AUSTRALIAN SOCIETY OF



EXPLORATION GEOPHYSICISTS

Number 25

April 1990

Perth

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CONTENTS

| INTRODUCTION | 1 |
|-----------------------------|----|
| ASEG BRANCH NEWS | 2 |
| AUSTRALIAN SCIENCE FORUM | 4 |
| ANNUAL GENERAL MEETING | 5 |
| PROFESSIONAL DIRECTORY | 13 |
| THE DAY THE EARTH SHOOK | 19 |
| RESEARCH FOUNDATION | 20 |
| LETTERS | 21 |
| MEMBERSHIP | 22 |
| CALENDAR OF EVENTS | 23 |
| CONFERENCE CALLS FOR PAPERS | 24 |

ASEG BRANCH NEWS

A.C.T.

The Annual General Meeting of the ACT Branch of the ASEG will be held in The Boardroom at the School of Tourism and Hospitality, ACT Institute of TAFE, Reid Campus, Constitution Avenue, Reid at 6.00 pm on Wednesday, 2 May, 1990. Unlike previous meetings, drinks will be available after the meeting when the bar at the School is open.

The guest speaker for the meeting will be Robyn Gallagher, CRA Exploration Canberra. The title of her talk will be "Image Processing and Geographic Information Systems for Minerals Exploration".

Following the meeting Robyn will be the guest of the Branch for dinner at the Restaurant within the School of Tourism and Hospitality. This is an excellent venue and costs only \$15 per person for a 3-course dinner. The Branch will supply wines and drinks for the evening. So, if you want an inexpensive night out, in ideal surroundings, with first class company and do your bit to help the education of Canberra's youth, contact me on 249 9401 as soon as possible as numbers are limited to about 30. Spouses and friends are most welcome.

Several positions for the Executive and Committee remain vacant. Over the past few years the Branch has been dominated by seismic geophysicists; if there are any non-seismic people interested in nominating for the Executive, they will be welcomed with open arms.

Kevin Wake-Dyster Hon. Secretary



TIMMINS GEOPHYSICAL SERVICES

a division of WORLD GEOSCIENCE CORPORATION LIMITED.

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N.S.W.

The Annual General Meeting for the NSW Branch was held on 27 February at the Rugby Club prior to Dr Richard Smith's lecture "Obtaining Conductivity-Depth Sections from Airborne Measurements". The meeting was well attended by members.

The financial accounts were accepted and after a fiercely contested election, the following officers were elected unopposed:

President: Chris Hodge Treasurer: Len Diekman Secretary: Scott Gagen

The Branch was informed of the departure of Penny Fraser, Branch Organiser, whose invaluable efforts, shown countless times throughout past years and often without proper thanks, will be sorely missed by all concerned. All present at the AGM wished her the best of luck for the future.

The April meeting for the ASEG NSW Branch took place at the Lord Nelson Brewery Hotel in The Rocks. The evening consisted of two lectures:

- Willie Simpson, Editor of Australian Beer Magazine, selected various ales and divulged some of his extensive knowledge of beer and brewing.
- Mike Walcott, seismic acquisition 'Bird-Dog' with a wealth of experience in onshore operations, spoke on "Environmental Aspects of Seismic Acquisition".

The next meeting will be held at the Rugby Club in Crane Place, Sydney on 30 May. Karen Christopherson of Chinook Geoconsulting will speak on magnetotelluric surveying in Papua New Guinea.

Scott Gagen Secretary

QLD

The Branch AGM was held on 6 March. The outgoing Executive reported that the Branch was still in the black and that, despite a shrinking of the industry in Brisbane during 1989, the Branch was surviving.

Following the AGM a talk was given by Roger Meaney, a geophysical consultant, on "Modern Seismic Acquisition in the Carpentaria Basin".

The 1990 Branch Executive is:

President: Henk Van Paridon (Crusader Ltd)

V/President: Andrew Mutton (CRA) Treasurer: Danny Burns (Delhi) Secretary: Brenton Oke (Delhi)

Danny Burns



The Annual General Meeting was held on 21 February at the Kings Head Hotel. John Hughes organised the slide show which was even enjoyed by the small minority of attending members who were under 40. Prehistoric scene followed prehistoric scene until it was time to go (to Hindley Street where even more primitive scenes unfolded).

The new committee was introduced at the AGM. The inaugural committee meeting was held at the British. The Wine and Melbourne Cup sub-committees have been appointed.

The 1990 SA Branch Committee is:

President: Jim Frazer (Santos)
Secretary: Nick Fitzgerald (Santos)
Treasurer: Peter Dunne (SADME)

Committee:

Allan Appleton (SADME)
Alan Anderson (Santos)
Stuart Brew (HGS)
Mark Flynn (Santos)
Neil Gibbins (Santos)
Robin Gerdes (SADME)
Peter Hopgood (SSL)
John Hughes (Santos)
John Iredale (Santos)
Doug Roberts (SAGASCO)
John Saunders (NCPGG)

The April meeting of the Branch was held on 11 April. The meeting was well attended with 45 people signing the attendance book.

John Saunders of the NCPGG gave a presentation on "Seismic data enhancement project" which is currently being conducted by the Centre.

The acquisition phase of this project has just been completed and John gave the attendees some insight into the objectives, methods and problems of this project. We are looking forward to a further talk from John later this year when some results from the processing are available.

Nick Fitzgerald Secretary

W.A.

Following the State AGM, the new State Branch committee is as follows:

President: Vice President: E. Clarke N. Uren

Secretary: Treasurer: K. Frankcombe

: M. Brumby

Committee:

T. Walker

B. Evans

G. Bubner

G. Fallon

I. Edwards

P. Harman

R. Clifton

R. Williams

A minerals versus petroleum cricket match was held at Port Beach on March 28. The game was a walk or fall over for the minerals team, due in part, I am assured, to the failure of any petroleum players to turn up. A magnificent and very rare trophy will be presented to the minerals captain at the next Technical Meeting which is on May 2.

An oily talk by Norm Uren will be given and a presentation on some of the geophysical exploration of Granny Smith by Greg Hall of Placer. More details in the next WA newsletter.

Kim Frankcombe Secretary

PROFILE ON AUSTRALIAN SCIENCE FORUM

Below are details on a Forum based on the recent ASTEC Report "Profile on Australian Science". The report assesses the status and potential of Australia's scientific research and gives information on the resources made available to basic science and the ends to which they are directed. It details areas of research strength and relative weaknesses. The Chairman of ASTEC, Professor Ray Martin, has stated that the intention of the report is to stimulate debate about the future directions and requirements of basic research in Australia.

This Forum will enable interested parties to contribute to a discussion of the key issues raised by the Profile and to focus on their implications for specific disciplines. It is being held in the Academy of Science on 1 May 1990 commencing at 9.00 am. Lunch and light refreshments will be provided by ASTEC.

