accompanied by current or recent officers of SEG.

The 2004 SEG Annual Meeting will preserve the strongest features of previous meetings. This year's Annual Meeting will officially open with the Honors and Awards Ceremony and Presidential Address on Sunday afternoon in the Colorado Convention Center. One of the highlights of the 2003 Dallas meeting, the *TLE* Forum, is again scheduled as the main event for Monday morning, and another panel of impressive speakers has been lined up to interact with the audience on the theme *Globalization of the Energy Business*. This year's International Showcase, although generally following the highly successful format established during the past several annual meetings, will also feature a slate of distinguished speakers discussing *The Role of Technology in the Global E&P Business*.

More than 775 abstracts have been submitted for the Technical Program at the 2004 Annual Meeting. The Technical Program Committee is taking the best of these submissions and organizing poster sessions and ten parallel oral sessions that will run from Monday afternoon through Thursday morning.

Denver is a venue that is expected to attract a relatively large number of spouses. Therefore, considerable attention has been given to organizing a warm and welcoming spouse program that includes a hospitality suite, special spouses' luncheon with entertainment, and a great assortment of tours of Denver and the beautiful surrounding area. For delegates and spouses alike, there is a preconvention field trip featuring geology of the local area and a postconvention field trip to a nearby producing gas field undergoing time-lapse seismic monitoring of enhanced recovery operations.

The traditional preconvention golf tournament is scheduled for Saturday at the spectacular Arrowhead Golf Course, situated among the beautiful red-rock formations along the mountain front southwest of Denver. Because of dwindling interest, there will be no tennis tournament at the Annual Meeting.

Early indications are for excellent attendance and a successful Annual Meeting in Denver.

Constitution and Bylaws
Walter E. Johnson, chairman

The Constitution and Bylaws Committee has been working with the SEG Executive Committee on the possibility of dropping the global membership classification and structuring the annual dues to vary with the country of residence and citizenship based on World Bank classifications.

The committee has aided the Executive Committee in the structural changes required to address their objectives; however, this has become an issue of lively discussion among some members of the committee.

Some concerns are: (1) Can geophysicists' salaries be equated to the mean salary of each country? (2) By definition, exploration geophysicists are looking for commodities that virtually have the same value worldwide. Thus, should the value of SEG membership vary worldwide? (3) Many geophysicists have their membership dues paid for by their employers. Should an employer of a developed country pay more for employees' dues when all employers are selling their commodity at the same price? (4) What happens to the existing global members? Should they become active members or associate members? (5) Is the SEG Executive Committee acting in the best interest of the SEG members?

The chairman of the Constitution and Bylaws Committee thanks fellow members Bill Barkhouse and Jack Kruppenbach for their service. All members of the committee thank the SEG staff members for their excellent advice and support. For the last several years, the Constitution and Bylaws Committee has met in conjunction with the SEG Annual Meeting. We invite members with concerns to come by to express their views.

Continuing Education
Frank Brown, chairman
Brad Birkelo, vice chairman

The Continuing Education Committee (CE) remains committed to providing quality educational opportunities to all of our members. The fact that only 600 of these members attended a CE course in 2003 shows the difficulty of the task.

The committee continues to monitor and update the curricula, as evidenced by the recent addition of Bee Bednar's course, *Migration without the Math*. We also have undertaken face-to-face meetings with chief geophysicists and training coordinators (our clients) to ensure that we are meeting their needs. These meetings will continue. The committee also is investigating ways to provide greater access to SEG services to our growing membership outside North America and Europe.

The Distinguished Instructor Short Course (DISC) remains our flagship program. The 2004 Distinguished Instructor, Paul Weimer, is currently on tour. His course, *Petroleum Systems of Deepwater Settings*, is receiving excellent reviews. Next year's Distinguished Instructor, Rodney Calvert, is diligently working on his course notes, *4D Insights and Methods for Reservoir Monitoring and Characterization*. The DISC subcommittee, ably led by Brad Birkelo, is vetting candidates for 2006, and we will ask for Executive Committee approval soon.

Last but not least, the committee continues its investigation of distance learning. The ability to provide access to training in ways other than the traditional classroom is our primary medium-term goal. In March of this year, we conducted a live Webcast of Bill Abriel's Distinguished Lecture. (This followed our Webcast of Art Weglein's Distinguished Lecture late last year.) Approximately 130 people, in groups ranging in size from 1 to 35, watched. We are evaluating their critiques. We will do a second Webcast of Abriel's lecture this year for our members in the Far East. We look forward to this fall's Distinguished Lecturer, Heloise Lynn, who has promised us her full enthusiastic cooperation in learning more about Webcasts.

The committee also is actively investigating the nuts and bolts of putting our lecture material on DVD, thereby allowing our members to access this material at their own pace and

on their own schedules. Our Executive Committee liaison, Leon Thomsen, is coordinating effort toward a distance-learning workshop at the 2004 SEG Annual Meeting in Denver. We encourage everyone interested to participate.

Of course, none of this work would get done if not for the hard work of the SEG staff. A sad note is that longtime CE member and my predecessor as chairman, Rod Cotton, died recently. Cotton's commitment to education and his gentle, guiding hand will be sorely missed by the Society and by me.

Development and Production
Roger M. Turpening, chairman

This was a watershed year. In the late 1980s, it was felt that there ought to be a place in a society of exploration geophysicists for geophysicists who were not exploring for hydrocarbons but were developing oil and gas fields. Thus, the Development and Production Committee (D&P) was formed. Throughout the 1990s, the D&P Committee performed its task—a task of transition, as we see it now—using a forum in the summer, workshops and luncheons at the annual meeting, and special columns/special issues of THE LEADING EDGE to highlight the geophysics needed in production. It appears now that the transition has been completed, and that the entire Society of Exploration Geophysicists has evolved into a body of development and production professionals, or nearly so. We no longer have to demonstrate that the functions and needs and scales of D&P geophysicists are different from those of the exploration geophysicists—the differences are well known.

Some members have said that they no longer feel the need to attend special D&P workshops and forums because the entire Annual Meeting is now a D&P meeting. The special D&P issue of *TLE* was eliminated this year because, as John Eastwood remarked, every issue of *TLE* is a D&P issue. The transition is over.

It is gratifying that "we won," but the victory brings some difficult questions—e.g., what do we do with all those functions of the D&P Committee? Are they needed any longer? I would like to examine the need for a D&P Committee. Some people say, "Yes, this is the trailing edge of the transition period, so the D&P committee still has to play the role of facilitator." However, this year we were forced to cancel the summer forum because of lack of participants. The e-mail "buzz" prior to and following this cancellation indicated not a lack of interest but a lack of time—our members are working long hours and long weeks. Simultaneously, the joint SPE/SEG summer forum (conducted through the D&P committee) so far is showing very low registration.

These two events, taken together with the recognition that this is the end of the D&P transition period and the observation that companies are using existing staff to accomplish increased workloads, prompted the committee to probe deeper. An informal poll of D&P Committee members is under way, and opinions are continuing to come in. Susan Raikes is organizing the responses.

A single simple question was asked: "What, in your opinion, is the reason for low attendance at this year's D&P forum?" About 33% of the D&P members have responded to date. I quickly scanned the returns to write this report, and I found that no single reason is favored. The opinions include: (1) overworked employees with no time for professional meetings, (2) high cost, (3) poor location, (4) poor topic, (5) length of meeting, and (6) too many meetings in general. Some members took the opportunity to suggest broad, sweeping solutions such as a merger of AAPG and SEG, but for every fault cited, other members stated that this particular "fault" was definitely not the trouble. The organized compilation of the responses will be made available, possibly in *TLE*.

A tangential question was asked about moving D&P forums outside the United States—again, the answers were mixed.

In the meantime, given no easy consensus, we are moving ahead with the 2005 forum, to be held in Austin, Texas, May 15–19, and we will employ the old format of a three- to four-day meeting. We live in interesting times.

Distinguished Lecture
Michael H. Powers, chairman

The fall 2003 SEG/AAPG Distinguished Lecturer was Steve May. His lecture was titled *Visualization and Volume Interpretation in Geoscience: 3D Seismic and Beyond*. His tour was organized by the American Association of Petroleum Geologists. The next joint SEG/AAPG lecture tour, in the fall of 2004, will be organized by SEG because these duties alternate between the two societies from year to year.

In a discussion with the Distinguished Lecture Committee chairmen from AAPG and the Society of Petroleum Engineers (SPE), we agreed to propose bringing SPE into our fall joint lecture tour. We envisioned a three-year alternating program for the fall DL tour, probably starting no sooner than 2006. The SEG Executive Committee approved this change, and it is under consideration by AAPG and SPE.

Bill Abriel served as the spring 2004 Distinguished Lecturer. His lecture, *Earth Model Complexity and Risk Description in Resource Exploration and Development*, was delivered at 24 North American locations to more than 1250 geoscientists. Abriel also presented a Webcast which reached 110 geoscientists at 36 locations and was deemed a successful test of the technology. He toured several international locations, including Australia, Russia, Kazakhstan, and China, in July and September, thanks to sponsorship from the Australian Society of Exploration Geophysicists (ASEG), ChevronTexaco, and BGP.

The fall 2004 joint SEG/AAPG Distinguished Lecture series will be presented by Heloise Lynn. Her lecture, *The Winds of Change: Seismic Signatures in Anisotropic Rocks*, will challenge and excite geoscientists around the world. Lynn intends to make an extensive test of distance-learning techniques during her tour.

The spring 2005 Distinguished Lecturer will be Greg Partyka of BP. He was awarded SEG's Virgil Kauffman Gold

Medal in 2003 for his work on the development of the spectral decomposition technique for reservoir characterization.

Exhibitors
Carmen Comis, chairman

Since its inception in 2001, the Exhibitors Committee has had the objective to collect and relay concerns and ideas to the SEG leadership. Committee members are available throughout the year to aid exhibitors with questions regarding exhibiting at SEG's Annual Meeting. SEG also has provided the committee with a Help Desk, manned by members, to provide onsite support and answer basic logistical questions during booth setup. The committee has also volunteered to "shepherd" high-school student delegations during showtime.

Committee members for 2004 are Amanda Roth, Dan Smith, Denise Burke, Liz Ivie, Lynne Asher, Maureen Iglesias, Michelle Kluge, Phil Newby, and Shawn M. Porche.

The 2004 Committee conducted its first meeting in the winter of 2003, just after the Annual Meeting in Dallas. Subsequent meetings were held in the first quarter of 2004, and additional meetings are scheduled prior to the Annual Meeting. The objective of the first meeting was to introduce the incoming chairman and to gain a better understanding of exhibitors' needs. An independent poll was conducted among a control group representing small, medium, and large exhibitors. The results, which were distributed to the SEG Executive Committee liaison and the SEG Business Office, yielded the following observation and comments:

1) There was a decrease of traffic in the exhibition hall at the 2002–2003 meeting.
2) The third day had virtually no traffic in the hall (according to small-to-midsize exhibitors).
3) Merge the Wednesday night gala and Icebreaker into one main event.
4) Begin the Icebreaker at an earlier time and shorten it to two hours (e.g., 5–7 p.m. or 6–8 p.m.).
5) Provide more and better food and beverages during the Icebreaker (shortages in Dallas).
6) Improve badge pickup procedures to limit unauthorized use of paid-delegate badges (e.g., request ID for badge pickup).
7) Concerns were voiced that the Housing Bureau charges for hotel changes or cancellations. This issue was brought up at the exhibitors' luncheon in Dallas 2003.
8) Hold some main activities on the show floor to encourage traffic into the exhibition.
9) Clearly mark beverage stands throughout the hall during Icebreaker to encourage better traffic flow.

Items 10–13 are long-term goals:

10) Shorten the show to two full days in Houston and two-and-a-half days for other cities.
11) Conduct the SEG Annual Meeting every other year in Houston and the alternating year in San Antonio, Dallas, or New Orleans.
12) Move the exhibition to midweek, with technical papers starting on Monday and Tuesday, exhibition on Wednesday and Thursday, and teardown on Friday.
13) Merge the AAPG, SEG, SPE, etc., annual meetings.

The majority of the issues (numbers 1 through 9) were addressed quickly by Jim Lawnick and Steve Emery, and solutions are now in the works for the Denver meeting. The long-term items (10–13) have been communicated to the Executive Committee for consideration. From a business perspective, most exhibitors would welcome a combined show because it broadens exposure and decreases their costs. Some exhibitors noted that they would consider paying premium space fees for such a combined event. However, small and medium exhibitors did not express the same opinion.

The goal of the Exhibitors Committee chairman will be to obtain new volunteers to foster fresh and innovative ideas for future meetings.

As of July 2004, Steve Emery reported that 776 booths had been rented to 195 exhibiting companies, a promising indicator that the Annual Meeting in Denver promises to be a Mile High event!

Exhibitor representatives and the SEG Business Office have a close working relationship that ensures this exhibition will continue the standard of excellence established at past annual meetings.

I have enjoyed my tenure as chairman and consider it a privilege to be working with the professional team at the SEG Business Office.

Along with my committee, we look forward to *Reaching New Summits* at the 2004 Annual Meeting in Denver.

SEG Foundation Board of Directors
Richard A. Baile, chairman

The Foundation Board of Directors held three meetings during the past year. In addition, the Foundation Executive Committee (chairman, vice chairman, and treasurer) met regularly to discuss finances, policy, bylaw revisions, and other matters.

The board approved initiation of a major gift campaign to begin during the fourth quarter of 2004, with a goal of raising $20 million for the Foundation corpus. The AAPG Foundation, which also is considering a major gift campaign, will be approached to study the feasibility of a joint effort by the two foundations in this major funding effort.

To provide added support for this campaign, the board worked under the SEG leadership in hiring Peter Pangman as director of geophysics, a new staff position responsible for geoscience education/professional development and fund-raising.

In addition to the above, the Foundation board approved $45 000 for the following projects for 2004:

- education and outreach in Earthquake Seismology through the Geoscience Center in Tulsa—$5000
- PCs for students at Taras Schevchenko National University, Ukraine—$7500
- SOVG (Society of Venezuela Geophysicists) library—$2500
- SAGE (Summer of Applied Geophysics and Engineering)—$10 000
- CSM (Colorado School of Mines) summer field camp—$10 000
- Seismic Unix—$5000
- SEG/AAPG spring student exposition—$5000

The 2004 Foundation operating budget for the calendar year anticipates a cash inflow of $465 000 from interest and dividends, contributions, and other miscellaneous sources. The board approved expenses of $345 000, in support of scholarships ($204 000), DISC ($90 000), and annual projects ($50 000)—$45 000 of which has been appropriated as distributed in the list above—and student dues ($1500). This, coupled with expenses of $250 000, leaves a deficit of $130 000 to be funded from corpus assets.

Thus, it becomes critical that the major gift campaign increase endowments and restricted funds for the Foundation corpus.

The board approved revision of Foundation Bylaws and the Policy and Procedures manual to better comply with 501(c)(3) regulations governing tax-exempt foundations. In addition, the board approved better definition and clarification of Foundation goals, committee functions, and other items to increase efficiency of operations.

Finally, the board is pleased to announce an increase in Foundation net assets from $7 521 246 on December 31, 2002, to $8 375 462 on January 31, 2004. This is attributable to investment gains, interest earned, and several generous contributions, some of which were matched by a section society, contributor's employer, and SEG Double Impact matching funds.

The board thanks all who have so generously contributed money, time, and talent in support of the Foundation goals and programs.

SEG Foundation Trustee Associates
Sam L. Evans, chairman

The SEG Foundation Trustee Associates Steering Committee (TASC) is an integral part of the SEG Foundation and functions under the direction and control of the SEG Foundation Board of Directors (BOD). TASC provides many services within the Foundation. It serves as an advisory and support group to the BOD, but its main function is primary fundraising for the Foundation. TASC exercises general executive control and manages its affairs in such areas as organization and structure, election of TASC officers, assignment of subcommittees for specific tasks, and coordination with the Executive Committee and SEG staff.

The Steering Committee members who served during this report period and their respective duties were:

Sam L. Evans	chairman
Gary G. Servos	chairman-elect, scholarships
Gary M. Hoover	secretary
Louis I. Schneider Jr.	treasurer
Ben B. Thigpen	vice chairman, fund-raising
Rodney L. Cottrell	vice chairman, fund-raising
Charles B. Smith Jr.	vice chairman, fund-raising
Joseph G. Putman III	vice chairman, fund-raising
George E. Parker	vice chairman, fund-raising
L. C. (Lee) Lawyer	past chairman

Actions to be undertaken by TASC are assigned by the Foundation Board of Directors after plans are set forth in generalities at meetings. These meetings, held jointly with the Executive Committee of the SEG Foundation each summer, are the means whereby all principal fund-raising planning and development of new initiatives are established and defined. Those meetings typically include members of the SEG Executive Committee whose contributions assist in coordination with SEG functions and control.

In 2003, a committee made up of Marvin R. Hewitt, Gary G. Servos, and Joe G. Putman and chaired by Sam L. Evans undertook the assigned task to select meeting sites for the next three years. Criteria for those selections were based on a survey of trustee associate members on preferences of venue (geographic, mountain, seashore, historical, etc.) and accessibility for sporting activities (golf, fishing, hiking, etc.), historical significance, cost, tours, and shopping. Responses from 71 respondents indicated:

- Meeting location preference:

Mountains	51%
Central or south Texas	38%
West Coast	31%
Canada	18%
East Coast	25%
Deep South	21%

- Preferred time of year—May or June

Based on these and other survey results, the committee selected Lake Tahoe, Nevada, for 2004, a mountain location in Colorado yet to be decided for 2005, and Charleston, South Carolina, for 2006.

Principal activities for the subject period were a continuation of those undertaken in late 2001 and as set out by directions forthcoming from the strategic plan approved by the BOD in August 2001 and expanded at the annual meeting in Monterey, California, in April 2003. Those included:

- Organize campaigns to increase the numerical and gifting sizes of individual, corporate, and local SEG sections.
- Increase the number and regional scope of trustee associates' meetings and recruitment of SEG members therein.