PROGRAM TUESDAY, 1 MAY, 1990

Chairman: Ray Martin, AO, Professor of Chemistry, Monash University, Chairman of ASTEC

10.00 INTRODUCTION - OBJECTIVES OF SEMINAR
Prof R Martin

10.15 PRODUCING THE "PROFILE AIMS & METHODOLOGY" J McLeod AO, Professor of Medicine,

University of Sydney, Chairman - Working Party

10.45 MAJOR ISSUES RAISED

Prof. I Ross, Science Policy Secretary, Australian Academy of Science

11.15 DISCUSSION

12.15 LUNCH

Chairman, Graham Rigby FTS, Professor of Electrical Engineering, University of NSW, Member of the Working Party, ASTEC

1.00 PANEL DISCUSSION

Biological Sciences Prof A Clark
Physical Sciences Prof T Klein
Earth Sciences Prof K Lambeck
Engineering H Wragge
Mathematics Prof C Heyde
Chemical Sciences Prof I Ross
Medical Sciences Prof J McLeod

2.30 DISCUSSION

3.30 COFFEE

Chairman: Professor Ray Martin

3.45 SUMMING UP

Prof R Johnston

J Madden

4.10 CLOSE

FURTHER DETAILS AND REGISTRATION FORMS CAN BE OBTAINED BY CONTACTING MS MARGARET CAMERON, (042) 26 8866, THE CENTRE FOR TECHNOLOGY AND SOCIAL CHANGE, UNIVERSITY OF WOLLONGONG, PO BOX 1144, WOLLONGONG NSW 2500

Note: There will be no charge to attend this Forum

Elizabeth and Frederick White

CONFERENCES

With the generous support of Lady Elizabeth White BM, BS, and Sir Frederick White FAA, FRS, the Academy conducts a series of research conferences in the physical and mathematical sciences related to the solid earth, the terrestial oceans, the earth's atmosphere, solar terrestrial science, space sciences and astronomy.

The purpose of the conferences is

- to advance at the most fundamental level the understanding of the subject
- to endeavour to introduce to Australian research new aspects or directions, and
- to encourage participation of overseas scientists.

Up to two conferences of about two days duration are organised each year with a membership of 20-30. A sum of up to \$5 000 is allocated for each conference and the supplementation of this sum is encouraged. The conferences are held in the Academy's Ellerton Becker Building in Canberra on a date agreed upon by the conference organisers and the Academy.

The initiative, financial responsibility and detailed arrangements for the conference are the responsibility of the organisers and scientific society/organisation which acts as a joint sponsor with the Academy.

Societies and organisations are invited to prepare proposals for meetings in 1991. Proposals should be submitted on application forms available from the Academy secretariat and should be addressed to:

The Executive Secretary
Academy of Science
GPO Box 783
Canberra ACT 2601
Telephone enquiries: Faye Nicholas
(062) 47 5777

Closing date for applications is 31 July 1990

Australian Academy of Science



ANNUAL GENERAL MEETING

The Annual General Meeting of the Federal Australian Society of Exploration Geophysicists was held at the Raffles Hotel, Applecross in Perth on Wednesday 28 February.

The following were named by the Nominating Committee and elected unopposed:

President: Brian Embleton
1st Vice President: Mike Sayers
2nd Vice President: Greg Steemson
Treasurer: Craig Dempsey
Secretary: Andre Lebel

The following reports were presented at the meeting:

PRESIDENT'S REPORT



by G.J. Street

At the last Annual General Meeting the previous President, Eve Howell, reported that her year of office was taken up with the transfer of the Executive from Adelaide to Perth.

The past year has seen a continuation of the transfer but also a consolidation of our efforts towards efficiently running the real business of the Society. We have increased our efforts therefore in the publication of technical material, running of technical meetings and in general promotion of the profession.

From our experience the transfer from State to State is not a smooth transition. We have developed systems and databases such that this will be easier in the future. I believe, however, that the Executive should remain in Perth for another two years before moving to Melbourne. I will be recommending this to the incoming Executive.

Some of the achievements of the year were:

• The 7th ASEG Conference and Exhibition was run at the Hilton Hotel in Melbourne during September. The event was highly successful and the Conference Committee, led by Tom Eadie and Peter Grant, are to be commended for running an extremely professional convention. Nothing, it appeared, was left to chance and all events ran with smooth precision. The turnout of in excess of 400 delegates was pleasing considering the efforts that some of you had to make to get to Melbourne during the pilot's strike.

"Exploration Geophysics", the bulletin of the ASEG, has continued in publication throughout the year and, by now, all members should have received all issues up to Volume 20/3. Volume 20/4 should be out shortly and subsequent to that issue we should be able to remain on schedule for the next 18 months. The Editor, Don Emerson and Publisher, Terry Crabb are to be commended for their efforts.

We have been making efforts to have "Exploration Geophysics" included in the SEG cumulative index. Roger Henderson and Norm Uren made representations on our behalf at the SEG meeting in Dallas and it appears we have reached consensus with the SEG on this matter.

The continuing success of the Bulletin depends on the participation of the membership. For our small size I believe that we do amazingly well in terms of the number of papers published. We need to continue the effort and this means not only in publishing your own work but also in encouraging others to publish or perhaps smoothing the way for your company employees.

- "Preview", our bimonthly newsletter, has continued to be upgraded under the Editor, Anita Heath. It is good to see the occasional article or letter from members.
- The ASEG Research Foundation is now a reality. We have formally been notified by the Australian Taxation Office that we are an "Approved Research Institute". This means that all donations are 100% tax deductible. We hope that awards will be made for projects either in the second semester 1990 or for 1991.
- The preparation of the first ASEG monograph "Australian Oil and Gas - Case Histories" is well underway and will probably go for printing in late 1990.
- Awareness of the problems in scientific education has increased during 1989. The Student and Academic Liaison Committee has been revitalised under Brian Evans and a charter prepared. The committee met at the ASEG Conference in Melbourne and it is hoped that there will be a more co-ordinated effort in the future towards geophysics education in universities.
- The Federal Executive has been aware of the need to promote geophysics as a

profession to school students. Some research efforts have been made in this direction and a career outline has been placed in the national job guide produced by the Australian Department of Education. Further work needs to be done on promoting geophysics directly through its introduction into the school syllabus.

- The membership database has been continually upgraded during 1989 and subsets of the database have been distributed to State branches. All non-financial members have been deleted from the database.
- The major work of the Federal Executive continues to be the supervision of conferences. While it is not the job of the Executive to interfere with Conference committees it is felt that there is a certain formula and standard that the membership has come to expect from an ASEG conference. The meeting of the ASEG Council in Melbourne made it very clear to the Federal Executive that they were expected to be vigilant in ensuring that the standards of the conference in both technical and financial terms was not degraded.

A conference advisory manual has been prepared by Steve Mudge which contains the general formula which we expect to be maintained. The Federal Executive should continue to carefully monitor the progress and decisions of future conference committees.

I would like to thank all members of the Federal Executive, Chairmen of Standing Committees and the honorary editors for their continuing hard work and support during the year. In particular, I would like to pay tribute to Bill Peters who will be standing down as Treasurer this year. Bill has had a continuing involvement with the ASEG for the past six years, first as Treasurer on the State branch committee, then on the Perth Conference Committee and, for the past two years, as Federal Treasurer. He leaves the committee with the Society in better financial shape than it has ever been. Bill's service and advice to the ASEG on financial matters has been invaluable.

SECRETARY'S REPORT



by C.E. Dempsey

As Secretary of the Australian Society of Exploration Geophysicists Federal Executive for 1989, I herewith present the following report to members concerning

the affairs and activities of the Society for the year ended 31 December 1989.

1988/89 Office Bearers

President
Past President
1st Vice President
2nd Vice President
Hon. Treasurer
Hon. Secretary
Hon. Ast. Secretary
Hon. Editor
Public Officer

Greg Street
Eve Howell
Mike Sayers
Greg Steemson
Bill Peters
Craig Dempsey
Anita Heath
Don Emerson
Steve Greaves/
Lindsay Ingall

Standing Committee Chairmen

Conference Advisory Corporate Affairs Geophysical Activity Honours & Awards Publications Technical Standards Steve Mudge
Lindsay Ingall
Roger Henderson
Lindsay Ingall
Terry Crabb
Don Pridmore/
Paul Wilkes

Student/Academic Liaison

Brian Evans

The following nominations have been received for the Executive Committee for the year 1990:

President 1st Vice President 2nd Vice President Treasurer Hon. Secretary Don Emerson Mike Sayers Greg Steemson Craig Dempsey Andre Lebel

The following have accepted the responsibilities of:

Hon. Asst. Secretary Hon. Editor Anita Heath Don Emerson

Membership

The membership database programme was updated during the year so that it is now possible to divide the membership by State. With this new facility we hope to forward upgraded membership lists to the State Secretaries three times a year.

During the year, a list of unfinancial members was published in Preview and those listed who did not take the opportunity to become financial were taken off the database.

As at 28 February the financial membership is:

| Active and Associate | 636/159 |
|----------------------|---------|
| Corporate | 31 |
| Honorary | 7 |
| Student | 51 |
| Total | 884 |

The breakdown of membership for each State was:

| ACT | | 68 |
|----------|-----|-------|
| NSW | | 212 |
| QLD | | 94 |
| SA/NT | | 105/6 |
| TAS | | 7 |
| VIC | | 100 |
| WA | | 178 |
| Overseas | Sea | 85 |
| | Air | 29 |

Branches

During the year the State Branches were led by:

| State | President | Secretary | Treasurer |
|-------|--------------|-------------|----------------|
| ACT | P. Napier | K. Wake-Dys | ter M. Sexton |
| NSW | C. Hodges | S. Gagen | L. Diekman |
| QLD | D. Burns | K. Driml | H. Van Paridon |
| SA | | | |
| NT | J. Hughes | M. Flynn | P. Dunne |
| TAS | R. Richardso | n D. Leaman | R. Richardson |
| VIC | P. Grant | C. Gumley | J. Cull |
| WA | E. Clarke | T. Walker | M. Brumby |
| | | | |

LAURENCE HANSEN B.Sc. M.Sc.

GEOPHYSICAL CONSULTANT

SEISMIC DATA PROCESSING Q.C. VELOCITY PICKING AND Q.C. FOR 2D AND 3D SURVEYS INTERPRETATION AND WORKSTATION SERVICES

115 Doveridge Drive, Duncraig, W.A. 6023 Telephone (09) 246 1264

TREASURER'S REPORT

By W.S. Peters

Financial Year 1/1/89 to 31/12/89

As a company limited by guarantee, the ASEG is obliged under the Companies (NSW) Code to prepare audited annual accounts and to present these accounts along with the auditor's report at the AGM.

The Federal Executive is well established in Perth now, with an efficient Secretariat and computer database system. As a result things have run fairly smoothly throughout the year. Minor changes were made to the database software to allow automatic issuing of receipts and also to allow easier subsetting and updating of individual State databases.

Slee and Stockden Pty Ltd continue to be our accountants and they have prepared the accounts attached to this report. These accounts are subject to audit by our auditor, Colin Johnson. The audit will be late. This is mainly due to delays incurred because of the poor response from several sections of the ASEG to repeated requests for financial information. ASEG office bearers carry out their duties on an entirely voluntary basis and this is something for which the membership is grateful. Accepting the responsibility of office, however, does impose an obligation to carry out those duties as well as possible and the delays mentioned above are unacceptable.

The ASEG's accounts now include all State Branches, Publications, the two memorial funds, and the conferences. This is a change decided upon last year to give a truer (and more legal) reflection of the ASEG's finances. The Grahame Sands and Laric Hawkins Memorial Funds are held in trust and not used for normal operations. These accounts have balances of \$33,040 and \$962 respectively as at 31/12/1989.

It should be noted for comparison purposes that the last financial year (1988) was for a nine month period only. The more significant items apparent from the accounts are:

1. Profit and Loss

Income of \$195152 compares with \$115630 last year. The main increase is the profit from the Melbourne Conference (\$68344). The dues income varies because of the payment period overlapping the financial years. Advertising revenue has significantly increased. Some of this probably reflects the collection of overdue debts from the previous year.

Expenditure was \$138136 compared with \$80109 in 1988. The main increase in expenditure is publications costs of \$74389 which includes the Melbourne Conference volume.

Our profit for the year was \$57016 compared to \$35521 in 1988.

2. Balance Sheet

Our net assets have risen from \$176897 in 1988 to \$233913 in 1989. This increase is largely due to the conference profits. Of these assets, about \$213000 is held as cash mainly in high interest bearing accounts. As the ASEG is exempt from income tax, we are thus benefiting from the prevailing high interest rates.

General

The Melbourne Conference resulted in a significant profit of nearly \$68,000. This will significantly strengthen the resources of ASEG. This profit is particularly welcome after the Adelaide loss and the Melbourne Conference Committee are to be congratulated on showing us how to run an excellent conference and make a profit.

The overall financial position of the ASEG is very sound. There may be the temptation by some to criticise the high level of cash reserves and to say the dues should be reduced or similar. This would not be wise in my opinion as it has been shown that large financial losses can be incurred. There is, however, no need for dues increases in the foreseeable future and there is scope for some financial support for worthwhile ASEG projects if required.

New standardised cash books have been issued to all State Branches to improve accounting efficiency and to guide incoming Treasurers.

The Secretariat at the Chamber of Mines continues to be efficient and cost effective. Paula Sinclair is to be congratulated for another year of efficiently and courteously handling dues, correspondence, deposits, filing, helping to publish Preview, etc.

This is my last year as Treasurer and I thank the members of the outgoing Federal Executive for their friendship and advice over the years. I wish the new Treasurer every success in unravelling what I have left him!

AUSTRALIAM SOCIETY OF EXPLORATION GEOPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

PROFIT AND LOSS ACCOUNT FOR THE TEAR EMDED 31 DECEMBER 1989

| | Note | | r Ended .12.89 | Ended 31,12.88 |
|-------------------------------------------|------|---------|-------------------|-------------------|
| | | | \$ | \$. |
| NCOME Membership Dues | | | 29,848 | 54,763 |
| Wines and Ties | | | 23,040 | 1,045 |
| Non-member Subscriptions to | | | | +10.12 |
| Exploration Geophysicists | | | 11,491 | 5,011 |
| Advertising | | | 32,014 | 6,218 |
| Interest | | | 16,460 | 9,161 |
| Misc Receipts S.A. '88 | | | | |
| Conference | | | 783 | |
| Profit on Victoria '89 | | | 68,344 | |
| Conference | 2 | | 00,300 | |
| State Branch Revenue South Australia | 3 | | 16,396 | 19,615 |
| Queensland | | | 4,379 | 5,501 |
| New South Wales | | | 5,439 | 6,947 |
| Tammania | | | 1.5 | 108 |
| Western Australia | | | 4,624 | 4,669 |
| A.C.T. | | | 76 | 1,358 |
| Victoria | | | 5,283 | 1,234 |
| OTAL INCOME | | | 195,152 | 115,630 |
| ESS EXPENSES | | | | |
| Accounting Fees | | 5,113 | | 2,200 |
| Audit Costs | | 25 | | 2,000 |
| Awards - Students | | 28 | | 50 |
| Bank Charges | | 1,209 | | 933 |
| Book Purchased Capitation Fees | | 7,740 | | 7,881 |
| Computer Expenses | | 890 | | 720 |
| Depreciation | | 363 | | 552 |
| Filing Fees | | 77 | | |
| Loss on S.A. 88 Conference | | | | 4,555 |
| Loss on Sale of Satchells | | 3,689 | | 500 |
| Legal Expenses | | 1,595 | | 1,646 |
| Postage, Stationery, Sec. etc. | | 5,623 | | 4,585 |
| Plant Written Off Publication Expenses | | 74.389 | | 17,893 |
| Registered Office Fee | | 150 | | 11,095 |
| Social Punc, A.G.M. Costs | | | | |
| 4 Ties | | 2,040 | | 200 |
| Subscriptions | | 1,355 | | 1,025 |
| State Branch Expenditure | 4 | wastera | | 40 m March |
| South Australia | | 13,627 | | 19,173 |
| Queensland | | 4,031 | | 5,208 |
| New South Wales | | 5,953 | | 4,272 |
| Western Australia | | 457 | | 4,241 |
| Victoria | | 3,558 | | 2,250 |
| | | | 138,136 | 80,109 |
| TOTAL EXPENSES | | | | 50,103 |
| | | | | |