- Continue efforts to solicit donations for retirement of outstanding expenses for *The Doodlebugger* statue in the SEG Tulsa headquarters lobby.
- Develop updated databases for contacts of existing and prospective corporate trustee associates.

An additional charge forthcoming from the 2003 annual meeting in Monterey, California, is to increase the number of recruitment luncheon meetings for trustee associate members to include areas outside Houston (i.e., other cities with concentrations of SEG members and potential trustee associates).

Activities and achievements by the SEG Foundation trustee associates are the result of volunteers who participate by their personal donations (monetary and time) to foundation initiatives and programs and the many intangible contributions from its membership. Their participation in and support of the Foundation's activities are greatly appreciated, and thanks are extended to all on behalf of the SEG Foundation Trustee Associates Steering Committee.

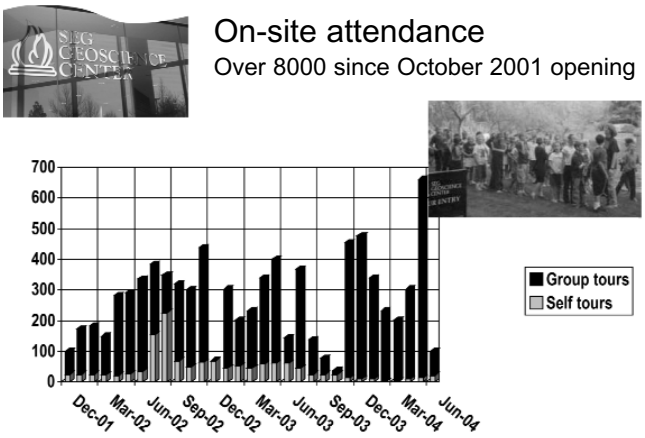
SEG Geoscience Center
Gene W. Sparkman, chairman

The Geoscience Center at the Geophysical Resource Center in Tulsa has continued to expand its role in providing geoscience education for K-12 students, the general public, professional organizations, and SEG. It also is an archive of valuable historical instruments, photographs, and documents pertaining to geophysics from its earliest days through current developments. The Geoscience Center is a resource development laboratory where educational and historical information is being made available to SEG's global membership through the Virtual Geoscience Center.

The Geoscience Center now has K-12 educational slide sets translated into Arabic, prepared by the Global Affairs Committee and Saudi Aramco. The translations of other slide sets into Spanish are in the works, with other Global Affairs Committee members assisting. These sets are on the SS/ALC Web site, with links to the Geoscience Center Web site.

Attendance at the Geoscience Center group tour has increased this year to 3177 from 2519 last year. The self-tour attendance, however, dropped to 207 from 959 last year. The decline was a result of a shortage of staff and volunteers available to keep the center open daily. Docents volunteered 795 hours during this past year, but there was a large drop-off in monthly hours after October.

The Oklahoma Energy Resource Board (OERB) has approved a $2 per student admission fee for the Geoscience Center for the upcoming year. This fund will be used to offset some of the supply and outreach costs. This year, the geographic areas served expanded noticeably from the Tulsa metropolitan area to north- and south-central Oklahoma, with groups coming from as far as west and south of Oklahoma City and from Kansas and Arkansas.



Outreach Programs (or Traveling Geoscience Center). Outreach events have been significant this year, beginning with shared booth space in November 2003 at the National Science Teachers' Association convention in Kansas City, at the invitation of the Department of Energy. SEG educational materials were distributed. When the supply of 3D seismic-cube activity kits was exhausted, arrangements were made to mail them to more than 30 high school teachers. In February, the Geoscience Center participated in the DOE Regional Science Bowl competition, where Susan Henley (Geoscience Center administrator) was a Science Bowl official and educational materials were made available to team coaches.

Other outreach events included the fourth year of participation in the Sixteenth Tulsa Engineering Challenge (grades 6–12) in April. The Geoscience Center was the umbrella organization that invited friends of the center to share SEG booth space. Geologists from Tulsa Geological Society Educational Outreach and Oklahoma Geological Survey (Norman) Educational Outreach and an earthquake geophysicist from OGS brought their own educational materials and activities. In April, Geoscience Center docents led rock field-trip tours for the International Oil Recovery/Society of Petroleum Engineers Fourteenth Symposium. In June, the Geoscience Center was invited by the Boy Scouts to Camp Russell for three days to teach the geology merit badge to more than 200 students.

The Geoscience Center will present earth science hands-on activities at a workshop for Denver-area teachers at the Applied Science Program during the 2004 SEG Denver Annual Meeting in October.

The Geoscience Center has partnered with the SS/ALC to get SEG student section participation in its themed "Rocks from around the World" booth at this year's four-day Kids' World (expected attendance 26 000).

Summer Intern. In June, the Geoscience Center welcomed a summer intern from the University of Oklahoma, who is halfway through a master's degree program in museum studies and history. Her father is a geophysicist. Our intern is establishing a new database for the Geoscience Center inventory on a museum software program and is updating historical information when possible. Other plans include establishing photo archive protocols.

Archival. The Robert M. Iverson Collection (primarily gravimeters) was acquired through the leadership of Guy Flanagan, members of the Gravity and Magnetics Committee, and matching Foundation funds. In June, these items were installed in new display cases with temporary signage. Other acquisitions include more donations from the Marland Oil Museum; photo albums from the 1920–1930s; a significant collection of cores, fossils, rocks, and minerals from SEG member Samuel Martner, a five-foot-by-three-foot sand peel from the Red River, donated by the Society for Sedimentary Geology; and 1940s eight-millimeter films of oil exploration in Saudi Arabia. Jack Kruppenbach and friends plan to fund the restoration and transfer of these films to digital format.

Display cases were acquired and restored for the growing rock, fossil, core, and mineral collections. Plans are to have them installed by early September 2004.

The Oklahoma Geological Survey donated a computer with an educational visual earthquake program in a loop format for visitors to view current and past earthquake activity in Oklahoma by county.

Grants. The Geoscience Center will partner with Michigan Technological University in applying for Southwestern Bell Company (SBC) technology grant to install Wayne Pennington's UPSEIS program in the center as a pilot for K-12 earthquake programs.

Virtual Geoscience Center. The master database program that catalogs photos and information was upgraded to allow captions beneath figures when displayed on the Web site and to provide more information on all pages. It will now be possible to easily archive and incorporate descriptions and information about instruments, geophysical methods, and descriptions of historical photos and have this information displayed correctly with the photos on the Web site.

The site continues to be upgraded to incorporate additional information and make it more accessible and user friendly. Photos of SEG presidents will soon be available on the site.

I want to thank the members of the Geoscience Center Committee for their efforts in the continued improvement of the Geoscience Center. I especially want to commend Susan Henley for her outstanding work that has made the Geoscience Center a first-rate learning center.

Global Affairs
Mariangela Capello, chairman
Vikram Sen, vice chairman
Shane Coperude, past chairman

The Global Affairs Committee (GAC) had another successful year in actively promoting the SEG mission among members worldwide and assisting the Executive Committee in achieving a priority goal of making SEG a multinational or global professional society in fact as well as in name.

Spring Meeting. The GAC met in February at the Westlake office complex of BP in Houston with SEG Executive Committee members Peter Duncan, Leon Thomsen, Brian Spies, and Steve Hill and Executive Director Mary Fleming. For the first time, an entire day was devoted to a workshop session, facilitated by Brian Spies. The working groups discussed ways to enhance the value of SEG membership. GAC country representatives and regional coordinators actively participated by teleconferencing. Global perspective was applied in analyzing the SEG dues structure, which led to a recommendation for Brian Spies and Steve Hill to form an ad hoc committee to review the issue. Other ideas discussed were:

- expanding the SEG Geoscience Center program
- creating parenting-student sections for low-income student sections, using the Rotary Club mentorship model
- restructuring the DISC program to select more regional speakers per year and offer a variety of different topics worldwide
- translating the K-12 educational material into all languages represented by the SEG membership
- studying the governing and membership structures of SPE and AAPG to ascertain their strengths in servicing the needs of their global members
- exploring ways to empower local sections to participate, organize meetings, and take other initiatives within their regions

Country Representatives and Regional Coordinators. The GAC has 17 regional coordinators who represent geographical areas in Africa, Asia, Canada, Europe, the former Soviet Union, Latin America, the Middle East, the Pacific, and the United States; 44 country representatives; and two student country representatives. This year, information outlining programs and services from all SEG departments was mailed to regional coordinators and country representatives. Reports from country representatives will be compiled by regional coordinators and presented at the GAC meeting in Denver.

GAC Luncheon Meetings in Denver

Asia/Pacific. Speaker: Agu J. Kantsler, director of new ventures, Woodside Energy
Topic: *Exploration and the Challenges of Geophysics: A Global Perspective from Australia*

Former Soviet Union (FSU)/Europe. Speaker: Kairat Sydykov, director of seismic operations and quality, TNK-BP
Topic: *Reflection on the Geophysical Industry in Russia*

Latin America. Speaker: Adan E. Oviedo-Perez, vice president of exploration, PEMEX
Topic: *Current PEMEX Advances in Exploration Activities*

Africa/Middle East. Speaker: Doug Cherry, exploration manager, Energy Africa
Topic: *Source, Reservoirs, and Trap*

PCs for student sections. The PCs for students program received $7500 from the SEG Foundation and Hampson-Russell Limited Partnership and software donations from Seismic Micro-Technology. A record number of 11 applications were received and are being reviewed. The committee is actively seeking other companies to donate software or financial contributions to match the grant from the SEG Foundation.

***TLE* Global Spotlight.** Michael J. Burianyk was appointed GAC special editor for *TLE* "Spotlight" articles. These papers are designed to highlight members, SEG sections, and student sections from an international perspective.

Global Membership program. Apache Corporation is continuing its generous support for the global membership for another year. We now have 1629 global members.

Global Forum II. In recognition of the growing diversity of membership, GAC and the International Showcase are sponsoring a global forum on *The Role of Technology in the Global Exploration and Business* at the 2004 SEG Annual Meeting in Denver.

Translation Assistance. GAC members helped the SEG Member Services department translate guidelines for completing membership applications in Arabic, Chinese, French, and Russian. GAC members also assisted the K-12 program in translating educational material into Arabic.

Council/GAC Meeting. An important resolution at the spring meeting was a proposal by Executive Committee members to pursue a joint meeting of GAC members and the SEG Council. For the first time, GAC members will meet council representatives in an official gathering at the Annual Meeting. The Society expects a fruitful interaction.

International Meetings Committee. GAC representatives have given input to the International Meetings Committee and have recommended SEG members for leadership appointments for SEG-sponsored meetings around the world (e.g., Moscow, 2003; Caracas, 2004; Bucharest, 2005; Cairo, 2005; and Mar del Plata, 2005).

Final Remarks. The GAC chairman wants specifically to formally acknowledge on behalf of all GAC members the professional and energetic assistance received by all GAC members from Pamela Terekhova. She has served the GAC efficiently and diligently, turning herself into the natural liaison for this fast and ever-changing committee.

GAC chairman Mariangela Capello wants to gratefully acknowledge the immense support received during her tenure from SEG President Peter Duncan and all other SEG Executive Committee members. In addition, Capello appreciates the support and encouragement from her Executive Committee liaison Brian Spies, GAC vice chairman Vikram Sen, former GAC chairman Shane Coperude, and SEG Executive Director Mary Fleming.

Gravity and Magnetics
Guy Flanagan, chairman
Dave Oxley, vice chairman

The Gravity and Magnetics Committee's objective is to serve as a focus for activities within the Society dealing with gravity and magnetics and to promote and expand the knowledge and use of gravity and magnetic methods. The committee meets twice yearly, once at midyear and again at the Annual Meeting.

The 2003 Annual Meeting featured two technical sessions devoted to gravity and magnetics and several other sessions with papers related to gravity and magnetics. In addition, we had an extremely successful postconvention workshop on *Enhanced Seismic Imaging and Interpretation with Gravity and Magnetics*, thanks particularly to the efforts of Harold Yarger. This workshop was especially satisfying because it brought together some key seismic processing and interpretation experts to share insights on the limitations and opportunities of integrated processing and interpretation of gravity, magnetics, and seismic.

At the 2004 Annual Meeting, we expect to have three sessions devoted to gravity and magnetics as well as our usual Tuesday luncheon. The luncheon will feature Dan Larson, professor of anthropology at California State University, speaking on *Advances in Geophysical Applications in Archeology*. A postconvention workshop titled *Magnetic Gradiometry* is being organized by Terry McConnell and Michal Ruder.

Our committee continues to be highly involved in supplying input to THE LEADING EDGE in the form of the "Meter Reader" column, currently edited by John Peirce. Alan Reid has continued efforts to identify key papers in gravity and magnetics for a CD volume to be published by SEG. Michal Ruder also presented her highly successful short course in several locations throughout the year.

A major effort was made to update the Gravity and Magnetics Committee Web site, which had fallen a bit out of date. Particular thanks go to Chuck Campbell for his persistence in getting this accomplished.

Honors and Awards
Brian H. Russell, chairman

One of the most important functions of a professional society is honoring those who have made important contributions to the profession and to science. By unanimous agreement of the Honors and Awards Committee and the Executive Committee, the 2004 honorees are:

Maurice Ewing Medal: Vlastislav Cerveny in recognition of his lifetime contributions to our profession through his internation-

ally recognized work in the ray theory of wave propagation. Although his work goes far beyond exploration geophysics and has advanced fundamental aspects of theoretical geophysics, its impact on exploration geophysics has been felt in every area of seismic modeling, imaging, and inversion.

Honorary Membership: Aleksander A. Kaufman for 50 years of outstanding research that includes numerous published groundbreaking papers and a breakthrough patent on electromagnetic methods of exploration and induction logging. He has made extraordinary contributions to virtually every aspect of the application of electromagnetic techniques to geologic mapping and mineral exploration.

Tadeusz (Tad) J. Ulrych in recognition of his outstanding contributions to the development of seismic signal analysis and inversion, his long career as a mentor to many generations of geophysical students, and his service to SEG.

Ronald W. Ward (posthumous) for a lifetime of broad, selfless, energetic service to the geophysical community and SEG. Over the course of his rich career, he exemplified the ideal civil scientist, collaborating with colleagues on seminal developments in areas such as depth imaging, seismic modeling, 3D-AVO analysis, and petrophysical integration, mentoring young geophysicists both in industry and academia, and championing the advancement of the science and its application to exploration geophysics through insightful and inclusive technical discussion.

Virgil Kauffman Gold Medal: N. Ross Hill for his work in developing, implementing, and promoting the understanding of the process of Gaussian beam migration imaging and multiple removal in numerous difficult geologic areas around the world.

Cecil Green Enterprise Award: Fred J. Hilterman, John W. C. Sherwood, and Reginald N. Neale (posthumous) for founding Geophysical Development Corporation in 1981. Much of the financing came from the sale of personal assets such as life-insurance policies, annuities, and taking on personal debt. GDC was highly respected in the seismic community as a company in the forefront of developing new technology.

Reginald Fessenden Award: Biondo L. Biondi for his development of azimuthal moveout (AMO), which does for 3D data what dip moveout did for 2D data. AMO has contributed to many other developments in the areas of migration, multiple attenuation, and regularization of seismic data.

J. Clarence Karcher Award: Henning Kuehl for outstanding research abilities and an uncompromised willingness to share his knowledge with the geophysical community. Kuehl's doctoral dissertation on the development of least-squares migration as an extension of conventional migration was called by the external reviewer "one of the most innovative and important theses that I have seen in the last decade … shows promise as a technological breakthrough."

Yu Zhang in recognition of his contributions to the technology of exploration geophysics in the area of wavefield extrapolation and imaging. His published works address computational issues in wavefield extrapolation and in Kirchhoff migration, and he has brought his strong analytical and computational skills to bear on 3D antialiasing, approximations of "true-amplitude" weighting kernels in Kirchhoff-type inversion, 3D helical finite difference methods, tau-p-type prestack Kirchhoff migration/inversion, residual curvature analysis, common-offset/common azimuth Kirchhoff inversion, and stable *x-k* extrapolators for true-amplitude wave equation migration.

Distinguished Achievement Award: Curtin Reservoir Geophysics Consortium of Curtin University of Technology for research in areas that are highly beneficial to the exploration geophysics industry. A few examples of recent work on anisotropy and mode conversions include:

1) 3C-VSP analysis, recovery of anisotropic parameters and attribute analysis
2) anisotropic processing (NMO and velocity analysis). CRGC has developed a new implementation of anisotropic moveout that is accurate to all offsets.
3) isotropic and anisotropic P-wave imaging of VSP and surface seismic data
4) isotropic and anisotropic converted wave imaging
5) characterization of reservoir rock properties using seismic anisotropy
6) anisotropic AVO analysis

Life Membership: Paul S. Cunningham for his meritorious voluntary service to the Society, particularly during ten years as an active member of the Global Affairs Committee. He has served as Latin America regional coordinator for all of that time. He was the general cochairman of the Rio '99 meeting and did a tremendous amount of fund-raising to make that event possible. Cunningham exemplifies the meaning of the term *global geophysics*.

David H. Johnston for long service to the geophysical community, to SEG and the Geophysical Society of Houston, and to the SEG Foundation as a fund-raiser, an organizer of numerous technical sessions, and an inspirational speaker and mentor for younger geophysicists. He enjoys world-class recognition for his fundamental contributions in time-lapse 4D seismic, which he has shared with the greater geoscience and engineering communities.