AUSTRALIAM SOCIETY OF REPLORATION GROPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED 31 DECEMBER 1989

| | Year Ended | Nine Months Ended 31.12.88 |
|-------------------------------------------------------------------------|-------------------|----------------------------------|
| - 4 | \$ | s |
| Operating Profit Income Tax Attributable to Operating Profit | 57,016 | 35,521 |
| | ******* | |
| Operating Profit After Income Tax Retained Profits at 1 January 1988 | 57,016 141,893 | 35,521 106,371 |
| Retained Profits at 31 December 1989 | 198,909 | 141,893 |

AUSTRALIAN SOCIETY OF EIPLORATION GEOPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

POR THE TEAR ENDED 31 DECEMBER 1989

| | Note | Year Ended 31.12.89 | Nine Months Ended 31.12.88 |
|--------------------------------------------|-------------|------------------------|----------------------------------|
| | | \$ | 5 |
| CURRENT ASSETS | | | |
| Canh | 6 | 82,734 | 72,881 |
| Receivables | 7 | 20,000 | 47,091 |
| Inventories | 6 7 8 | - | 7,000 |
| Other | 9 | 154,396 | 57,066 |
| | | 202 424 | |
| Total Current Assets | | 257,130 | 184,038 |
| NON-CURRENT ASSETS | | | |
| Plant and Equipment | 1.0 | 17 | 363 |
| -775 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - | | | |
| TOTAL ASSETS | | 257,130 | 184,401 |
| | | | |
| CURRENT LIABILITIES | | | |
| Trade Creditors and Accruals | | 23,217 | 7,504 |
| Total Current Liabilities | | 23,217 | 7.504 |
| TOTAL CULTURE DIRECTION | | | 14.575 |
| Total Liabilities | | 23,217 | 7,504 |
| NET ASSETS | | 233,913 | 176,897 |
| HET ASSETS | | ******* | |
| | | | |
| | | | |
| MEMBERS EQUITY Reserves | | 35.004 | 35,004 |
| Retained Profits | | 198,909 | 141,893 |
| Margrined LTATTES | | 270,707 | .,,,,,,,, |
| Total Members Equity | | 233,913 | 176,897 |
| round manager address | | ****** | |

AUSTRALIAM SOCIETY OF EXPLORATION GEOPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

NOTES TO AND FORMING PART OF THE ACCOUNTS FOR THE TEAR KNDED 31 DECEMBER 1989

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

(a) General Principles of Accounting

The accounts have been prepared under the historical cost convention and have not been adjusted to take account of either changes in the general purchasing power of the Australian dollar or changes in the prices of specific assets except to the extent that the revaluation of certain assets, as noted in the accounts, partially reflects such changes.

(b) Depreciation

Non-current assets other than freehold land and buildings are depreciated over their estimated useful lives using either the straight line method or diminishing value method of depreciation.

2. PROFIT ON VICTORIA 1989 CONFERENCE/CONFERENCE FUNDS HELD

| Funds banked Cash Management Deposit Account Interest Earned on Cash Management Deposit Account Debtors (Funds still outstanding) | 63,000 10,772 4,600 |
|-----------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| Less Cheque Account Overdrawn Accounts Not Yet Paid | 78,372 2,528 7,500 |
| | 68,344 |

3.

| | | Year Ended 31.12.89 | Nine Months Ended 31.12.88 |
|-----|------------------------|------------------------|----------------------------------|
| | | \$ | \$ |
| (a) | South Australia | | |
| | Annual Dinner Receipts | | 1,415 |
| | Seminar/Meetings | 100 | 2,624 |
| | Wine Sales | 13,044 | 13,766 |
| | Capitation Fees | | 1,080 |
| | Interest | 184 | 230 |
| | Sponsorship | 3,082 | 500 |
| | Donations | 86 | _ |
| | | | |
| | | 16,396 | 19,615 |
| | | ******* | |

AUSTRALIAM SOCIETY OF EXPLORATION GEOPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

MOTES TO AND FORMING PART OF THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 1989

| | | | Nine Months |
|-----|--------------------------------------------|------------------------|-------------------|
| | | Year Ended 31.12.89 | Ended 31.12.88 |
| | | 5 | - 3 |
| (b) | Queensland | | |
| | Heetings | 790 | 788 |
| | Capitation Fees | 930 | 1,575 |
| | Annual Dinner Interest | 1,929 | 2,530 |
| | A.S.E.G. | 500 | 274 334 |
| | Sponsorship | 200 | 234 |
| | aponia central | | |
| | | 4,379 | 5,501 |
| | | ****** | ****** |
| (0) | New South Wales | | |
| | Capitation Fees | | 3,738 |
| | Punctions | 4,107 | 1,920 |
| | Bank Interest Video Tape Sales | 1,092 | 819 |
| | Aideo labe pares | 240 | 470 |
| | | 5,439 | 5,947 |
| | | ****** | |
| (d) | Tesmenie | | |
| | Capitation Fees | | 102 |
| | Interest | 15 | 6 |
| - | | | |
| | | 15 | 108 |
| | | | ***** |
| | Western Australia | | 1 100 |
| | Annual Dinner Receipts Seminar/Meetings | 309 213 | 1,335 |
| | Capitation Page | 1,500 | 1,036 |
| | Interest | 1,053 | 22 |
| | Sale of A.S.E.G. Ties | | 150 |
| | Transfer from Investments | 1,300 | 2,000 |
| | Wine Sales | 64 | |
| 6 | Sponsorship | 185 | - |
| | | 77.77 | |
| | | 4,624 | 4,669 |
| (£) | | | |
| | A.C.T. Capitation 1987/88 | | 511 |
| | Capitation 1988/89 | | 700 |
| | Bank Interest | 76 | 27 |
| | Sale of A.S.E.G. Ties | + | 120 |
| | | ****** | |
| | | 76 | 1,358 |
| | | ****** | **** |

AUSTRALIAM SOCIETY OF EXPLORATION GEOPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

NOTES TO AND FORMING PART OF THE ACCOUNTS FOR THE YEAR EMDED 31 DECEMBER 1989

| | Year Ended 31.12.89 | Nine Months Ended 31.12.88 |
|---------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------|
| (a) Victoria | s | 5 |
| (g) Victoria Annual Dinner Capitation Interest Donation A.S.E.G. Wavelet Workshop | 480 581 1,162 3,060 | 175 920 44 95 |
| 4. STATE BRANCH EXPENDITURE | | |
| (a) South Australia Annual Dinner Maetings Wine Purchases Awards Printing and Stationery Bank Charges Subscriptions | 1,185 11,896 100 48 353 45 13,627 | 1,375 4,099 12,768 50 298 583 |
| (b) Queensland Meetings Annual Dinner Bank Charges Printing, Stationery & Stamps A.S.E.G. Ties Awards | 1,399 2,470 5 57 100 4,031 | 1,545 2,928 18 417 300 |
| (c) New South Wales Functions Bank Charges Miscellaneous | 5,542 26 385 5,953 | 4,166 6 100 4,272 |

AUSTRALIAN SOCIETY OF EXPLORATION GEOPHTSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

NOTES TO AND FORWING PART OF THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 1989

| | | Year Ended 31.12.89 | Nine Months Ended 31.12.88 |
|-----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------------------|
| | | \$ | \$ |
| (d) | Western Australia Annual Dinner Meetings Printing, Postage & Stationery Bank Fees A.S.E.G. Ties Purchase of Two Prof. Screens Wine Transfer Awards | 543 692 627 5 5 1,300 500 | 2,100 700 792 8 200 441 |
| (0) | A.C.T. Branch Meetings Christmas Dinner Poetage & Stationery A.S.E.G. Ties Bank Pees Golf Prize Student Support | 199 98 3 7 150 457 | 159 142 75 120 2 7 |
| (f) | Victoria Annual Dinner Meetings Kelvin Club Membership Kelvin Club Student Prizes & Sponsorship Postal Box Hire Bank Fees R J Hames Farewell Function Courier | 791 430 800 70 7 237 255 | 171 901 420 190 66 2 500 |

AUSTRALIAM SOCIETY OF EXPLORATION GEOPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

The company has been granted exemption from income tax by virtue of Section 23(q) of the Income Tax Assessment Act 1936.

5. INCOME TAX

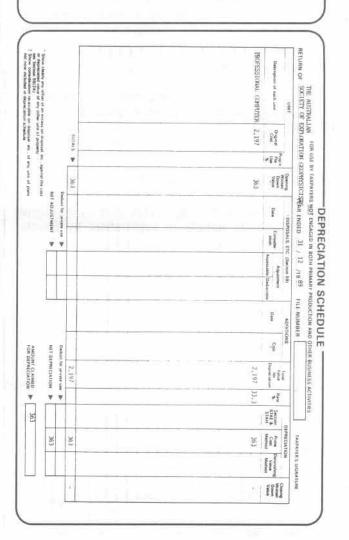
NOTES TO AND FORRING PART OF THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 1989

| | | Year Ended 31.12.89 | Nine Months Ended 31.12.88 |
|----|---------------------------------------------------------------------------------------|------------------------|----------------------------------|
| | | \$7 | s |
| 6. | CASH | | |
| | National Bank Publication Account A N E Bank Account | 1,987 3,021 | 2,414 2,325 |
| | "Grahame Sand Award for Innovation in Geoscience" "Laric Hawkins Hemorial Fund" | 33,040 962 | 28,400 954 |
| | BRANCH ACCOUNTS | | |
| | South Australia Bank Account Investment Account | 4,329 1,200 | 1,561 |
| | Queensland Bank Account Investment Account | 1,648 | |
| | New South Wales Cheque Account Investment Account | 2,333 | 2,847 |
| | Tosmania Bank Account | 425 | 410 |
| | Western Australia Bank Account Investment Account | 454 10,014 | 704 8,790 |
| | A.C.T. Bank Account Petty Cash on Hand | 1,020 | 1,380 |
| | Victoria Piccol Credit Union State Bank | 9,791 2,510 | 8,670 1,907 |
| | | 82.734 | 72 991 |

AUSTRALIAM SOCIETY OF EXPLORATION GROPHYSICISTS (Incorp. in N.S.W. and Limited by Guarantee)

NOTES TO AND FORMING PART OF THE ACCOUNTS FOR THE YEAR EMDED 31 DECEMBER 1989

| | | Year Ended | Nine Months Ended 31.12.88 |
|-----|---------------------------------------------------------------------------------------------|----------------|----------------------------------|
| | | \$ | 5 |
| 7. | RECEIVABLES | | |
| | Sundry Debtors | 20,000 | 47,091 |
| 8. | INVENTORIES | | |
| | Stock - Satchells for 1989 Conference | - | 7,000 |
| 9. | OTHER | | |
| | A.N.Z. Trustees Deposit Funds on Deposit - Aust Fixed Trust Advances - State Branches | 71,986 | 50,000 |
| | South Australia Victoria New South Wales | 7,000 7,000 | 7,000 |
| | Funds Held by Conference | 58,344 | - 0 |
| | | 154,396 | 57,066 |
| 10. | PLANT AND EQUIPMENT | | |
| | Service of the Service of the Service of | 2 | 2000 |
| | Plant and Equipment At Cost Less: Accumulated Depreciation | 2,197 2,197 | 1,834 |
| | | ****** | |
| | | | 363 |



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GEOPHYSICAL ACTIVITY COMMITTEE REPORT

By R J Henderson Chairman

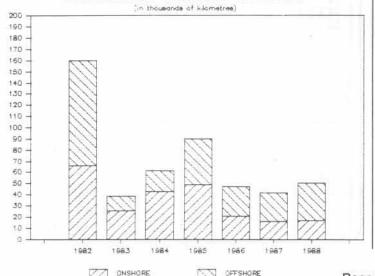
This year as Chairman of the ASEG Geophysical Activity Committee, I attended the annual meeting of the SEG Activity Committee, held in Dallas in October. I was appointed a member of this committee so that I could better serve the SEG in terms of the Australian activity. I hope members agree that recent SEG Geophysical Activity reports better reflect the true picture with regard to Australian geophysical activity. There is still the difficulty of getting an adequate response to questionnaire mailing list up-to-date and appropriate.

It was interesting to hear the Chairman of the SEG Activities Committee report at the meeting, that the information provided by their committee is eagerly sought by persons not only in the geophysical community but from the media, investment analysts and the like.

The ASEG Committee continues to rely on the published statistics for seismic exploration and personal knowledge for the airborne activity. It seems that the ground exploration activity is too small and/or conducted by a small number of contractors, who find themselves too busy to respond to the questionnaire for use to obtain statistics in this area.

A plot of the seismic activity over the past seven years was published in a recent issue of Preview. (Copy below). From this, it was apparent that onshore activity had fallen markedly over the past three years but offshore seismic was on the increase. Airborne activity in 1989 would appear to have maintained the level of recent years but almost all was related to mining. The use of airborne geophysics for petroleum exploration, by private contractors, has fallen to almost zero.

AUSTRALIAN SEISMIC ACTIVITY



The surveying carried out by the BMR would appear to be satisfying the requirement in this area.

Ground techniques have shown an increase in demand for electrical and electromagnetic methods of late, presumably due to the upsurge in interest for base metals. On many occasions throughout 1989, there were not enough electromagnetic instruments to fully satisfy the demand.

CORPORATE AFFAIRS COMMITTEE REPORT

By L.N. Ingall - Chairman

Stephen Greaves resigned in October 1989 as Chairman of the Corporate Affairs Committee and as ASEG Public Officer. This was a consequence of his move to New Zealand to work for Petrocorp Exploration Limited. We thank him for his sterling efforts on behalf of the ASEG.

Following these resignations the Federal Executive appointed Lindsay Ingall to the vacant positions.

We report that the two amendments to our Articles of Association passed at the AGM on 4 May 1988 were formally approved in May 1989 by the NSW Department of Business and Consumer Affairs. Members will recall that one amendment related to the implementation of an ASEG Research Foundation and the other to a change of our financial year to conform with the calendar year.

The ASEG holds a licence pursuant to Section 66 of the Companies (New South Wales) Code enabling its registration as a company without the addition of the word "Limited" to its name. A provision of the licence is an exemption under Section 66(5) from the necessity of lodging annual returns and of returns of particulars of directors, principal executive officers and secretaries.

In September 1989 the Department of Consumer and Business Affairs wrote to us requesting a statement confirming our eligibility to continue to hold the licence and our exemption status. We have supplied this information and currently await confirmation of our status quo.

On another matter, we were advised in early February by the National Companies and Securities Commission that their Policy Statement on Experts' Reports on Mining and Petroleum Securities and Properties is close to being issued.