Best Paper in GEOPHYSICS 2003

A new sea-floor gravimeter
Glenn S. Sasagawa, Wayne C. Crawford, Ola Eiken, Scott L. Nooner, Torkjell Stenvold, and Mark A. Zumberge

Honorable Mention (GEOPHYSICS)

Angle-domain common-image gathers by wavefield continuation methods
Paul C. Sava and Sergey Fomel

Focusing in dip and AVA compensation on scattering-angle/azimuth common image gathers
Sverre Brandsberg-Dahl, Maarten V. de Hoop, and Bjørn Ursin

Seismic trace interpolation in the Fourier transform domain
Necati Gülünay

An efficient finite-difference scheme for electromagnetic logging in 3D anisotropic inhomogeneous media
Sofia Davydycheva, Vladimir L. Druskin, and Tarek M. Habashy

Best Paper in THE LEADING EDGE 2003
Interpretation and practical applications of 4C-3D seismic data, East Cameron gas fields, Gulf of Mexico
Jay W. Nahm and Mike P. Duhon

Honorable Mention (*TLE*)
Pushing the limits of resolution at Holstein: A case history from the deepwater Gulf of Mexico
Alexander S. Calvert, Eric Ekstrand, Bill McLain, John Etgen, Frederic Billette, Vikram Sen, Carl Regone, Tom Byrd, Mark Truxillo, Scott Young, and Yannick Cobo

Factors affecting frequency content in preSDM imaging
Ian F. Jones and Juergen K. Fruehn

3D/4C Emilio: Azimuth processing and anisotropy processing in a fractured carbonate reservoir
Laura M. Vetri, Eugenio Loinger, James E. Gaiser, Andrea Grandi, and Heloise B. Lynn

Best Paper Presented at the 2003 Annual Meeting
Kirchhoff or wave equation?
Zhiming Li, Chen-Bin Su, Wesley Bauske, and Sharma V. Tadepalli

Honorable Mention (Best Paper, Annual Meeting)
Seismic interpretation using global image segmentation
Dave Hale and Jeff Emanuel

A brief history and recent advances of seismic technology in Mexico
Efrain Méndez-Hernández

Best Poster Paper Presented at the 2003 Annual Meeting
Key elements in the recovery of relative amplitudes for prestack, shot record migration
Steve M. Kelly and Jiaxiang Ren

Honorable Mention (Best Poster Paper, Annual Meeting)
How much wind is enough?
Peter A. Crisi and Timothy J. Perrin

Best Paper Presented by a Student at the 2003 Annual Meeting
Joint stochastic inversion of prestack seismic data and well logs for high-resolution reservoir delineation and improved production forecast
Omar J. Varela

Award of Merit (Best Student Paper, Annual Meeting)
Noncontacting ultrasonics for visualizing and exploiting multiple scattering
Alison E. Malcolm

3D refraction migration for depth imaging of West Africa salt walls
Connie J. VanSchuyver

Best Poster Paper Presented by a Student at the 2003 Annual Meeting
Passive seismic imaging in the presence of white noise sources: Numerical simulations
Deyan S. Draganov

Award of Merit (Best Student Poster Paper, Annual Meeting)
Propagator inversion for shallow structure
Robbert van Vossen

Improved attributes for interpretation and QC of the Vinton Dome 3D surface seismic
Warren S. Duncan

As chairman of this year's committee, I want to thank both the SEG membership at large for submissions and the members of my committee, Bill Barkhouse, Sally Zinke, Walt Lynn, and Mike Bahorich, for all of the hard work they contributed to the selection of these award recipients.

Interpretation
Hans Sheline, chairman

The SEG Interpretation Committee (IC) meets formally twice each year. The main meeting this year will be at the 2004 SEG Annual Meeting in Denver. We invite the AAPG Geophysical Interpretation Committee to attend, and just as important, we invite all our members with enthusiasm for interpretation to attend. Send a request to the chairman, **Sheline@VeriNova.com,** to ensure that there is enough room. The other formal meeting this year was at the AAPG annual meeting, where our SEG committee was invited to attend. These formal meetings give us a chance to get an update on projects, share ideas, and coordinate project planning (see executive summaries below).

Objectives. The IC energetically promotes best practices and expands methods and technologies to improve interpretation quality. This is done by encouraging SEG members to publish case histories and share their best practices, both at conventions and via continuing education. The IC represents the largest segment of the SEG membership and wants to be the sounding board for what interpreters want, a critical conduit for providing what they need, and the catalyst for making our profession more rewarding.

The committee is truly an integrated committee. Members come from many areas (exploration, development, onshore, offshore, and international) and use different skills (seismic, poten-

tial methods, and stratigraphy), but the common objective is to integrate the best information available in the most effective way to add maximum value to our business objectives.

The IC works especially closely with AAPG as well as with the Society of Petroleum Engineers (SPE) and the Society of Professional Well Log Analysts (SPWLA), among others. In fact, many members serve in more than one organization.

Most important, we try to keep an open-door policy and are always looking for enthusiastic members who will champion a good cause through to completion. We look forward to your participation.

Major current projects

- *Reservoir Geophysics 2* **(david.h.johnston@exxonmobil.com)**.
- Publishing in the "Geophysical Corner." The plan is to publish a compilation of "Geophysical Corner" articles in 2005 **(alistair@airmail.net)**.
- *Seismic Attributes* publications **(Sheline@VeriNova.com)**.
- *Pitfalls in Interpretation* compilation **(hjames@paradigmgeo.com)**.
- As a subset of *Seismic Pitfalls*, a technical session is scheduled on "failed amplitude anomalies" during the 2006 AAPG annual meeting in Houston. Deborah Sacrey plans to coordinate a publication resulting from that session.

Great ideas waiting on enthusiastic champions

- Harvest the best papers from international meetings, translate them as needed, and publish them so more of our membership and others can benefit.
- Take a survey of best interpretation practices (anonymously) by basin and share the results with our membership.
- Restart the "Geology for Geophysicists" column in THE LEADING EDGE.
- Restart the "Best papers of AAPG at SEG" and vice versa.
- Workshop on case histories of recent giant oil-field discoveries.
- Update potential-methods publications (such as Nettleton) and publish new potential-method case histories.
- Provide additional workshops.

Executive Summary of Formal Meetings in the last year

October 26, 2003, SEG Interpretation Committee Annual Meeting, Dallas: Alistair Brown summarized the "Geophysical Corner" publications planned. Note for the last half of 2004: "Converted Waves," by Chris Thompson; "Land Survey Design," by Mike Galbraith; "Marine Survey Design," by Malcolm Lansley; "The Use and Abuse of Seismic Attributes," by Hans Sheline; "Tracking and Other Workstation Tools," by Dave Agarwal; and "What has 4D Achieved?," by David Johnston. In 2005, a "Geophysical Corner" compilation is planned to be published. *Pitfalls in Interpretation* was discussed, as well as the need to get more international interpreters involved. A suggestion to consider harvesting the best papers from international meetings was made. The need for seismic attribute publications was discussed, and Hans Sheline agreed to look into what could be done. The value of collecting and sharing best practices was discussed. Hans Sheline was selected and agreed to be the IC chairman for the next year. Possible interpretation funding needs were discussed, as well as potential-methods publication updates. David Johnston gave a brief update on the planned *Reservoir Geophysics 2* publication.

April 18, 2004, AAPG Geophysical Interpretation Committee (GIC), Dallas, (rrandyray@aol.com): Educational Data Sets, Wayne Pennington: Legal problems with seismic data. Pennington and Dan Hughes will prepare a source list for the AAPG Web site, including known sources of public-domain data such as National Petroleum Reserve Alaska (NPRA), Department of Energy (DOE), and Continental Consortium for Reflection Profiling (COCORP). Note: AAPG Seismic Data Set available on CD 2002—AAPG Continuing Education Course Note Series #41, paperback and CD: *Course Manual and Atlas of Structural Styles on Reflection Profiles from the Niger Delta*, by Deborah Ajakaiye (University of Houston) and Albert W. Bally, (Rice University). Best of SEG at AAPG and vice versa. Interest was expressed in reestablishing this program, which was run by Margaret Welch. We will begin a dialog to see if the societies want it, and Steve Henry and Ashok Ghosh will begin to prepare a list of talks presented at recent meetings. Hans Sheline will revisit this topic at the 2004 SEG Denver committee meeting. Paul Weimer agreed to bring up the topic at the Advisory Council meeting to see if there is interest in reviving the concept. New idea—virtual publication focused on good general reference articles was discussed. AAPG and/or SEG Web sites could highlight or link to geophysical tools for geologists and vice versa.

We look forward to your thoughts, suggestions, and enthusiastic participation.

Membership
Robert Wyckoff, chairman

As of June 30, SEG membership was at an all-time high of 20 248, which includes 49 corporate members. This is an overall increase of 1509 in the past year. Significant increases were noted in both global and student member categories (404 and 1275, respectively). Active membership decreased by six, and associate membership decreased by 164. Figures included in this report display membership statistics in greater detail.

Apache Corporation is continuing its generous sponsorship of global membership dues. Halliburton Energy Services will continue to fund the SEG Student Membership Corporate Sponsorship program for three more years.

Now in the second year, the Member-Get-a-Member Campaign, assisted by the timely and skillful contributions of the SEG staff, is meeting expectations. The campaign is designed to support the values of membership on an individual level. As the campaign progresses, expectations are for membership to increase and services provided to new members to be recognized as adding value to professional careers. SEG sections will be encouraged to participate and provide a network to reach

potential members. SEG's first membership campaign netted 90 new members who were recruited by 66 SEG members. Ahmad Riza Ghazali of Kuala Lumpur, Malaysia, recruited the most new members. The 2004 campaign is under way, and as of June 30, 139 SEG members have recruited 501 new members. See **http://membership.seg.org/mgm2004/**.

An interesting note again this year is that outside the United States, membership increased by 3% and now represents 53% of the total membership. This brings global challenges that are being addressed by the Executive Committee. Brian Spies and Steve Hill cochaired an Ad Hoc Dues Committee on dues restructuring this past year. (Further details can be found in the first vice president and secretary-treasurer reports.) The Executive Committee charge to the committee was to develop a proposal for revision of SEG dues structure based on "ability to pay" or purchasing power.

Our sincere thanks go to the dedicated SEG staff that entered 3968 new/change applications, responded to queries from members, compiled membership statistics, and superbly supported the successful Member-Get-a-Member Campaign.

Figure 1.

Total SEG membership as of June 30, 1930—2004 (current)

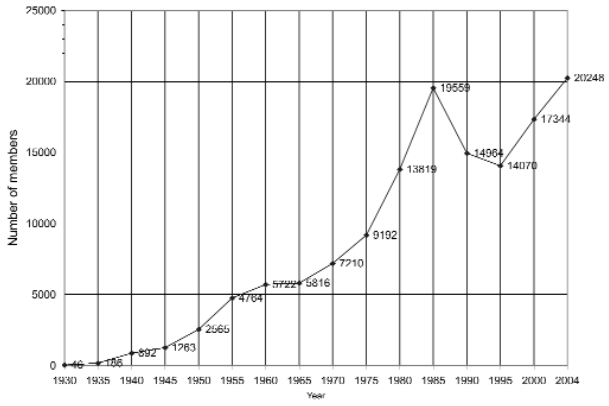


Figure 2.

Globalization of membership
as of June 30, 2004

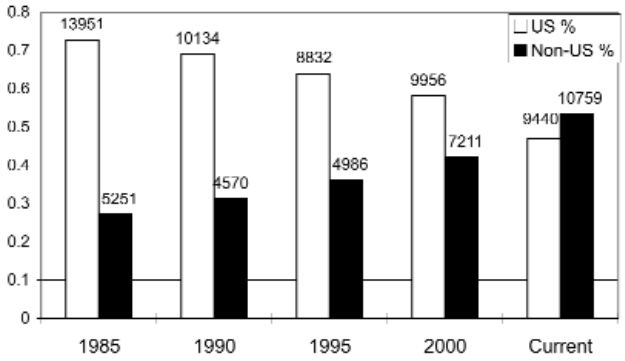


Figure 3.

Membership Report: Fiscal Years 2003—2004
(July 1—June 30)

	2002–2003	2003–2004
Active members	8089	8083
Associate members	7480	7316
Global members	1225	1629
Student members	1896	3171
Total	18690	20199
Membership as of June 30	17554	18690
New member applicants	3099	3337
Reinstatements	173	203
Deaths	-55	-42
Resignations	-127	-114
Dropped (nonpayment of dues)	-1954	-1875
Total	**18690**	**20199**
Net (decrease)	**1136**	**1509**

*Does not include corporate members in totals
Current corporate members - 49

Figure 4.

Fiscal year 2004 membership

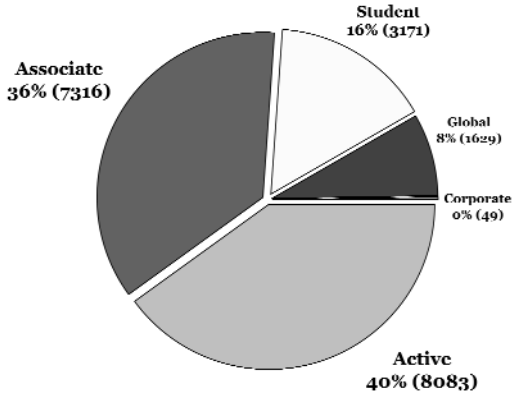
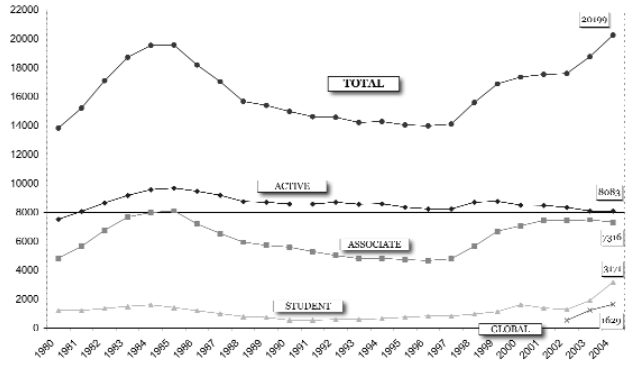


Figure 5.

Membership by classification



Mining and Geothermal
Dick West, chair
Mary Poulton, vice chairman

The main activity for the committee this year has been organizing the activities and assisting in the generation of the Technical Program for the Annual Meeting to be held in Denver. This is a "focus on mining" year (every second year) for the committee, and it comes at a time of a strong recovery of metal prices and exploration activity. There is excellent support for the Technical Program from the mining and geothermal community, as evidenced by the number of presentations and posters that will be presented at the Annual Meeting as well as the short course, workshop, and mine tour that are planned. Misac N. Nabighian was the Mining and Geothermal Committee's key contact for the Technical Program Committee and was in charge of the review process for all abstracts. His efforts are greatly appreciated.

Membership on the M&G Committee list server continues to increase, and Geosoft continues to generously host the server. This year the committee's proposal to fund the generation and maintenance of an SEG-sponsored M&G Web page by selling advertising on the Web page was approved by the Executive Committee. Details remain to be worked out, but the main hurdle has been jumped. This concept was started four years ago by previous chairman Alan King.

My two years as committee chairman will end at the 2004 SEG Annual Meeting in Denver, and Mary Poulton, vice chairman, will ably take on the role of chairman. Michael Zang has been nominated to be the new vice chairman for the next two years. I appreciate the efforts of the committee in the last two years, especially those of Ken Witherly, and I look forward to assisting Poulton and Zang in the future.

The committee has recognized that one of the great challenges the industry faces is the lack of student interest in geophysics and earth sciences. Currently, there are few earth science majors and even fewer graduates with master's degrees or doctorates. This will have a significant and deleterious effect on the industry within ten years. In the short term, there is a lack of qualified junior geophysicists needed to help acquire and interpret the data that lead to new discoveries. To assist and entice students into the fields of mining and geothermal geophysics, two initiatives are being developed by the committee. The first is a list of universities worldwide that offer geophysical degrees for students interested in mineral and geothermal exploration and a list of scholarships that can be used to attend those institutions. This will be posted on the Web page after it has been added to the SEG Web site. The other initiative is a virtual mentoring program that would hook up professionals in the mining and geothermal field with students in the universities. The biggest hurdle for this is the heavy workload that most professionals are saddled with these days.

Committee meetings were held at the Vancouver Roundup Conference in January and at the Prospectors and Developers Association of Canada (PDAC) meeting in Toronto last March. The primary topic of discussion was planning of the mining and geothermal program for Denver. Poulton and I thank the members of the Mining and Geothermal Committee for their collaboration and efforts in support of M&G activities this year.

Committee on Nominations
Mike Bahorich, chairman

The Committee on Nominations included SEG past presidents Mike Bahorich, Walter S. Lynn, Sally G. Zinke, and representatives from four SEG sections: Kairat Z. Sydykov, Russia; Apurba Saha, India, Society of Petroleum Geophysicists; Michael E. Enachescu, Romanian Society of Geophysics; and Francisco A. Porturas, Scandinavian Visualization Society, Norway.

The committee received suggestions for potential candidates for the 2004–2005 Executive Committee from a variety of SEG members. After meeting at the 2003 SEG Annual Meeting in Dallas, the committee conferred via conference calls and e-mail to finalize a selection of candidates. Seventy-five candidates were considered, and the final list of ten was compiled from a rank-ordered list after all members of the Committee on Nominations had voted.

Candidates were contacted, and the following nominees for the 2004–2005 Executive Committee were submitted for the ballot process:

President-elect	Gary E. Jones Terry K. Young
First vice president	Jerry M. Harris Murray W. Roth
Second vice president	Micki Allen Bill Pearson
Vice president	Samir Abdelmoaty Klaas Koster
Secretary-treasurer	Craig M. Jarchow Susan Mastoris Peebler

Because Gerard T. Schuster will serve the final year of his two-year term as editor on the Executive Committee, there is no nominee for this position.

The Committee on Nominations also provides nominations for district representatives to the SEG Council as positions become open. Active members who are not represented by sections are represented on the Council by district representatives from among ten geographic districts corresponding

to their mailing addresses. This year, there were two district-representative vacancies, and the following candidates were contacted and agreed to run for election:

District 1	R. Lynn Kirlin Michael D. Rocereta
District 8	Guillaume Cambois Terje Dahl

I wish to thank all candidates for their willingness to serve the Society. I also thank the committee members for their hard work and active participation.

Online Governing Board
Henry Bland, chairman

The Online Governing Board (OGB) oversees the content, structure, and operation of the SEG Web site. The board's purpose is to oversee refinements of the Web site to better serve the membership. Because of the efforts of SEG staff members, the Web site is continually improving and providing enhanced online services to its members.

SEG online publications now include all technical papers from GEOPHYSICS since 1936 and from THE LEADING EDGE since 1982. Many members have chosen to discard their paper collections and instead rely on the online service to view current and past issues. As members put their trust in the long-term availability and affordability of the online archive, there have been simultaneous pressures to increase access fees as a means of generating revenue. The Online Governing Board strongly supports the Executive Committee's decision to maintain affordable access to the online publications archive.

Looking forward, the SEG Web site still has room for growth and improvement. The Web site requires content that will engage, excite, and enlighten the membership. In addition, we hope to provide more content relevant to student members, such as the upcoming Virtual Student Expo. This initiative will provide an online tool for matching student members with potential employers for internships and full-time entry-level positions.

Other future additions to the Web site may include a source-code repository, software clearinghouse, and links to GeoScienceWorld (GSW). SEG has offered support to GSW, an aggregated online source for journals from several earth science societies, by providing content from THE LEADING EDGE.

On behalf of the SEG membership, the OGB would like to sincerely thank the SEG staff members who work behind the scenes to make the SEG Web site possible.

Publications
Chris Liner, chairman

The Publications Committee is responsible for soliciting and working with the SEG Publications staff to produce all special publications other than GEOPHYSICS and THE LEADING EDGE. The committee's objective is to provide exploration geophysicists with the technical geophysical information they require in their jobs or studies. This report summarizes books recently published and those that are to be published in the near future.

Reference publications issued in fiscal year 2004:

- *Hardrock Seismic Exploration*, by volume editors David W. Eaton, Bernd Milkereit, and Matthew Salisbury
- *The Microtremor Survey Method*, by Hiroshi Okada, translated by Koya Suto, with contributions and foreword by volume editor Michael Asten, published in cooperation with SEG-Japan and the Australian Society of Exploration Geophysicists
- *Interpretation of Three-Dimensional Seismic Data, sixth edition*, by Alistair R. Brown, copublished with AAPG
- *Petroleum Systems of Deepwater Settings*, by Paul Weimer and Roger M. Slatt (Distinguished Instructor Short Course book)
- *Problems in Exploration Seismology and their Solutions*, by Lloyd P. Geldart and Robert E. Sheriff
- The SEG/Dallas 2003 *Technical Program Expanded Abstracts* book
- The SEG/Dallas 2003 *Technical Program Expanded Abstracts* CD-ROM
- GEOROM IX, CD-ROM archive of GEOPHYSICS (1936–2002) and THE LEADING EDGE (1982–2002)
- Expanded Abstracts Historical Series, 1982–2003, on CD-ROM
- CREWES Research Collection 2004 (published by CREWES)

Reference publications expected by 2004 SEG Annual Meeting in Denver:

- *Fundamentals of Geophysical Interpretation*, by Laurence R. Lines and Rachel T. Newrick
- GEOROM X, DVD-ROM archive of GEOPHYSICS (1936–2003) and THE LEADING EDGE (1982–2003)
- Expanded Abstracts Historical Series, 1982–2004, on DVD-ROM
- The SEG/Denver 2004 *Technical Program Expanded Abstracts* book
- The SEG/Denver 2004 *Technical Program Expanded Abstracts* CD-ROM

Other works in advanced stages of production:

- *Introduction to Petroleum Seismology,* by Luc Ikelle and Lasse Amundsen
- *Near-Surface Geophysics*, edited by Dwain K. Butler

The Publications Committee proposed, and the Executive Committee approved, the following policy statement about publication of software-related books:

> SEG encourages the submission of manuscripts on software-related topics for publication in print and/or electronic form if the work's primary aim is to promote the understanding of

geophysics and if the work involves geophysical software that is either free or in wide distribution. SEG is not interested in publishing manuals describing only the technical aspects of operating geophysical software. However, SEG does seek to publish self-guided tutorials and other treatises focused on explicating geophysical principles that may heavily involve specific free or widely used geophysical software. When SEG publishes such material, the publication will include a statement of this policy and a message stating that SEG does not promote the discussed software to the exclusion of any other product.

The Publications Committee consists of several dedicated individuals who generously donate their time and effort. These committee members, along with editors, book authors, and the SEG Publications staff, allow the publication process to work efficiently. The series editors are: Cynthia Menant Berlier, Slide Sets; Michael R. Cooper, Investigations in Geophysics; Dan Ebrom, Geophysics Reprints; David Fitterman, Geophysical Monographs; Steve Hill, Geophysical Developments; Gene Scherrer, Geophysical References; Ilya Tsvankin, Translations Committee chairman; and Roger Young, Continuing Education Course Notes.

Research
Stewart A. Levin, chairman

The Research Committee (RC) currently has 88 members. Our 2003 fall committee meeting was held at the SEG 2003 Annual Meeting in Dallas. Our 2004 winter meeting was held at the Landmark Graphics facilities in Houston, Texas. A joint EAGE/SEG RC meeting was held during the EAGE 2004 meeting in Paris, France. Information on the RC, minutes of committee meetings, workshop information, abstracts, and upcoming RC events can be found at our Web site: **http://seg.org/research/**.

The committee will hold the following events:

- 2004 SEG/EAGE Summer Research Workshop, August 1–6, Vancouver, British Columbia, Canada: *Characterization of Fractured Reservoirs*, organized by Arthur C. H. Cheng, Wenjie Dong, James E. Gaiser, Stephan M. Gelinsky, Kurt T. Nihei, Chris Payton, Michael A. Schoenberg, and Kenneth M. Tubman
- 2004 EAGE/SEG Summer Research Workshop: The EAGE lead organizers will hold a workshop on multicomponent seismics, title not yet finalized, in late August or early September. Organizers are Jean-Luc Boelle, Shuki Ronen, and Jan Petter Fjellanger.
- Special Session at the 2004 SEG Annual Meeting: *Recent Advances and the Road Ahead* Research Committee Annual Session, organized by Ali Tura and Yoram Shoham
- Postconvention Workshops at the 2004 SEG Annual Meeting: *Geophysical Overpressure Prediction*, organized by Colin M. Sayers, Kevin J. Dodds, Dan Ebrom, Alan R. Huffman, Keith W. Katahara, Dirk Smit, and Kurt-Martin Strack; *Stress and Pore-Pressure Changes from 4D*, organized by Colin M. Sayers, David N. Dewhurst, Paul J. Hatchell, Rune Holt, Martin Landrø, David E. Lumley, Colin D. MacBeth, and Kurt T. Nihei; *Towards a Unified Rock Physics Model*, organized by Arthur C. H. Cheng, Manika Prasad, and Greg Boitnott; *Applications of Electroseismics/ Seismoelectrics to Subsurface Imaging and Characterization*, organized by Kurt T. Nihei, Steven R. Pride, and Arthur R. Thompson; *Uncertainty in Reservoir Prediction and Reservoir Risk Analysis*, organized by Sharma V. Tadepalli, David A. Wilkinson, and Geoffrey A. Dorn; *Velocity Uncertainty from Seismic: Causes and Consequences*, organized by James H. Robinson, Biondo L. Biondi, Robert G. Clapp, and Wook B. Lee; *Unconventional Computer-Aided Geophysical Education (UNCAGE)*, organized by Leon Thomsen, Frank D. Brown, Wulf F. Massell, and Joseph M. Mills Jr.
- SEG 2005 Summer Research Workshop: Francis Muir has volunteered to lead the organization of this workshop on heterogeneity, with a focused emphasis on such areas as equivalent media. It is tentatively to be held at or near Stanford University.

In addition, several members of the Research Committee are contributing to the Drilling and Production Committee's 2005 summer forum on attenuation.

Other committee activities include voting for the second year by remote workshop participants at the Research Committee winter meeting. Workshop topics were both suggested and voted on by RC members present in Houston and by about two dozen members who could not be present but participated by e-mail. In addition to setting up workshops, the committee also authorized two new standing subcommittees, for SEGRC Web site improvements and Extra-SEG Relations.

Finally, the RC thanks William H. Green for his guidance and support and Amy Watson and Kristi Smith of the SEG staff for their energetic and professional assistance to this committee in helping to plan workshops and meetings.

Reviews
Bill Green, chairman

This committee is somewhat unusual in that it does not meet in person or have any forums for discussion on SEG issues. In essence, it is a collection of people who contribute book reviews to THE LEADING EDGE, and the "chairman" is basically an associate editor of that journal.

The goals and modus operandi of the Reviews Committee continued in their well-established forms during the past year. It reviews technical books of interest to SEG members to help them keep current with the literature related to their professional activities. We also review occasional books of general interest to geoscientists. The committee has members around the world, representing all aspects of geophysics as a profession. Its work is conducted almost exclusively by e-mail. Notices of available books are sent to potential reviewers, reviews are submitted to the reviews editor, and the corrected

drafts are forwarded to the SEG Business Office for publication. The only manual process is shipping the books from the SEG office to the reviewers.

For the reporting period (June 2003–May 2004), the visible effects of the committee's work were as follows: 24 book reviews appeared in print, by 13 authors from four countries. Of the 24 books, two had two opinions contributed by different reviewers.

After the review is submitted, publication is essentially immediate. Many reviews appear in *TLE* in the following issue.

The process of actively soliciting books of interest from publishers continues, resulting in an excellent selection of books available for review. Two troubling trends have developed. A smaller percentage of books available is being taken by reviewers, and the average time for reviews to be prepared seems to be increasing. In addition, the numbers of reviews and reviewers are both somewhat less than last year. Considering all of this, it appears that the committee may need to expand its active membership.

Once again, I would like to thank Merrily Sanzalone of the SEG Business Office for all her help in handling the logistical side of the review process and for her efforts in lining up review copies of new books. Thanks also to Dean Clark for the quick transitions from e-mail attachments to print in *TLE*. Finally, I must express my appreciation for the efforts of the contributors to the "Reviews" column. Without them, the committee would not accomplish much.

Any members who would like further information or would like to participate are welcome to contact me via e-mail: **billgreen@telus.net**.

SEG Scholarship
Jim E. Flis, chairman

The SEG Foundation Scholarship program seeks to find and recognize the best and brightest geophysical students within the SEG international and collegiate community. With generous funding from our sponsors and organizations, we award scholarships to our future society leaders and innovators and ensure a continuation of a strong, healthy SEG community in the years ahead. In addition, we honor, through memorial scholarships, geophysical leaders who have made an impact on our Society and our lives.

Our scholars. On May 5, 2004, the committee met to discuss the final ranking of 236 scholarship applicants from 102 universities and 21 countries. Of this total, 64 new awards were approved and 60 were scholarship renewals. The scholarship recipients represented the full breadth of the rich diversity of the geophysical sciences. Several awards, ranging from $500 to $14 000, target students who are striving for a specialty in geophysics, physics, or geosciences. Most awards are for $1000 (49), $1500 (30), and $2000 (27).

Our sponsors. We presently have 48 sponsors who represent a complete cross section of the SEG community. They consist of individuals, corporations, and SEG sections. A large number of our scholarships are endowed, which allows for stable funding, unaffected by economic downturns.

Type	Number	Amount
Corporate	44	$74 250
Individuals	40	$95 000
SEG sections	30	$45 000
SEG general	10	$ 9000

This year, $223 250 was awarded, an increase of $20 750 from the previous year. Of the scholarships awarded, $166 750 was endowed and $56 500 was from yearly contributions and carryovers.

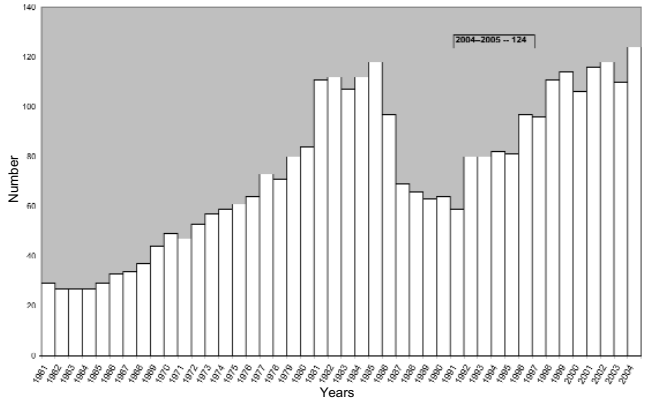
The Foundation Trustee Associates secure funding and oversee fiscal discipline for the scholarship program. They are to be commended.

Our committee. The Scholarship Committee consists of eight members who serve for eight years each. They review and assess the applications of hundreds of students in preparation for the committee's annual spring meeting. It is a challenging and a very humbling task. We rank an impressive array of the brightest students from high schools and universities all over the world. In addition, each committee member is assigned a group of scholarship recipients, providing a direct link for our students to the SEG community. Through this direct contact, we mentor and monitor their academic progress. Many thanks to the committee members, Vicki Messer, Mike McCormack, Karen Dittert, Gokay Bozkurt, Robert Van Nieuwenhuise, Martin Stupel, and Wenjie Dong, for their continued dedication to our society. I am especially grateful for the expertise and guidance provided by SEG staff members Mary Fleming, executive director; Brian Young, administrative coordinator; Kathleen Lanigan, manager, executive office/Foundation; and Gary Servos, SEG Foundation Trustee Associates chairman.

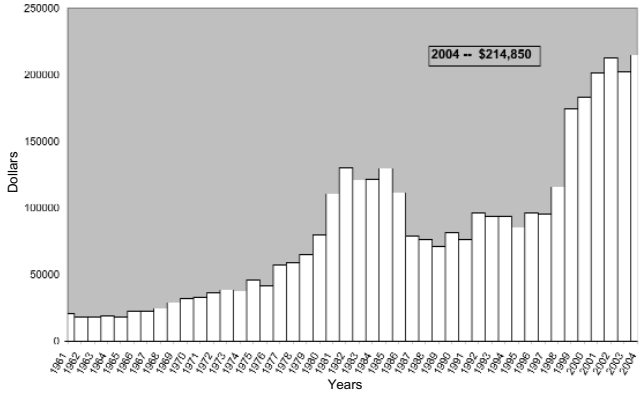
SEG Foundation Scholarship Sponsors for the 2004–2005 Academic Year

Allen Memorial, Donald R.	$ 500
AGIP	$ 1000
ARCO	$ 2000
Baird, Ralph W.	$ 1500
Born Memorial, Ted	$ 1000
Bridges, Rutt—Tim Long Memorial	$ 1000
Butler, John R. Jr.	$ 1000
ChevronTexaco E&P	$12 000
ConocoPhillips Inc.	$ 5000
Dallas Geophysical Society	$ 4000
Dallas Geophysical Society—Karen Kellogg Shaw Memorial	$ 7000
Denver Geophysical Society	$ 9000
Excel Geophysical Services	$ 1000
ExxonMobil Upstream Research Co.	$13 250
Forrest, Michael	$ 2000
Geophysical Society of Alaska	$ 1000
Geophysical Society of Houston	$ 9000
Geophysical Society of Houston—Carleton-Farren Award	$ 5000
Geophysical Society of Oklahoma City	$ 2000
Geophysical Society of Tulsa	$ 2600
Gregg, Mark E.	$ 1000
Harrison, Jim and Ruth	$ 2000
Hewitt, Marvin and Jene	$ 1000
Hilterman, Fred	$ 1000
Hohmann Memorial	$ 4000
Hron Memorial	$ 1000
Jack, Ian (University of Birmingham)	$ 5000
KEGS	$ 2000
LaCoste	$10 000
Landmark Graphics	$13 000
Mazza Memorial, Thomas	$ 1000
McBride Memorial	$ 1000
McBurney Memorial	$ 4000
Permian Basin Geophysical Society	$ 1000
Schlumberger	$ 2000
SEG General	$ 6000
Shell Oil Foundation	$ 2000
Sheriff, Margaret	$12 000
Sheriff, Robert E.	$14 000
Smith, Charlie and Jean	$13 000
Softball Tournament	$ 3000
Tilley, Aubra	$12 000
Veritas DGC	$ 2000
WesternGeco	$ 5000
WesternGeco, Salvatori Memorial	$ 5000
WesternGeco, Savit Memorial	$ 5000
Worthington, David	$ 4000
Wrolstad Memorial	$ 1000