SELBY FELLOWSHIP

The fellowship is financed through the generosity of the trustees of the Selby Scientific Foundation.

PURPOSE

Fellowships are awarded to distinguished overseas scientists to visit Australia for public lecture/ seminar tours and to visit scientific centres in Australia.

Fellows are expected to increase public awareness of science and scientific issues and accordingly will be outstanding lecturers to the general lay public.

CONDITIONS:

Fellowships are tenable for visits of not less than two weeks and not more than three months. Overseas and local air fares and a daily allowance are provided.

AWARD:

Fellowships are awarded and the length of tenure determined by the Council of the Academy on the recommendation of its Public Lectures Committee.

NOMINATIONS:

Nominations are invited for the Selby Fellowship in 1991. Nominations are confidential and should include a detailed curriculum vitae and a proposed itinerary. Nomination forms are available from the Academy secretariat and should be addressed to:

The Executive Secretary
Australian Academy of Science
GPO Box 783
Canberra ACT 2601
Telephone enquiries: Faye Nicholas
(062) 47 5777

Nominations close on 30 June 1990

PUBLICATIONS COMMITTEE REPORT

By T.N. Crabb

Members of the Publications Committee for this year included:

| Τ. | Crabb | Chairman |
|----|-------|----------|
| | | |

D. Emerson Editor

A. Heath Preview Editor

M. Asten Guest Editor - Melbourne Conference J. Denham Guest Editor - Melbourne Conference

T. Tyne Guest Editor - Sydney Conference
 J. Dooley Guest Editor - Engineering Workshop
 E. Howell Guest Editor - Special Publications

M. Middleton Guest Editor - Special Publications

M. Sayers 2nd Vice President

Graphic Services Pty Ltd continued as our printer this year and printed the two issues, Volume 19/4 and 20/1-2 during the period April 89 through December 89. Volume 20/3 was released in February 1990 and the amount listed below includes an estimate of \$2040 for mailout charges.

| Vol | Date | Release | Cost | Cost/Pge |
|-------|--------|---------|----------|----------|
| 18/3 | Sep87 | Nov87 | 9122.72 | 85.26 |
| 18/4 | Dec87 | Jun88 | 7833.93 | 139.89 |
| 19/1- | 2Mar88 | Feb88 | 36437.39 | 91.09 |
| 19/3 | Sep88 | Mar89 | 8816.37 | 137.75 |
| 19/4 | Dec88 | Jul89 | 9880.82 | 152.01 |
| 20/1- | 2Mar89 | Sep89 | 47188.17 | 136.38 |
| 20/3 | Sep89 | Feb90 | 11497.00 | 179.64 |

Note that these costs do not include advertising income.

Prices per page for the 64 page standard issue appear to reflect a concerning 8% to 17% increase over the years 1989 and 1990 respectively and will need to be monitored.

The delay of approximately six months with issues continues. Graphic Services received the bulk of Volume 20/4 manuscripts in mid January, the publication date for this issue will probably be May. However, this may change during 1990.

Jim Dooley has accepted the Guest Editors position for the issue on Engineering Geophysics and as a consequence this double issue will be published as Volume 21/1-2, hopefully in June. Issues 3 and 4, Volume 21, will be made up of assorted papers with Volume 22/1-2 being the Sydney Conference issue, will need to be published in January 1991.

Brackett Secretariat continued as the ASEG publisher and made efforts to follow up advertising revenue collection and missing non-member subscribers. At a meeting in Melbourne of the Publications Committee in September 1989 it was

agreed that no advertising will be run in future issues without prepayment or a standing order - thus minimising future advertising revenue loss.

Don Emerson has again agreed to stand as honorary Editor of Exploration Geophysics through 1990 and the debt the Society owes Don for his labour over the years is immense.

HONOURS AND AWARDS COMMITTEE REPORT

By L.N. Ingall - Chairman

Committee members are Lindsay Ingall Barry Long Bill Peters

The most notable event was the 7th ASEG Conference held in Melbourne in September 1989. The ASEG Honours and Awards presented at the Conference were detailed in Preview Number 22 dated October 1989. In summary they are:

ASEG Gold Medal: Kenneth McCracken

Honorary Membership: Kenneth McCracken Keeva Vozoff

Grahame Sands Award: Not presented

Laric Hawkins Award: G.R. Pettifer et al.

Best Paper Presentation: P.M. Smith & M. Whitehead

Best Petroleum Geophysics Paper G.M. King & S. Endersby

Best Mining & Engineering Geophysics Paper: O. Olsen et al.

Best Exhibit: Sierra Geophysics Inc.

Nominations for the SEG Honours and Awards for 1990 closed on 7 January 1990. The various Honours and Awards are described in Preview Number 19 dated April 1989. In November 1989, we wrote to all State Branch Presidents with a request for nominations, however, none were received by the closing date.

CONFERENCE ADVISORY COMMITTEE REPORT

By S. Mudge Chairman

The Conference Advisory Committee (CAC) for the past year comprised the following:

Steve Mudge (Chairman)
Roger Henderson
Greg Street
Barry Long
Greg Steemson (Federal Executive Liaison)

Barry Long will step down in 1990 to chair the Gold Coast '92 Conference whilst Reg Nelson and a member of Melbourne '89 Committee (to be confirmed) will join the CAC for 1990-91.

MELBOURNE '89 (September 1989)

The 7th ASEG Conference and Technical Exhibition was staged at the Hilton Hotel in Melbourne during 24-29 September 1989. The event attracted 396 registrants and 42 exhibitors occupying 51 exhibition booths, this was despite the protracted airline pilots' strike at the time. Seventy five (75) technical papers were presented under the theme "Prediction with Precision". The event showed a profit of \$68,,000, after payment of publication costs and reimbursement of seed funding to the Federal Executive.

Co-Chairmen Tom Eadie and Peter Grant and their Committee are congratulated for staging a highly successful event. They submitted a comprehensive report on the conference to the Federal Executive in February 1990.

SYDNEY '91 (17-21 February 1991)

The 8th ASEG Conference and Technical Exhibition will be a joint meeting with the Geological Society of Australia at the Sydney Convention and Exhibition Centre at Darling Harbour. This will be the first joint geophysical/geological conference held in Australia and will be the premier Australian geoscience meeting for 1991.

Co-Chairmen Wes Jamieson and Tim Pippett are leading a very capable committee to organise this the biggest exploration geoscience meeting ever seen in Australia. Planning is well underway and present indications suggest that more than 100 exhibition booths will be occupied by a wide variety of exhibitors offering services to the exploration industry.

Gold Coast '92 (September/October 1992)

The 9th ASEG Conference and Technical Exhibition will be held at Conrad's Hilton/Jupiter's Casino on the Gold Coast, Queensland, in 1992. Barry Long is presently organising a committee for this event. Final date will be set shortly.

General CAC Matters

I am pleased to report that during the year the CAC produced the ASEG's first comprehensive Conference Guidelines Manual. It contains vital information like the timing of activities during a conference planning period and summarizes the wealth of experience gained from all previous conferences. The manual also records important conference statistics. It is presently being updated with the results of Melbourne '89 and the revised edition will be available late March 1990.

The CAC is a very active committee. We have maintained constant communication with the current conference organising committees and the Federal Executive. The CAC role as a continuous link with past and future conferences and the Federal Executive has proved to be both essential and beneficial in order to maintain and develop a high level of professionalism in the content and conduct of the ASEG's premier event.

ASEG STUDENT/ACADEMIC LIAISON COMMITTEE REPORT

By B J Evans

The draft Charter has been circulated to all members of the Committee. The initial response was favourable, with the exception that some Committee Members felt there was excessive emphasis on industry involvement and that geophysics teaching should be broader ranging. The Charter will be finalised in the not too distant future.