Number of scholarships



SEG Foundation: 2004 funds available for scholarships



Name	University	Award
Amy Allen	Montana Tech	Aubra Tilley
Alicia Arevalos	Williams College	ConocoPhillips
Elizabeth Beckel	Colorado College	Excel Geophysical Services
Michael Beckel	Colorado College	Denver Geophysical Society
Anthony Berthelote	University of Montana	Geophysical Society of Alaska
Nedra Bonal (Alexander)	University of Texas at Austin	Geophysical Society of Houston
Sarah Brophy	Washington University	Barbara McBride Memorial
Pablo Buenafama	Texas A&M University	Landmark Graphics
Hoa Quang Bui	Texas A&M University	ChevronTexaco E&P
Neda Bundalo	University of Houston	Carl Savit
Benjamin Byerly	University of Oregon	Keith Wrolstad Memorial
Katrina Byerly	University of South Carolina	ExxonMobil Upstream
Zhihong Nancy Cao	University of Calgary	SEG General
Matthew Casey	Montana Tech	SEG General
John Chakalis	Colorado School of Mines	Denver Geophysical Society
Amy Chen	University of Minnesota	Schlumberger
Kevin Christie	University of Wisconsin-Madison	Ted Born Memorial
Colin Cikoski	New Mexico Tech	Permian Basin Geophysical Society
Carlos Cobos	University of Houston	Charlie and Jean Smith
Amy Daradich	University of Toronto	ExxonMobil Upstream
Pawan Dewangan	Colorado School of Mines	Denver Geophysical Society
Diana Nicoleta Dragoi	University of Houston	ChevronTexaco E&P
Ben Drenth	University of Texas at El Paso	Lucien LaCoste
Xiang Du	University of Calgary	Frantisek Hron
Lauren Edgar	Dartmouth College	Dallas Geophysical Society
Jennifer Engles	University of Hawaii–Manoa	ExxonMobil Upstream
Tina Erickson	Gustavus Adolphus College	Veritas DGC
Robert Eslick	University of Kansas	ExxonMobil Upstream
John Evangelatos	McGill University	Landmark Graphics
Shelby Frost	Winona State University	SEG General
Rodrigo Fuck	Colorado School of Mines	Carl Savit
Jourdan Fuhrmann	Southwest Missouri State University	WesternGeco
Toshiko Furukawa	University of Utah	Landmark Graphics
Greg Gandler	University of Texas at Austin	Landmark Graphics
Rui Ge	University of Texas at Dallas	Karen Kellogg Shaw/DGS
Geophysical Field School	University of Saskatchewan	CSEG Annual Grant
Irina Gladkova	Reed College	Marvin and Jene Hewitt
Cory Grady	Colorado School of Mines	Fred Hilterman
Alexander Gribenko	University of Utah	Michael Forrest
Derek Grimm	Colorado School of Mines	Aubra Tilley
Melissa Hayes	Montana Tech	Geophysical Society of Houston
Gabriel Hebert	Georgia Institute of Technology	Tim Long
Scott Hess	Montana Tech	ConocoPhillips
Andrew Hinnell	University of Arizona	ChevronTexaco E&P
R. Chadwick Holmes	Columbia University	ChevronTexaco E&P
Shuo Hou	University of Texas at Austin	GSH/Carleton-Farren
Yu-Ting Tiffany Huang	Harvard University	ExxonMobil Upstream
Aleksandar Jeremic	University of Houston	Robert E. Sheriff
Michael Jessop	University of Utah	Hohmann Memorial
Yue Jia	Southern Methodist University	Karen Kellogg Shaw/DGS
Katarina Jovanovic	University of Houston	David Worthington
Karl Kappler	University of California–Berkeley	Charlie and Jean Smith
Ashley Krakowka	University of Manitoba	Softball Tournament
Mritunjay Kumar	University of Houston	Margaret S. Sheriff
Keumsuk Lee	University of Texas at Dallas	Dallas Geophysical Society
Kun Liu	University of Calgary	ARCO
Virginie Maris	University of Utah	Charlie and Jean Smith
Jake Martin	University of Rhode Island	Aubra Tilley

Name	University	Award
Stephanie Mason	University of Rochester	ExxonMobil Upstream
David McCowan	Ohio University	Geophysical Society of Houston
Andrew McNeill	University of Victoria	Dallas Geophysical Society
Alison Meininger	Colorado School of Mines	Denver Geophysical Society
Aaron Mertz	Washington University	ChevronTexaco E&P
Sasha Meyer	University of Arizona	Hohmann Memorial
Thomas D. Mikesell	Colorado School of Mines	Denver Geophysical Society
Justin Milliard	University of Montana	Charlie and Jean Smith
Robert Monnar	University of Nevada–Reno	Landmark Graphics
Kerry Moreland	University of Oklahoma	Charles B. McBurney Memorial
Geoff Moret	Pennsylvania State University	Geophysical Society of Houston
Dana Mucuta	University of South Carolina	ChevronTexaco E&P
Charles Oden	Colorado School of Mines	Charlie and Jean Smith
Sara Old	Texas A&M University	Karen Kellogg Shaw/DGS
Suzanne Opalka	Hobart & William Smith Colleges	ExxonMobil Upstream
Nikita Panasenko	California Institute of Technology	ConocoPhillips
Robert Penna	University of Rochester	Schlumberger
Alexander Pirogov	Colorado School of Mines	SEG General
Seward Pon	University of Calgary	Softball Tournament
Nebojsa Pralica	University of Houston	Henry Salvatori
Nathaniel Putzig	University of Colorado	Charlie and Jean Smith
Robert (Brent) Riley	Texas A&M University	GSH/Carleton-Farren
Emily Roland	Colorado School of Mines	Mark E. Gregg/KiwiEnergy Ltd.
Stephen Rose	Washington State University	WesternGeco
Michael Rumon	University of British Columbia	Charlie and Jean Smith
Sandra Saldana-Farkas	University of Nevada–Las Vegas	Geophysical Society of Houston
Sergey Samsonov	University of Western Ontario	KEGS
Caleb Schiff	University of Colorado	WesternGeco
Wesley Schumacher	University of Texas at Austin	Geophysical Society of Houston
Sarah Shearer	Colorado School of Mines	Barbara McBride Memorial
Susumu Shibata	Oklahoma State University	Geophysical Society of Oklahoma City
Ashley Shuler	Rensselaer Polytechnic Institute	Aubra Tilley
Nicholas Sidelnik	Massachusetts Institute of Technology	AGIP
Janae Singer	Montana Tech	Ralph W. Baird
Satish Sinha	University of Oklahoma	Aubra Tilley
Miguel Sipuikinene	University of Oklahoma	WesternGeco
Steven Sloan	University of Kansas	Charlie and Jean Smith
Justin Snyder	Colorado School of Mines	Denver Geophysical Society
Yoscel Suarez	University of Oklahoma	Charles B. McBurney Memorial
Jeffrey Svatek	Texas A&M University	GSH/Carleton-Farren
Erika Szabo	University of Western Ontario	Landmark Graphics
Nivedita Thiagarajan	Rice University	ExxonMobil Upstream
Upendra Tiwari	University of Texas at Dallas	Karen Kellogg Shaw/DGS
Henrique Tono	Duke University	Thomas Mazza Memorial
Wen-Feng Angela Tseng	University of California–Irvine	SEG General
Tobyn Van Veghten	University of Missouri–Rolla	ARCO
Joanna Vickers	Southwest Missouri State University	SEG General
Sean Wagner	Michigan Technological University	Jim and Ruth Harrison
Kathryn Watts	Louisiana State University	Landmark Graphics
Cy Webster	Montana Tech	Landmark Graphics
Byron Wong	University of Minnesota	Shell International E&P
Kathleen Wooten	College of William and Mary	Softball Tournament
Xiaoxia (Ellen) Xu	Colorado School of Mines	Jim and Ruth Harrison
Shelley Zaragoza	University of Nevada–Las Vegas	Shell International E&P
Yongkai Zhang	University of California–Berkeley	Charlie and Jean Smith
Mikhail Zykov	University of Victoria	WesternGeco

SEG Student Sections/Academic Liaison
Doug Wyatt, Chairman

In 2004, the Student Sections/Academic Liaison Committee (SS/ALC) continued to build on successes from 2003 in supporting new student initiatives and activities and in improving student involvement in the Society. Our activities this past year can be described in terms of improvements to our routine committee functions, new initiatives or activities, and longer-term goals. In reporting our committee activities, all credit must be given to our SEG committee liaison, Tonia Gist, for tireless efforts on our behalf. She is enthusiastic and dedicated to our activities and deserves our thanks. In addition, Kay Aikin accepted the position of SS/ALC vice chairman for 2004. Aikin, at the pleasure of the SEG president, will serve as chairman in 2005. Our committee minutes can be viewed on the **Students.seg.org** Web page.

First, improvements and activities have occurred in our routine committee functions. We have established increased communications with all of our student sections by renewing routine publication of *The Anomaly*, our student-section newsletter, and by completing a major update of our Student Connections Web site. Our site is now more up to date, easier to navigate, and contains new material. As part of an effort to improve student involvement in the DISC program, we have sent DISC videos and annual meeting abstracts to requesting student sections.

Six new student sections were accepted in 2004, and we are working on two more, with ongoing communications and the potential for more. We continued to support the student paper contest at the Annual Meeting and are updating the careers brochure. We also continued our coordination and support of the SEG/AAPG Student Expo in Houston and jointly supported the SEG/AAPG/SPE Job Fair at the Eastern Section Meeting in Pittsburgh. We also participated in AAPG's Career Planning Workshop at the AAPG annual meeting in Dallas.

In our support of the K-12 outreach activities and the Geoscience Center, we partnered with the Global Affairs Committee and the Geoscience Center to collect "Rocks from Around the World" for Kids' World. Our support of the 55th Intel International Science and Engineering Fair (Intel ISEF) continued, and our judges had a wonderful time. Richard Nolen-Hoeksema is the ISEF subcommittee chairman, and our judges this year were Kay and Steve Wyatt, Wayne Suyenaga, and Tonia Gist. About 60 projects were singled out from more than 1100 before we selected the SEG Special Award finalists and honorable mentions. Please review our winners in *TLE*.

Second, the SS/ALC supported new projects and programs to increase our student involvement. The committee is working with the AAPG/SEG Student Expo Committee to offer a Career Planning Workshop at the 2004 SEG Annual Meeting in Denver. This workshop is a follow-up to the successful first workshop at the recent AAPG meeting. We provide a panel of experienced geoscience speakers and career specialists, and students have time to ask relevant questions about résumés, job searches, and interviewing skills. Our goal is for 40–60 students to participate.

The SS/ALC also requested two actions from the Executive Committee. The first request was that the Executive Committee pursue a corporate sponsor for students to attend DISC free of charge. Our second request was to ask that student members of approved SEG student sections whose membership in the student section was for at least one school year prior to graduation be granted a one-year associate membership at a reduced rate after graduation.

Finally, the committee began a reevaluation of our mission and goals. At the encouragement of Leon Thomsen, I created a five-year plan that was circulated to and commented on by the committee as a whole. This plan is now in review by members of the Executive Committee. Key portions of the plan include increased and expanding roles for student-section activities and academic liaison; increased international cooperation and understanding among student sections, faculty, and industry experiences; and increased outreach. We also propose modifications to our subcommittee structure to improve our involvement and services.

Technical Standards
Alan Faichney, chairman

In 2002–2003, working groups reviewed SEG-D and SPS to assess the suitability of the formats for serving the present and future needs of the industry, taking into account technological and operational developments, and formed views on the relative balance of costs between the inevitable disruption caused by modifying a standard and the costs incurred by any inefficiencies in the existing standard.

The reviews concluded that the SEG-D format needs to be extended and that SPS requires modification. No volunteer effort has been available to implement the SEG-D changes, and so this has been shelved.

A working committee (Phil Behn, Alan Faichney, and Mike Norris) is considering SPS modifications. It is anticipated that a draft of a new standard will be presented to the committee at the 2004 SEG Annual Meeting in Denver.

Tellers
Thomas A. Heinecke, chairman

Anderson Marketing Services, Inc. (AMSI), of Tulsa, Oklahoma, was retained for tabulation of the ballots for the 2004–2005 election of SEG officers and district representatives.

Of the 7432 ballots mailed, 1978 valid ballots were received through July 30, 2004. The ballots received by July 23 were picked up by David Anderson of AMSI, where the votes were scanned, tabulated, and verified, and then they were returned to the SEG Business Office. The 96 ballots received between July 23 and July 30 were counted by hand and the

results were added to the tabulation under the supervision of Tom Heinecke, chairman of the Tellers Committee. A total of 27 ballots was declared invalid. A tie between the two candidates for district representative in District 8 was decided by the SEG Committee on Nominations, in accordance with SEG Bylaws, Article VII, Section 7.

On August 2, the Tellers Committee verified the count provided by AMSI. The data input was checked on 25% of the batches processed by AMSI. One input error was found. Additional processing was not deemed necessary because the error-rate percentage (1 in 2000) was insignificant to the outcome of the election.

The election results are as follows:

2004–2005 SEG Executive Committee

President-elect	Terry K. Young
First vice president	Jerry M. Harris
Second vice president	Bill Pearson
Vice president	Klaas Koster
Secretary-treasurer	Susan Mastoris Peebler
Editor	Gerard T. Schuster is in the second year of his two-year term.

District Representatives

District 1	Michael D. Rocereta
District 8	Guillaume Cambois

THE LEADING EDGE Editorial Board
Lawrence M. Gochioco, chairman

THE LEADING EDGE Editorial Board is now a recognized and valuable commodity within SEG. Based on the board members' numerous interactions with domestic and international delegates at annual meetings, the vast majority of SEG members appears to be very pleased with the quality of papers in *TLE* because the technical content and style are reader friendly. Moreover, a recent survey conducted by a renowned company supported this finding. Readership has grown more in the last four years compared to those of similar magazines. Personal archiving of past *TLE* issues seems to be common.

The general role of board members is to identify the most pertinent and practical topics that will be of great interest to the membership. This brought about the monthly special sections for which board members solicit and edit submitted papers. As a result of constant queries from prospective authors, the board published a two-page article (April 2004) explaining the internal review process. When Mike Bahorich (then SEG president) and Peter Duncan (then president-elect) asked about the makeup of papers published in *TLE*, the board responded and conducted an internal statistical study from the years 2001 to 2003. The study showed that 138, 139, and 142 papers were published in those years, respectively. Papers were sorted into three categories—geographic origin, first-author origin, and geophysics type and application. The survey results reflected the internationalism of the SEG membership. Details of this study can be found in the April 2004 issue of *TLE*.

In response to current trends in the industry, the board prepared a list of interesting special topics and regional studies for 2004. They are Gulf of Mexico, *TLE* Forum IV and future of upstream, Russia/former Soviet Union, offshore/Cecil Green tribute, development and production, geophysics for real-time drilling decisions, near-surface problems and solutions, reservoir modeling, interpretation technology, seismic survey design, 4D, and deep exploration. In addition, the board launched a new series called "Interpreter Sam," which highlights the lighter side of day-to-day experiences of fellow geoscientists in the office. The Global Affairs Committee (GAC) was granted more coverage in *TLE*.

The number of papers submitted to *TLE* not only increased, but the quality of papers improved significantly. It became apparent to the board that nominating and selecting papers for the Best Paper award for 2003 would be more difficult than previous years. This year, we recognized three papers as honorable-mention awardees.

Building on last year's successful forum of key industry executives, this year's forum (the fifth) has another group of a new list of industry-recognized executives who will provide a broad geographic and diverse representation of the industry. The theme is *Globalization of the Energy Business*. The six invited speakers are Robert Brunck, chairman and CEO of Compagnie Générale de Géophysique (CGG); Peter Carragher, head of discipline, worldwide exploration, a senior functional position in BP's Exploration and Production Technology unit; João C. A. Figueira, executive manager, Petrobras' International Exploration and Production; Robert (Bob) A. Gistri, manager, new business identification, business development for ExxonMobil Exploration Company; Robert (Bob) Peebler, president and CEO, Input/Output (I/O); and Matthew R. Simmons, chairman and CEO of Simmons & Company International. The forum will be moderated by Michael (Mick) Lambert, president and CEO, GX Technology (GXT) Corporation.

We experienced a temporary advertising slump in fiscal year 2003 ($792 550) because of the poor conditions of the industry. However, recent record-high energy prices indicate that a recovery could be under way despite some industry consolidations. Advertising revenue for fiscal year 2004 is above expectations and is pegged to be at $829 764.

Let me emphasize that the majority of the credit to *TLE*'s success lies with its dedicated staff. Dean Clark and Dolores Proubasta have been the pillars of stability and growth since its inception. Under their leadership, *TLE* grew and evolved into a valuable SEG commodity. One special feature that elevated *TLE* from the rest of the pack was the ever-changing front covers that reflected the special sections. Kathy Gamble and Ian Danziger are the graphic designers who made it happen. It is unfortunate that *TLE* lost a very capable and charming staff member, Jennifer Cobb, who decided to be a full-time mother. Sylvie Dale, her replacement, has proved very effective.

As with many geophysicists, my career is filled with peaks and troughs. Being able to serve on the editorial board was the

most challenging and rewarding experience of my entire career. My four-year term on the board will conclude at this year's Annual Meeting in Denver. My replacement will be Rick Miller of the Kansas Geological Survey. John Eastwood will be the new chairman. He will be supported by a technically diverse board that will continue the rich tradition of innovativeness and responsiveness.

Translations
Ilya Tsvankin

During the report period (June 2003–May 2004), the Translations Committee considered several foreign-language books for possible translation and publication by SEG. The committee met in Dallas on October 27, 2003, and continued discussions by e-mail throughout the year. *Three-Dimensional Magnetotellurics,* by Vjacheslav V. Spichak, recommended by the committee for publication in 2002, was revised according to the reviewers' suggestions and forwarded to the Publications Committee. Another previously recommended book, *Inverse Problems in Geophysics*, by Tatiana Yanovskaya and Ludmila Porokhova, was revised, updated, and translated into English by the authors. This book is also with the Publications Committee.

After reviewing and evaluating the book *Statistical Methods for Processing and Interpretation of Geophysical Data*, by Vladimir Troyan and Yuri Kiselev, the committee sent it back to the authors for corrections and updates. The committee recently has received for review a new Russian book *Theoretical Models in Seismoacoustics of Poroelastic Fractured Media*, by Yuri Kurjanov, Yuri Kukharenko, and Vladimir Rok.

Among the committee's projects for next year is participation in the translation of Robert E. Sheriff's *Encyclopedic Dictionary of Applied Geophysics* into Spanish and possibly Chinese.

Tables of contents of the following foreign journals are published in GEOPHYSICS on a regular basis.

China

Oil Geophysical Prospecting
Journal of the University of Petroleum

Hungary

Geophysical Transactions of the Eötvös Lorand Geophysical Institute

Japan

Butsuri-Tansa (Geophysical Exploration) of the SEG Japan

Russia

Geology and Geophysics, Russian Academy of Sciences, Siberian Branch

Ukraine

Geophysical Journal, Ukrainian Academy of Sciences

Tables of contents of other journals and one-time reports of possible interest to the readership of GEOPHYSICS are published as they become available.

Report of the Ad Hoc Committee Chairmen

International Meetings
Walter S. Lynn and Brian H. Russell, cochairmen

At the request of the SEG 2003–2004 Executive Committee, the International Meetings Ad Hoc Committee (IMC) was formed to review past international meetings, analyze current trends that affect international meetings, and make recommendations for a proactive strategy to hold international meetings. The committee members conferred via conference call and through e-mails to develop a draft proposal that was presented to the Executive Committee at the May meeting in Calgary. The proposal was well received and the IMC finalized the document for the Executive Committee.

The committee's recommendations are based on the following observations and trends:

Membership

- SEG membership growth is primarily outside the United States.
- The largest international membership growth is in China and India.
- A large percentage of new members consists of global and student members.
- SEG continues to be very highly regarded for its integrity, scope, and technical transfer capabilities.
- A growing number of members work in applied geophysics rather than exploration geophysics. The use of seismic data is growing for reservoir characterization and reservoir monitoring.
- Nearly 20% of SEG members reside in Europe.

Meetings

- Conferences have three major benefits: technical transfer and discussion, marketing, and networking. Technical transfer can migrate to the electronic world, but face-to-face contact remains critical for marketing and networking.
- Attendance at the Annual Meeting has been dropping during the past decade. Large contractors and especially oil companies have cut back on the number of delegates.
- Although attendance has been dropping the past decade, international registrants consistently make up about 20% of the total. Typically, 65–75 countries are represented.
- The Internet has removed many of the geographic barriers for technical transfer. This fact is clear for journal publications, and electronic transfer (both live and recorded) will become more prevalent for education (CE, DL, and DISC) and technical presentations and forums.
- Many exhibitors say they are seeing less return on investment at the Annual Meeting.
- Many exhibitors have expressed a concern over the number of meetings per year and would like to see some of them combined (e.g., AAPG and SEG).
- SEG survey results from the 2003 Annual Meeting show a strong desire for international meetings to be held in Europe, South America, Asia, the Pacific Rim, and the Middle East.
- Travel to the United States for non-U.S. citizens has become more difficult since September 11, 2001.
- Travel budgets for SEG staff to attend international meetings continue to be tight.
- SEG has convened 15 Level 4 or Level 5 meetings since 1985, at least one per year from 1992 through 1999.
- The success of an international conference depends highly on having a dedicated champion to spearhead the effort.

Financial

- SEG continues to be very dependent financially on the success of the Annual Meeting.
- Increases in global and student members do not help the financial bottom line.
- SEG has limited experience with being financially committed with other large geoscience societies (Cairo 2002).

Given these observations and trends, the committee discussed the merits of a more proactive international-meetings strategy by performing an analysis of strengths, weaknesses, opportunities, and threats (SWOT). Based on the above observations, trends, and SWOT analysis, we recommend that SEG implement a long-term strategy and plan to hold at least one Level 4 or Level 5 international meeting (i.e., outside the United States and Canada) every year. Each conference should be budgeted to make a modest profit while bearing the full costs of planning and running the meeting, including overhead, staff, and travel. With complete project accounting now implemented in Tulsa, this accounting should be straightforward. It is likely that at least one additional staff member will be needed, preferably with international-meeting experience and foreign-language skills.

A poll from the 2003 Annual Meeting indicated significant interest in having SEG host meetings outside the United States and Canada. In order of interest, these areas are Europe, South America, Asia, the Pacific Rim, and the Middle East. Selecting each of these areas suggests a five-year rotation for international meetings. A four-year rotation could be obtained by

alternating between Asia and the Pacific Rim. Other, more specific, locations exist for international meetings. These include India, North Africa, Indonesia, Eastern Europe, and West Africa.

The timing and implementation of each conference must take into consideration planned conferences of local societies and other international societies (e.g., AAPG and SPE). In fact, it may be advantageous to host the meetings jointly with other major organizations. This may become a prerequisite for future international meetings. It is imperative that SEG first establish a firm strategy before approaching other geoscience societies.

Furthermore, SEG needs to encourage related geoscience societies to engage in more long-term planning and strategic thinking. Some local groups tend to plan meetings on relatively short notice because they do not realize the extent of planning and preparation involved in conferences. Perhaps SEG could publish a short brochure for local societies on how to plan a conference.

Reports of the Representatives

AGI Member Society Council
Wayne D. Pennington, representative

Just as individuals are members of societies, such as SEG, so are some societies themselves members of other societies. The American Geological Institute (AGI) is a society whose members are 43 other societies, all engaged in aspects of the earth sciences. There are no individual members, but the members of those 43 societies enjoy the privileges of AGI (such as a subscription to its journal, *Geotimes*, at a reduced rate) and are represented in AGI through the Member Society Council.

The main goals of AGI are stated on its Web site, **www.agiweb.org**. "Founded in 1948, AGI provides information services to geoscientists, serves as a voice of shared interests in our profession, plays a major role in strengthening geoscience education, and strives to increase public awareness of the vital role the geosciences play in society's use of resources and interaction with the environment." The Member Society Council assists the professional staff of AGI in setting specific goals and directing efforts. A large fraction of the work is accomplished, as at SEG, through the volunteer efforts of members of the constituent societies.

SEG is one of the larger member societies of AGI, along with the American Association of Petroleum Geologists (AAPG), American Geophysical Union (AGU), Geological Society of America (GSA), and a few others. As such, we often find ourselves in leading roles in some respects, and we assist AGI and its member societies in certain ways. During the past couple of years, a coalition of societies formed a new organization called GeoScienceWorld (GSW), with the intention of aggregating earth-science journals into one large electronic database. A significant amount of technical expertise was provided to the organization through SEG's publications department, and our experiences with electronic publication and archiving were also valuable for GSW. At this time, SEG will participate in GSW through THE LEADING EDGE, which will become one of the journals in the electronic aggregate, and thus we hope to reach a larger number of earth scientists.

Many of the AGI member societies, including SEG, are grappling with some aspects of globalization, in the sense that the mission of these societies is changing as the profession and the world at large are becoming more international in all respects. At the same time, apparent roadblocks to enhancing this globalization are being emplaced by some governments in response to threats of terrorism or as a continued effort in trade protection. The member societies have formed a committee of those concerned with these trends, in which experiences and attempted solutions (both successful and otherwise) are shared in an effort to improve the global aspects of all the societies. The "global membership" status of SEG is of particular interest to many of those societies, and the experiences of some of those, such as AGU, are of interest to us.

There are two main meetings of the AGI Member Society Council each year, held in association with the annual meetings of GSA (in the fall) and of AAPG (in the spring). Most of the action takes place not at these council meetings but at meetings of special-interest groups held on days before and after the council meeting. The presidents or other officers of the member societies also gather for a Leadership Forum held by AGI each year, at which they discuss items of shared concern. One of the primary subjects of this year's forum was the training of teachers (K-12) and the declining enrollment of college students in the earth sciences. The resulting exchange of thoughts and ideas was greater than any individual society alone could have generated independently, because the forum included officers from societies specifically representing earth-science teachers (at the middle- and high-school levels) and geology teachers (at the college level) as well as societies representing professional or independent geoscientists, mineralogists, and so on.

The AGI journal, *Geotimes*, has undergone a transformation in the past several years, and is now filled with contemporary articles that should be of current interest to most members of the various societies. Those articles can also be found online, at the AGI Web site. By being a member of SEG, you are already participating in AGI, and these articles, the activities described above, and other activities supported or conducted by AGI are part of your involvement.

API Central Committee for Telecommunications
Cliff Ray, representative

There have been two meetings of the API Telecommunications Committee since the last report. I attended both the fall meeting in Washington, D.C., on September 23–25, 2003, and the spring meeting in Colorado Springs on March 29–30, 2004, where we reviewed the status of items that may be of interest to members of SEG. Several of these items are as follows:

1) Concerning ultra-wideband transmission systems (UWB), the FCC adopted an Order on February 14, 2002, that

allowed developers to begin marketing and deploying these devices in the bands between 3.1 and 10.6 GHz, subject to certain standards and other limitations. On March 12, 2003, the commission released a further Memorandum Opinion and Order with no substantial changes to the February 14, 2002, Order. However, a coalition of C-band satellite earth station licensees has expressed an increased concern that there is significant potential for interference from UWB devices to C-band satellite earth stations. It appears that the commission will consider again the interference issues for possible changes to the rules.

2) On May 15, 2003, the FCC adopted a Report and Order and Further Notice of Proposed Rulemaking in its "secondary-markets" proceeding in which the agency amended its rules to permit licensees to lease underused or unneeded portions of spectrum in some bands. Specifically, the new rules will allow wireless radio licensees, with exclusive rights, to enter into third-party spectrum lease agreements.
3) At an Open Meeting on May 13, 2004, the FCC adopted a Notice of Proposed Rulemaking (NPRM) to allow unlicensed devices to operate in unused broadcast TV spectra. The NPRM seeks to create two general categories of unlicensed broadband devices: (1) lower-power "personal/portable" unlicensed devices, such as wireless fidelity (Wi-Fi) laptop computer cards or wireless in-home local area networks; and (2) higher power "fixed/access" unlicensed devices that can provide commercial services, such as wireless broadband. To eliminate any interference to incumbent TV stations, the commission has also proposed to require unlicensed devices to incorporate "smart-radio" features that can identify unused TV channels. Deadlines for comments on the NPRM have not yet been set.
4) Concerning the Promotion of Spectrum Efficient Technologies on Certain Part 90 Frequencies rules, the FCC has extended the January 14, 2004, deadline that prohibits filing applications for devices exceeding 25 kHz until January 1, 2006, giving an additional two-year grace period.
5) The Federal Communications Commission released a Notice of Proposed Rulemaking (NPRM) on February 23, 2004, that looks toward the adoption of new technical and administrative rules governing the operation of Access broadband over power-line (Access BPL) systems. Access BPL systems typically use medium-voltage power lines as a transmission medium to provide high-speed communications services. The commission's goal in this proceeding is to facilitate the deployment of Access BPL, while ensuring that licensed services continue to be protected from harmful interference. Today, most Access BPL systems operate on an unlicensed (part 15), noninterference basis on frequencies as great as 50 MHz with very low power signals spread over a broad range of frequencies. Incumbent licensed operations in the radio spectrum below 50 MHz include fixed, land mobile, aeronautical mobile, maritime mobile, radiolocation, broadcast radio, amateur radio, and radio astronomy. The API has engaged this issue to safeguard licensed radio operators in spectrum bands for which interference could occur.

The involvement of SEG as a nonvoting member on the API Telecommunications Committee provides us with the opportunity to be kept abreast of spectral issues affecting the oil and gas industry. Normally, there are two meetings a year, which provide current regulatory and legislative information and allow for discussion and interaction with representatives from the FCC and industry. I plan to attend the fall meeting in Washington, D.C., again this year.

European Petroleum Survey Group (EPSG) Geodesy Working Group
Alan K. Faichney, representative

In addition to maintaining links with the United Kingdom Offshore Operators Association (UKOOA) and the International Association of Geophysical Contractors (IAGC), the Technical Standards Committee has developed closer links during the past three years with the European Petroleum Survey Group (EPSG), which maintains and publishes a comprehensive data set of parameters for coordinate system and coordinate transformation description.

In early 2002, the Technical Standards chairman was invited to assist as SEG's representative on the EPSG Geodesy Working Group, with resolving the technical and legal incompatibilities of the two standards bodies.

In 2002, good progress was made and the technical issues were resolved, allowing the SEG-Y Revision 1 to use the form of the EPSG coordinate descriptions. In 2003, intellectual property and legal issues were addressed. In early 2004, these were resolved with the release of a completely free, platform-independent version of the database, and the agreement that SEG could archive the database on its Web site, assuring access to all.

The Technical Standards Committee subsequently has recommended to the SEG Executive Committee that SEG adopt the EPSG database as the standard methodology for describing coordinate reference systems and transformations between them.

International Association of Geophysical Contractors (IAGC)
Craig J. Beasley, representative

The International Association of Geophysical Contractors (IAGC) is one of the most important allied organizations for SEG. IAGC is a trade association that concerns itself with issues affecting the business side of geophysics. In many of these activities, SEG and IAGC interests overlap. For example, IAGC is actively involved in setting standards for the industry. These standards cover a wide range of issues such as data formats, contracts, governmental regulations, health, safety, and environment. In recent years, the dialog has increased between SEG and IAGC, primarily concerning the value of IAGC members participating in SEG-related activities such as the Annual Meeting. Although the scientific and career-develop-

ment benefits associated with the SEG Annual Meeting are widely recognized, difficult economic conditions have led geophysical contractors and other exhibitors to carefully examine how their advertising and marketing expenditures add value to their business.

Such issues naturally are important to SEG because the member companies of IAGC figure significantly in SEG's organizational health. Member companies pay for exhibition space, sponsor events, and pay for registration for their employees and guests at the Annual Meeting. They advertise in SEG publications and often reimburse employees for SEG annual dues. Many of the contributors to SEG journals and technical programs at SEG-sponsored meetings come from IAGC member companies, and they contribute employees' time to serve on committees—even the SEG Executive Committee. In response, recent Executive Committees of SEG have worked diligently with IAGC to improve communication and enhance the value of the Annual Meeting for their members. For example, concerns have been expressed related to attendance of potential customers and decision makers at the Annual Meeting. As a result, IAGC actively participated in last year's Annual Meeting by sponsoring a luncheon aimed at oil-industry executives and by organizing a featured technical session.

Other suggestions, such as joining with related societies in meetings, are being explored, but such possible changes are necessarily long term. To gain more input and a better understanding of our strategy for meetings and events, this year's Executive Committee passed a resolution recommending that a committee on meetings be formed to advise on meetings strategy. This committee will be functional in the near future and will be in close contact with IAGC to understand its concerns. I welcome the opportunity to continue to work with IAGC next year in my term as president. I believe we have made substantial progress, but there is more that we can do to work together. After all, improving the value of SEG to its members—particularly the value of the Annual Meeting—will benefit all.

Offshore Technology Conference (OTC) Board of Directors
Jack Caldwell, representative

The 2004 Offshore Technology Conference was held May 3–6 at Reliant Center in Houston, Texas. It was the 35th anniversary conference. The theme for this year's conference was *Innovation without Limits*. Total attendance was 50 921, a 19-year high and just slightly up from last year's 50 655. More than 2100 companies had exhibits at the conference, an increase of 114 from 2003. By the end of August 2003, 96% of the floor space had been sold, and 94% of that was from returning exhibitors. This is an indication of the importance attached to the OTC by the exhibiting companies.

SEG is a sponsoring organization of the Offshore Technology Conference. The relationship dates to 1968, when SEG accepted an invitation to join with AIME and seven other engineering and scientific societies to establish OTC as an interdisciplinary meeting on technology related to offshore resources. As a sponsoring organization, SEG is entitled to appoint one of the 12 members to the OTC board of directors. To provide an idea of how interdisciplinary the OTC is, a list of the other 11 sponsoring organizations follows: AAPG; American Institute of Chemical Engineers; American Institute of Mining, Metallurgical, and Petroleum Engineers; American Society of Civil Engineers; American Society of Mechanical Engineers, Petroleum Division; Institute of Electrical and Electronics Engineers—Oceanic Engineering Society; Marine Technology Society; Society for Mining, Metallurgy, and Exploration Inc.; Society of Naval Architects and Marine Engineers; Society of Petroleum Engineers; and the Minerals, Metals and Materials Society.

It is an honor and a privilege to represent SEG on the board, on which I have just completed my second year. This past year, I served on the General Sessions Committee and the Task Force 2004 Committee. Presently, I am serving on the New Technology Task Force and the 2005 Awards Committee.

The OTC uses a variety of techniques to provide information to its attendees. Three industry breakfasts were held: *CNG: An Emerging Marine Gas Transport Industry*; *Examining Angola's Offshore Opportunities*; and *Commercial Opportunities in Qatar's Offshore Oil and Gas Sectors*. There were two general sessions, one on *Liquefied Natural Gas—Understanding the Value Chain*, and the other on *Risks and Challenges to the Successful Execution of Major Offshore Projects*.

Nine topical luncheons took place: *Trends in Drilling Operations for Exploratory and Development Wells in Deep Water; Opportunities for Investment in the North Sea; Strategies for Improving the Oil and Gas Industry in Brazil; Business Relations Between the Operators and the Service Industry—Who Takes the Financial Risk of the Project; Norwegian Perspectives on Global Oil and Gas Challenges; The Future Cost to Create More Energy; Managing Mega-Mega Projects; From Subsea to Outer Space and Back;* and *Rebuilding Iraq*.

At each conference, the OTC Active Arena focuses on technology, opportunities, and developments in an extremely active area of the world. This year's focus was *Independent Operator—The Future of the North Sea*. In the 49 technical sessions, more than 300 presentations were given. Beginning September 30, 2003, OTC papers appeared online. As of early May 2004, nearly 850 papers had been purchased at $10 each through this new service.

OTC's Spotlight on New Technology, initiated this year, highlights companies in the exhibition because their technologies are new and innovative, are proven, have broad appeal to the industry, and have a significant impact on the industry. Fifteen technologies were selected in this inaugural year:

- ABB Offshore Systems: Vessel Internal Electrostatic Coalescer (VIEC)
- Baker Hughes: TesTrak (Formation Pressure Tester)

- Baker Hughes INTEQ: Acoustic Properties eXplorer (APX)
- CDS Separation Technologies: CDS-Statoil Deliquidizer
- Epcon Offshore AS: Epcon CFU Technology
- FMC Kongsberg Subsea: Riserless Light Well Intervention
- Halliburton: GeoTap Formation Pressure Tester
- Halliburton: DepthStar Tubing Retrievable Subsurface Safety Valve (TRSV)
- Natco Group Inc.: VersaFlo Single Cell Compact Vertical Column Flotation
- Ocean Design Inc.: Field Assembled Cable Termination (FACT)
- Perkin Elmer Centurian Seals: Centurion Swivel Seal
- Schlumberger: SeismicVISION Seismic while Drilling
- Superior Energy Services: CoilTAC (Coil Thrust and Carry)
- Tracerco: The TRACERCO Profiler
- Weatherford International: Simply Intelligent (multizone intelligent completion system)

The 2004 OTC Distinguished Achievement Award for Individuals was given to F. Richard (Dick) Frisbie of Oceaneering International Inc. for his vision and leadership during several decades in the advancement of enabling technology to allow the realization of deepwater drilling and production, especially the use of remotely operated vehicles. The Distinguished Achievement Award for Companies, Organization, and Institutions was awarded to Shell and BP for the Na Kika project. The International Association of Drilling Contractors and the Offshore Operators Committee received special citations for their foresight, initiative, and leadership in the development of deepwater well-control guidelines. The awards luncheon speaker was Andrew Gould, CEO of Schlumberger.