SEG PROFESSIONAL AFFAIRS COMMITTEE REPORT

By L.N. Ingall

There has been nothing more to report since the activities report presented in Preview Number 22 dated October 1989.

TECHNICAL STANDARDS COMMITTEE REPORT

By P G Wilkes

Items under current consideration by this committee are:

- Radiometric calibration pads and test areas.
- ASEG-GDF format for located data tapes for airborne geophysical data.

Items we expect to include in future work are:

- Standards for transfer of data on optical discs
- Standards for transferring gridded data files
- Calibration facilities for resistivity logging

Paul Wilkes took over as Chairman of this committee in February 1990.

Detail:

RADIOMETRIC CALIBRATION FACILITIES:

A sub-committee comprising:

Bruce Dickson CSIRO, Sydney
Brian Minty BMR, Canberra
Don Pridmore World Geoscience, Perth

Steve Webster Austirex, Sydney
Paul Wilkes ECS, Perth

was formed after the 1988 Adelaide ASEG Conference. The brief was to conduct a feasibility study to consider and make recommendations to establish radiometric calibration facilities in Australia, suitable for airborne gamma-ray spectrometers. This sub-committee produced a draft report which was presented at the 1989 ASEG conference in Melbourne. The summary from this report is reproduced here:

SUMMARY -

"This report contains recommendations for establishing radiometric calibration facilities in Australia. These are required in order to produce more accurate radiometric maps, to facilitate making composite radiometric maps from multiple surveys and for testing improved instrumentation.

The facilities proposed are:

 Two sets of transportable calibration pads suitable for calibrating ground and airborne sectrometers. One set comprises 4 pads each 1 m x 1 m x 0.3 m. Test strips which can be overflown by geophysical aircraft. These strips would be sampled geochemically and by calibrated ground spectrometers to determine the concentration of Potassium, Uranium and Thorium.

Measurements over the pads provide accurate stripping ratios required for data processing and comparison data between different systems. The test strips provide height correction coefficients, and sensitivity figures to relate counts recorded at survey altitude to concentrations of Potassium, Uranium and Thorium in the ground.

Two sets of pads are proposed. One set should be located at Jandakot Airport, Perth and the second set at an airport in Eastern Australia, probably Canberra or a Sydney airport (Bankstown?).

The pads should be purchased ready made from Canada. The total costs of purchase, transportation and positioning of the pads should be approximately \$30,000 -\$35,000."

This report was favourably received and may receive financial support from BMR and the various State Geological Surveys. Alternative sources of funding are also being canvassed, eg. AMIRA. In the meantime, Aerodata has recently purchased a set of pads and these have recently arrived in Perth. ASEG may wish to consider purchasing these from Aerodata and providing a service to users of airborne and ground spectrometers. We recommend purchase of a second set for use in eastern Australia, to be located either in Canberra (BMR) or Sydney. Current price for one set is Can\$11,000.

The second phase of the proposal is to establish dynamic test strips which can be overflown by geophysical aircraft. These strips require ground spectrometer measurements and geochemical sampling to establish ground concentrations of Potassium, Uranium and Thorium.

ASEG-GDF FORMAT LOCATED DATA TAPES:

Various users require the use of this format but its use appears to be rather small at present. It appears that the various suppliers of these tapes do not produce identical formats!

We need to review various standards for located data tapes and recommend whether we continue with ASEG-GDF format.

RESEARCH FOUNDATION REPORT

By R J Smith

The ASEG Research Foundation formally came into existence when an inaugural committee meeting was held on September 25, 1989 during the Melbourne ASEG Conference. A committee has been formed, consisting of:

| R.J. Smith | Chairman | |
|---------------|-----------|--|
| J. Cucuzza | Secretary | |
| N. Hungerford | Treasurer | |

S. Mudge

D. King

P. Gunn

J. Denham

D.W. Emerson

P.K. Fullagar

S. Hearn

B.J.J. Embleton

E.A. Howell

D. Boyd

P.W. Priest

Although formal application was made to the Australian Tax Office in Canberra requesting acceptance as an Approved Research Institute, and this acceptance has been approved by CSIRO (the accrediting organisation) we still have no response from the ATO. We do not expect any further problems and final approval should be forthcoming in the near future.

A request for donations to the ASEG Research Foundation was attached to the ASEG Subscription renewal form sent out late in 1989. The initial response has been encouraging and several hundred dollars have been received so far. When final approval of ARI status is received, approaches will be made to companies for more substantial donations. The ASEG itself is expected to support us financially and we also expect significant support from some other professional societies.

It is now too late to establish the type of support that we plan for future years, in 1990. Nevertheless, if approval from the ATO is granted in the near future, and if significant funds can be gathered then some minor support could be initiated in 1990. The major unknown before us is the amount of tangible (financial) support we can attract. Moral support is in plentiful supply but we must soon test the real commitment of our supporters.

Approaches have been made to SEG, AIMM and SADME, since tax deductibility is not an issue with these groups. AIMM have declined to support us as they are channelling support into scholarships. SEG and SADME have not formally replied but their response is not encouraging.

THE DAY THE EARTH SHOOK

(Reprinted with kind permission, GeoNews. Article by G. Rockett, cartoon by S Hudson)

At 2.40 pm on January 24, 1990 an earthquake shook the small town of Meckering, 150 km east of Perth. The quake measured 5.5 on the Richter scale, with a focus 5.75 km below the surface. The epicentre was estimated to be 10 km SSW of the townsite. The Meckering area has been monitored continuously since the disastrous quake of 1968, and small movements have been common place but the recent quake was the most significant to date. Although in the order of 50 times smaller than the 1968 quake, the disturbance was still very noticeable in Perth.

The recent earthquake was the same magnitude as the Newcastle quake on December 28, 1989 yet nowhere near as damaging. One reason suggested for this is the different rock densities. Newcastle lies on loosely consolidated alluvium, whereas Meckering is on grantie. The epicentre for the Newcastle quake was estimated to have been directly beneath the Central Business District. There is uncertainty in this estimate because the nearest seismograph to Newcastle was in Sydney, over 100 km away. As no movement had been recorded in the Newcastle area since 1925, a seismograph had not been installed!

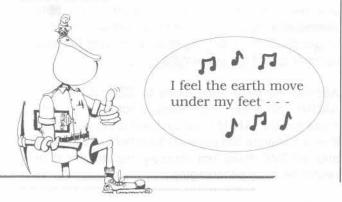
In the Department of Geology at the University of Western Australia, the Meckering quake was felt strongly by people on the first and second floors.

The Museum's siesmograph recorded the earthquake and copies of the seismogram are available from the Curator.

Other seismograms available from the Museum are for the:

San Francisco quake 18/10/89 Solomon Islands quake 28/10/89 Japan quake 2/11/89

A copy of the Newcastle earthquake seismogram recorded by the Adelaide Seismic Observatory is also available.



SOUTHERN GEOSCIENCE CONSULTANTS

8 Kearns Crescent, Ardross, Western Australia 6153

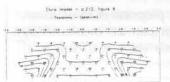
PC-IP AN INTERACTIVE DIPOLE-DIPOLE MODELLING PROGRAM

***** PC-IP *****

The software is based on Rijo's finite element algorithm.

Features of the software include:

- ☐ interactive operation
- ☐ model input via polygon vertices
- ☐ multiple bodies of arbitrary cross section
- ☐ allows topographic variations
- □ screen/printer pseudosections of apparent resistivity, pfe and metal factor
- Output xyz files in a format suitable for input to SURFER (Golden Software) for contouring etc.
- ☐ runs on any IBM compatible with 640k RAM available
- run times are less than 3 minutes on a 386 machine with a math co-processor
- ☐ multiple help screens
- ☐ full colour





The software is available as a single machine licence (\$1,800) or a multiple machine licence (\$5,500).