Thanks to the able leadership of Dan Ebrom, the exploration and development geophysics technical program was quite strong again this year. There were sessions on time-lapse seismic; improved seismic imaging through advances in multiple attenuation; seismic inversion; shallow geohazards to target reservoirs; and rock physics and seismic inversion. Session chairs included Ebrom, Gene W. Sparkman, Ken Matson, Jonathan Sheiman, Dan McConnell, Tim Berge, and John Bork. The point cannot be emphasized enough that the geology and geophysics program at the OTC continues to be quite strong because of the efforts of people such as those listed above.

The 2005 OTC will be held at Reliant Center on May 2–5, and the theme will be *A Sea of Resources: An Ocean of Knowledge*.

OTC Technical Program
Dan Ebrom, representative

This year's Offshore Technology Conference had the highest attendance in more than ten years—more than 50 000 people walked through the doors. The technical program was unusually strong, and a coordinated effort by the editors of THE LEADING EDGE resulted in a three-month series of info-ads that brought the specifics of the most interesting sessions to the SEG membership. As a brief recapitulation, here are the *TLE* summaries of the SEG-sponsored and/or cosponsored sessions:

Time-lapse Seismics. *Summary from session cochairmen Dan Ebrom and Gene Sparkman.* If there's a single technology that is making engineers actually want to sit down with a geophysicist for a workstation session, it's time-lapse seismics. Time-lapse technology is delivering on its promise as the key to increased production, decreased operating costs, and improved recovery rates. This session presented talks from each of the three supermajors, as well as talks from two leading major oil companies and two significant 4D contractors. This session will have the first public results from Valhall, the world's largest 4C permanently instrumented field to date.

Here's a smattering of teasers:

Brackin Smith: "We find that 4D seismic response to pressure changes can give surprising brightening of amplitudes—even though velocities increase as effective pressure increases, the V_P/V_S ratio can decrease, brightening far-stack amplitudes."

Dave Davies: "Interbedded shales (and other nonreservoir rocks) in and near the reservoir sequence in a field have 4D pressure responses that can be removed from combined fluid and pressure effects in the reservoir to yield accurate saturation-only effects."

Phil Christie: "If statistics show anything at all (and statistics demonstrate that they do), it is that 4D repeatability metrics tell us about signal-to-noise ratios in seismic data, that time-lapse noise floors are driven down with modern acquisition technology, and that the impact of individual processing modules on trace matching can be quantified."

Dave Johnston: "High-resolution 4D seismic imaging of water sweep at the Jotun field in Norway is consistent with production logging tool data and led to a successful infill drilling program."

Rodney Calvert: "The principles of 4D technology are proven—now we have to engineer to provide reliable reservoir change information and to develop schemes to better use this information to optimize recovery."

Olav Barkved: "The striking time-lapse images from Valhall are vital for planning infill wells and have also initiated additional well work to capture more reserves as they inform our understanding of the drainage patterns."

Improved Seismic Imaging though Advances in Multiple Attenuation. *Summary from session organizer and cochairman Ken Matson.* The oil industry has made tremendous strides in our ability to obtain seismic images in previously unimageable areas. Most notably, advances in subsalt imaging have opened up new basins that were previously opaque to seismic. Arguably, the virgin basins left to explore are not inaccessible

because of their geography but are closed because of technological barriers, and it is through advances in technology that we will be able to access new opportunities.

A necessary preprocessing step to any imaging method is multiple attenuation—that is, the removal of events that reflect more than once in the subsurface. These multiple reflections violate the assumptions inherent in our imaging algorithms and can severely corrupt the seismic image. The geologic complexity that drives the demand for more advanced imaging methods also violates the assumptions of conventional multiple-attenuation methods. Thus, not only do imaging methods need to become more sophisticated, but the preprocessing methods do as well. In this session, papers will be presented that show how improvements in multiple attenuation have impacted our ability to see beneath complex overburdens. Experts in the field of multiple attenuation will show examples of the current state of the art, unimaginable only a few years ago, and also will present their vision of the future.

Agbami Field Development. *Summary from session co-chairman Guy W. Purnell.* A seven-paper session cosponsored by SEG at the 2004 OTC was dedicated to the world-class deepwater project known as Agbami, located offshore Nigeria. Multiple stacked pay zones, 4800 feet of water depth, and adherence to the no-flare environmental policy were some of the hurdles that required the best deepwater experience and state-of-the-art technology. The following topics were covered by the project team:

- the Agbami project, a world-class deepwater development
- issues in the use of seismic data at Agbami field, offshore Nigeria
- Agbami field development concept selection
- application of experimental design in selecting a development plan
- well count optimization incorporating a wide range of uncertainty
- Agbami project subsea facilities design development
- application of risk-based design relative to health, environment, and safety

Special interest for SEG members will result from the issues associated with the use of seismic data and from the range of earth models generated and used within the experimental-design uncertainty analyses.

The session described the evolution of the seismic data at Agbami and the impact on interpretation. The data suffer significant contamination from water-bottom multiples that interfere with imaging of the main pay zone. Initial processing of the data did not adequately address the multiples, resulting in poor image quality. Early reprocessing after the discovery well was drilled more effectively attenuated the multiples and facilitated structural mapping but also adversely affected the primary amplitudes. More recent reprocessing efforts have better attenuated the multiples and better preserved the primary energy, opening the door to more quantitative analysis of the data.

The session also described how streamline simulation was used for static and dynamic ranking for the selection of earth models within the experimental design uncertainty analyses. Three hundred earth models were generated, representing 30 equiprobable realizations for each of five end-member geologic interpretations. Half of the models were conditioned to seismic attributes. The session described the above issues and presented the technology the project team used to incorporate uncertainty measures into the Agbami field development plan.

Rock Physics and Seismic Inversion. *Summary from session organizer and cochairman Jonathan Bork.* Exciting new developments in rock physics and prestack inversion promise to assist the geoscientist with the all-important yet difficult tasks of reservoir delineation and reserve estimation. Combining these disciplines produces stable, high-resolution estimates of reservoir properties. This session provided the rock-physics foundation and extensions as well as excellent examples of both AVO and full-waveform prestack inversion. In addition, a thought-provoking discussion on the limitations of inversion and prestack migration was presented. This was a timely session on cutting-edge reservoir technology.

In addition, several sessions of interest to the geophysical community were sponsored by AAPG and SPE. They included: petrotechnical visualization, mass-transport complexes, natural hydrates and production issues, seismic inversion for shallow geohazards, digital energy panel, and Hubbert's peak.

The best attended were the sessions on Agbami field development and the session on Hubbert's peak (world oil-depletion curves). Each had more than 300 attendees, with a broad cross section of geophysicists, geologists, and engineers. Geophysics specialty sessions, such as time-lapse seismics, drew about 100. A fire alarm Tuesday afternoon resulted in the evacuation of the Reliant Center and early termination of the *Multiples Suppression* session. Several speakers in that session did not have a chance to speak, but the Geophysical Society of Houston will offer openings in its upcoming schedule to them.

As usual, there is a tremendous amount of behind-the-scenes help that needs to be acknowledged. Guy Purnell performed heroically as the vice chairman, as well as talking ChevronTexaco into presenting a wildly popular field case study (Agbami). Gene Sparkman, Ken

Matson, and Jonathan Bork all put together outstanding technical sessions. John MacDonald helped organize and rate the submitted abstracts for the geophysical sessions, and Bob Sheriff and Mike Mueller were invaluable in resolving on-the-scene emergencies during the show. Jack Caldwell, SEG's representative to the OTC board of directors, and William H. Green, SEG second vice president, have provided continual support, advice, and creative input.

This year, I take my leave of the chairmanship of the committee. I have had an enormous amount of fun in my ten years on the OTC Technical Program, and I would not leave the post if there were not a successor equal to the job's requirements. Fortunately, there is such an individual. Gene Sparkman will assume chairmanship of the 2005 SEG Technical Program Committee for OTC. He will be aided by Ali Tura as vice chairman. Guy Purnell and I will continue to serve on the committee, joined by Bill Barkhouse, Don Herron, Larry Scott, and John MacDonald. As always, we are eager to hear ideas for specialty theme sessions at future OTC meetings, and we look forward to your e-mail.

Petroleum Technology Transfer Council (PTTC) Board of Directors Hugh Rowlett Jr., representative

The Petroleum Technology Transfer Council (PTTC) continues to play an important role in the transfer of technology to independent oil and gas producers. Independent oil and gas companies in the United States drill 85% of all domestic wells, produce 65% of domestic natural gas, and produce 60% of the oil in the lower 48 states. The independent producer continues to produce more and more of the domestic United States oil and gas, and the major producers focus on international projects.

PTTC is a national not-for-profit information network formed in 1993 by oil and natural gas producers. Programs are funded primarily by the U.S. Department of Energy's (DOE) Office of Fossil Energy through the National Petroleum Technology Office (NPTO) and Strategic Center for Natural Gas (SCNG) within the National Energy Technology Lab (NETL). Other funding comes from state governments, universities, state geological surveys, and industry contributions. During fiscal year 2003, the DOE awarded PTTC a five-year grant to continue its work.

Because most independent producers do not have in-house technology organizations and applied technology plays a major role in finding new reserves and increasing the recovery factor in existing reservoirs, there is a need to transfer technology to independent producers. PTTC serves this function. For example, PTTC had a record year in fiscal year 2003 with increases in workshops (15%), attendees (38%), and contacts (31%). In first-quarter fiscal year 2004, PTTC was associated with 33 events (e.g., workshops and "lunch and learn") attended by 4964 people.

Independent oil and gas producers ranked their technology needs as follows: (1) produce more from existing wells by identifying behind-pipe potential or through advanced stimulation; (2) prioritize in-field development through geologic targeting; and (3) increase output through improved oil-recovery methods using realistic screening criteria and benefiting from sound operating practices, as documented in case studies.

PTTC offers more than 100 annual workshops throughout the country, organized through its ten regional resource centers. PTTC's workshops provide solutions to address specific regional concerns. These range from 3D seismic imaging and field operations to horizontal drilling. These low-cost workshops can help independent operators reduce finding costs, improve operations, and meet environmental regulations.

PTTC is a valuable resource for the industry, and SEG has a major role to play with PTTC and independent producers through knowledge transfer of locally appropriate and cost-effective methods in seismic acquisition, processing, and interpretation of 3D data. This relationship will become even more important as producers reevaluate hydrocarbon recovery and reserves in medium to large fields.

PTTC's Web site, **http://www.pttc.org**, is a useful resource for learning more about this organization. The Web site has a list of workshops from 1995, an extensive list of different technologies in summary form, case studies, links to many petroleum-related publications and calendars, various initiatives conducted by the regional centers, and contact information. In 2002, PTTC initiated "Technology Alerts," an approximately biweekly mass e-mail providing highlights from industry, DOE, and PTTC, plus an alert to upcoming PTTC events.

The PTTC headquarters is located in Houston, Texas. SEG members also can talk with PTTC representatives at the SEG Annual Meeting. SEG technology leaders and educators who have applied technology useful to independent producers will find PTTC a good vehicle to interface with this sector of the petroleum industry.

Sartain Fischbein + Co. S F + C Accounting + Consulting since 1951

Independent Auditors' Report

To the Board of Directors
SEG Foundation

We have audited the accompanying statements of financial position of SEG Foundation (the "Foundation") as of December 31, 2003 and 2002 and the related statements of activities and cash flows for the years then ended. These financial statements are the responsibility of the Foundation's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the SEG Foundation as of December 31, 2003 and 2002 and the changes in its net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Sartain Fischbein & Co.

February 12, 2004

SEG FOUNDATION

STATEMENTS OF FINANCIAL POSITION

December 31,	**2003**	2002
ASSETS		
Cash and Cash Equivalents	**$ 825,889**	$ 828,150
Pledges Receivable, (no allowance for doubtful pledges)	**51,163**	21,605
Doodlebugger Inventory	**13,534**	1,543
Endowment Investments	**7,323,205**	6,538,212
Exhibits	**131,736**	131,736
Total Assets	**$ 8,345,527**	$ 7,521,246
LIABILITIES AND NET ASSETS		
Liabilities:		
Accounts payable	**$ 42,524**	$ 22,452
Total Liabilities	**42,524**	22,452
Net Assets:		
Unrestricted	**1,401,898**	1,372,494
Temporarily restricted	**1,253,385**	783,353
Permanently restricted	**5,647,720**	5,342,947
Total Net Assets	**8,303,003**	7,498,794
Total Liabilities and Net Assets	**$ 8,345,527**	$ 7,521,246

The accompanying notes are an integral part of the financial statements.

SEG FOUNDATION

STATEMENTS OF ACTIVITIES

Years Ended December 31,	**2003**	2002
Changes in Unrestricted Net Assets:		
Revenue and Gains:		
Contributions	**$ 330,090**	$ 331,455
Sale of doodlebuggers	**5,626**	14,491
Interest and dividends	**79,329**	88,026
Net assets transferred and released from restrictions	**64,554**	(118,725)
Total Revenue and Gains	**479,599**	315,247
Program Expenses:		
Projects	**177,280**	232,446
Scholarships	**177,500**	193,250
Cost of doodlebuggers sold	**3,008**	10,801
Promotional expense	**7,513**	19,940
Miscellaneous expense	**10,329**	16,071
Total Program Expenses	**375,630**	472,508
Supporting Expenses:		
Administrative fees	**220,884**	193,200
Facility rent	**102,000**	114,000
Professional fees	**6,400**	7,241
Other	**9,678**	15,403
Total Supporting Expenses	**338,962**	329,844
Net Gain (Loss) on Investments	**264,397**	(195,842)
Increase (Decrease) in Unrestricted Net Assets	**29,404**	(682,947)
Changes in Temporarily Restricted Net Assets:		
Contributions	**67,078**	72,726
Interest and dividends	**161,813**	159,413
Net gain (loss) on investments	**539,316**	(596,237)
Net assets transferred and released from restrictions	**(298,175)**	26,880
Increase (Decrease) in Temporarily Restricted Net Assets	**470,032**	(337,218)
Changes in Permanently Restricted Net Assets:		
Contributions	**71,152**	89,384
Net assets transferred and released from restrictions	**233,621**	91,845
Increase in Permanently Restricted Net Assets	**304,773**	181,229
Increase (Decrease) in Net Assets	**804,209**	(838,936)
Net Assets, beginning of year	**7,498,794**	8,337,730
Net Assets, end of year	**$ 8,303,003**	$ 7,498,794

The accompanying notes are an integral part of the financial statements.

SEG FOUNDATION

STATEMENTS OF CASH FLOWS

Years Ended December 31,	**2003**	2002
Cash Flows From Operating Activities:		
Increase (decrease) in net assets	**$ 804,209**	$ (838,936)
Adjustments to reconcile increase (decrease) in net assets to net cash used in operating activities:		
(Gains) losses on investments	**(803,713)**	792,079
Change in assets and liabilities:		
Pledges receivable	**(29,558)**	8,500
Prepaid expenses	**-**	2,500
Doodlebugger inventory	**(11,991)**	8,851
Accounts payable	**20,072**	(70,732)
Net Cash Used in Operating Activities	**(20,981)**	(97,738)
Cash Flows From Investing Activities:		
Sales and maturities of investments	**1,409,125**	1,455,059
Purchases of investments	**(1,390,405)**	(1,496,572)
Additions to exhibits	-	(39,513)
Net Cash Provided by (Used in) Investing Activities	**18,720**	(81,026)
Net Decrease in Cash and Cash Equivalents	**(2,261)**	(178,764)
Cash and Cash Equlvalents, beginning of year	**828,150**	1,006,914
Cash and Cash Equivalents, end of year	**$ 825,889**	$ 828,150

The accompanying notes are an integral part of the financial statements.

SEG FOUNDATION
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2003 AND 2002

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Activities: SEG Foundation (the "Foundation"), is a not-for-profit corporation administered by the Society of Exploration Geophysicists (the "Society"). The Foundation encourages and supports scientific, educational, and charitable activities of benefit to geophysicists. The Foundation awards scholarships to students involved in the study of geophysics and promotes research, primarily within the field of geophysics. The Foundation maintains a Geoscience Center devoted to documents, equipment, films and publications in the field of geophysics. Contributions are received primarily from members of the Society.

Net Assets: To ensure observance of limitations and restrictions placed on the use of resources available to the Foundation, the net assets of the Foundation are segregated according to any restrictions placed on the resources. In the accompanying financial statements, net asset restrictions that have similar characteristics have been combined, though the accounting records maintain more detailed accounts. The net assets of the Foundation are segregated as follows:

- Unrestricted/Board Designated: This category reflects net assets that are generally available for authorized expenditures in furtherance of the goals and objectives of the Foundation and represent unrestricted contributions and cumulative earnings of funds other than those whose use has been specified by the donor.
- Temporarily Restricted: This category reflects contributions provided by donors for specified Foundation activities and the earnings of investments thereon. Also included are pledges due in future periods.
- Permanently Restricted: This category reflects contributions provided by donors who have explicitly expressed that they wish only the income earned on their donations expended for Foundation activities while the corpus is to remain intact.

SEG FOUNDATION
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2003 AND 2002

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Activities: The Foundation's activities consist of the following:

- Scholarships: The Foundation provides scholarships to university students in courses of study preparing for a career in the field of geophysics and related sciences.
- Professional Development: Professional development program sponsors seminars, lectures and other educational courses to further the scientific understanding of geophysics.
- Student Programs: Student programs include the Emerging Nations, Adopt-A-Student, and Hilterman Book Program. These programs provide support and educational materials for student sections.
- Other Programs: Other programs include supporting publications in the field of geophysics, support for the Geoscience Center, and paying membership dues for qualified individuals and students in developing countries.

The Foundation has established a Double Impact Program to match contributions to the Foundation. A maximum of $1,500,000 in unrestricted general funds was available to match contributions received for the Foundation's Behind Education Programs and the Geoscience Center, for minimum donations of $1,000 to a maximum of $100,000. The Foundation received from donors approximately $74,000 during 2003 and $92,000 during 2002 which were matched as part of this program. The amount remaining which is available for the Foundation match was $162,527 at December 31, 2003. The funds matched by the Foundation are placed in permanently restricted net assets.

Cash and Cash Equivalents: Cash and cash equivalents include cash on hand and all highly liquid investments with a maturity when acquired of three months or less. Cash equivalents consist of money market funds held by a brokerage firm.

Investments: Investments consist of fixed income securities and equity investments and are carried at fair value at December 31, 2003 and 2002. Fair values for investment securities are based on quoted market prices, where available. If quoted market prices are not available, fair value is based on quoted market prices of comparable instruments.

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Pledges Receivable: Contributions are recorded at fair value in the period received or pledged. There is no allowance for doubtful pledges. Pledges receivable eligible for the Double Impact Program are double impacted when the contribution is received.

Exhibits: Geoscience Center exhibits are carried at cost or the estimated fair market value at the date donated and are not depreciated.

Income Taxes: The Foundation is exempt from federal income taxes under Section 501(c)(3) of the Internal Revenue Code. Contributions to the Foundation qualify as charitable deductions.

Reclassifications: Certain reclassifications have been made in the 2002 financial statements to conform to the classifications used in 2003. These reclassifications have no effect on net income.

Use of Estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

SEG FOUNDATION
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2003 AND 2002

2. ENDOWMENT INVESTMENTS

Endowment investments, at fair value, consist of the following at December 31:

	2003	2002
Fixed income securities:		
U.S. Treasury notes	**$1,400,466**	$1,436,681
GNMA certificate	**20,624**	42,177
Corporate bonds	**1,398,236**	1,329,889
	2,819,326	2,808,747
Equity investments:		
Common stocks	**4,503,879**	3,729,465
	$7,323,205	$6,538,212

The fair value of fixed income securities at December 31, 2003 by maturity, are shown below:

Due after one year through five years	**$1,054,755**
Due after five years through ten years	**1,743,947**
GNMA certificate	**20,624**
	$2,819,326

3. RELATED PARTY TRANSACTIONS

The Society provides substantially all of the administrative and financial services and also provides office space to the Foundation free of charge. The estimated amount of the in-kind contribution from the Society for these services is $276,596 and $257,149, respectively, has been included as contribution revenue and administrative and rent expense for 2003 and 2002.

Included in accounts payable at December 31, 2003 and 2002 was a payable to the Society in the amount of $41,080 and $20,641, respectively.

SEG FOUNDATION
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED DECEMBER 31, 2003 AND 2002

4. TEMPORARILY RESTRICTED NET ASSETS

Temporarily restricted net assets are available for the following programs:

	2003	2002
Scholarships	**$ 578,137**	$299,118
Professional development	**275,643**	240,810
Student programs	**117,289**	53,167
Other programs	**282,316**	190,258
	$1,253,385	$783,353

5. PERMANENTLY RESTRICTED NET ASSETS

Net assets were permanently restricted for the following purposes:

	2003	2002
Scholarships	**$2,879,979**	$2,647,244
Professional development	**762,140**	747,569
Student programs	**425,000**	396,738
Other programs	**396,105**	380,275
General	**1,184,496**	1,171,121
	$5,647,720	$5,342,947

6. CONCENTRATION OF RISK

The Foundation's cash accounts are maintained in financial institutions, which are insured by the Federal Deposit Insurance Corporation up to $100,000 for each account. The Foundation's cash equivalents are maintained in a brokerage firm, which is insured by the Securities Investor Protection Corporation up to $500,000.

Sartain Fischbein + Co. S F + C Accounting : Consulting since 1961

Independent Auditors' Report

To the Executive Committee and Members
Society of Exploration Geophysicists
Tulsa, Oklahoma

We have audited the accompanying statements of financial position of the Society of Exploration Geophysicists (the "Society") as of June 30, 2004 and 2003, and the related statements of activities, and cash flows for the years then ended. These financial statements are the responsibility of the Society's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Society of Exploration Geophysicists as of June 30, 2004 and 2003, and the results of its activities and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Sartain Fischbein & Co.

August 9, 2004

SOCIETY OF EXPLORATION GEOPHYSICISTS

STATEMENTS OF FINANCIAL POSITION

June 30,	**2004**	2003
ASSETS		
Current Assets:		
Cash	**$ 1,282,011**	$ 1,602,440
Short-term investments	**1,393,264**	337,473
Accounts receivable, less allowance for doubtful accounts of $3,700 in 2004 and $0 in 2003	**465,812**	666,191
Inventories	**546,067**	617,568
Prepaid expenses	**235,503**	279,007
Accrued interest receivable	**28,219**	24,337
Total Current Assets	**3,950,876**	3,527,016
Investments	**3,710,118**	3,154,398
Property, Furniture and Equipment:		
Land	**489,605**	489,605
Building	**7,829,133**	7,891,186
Furniture, fixtures and equipment	**766,725**	747,818
	9,085,463	9,128,609
Less accumulated depreciation	**3,522,091**	3,652,084
Net Property, Furniture and Equipment	**5,563,372**	5,476,525
Other Assets	**2,793**	-
	$ 13,227,159	$ 12,157,939
LIABILITIES AND NET ASSETS		
Current Liabilities:		
Accounts payable and accrued liabilities	**$ 341,657**	$ 291,535
Current portion of capital lease obligation	**24,483**	-
Deferred revenue	**2,925,933**	2,673,779
Total Current Liabilities	**3,292,073**	2,965,314
Deferred Revenue	**25,321**	40,437
Capital Lease Obligation	**104,768**	-
Total Liabilities	**3,422,162**	3,005,751
Unrestricted Net Assets:		
Undesignated	**9,554,997**	9,152,188
Board Designated	**250,000**	-
	9,804,997	9,152,188
	$ 13,227,159	$ 12,157,939

The accompanying notes are an integral part of these financial statements.

SOCIETY OF EXPLORATION GEOPHYSICISTS

STATEMENTS OF ACTIVITIES

Years Ended June 30,	**2004**	2003
Revenue:		
Membership dues	**$ 1,052,908**	$ 1,037,581
Conferences and meetings	**3,906,653**	3,542,184
Publication sales and advertising	**2,012,822**	2,015,773
Continuing education	**310,531**	309,755
Investment income gain (loss)	**437,619**	178,861
Building lease operations	**999,775**	1,025,455
Other	**210,257**	162,152
Total Revenue	**8,930,565**	8,271,761
Expenses:		
Membership record services	**338,189**	297,884
Conferences and meetings	**2,158,042**	2,217,529
Publications	**2,140,824**	2,287,353
Continuing education	**604,575**	616,506
General and administrative	**1,870,717**	1,338,103
Building lease operations	**805,624**	815,247
Special projects	**63,955**	177,871
Total Expenses	**7,981,926**	7,750,493
Increase in Net Assets Before Contributions to Foundation	**948,639**	521,268
Contributions to Foundation	**(295,830)**	(272,248)
Increase in Net Assets	**652,809**	249,020
Unrestricted Net Assets, beginning of year	**9,152,188**	8,903,168
Unrestricted Net Assets, end of year	**$ 9,804,997**	$ 9,152,188

The accompanying notes are an integral part of these financial statements.

SOCIETY OF EXPLORATION GEOPHYSICISTS

STATEMENTS OF CASH FLOWS

Years Ended June 30,	**2004**	2003
Cash Flows From Operating Activities:		
Increase in net assets	**$ 652,809**	$ 249,020
Adjustments to reconcile increase in net assets to net cash provided by operating activities:		
Depreciation and amortization	**352,612**	370,914
Gain on investments	**(277,518)**	(35,569)
Gain on disposal of property, furniture and equipment	**-**	(454)
Reinvested interest and dividends	**(146,351)**	(134,587)
(Increase) decrease in assets:		
Accounts receivable	**200,379**	148,902
Inventories	**71,501**	71,073
Prepaid expenses	**40,711**	(28,906)
Accrued interest receivable	**(3,882)**	4,060
Increase in liabilities:		
Accounts payable and accrued liabilities	**50,122**	34,745
Deferred revenue	**237,038**	91,753
Net Cash Provided by Operating Activities	**1,177,421**	770,951
Cash Flows from Investing Activities:		
Purchases of property, furniture and equipment	**(300,545)**	(168,386)
Purchases of investments	**(1,200,000)**	-
Proceeds from investments	**12,358**	15,300
Proceeds from sale of equipment	**-**	1,311
Net Cash Used in Investing Activities	**(1,488,187)**	(151,775)
Cash Flows from Financing Activities:		
Principal payments on capital lease obligation	**(9,663)**	-
Net Cash Provided by Financing Activities	**(9,663)**	-
Net Increase (Decrease) in Cash	**(320,429)**	619,176
Cash, beginning of year	**1,602,440**	983,264
Cash, end of year	**$ 1,282,011**	$ 1,602,440
Cash paid for interest	**$ 4,302**	$ -
Noncash purchases of property, furniture and equipment	**138,914**	-

The accompanying notes are an integral part of these financial statements.

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations: The Society of Exploration Geophysicists (the "Society") was organized in 1930 as a not-for-profit organization. The objectives of the Society are to promote the science of geophysics, especially as it relates to exploration and research, to foster the common scientific interests of geophysicists and to maintain a high professional standing among its members. The Society accomplishes these objectives by publishing scientific literature, conducting continuing education programs and technical meetings, and providing other informational services.

The accompanying financial statements include the financial position, results of activities and cash flows of the Society. These financial statements do not include the SEG Foundation (the "Foundation"), a separate not-for-profit organization which receives contributions for public education and other scientific purposes.

Cash and Cash Equivalents: Cash and cash equivalents include cash in banks and all highly liquid investments with an original maturity of three months or less. Cash equivalents exclude money market funds held by a brokerage firm.

The Society maintains cash balances at several banks. Accounts at each institution are insured by the Federal Deposit Insurance Corporation up to $100,000. At June 30, 2004 and 2003, the Society had deposits in excess of the federally insured limit.

Accounts Receivable: Accounts receivable consists of uncollateralized billings for memberships, sponsorships, and exhibit space. Accounts receivable are stated at the amount billed. The carrying amount of accounts receivable is reduced by a valuation allowance that reflects management's best estimate of amounts that will not be collected.

Inventories: Inventories of publications for resale are valued at the lower of cost, determined by the moving-average method, or market.

Investments: Investments consist of marketable debt and equity securities which are valued at their fair values in the statements of financial position. Fair values for investments are based on quoted market prices. Unrealized gains and losses are included in the statements of activities.

SOCIETY OF EXPLORATION GEOPHYSICISTS
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 2004 AND 2003

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Property, Furniture and Equipment: Property, furniture and equipment is carried at cost. Depreciation is computed using the straight-line method based on the estimated useful lives of the assets. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any resulting gain or loss is included in the statement of activities. Expenditures for maintenance and repairs are charged to expense as incurred. Major improvements are capitalized.

The lives used in computing depreciation are as follows:

Building	50 years
Furniture and equipment	3 to 10 years

Net Assets: The Executive Committee of the Society has designated $250,000 of net assets for future building improvements.

Income Taxes: The Society is a not-for-profit organization under Section 501(c)(6) of the Internal Revenue Code and is subject to income taxes on unrelated business income. Based upon the allocation of costs as prescribed in the IRS regulations, no provision for income taxes was necessary for 2004 and 2003.

Transactions with Foundation: The Society leases building space and provides administrative services to the Foundation. The Society did not charge the Foundation for rent and administrative services in 2004 or 2003. The estimated amount of the in-kind contribution to the Foundation for these services has been included as other revenue ($193,831 and $158,000), building lease operations revenue ($95,000 and $114,000) for 2004 and 2003, respectively, and contributions to foundation ($295,830 and $272,000) for 2004 and 2003, respectively. Included in accounts receivable at June 30, 2004 and 2003 was $30,164 and $65,114, respectively, which was due from the Foundation.

Revenue Recognition: Membership dues and publication subscription revenues are recognized ratably over the applicable membership or subscription period. Revenues relating to meetings are recognized as revenue at the time of the meeting.

SOCIETY OF EXPLORATION GEOPHYSICISTS
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 2004 AND 2003

1. ORGANIZATION AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Building Lease Operations: The Society owns the land and building where its administrative offices are located in Tulsa, Oklahoma. Office space which is not used by the Society is leased to other companies.

Reclassifications: Certain reclassifications have been made in the 2003 financial statements to conform to the classifications used in 2004. These reclassifications had no effect on increase in net assets.

Use of Estimates: The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

2. INVESTMENTS

At June 30, 2004 and 2003, investments were as follows:

	2004	
	Cost	Market
Cash management fund	**$ 45,458**	**$ 45,458**
Certificate of deposit	**1,184,000**	**1,168,240**
Federal agency securities	**100,000**	**99,188**
Equity investments	**1,588,708**	**2,080,869**
Corporate bonds	**1,648,109**	**1,709,627**
	$4,566,275	**5,103,382**
Less short-term investments		**1,393,264**
Long-term investments		**$3,710,118**

SOCIETY OF EXPLORATION GEOPHYSICISTS
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 2004 AND 2003

2. INVESTMENTS (CONTINUED)

	2003	
	Cost	Market
Cash management fund	$ 237,535	$ 237,535
Equity investments	1,446,638	1,554,107
Corporate bonds	1,548,906	1,700,229
	$3,233,079	3,491,871
Less short-term investments		337,473
Long-term investments		$3,154,398

The fair value of debt securities at June 30, 2004 by maturity, are shown below.

Due in less than one year	$1,347,806
Due after one year through five years	944,554
Due after five years through ten years	684,695
	$2,977,055

Investment income in the accompanying statements of activities consists of the following:

	2004	2003
Interest income	**$160,101**	$143,292
Gain on investments	**277,518**	35,569
	$437,619	$178,861

3. PENSION AND SALARY REDUCTION PLANS

The Society sponsors a defined contribution pension plan which does not allow employee contributions. The Society makes contributions to the Plan based upon 4.5% of the employees' eligible wages.

The Society also sponsors a salary reduction plan. The Society's contributions to this plan are computed based on 2% of salaries and a two-for-one matching contribution of employees' contributions, up to a maximum of 4.33% of salaries.

The Society's expense under these plans was $251,350 and $210,113 in 2004 and 2003, respectively.

SOCIETY OF EXPLORATION GEOPHYSICISTS
NOTES TO FINANCIAL STATEMENTS
YEARS ENDED JUNE 30, 2004 AND 2003

4. LEASING ARRANGEMENTS

The Society leases approximately 75% of the office space in its headquarters building to unaffiliated parties under noncancelable operating leases. The following is a schedule of minimum future rental revenues from those tenants as of June 30, 2004:

Year Ending June 30,	Amount
2005	$ 708,111
2006	588,254
2007	423,387
2008	125,239
	$1,844,991

The Society leases phone equipment under a capital lease expiring January 2009. At the inception of the capital lease, the asset and liability under the capital lease are recorded at the lower of the present value of the minimum lease payments or the fair value of the asset. The asset is amortized over its estimated useful life. Phone equipment under the capital lease (which is included in furniture and equipment) was $127,338, net of accumulated depreciation of $11,576 at June 30, 2004.

Minimum future rental payments under capital lease are as follows:

Year Ending June 30,	Amount
2005	$ 33,517
2006	33,517
2007	33,517
2008	33,517
2009	19,552
	153,620
Less imputed interest	(24,369)
Present value of future minimum lease payments	129,251
Current portion	(24,483)
Long-term capital lease obligation	$104,768

SOCIETY OF EXPLORATION GEOPHYSICISTS
BUDGET FOR THE FISCAL YEAR ENDED JUNE 30, 2005

		Revenues	Expenses	Net
MEETINGS	Annual Meeting Management	$ 93,900	$ 1,401,332	$ (1,307,432)
	Annual Meeting Exhibits	1,544,525	254,073	1,290,452
	Annual Meeting Registration	1,024,590	153,839	870,751
	Annual Meeting Technical Program	36,000	205,489	(169,489)
	Annual Meeting Sponsorship	304,005	4,970	299,035
	SRW	92,325	65,549	26,776
	D&P	66,950	58,999	7,951
	Offshore Technical Conference	500,000	15,993	484,007
	International Meetings Management		144,322	(144,322)
	Others/level I-IV		65,436	(65,436)
MEMBERSHIP		1,052,000	316,496	735,504
PUBLICATIONS	GEOPHYSICS	647,925	594,277	53,648
	THE LEADING EDGE - monthly	64,300	899,947	(835,647)
	Reference Publications	693,000	772,628	(79,628)
	TLE - Yearbook Supplement	4,000	83,597	(79,597)
PROF. DEVELOPMENT	Continuing Education	272,225	365,257	(93,032)
	DISC	202,847	202,847	-
	Distinguished Lecture		99,427	(99,427)
	Student Affairs		61,957	(61,957)
	Geoscience Center	12,000	104,409	(92,409)
SPECIAL PROJECTS	GeoScienceWorld		30,253	(30,253)
	Committee Support		127,979	(127,979)
	Near Surface	1,680	1,500	180
	General Section Support		8,869	(8,869)
	Outreach		26,605	(26,605)
	Web	-	209,225	(209,225)
	Foundation Support	5,925	213,002	(207,077)
ADVERTISING	Advertising - *TLE*	810,000	135,320	674,680
	Advertising - GEOPHYSICS	7,000	676	6,324
	Advertising - Yearbook		1,302	(1,302)
	Advertising - Online	19,500	5,351	14,149
ADMINISTRATION	Executive Office		318,235	(318,235)
	Finance	150,000	445,629	(295,629)
	Investments		-	-
	Information Technology		270,642	(270,642)
	Human Resources		106,038	(106,038)
	Executive Committee Support		212,981	(212,981)
FOUNDATION BOARD AND TRUSTEE ASSOCIATES SUPPORT		210,702	210,702	-
GEOSCIENCE RESOURCE CENTER		993,303	973,434	19,869
TOTAL		$ 8,808,702	$ 9,168,587	$ (359,885)