Examples of simple models from the Elura Volume are shown in the accompanying figures.

Enquiries should be directed to:

Southern Geoscience Consultants

Tel: (09) 364 2707

(09) 364 7693

Fax: (09) 316 1624

ASEG RESEARCH FOUNDATION

PRESS RELEASE

The Australian Society of Exploration Geophysicists (ASEG) has formed the ASEG Research Foundation to boost Australian research into exploration geophysics.

Funds are to be raised by donations from individuals, companies and professional societies (eg ASEG) and will be used to support graduate studies in exploration geophysics, primarily at B.Sc. Hons or M.Sc. level, in Australian tertiary institutions. Mr Bob Smith, Chairman of the Research Foundation, said that this is a level at which funding is difficult to obtain and yet where support is necessary if such research is to continue.

He added that research funds will go directly to support projects in order to maintain aplied objectives and hence make them more useful to industry.

The ASEG Research Foundation has recently become an Approved Research Institute, as defined by Income Tax Assessment Act 573A and all donations to the Foundation of \$2.00 or more, are now tax deductible.

Some donations have been received already and they will be more actively sought now that tax deductibility is assured.

Mr Smith said, "We anticipate that the leverage obtained in this way will have considerable impact. We aim to attract and keep good students in exploration geophysics and at the same time ensure that they attempt worthwhile and practical research projects of direct interest to industry. Extra funding available thorugh the ASEG Research Foundation should enhance the value of the projects undertaken.

Further to those names published in the February issue of Preview, the following people/organisations have contributed to the ASEG Research Foundation:

- J.I. Denham
- CSIRO Division of Exploration Geoscience
- G. Thomas

We thank you for your support.

NEWS RELEASE

NEW NAME FOR INTERNATIONAL SEISMIC GROUP

Horizon Exploration Limited, the international seismic contractor and a member of the Simon Group, is to be renamed Simon-Horizon Limited.

The change of name, which takes effect from 1 January 1990, reflects the positive links between Horizon's worldwide operations and other group companies.

From the same date, most of Horizon's overseas operations and joint ventures will also be using the Simon-Horizon name and all will trade under the common umbrella of Simon Geophysical Services.

In the USA, Geo-Search Corporation of Midland and Dallas, Texas which has been a Simon company since 1985, will merge with the Horizon subsidiary HEX Inc of Houston, Texas. The merged company, to be called Simon-Horizon Inc, will provide an integrated US based seismic acquisition and processing company with access to the additional resources of both Simon-Horizon Ltd and the Simon Group.

Employing some 7,500 people and with sales of about \$1,000 million, the Simon Group supplies specialised equipment, process engineering and technical services to industries and utilities throughout the world.

Further information:

Mr T Peploe
Simon Horizon Ltd
Horizon House
Azalea Drive
Swanley Kent BR8 8JR
England
Tel: 0322 68011

Fax: 0322 61350

LETTERS

Letter from R B Kirk, BHP Petroleum to G J Street, former President, ASEG in response to his article 'Geoscience in Schools'.

Dear Sir

I read your recent article with interest - it echoes thoughts that have been bothering me.

I think the idea of a State Committee is a good one and I would be interested in helping in the following capacity.

I envisage something along the lines of two or three 'roving teams' in each State. One team would be petroleum oriented, one mineral oriented and one engineering/groundwater etc. My main interest is in petroleum and this team would send to secondary schools:

- a geophysicist
- a geologist
- a reservoir engineer(?)

Each person would give a talk, which <u>must include</u> some hands-on experience. A drill bit, core cuttings with microscope, forams, oil-in-a-bottle, seismic records, a geophone, seismic lines to 'interpret' in class etc, should be provided to let the students get involved. Companies such as BHPP, have audio visuals which could be used - such as the Jabiru and Challis developments.

Each team would visit several schools and teacher feedback would be required to monitor, and adjust the presentation where necessary.

With respect to "Job Guide" what about including a phone number next time to the President who will then direct the enquiry to appropriate members to talk to students.

Letter from S Nixon, Managing Director, Earth Resource Mapping to A Heath, Preview Editor

Dear Ms Heath

This is just a short note to thank you for including the highlight regarding Earth Resource Mapping sponsorship of the ASEG Preview, February 1990, on the front cover.

We have already received positive feedback from advertising in Preview.

A Reply to R Henderson, from M Asten and J Denham, Guest Editors, Exploration Geophysics, on the Melbourne Conference Issue of Exploration Geophysics

Mr Henderson (Preview, February 1990) expresses surprise that the conference issue (Exploration Geophysics, Vol. 20, nos 1/2) contains so many half-page abstracts, and blank pages. He is correct in his assumption that the issue was intended to contain "only refereed papers" and that is precisely what occurred for the 61 papers included. Where papers submitted did not meet editorial standards, publishing deadlines or referees critiques (14 papers) the short abstract was included and identified as such in the list of contents to ensure that future bibliographical indices would correctly distinguish between the two groups.

The use of expanded abstracts was excluded for the same policy reasons outlined by Mr Henderson. It is open to debate whether the short abstracts should be swept to the back of the conference issue, or published separately, but the view of the committee was that conference attendees and potential readers would be better served by a single volume which categorized papers by subject.

The occasional blank pages result from the use of separate double-sided pages for each published paper, a procedure which has the dual advantage of facilitating typesetting due to each paper being a separate entity and facilitating the production of variable reprint orders for the separate papers.

Production of a text-book on the model of "Proceedings of Exploration 87" would have been nice, but a corresponding two-year delay in publication of the Conference Issue may have generated alternative concerns.

We firmly believe that conference issues should continue to be issues of Exploration Geophysics, provided the level of refereeing used for the Adelaide (1987) and Melbourne (1989) conferences is maintained. A review of back issues of Exploration Geophysics shows that its strength lies in the conference issues; much material from industry published under the incentives and deadlines of a conference would not (does not) see publication elsewhere.

We agree with Mr Henderson's observation on the desireability of numbering advertising pages separately from indexed contents. This is normal practice in Exploration Geophysics (see eg. September 1989 and December 1988 issues) but was not followed in the conference issue due to a printer's error.

MEMBERSHIP

We welcome new members who have joined the Society:

| Member | Category | State |
|-------------------------------|-----------|----------|
| Christiaan Buechner | Student | NSW |
| Steven Pickering | Associate | WA |
| Troy Peters | Associate | QLD |
| Olusoga Adepoju | Student | NSW |
| Michael Dentith | Associate | WA |
| Campbell Mackey | Student | WA |
| V Rao Kunduri Active - Canada | | 0 100 10 |

Unknown addresses

We do not have the correct addresses for the following members. Can you help?

Brian Milner

last known address:

Schnabel Engineering Richmond Virginia

USA

Lindsay Horn last known address:

CSR Petroleum Ltd

Brisbane QLD

Branch Transfers

Roger Clifton (transferred from QLD Branch)

new address:

WA School of Mines

PO Box 597

Kalgoorlie WA 6430 Tel: 090 220 145

David Tucker (transferred from ACT Branch)

new address:

PO Box 305

Eastwood SA 5063

Bruce Preston (transferred from NSW Branch)

new address:

c/- Jarden Morgan Aust.

Level 29

Riverside Centre 123 Eagle Street Brisbane QLD 4000

Change of Address

Bruce Finlayson

new address:

14 Greer Street

Hyde Park SA 5061

Anita Heath

new address:

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