



AUSTRALIAN SOCIETY OF EXPLORATION GEOPHYSICISTS

P.O.Box 44, Eastwood, S.A., 5063

APRIL, 1986. No.3

*** PREVIEW ***

(ASEG NEWSLETTER)

EDITORIAL

The start of a new ASEG year and the end of an old one, this is the month of AGM's when the existing officers step down and other members take on the task of running the Society at both Branch and Federal level. The task although a fulfilling one is also demanding one and I opine that any member who takes up an active office in the ASEG at either Branch or Federal level deserves the esteem of the members at large. It is done in a purely voluntary capacity and there are few rewards except for self satisfaction.

The recent Federal Executive in particular deserve recognition for the work that they have put in over the last 12-18 months. It is the first time the Executive has been operated out of Sydney. There have been a number of teething problems and difficulties involved in achieving this not the least of which has been the operation of the Secretariat. In addition to this there have been problems associated with the production of our prime publication "Exploration Geophysics" which have been shared by other societies using Blackwell Scientific Publications Pty. Ltd.. The Executive has managed to overcome these problems and has paved the way for a healthy and prosperous Society over the next few years.

Officers on the Executive who deserve special recognition are: Reg Nelson (SADME) who has been President for the last two years overseeing the move from Sydney and bringing in many innovations into the ASEG committee structure and liaison with the Branches, Reg also was the prime mover in organising a joint ASEG/SEG Convention for 1988 which is almost at the Contract stage; Terry Crabb (SADME) who in addition to a demanding job and a new member in the family took on the position of Treasurer, an onerous and responsible position, but if this was not enough he also sacrificed some of his sleeping hours to take on Chairman of the Publications Committee; Don Emerson (Prof. Sydney Univ.) has been a tireless Editor of the Bulletin for yet another year and has maintained the high standard of the publication which he has developed over recent years; a special commendation in particular should be afforded Andy James (Schlumberger) who took on the enormous task of Business Manager and has put a great deal of time and effort into this position.

It is timely to inform members that there will be an editorial change to the Newsletter. Reg Nelson will become the new Editor and I consider a very able one. Members can look forward to an increase in the number of newsworthy items over the next few months. Sections of the Newsletter which members should consider contributing to are Letters to the Editor, and appropriate articles on the different aspects of the Industry. Contractors and suppliers are particularly encouraged to use Preview as an advertising medium. It is produced monthly and is a direct link to other members of the Society including Overseas members.

The recent downturn in the Oil, Nickel, and Tin prices and the steady lethargy in the demand for base metals does not bode well for Exploration Geophysicists but it is hoped that Administrators do not take the short sighted view of sacking staff. Good technical people are hard to come by and develop their skills over a long period of time it is therefore recommended that professional people be maintained on staff until the next upturn which is very close at hand.

A look at future ASEG activities brings closer the 1987 ASEG Conference in Perth next February. This will be held shortly after the America's Cup Yacht Race it is therefore suggested that members book early. There will be many tourists staying on to look at the wild flowers after the race. It is imminent that a joint ASEG/SEG Convention will be held in Adelaide in 1988. In conjunction with the Bicentennial Year this promises to be a big event. Particular attention is drawn to the Branch activities which are on going and usually very enjoyable.

To finish the present Editor wishes all members a successful and prosperous year.

Peter Elliott.

ANNUAL GENERAL MEETING

The Annual General Meeting was held on Thursday, 10th April. The meeting itself saw a very poor turn up which must reflect the complete confidence in the Executive Committee. The Dinner which followed after the AGM was on the other hand very well attended. It was fairly informal and enjoyed by most who were present.

The following members were elected as officers of the new committee:

President:	Bob Smith (CRA)
1st Vice President:	Peter Elliott (Billiton)
2nd Vice President:	Paul Hummel (Norpac)
Secretary:	Terry Crabb (SADME)
Treasurer:	Ian Edwards (WMC)
Editor:	Don Emerson (Univ. Sydney)
Standards Committee:	John Haigh (SADME)
Asst. Secretary:	Andy McGee (Delhi)

Reg Nelson will continue on the committee as Immediate Past President.

The SA Branch held their Annual General Meeting during the Annual Dinner immediately following the Federal AGM, this is reported in Branch News.

*** BRANCH NEWS ***

South Australian Branch

The SA Branch AGM was held immediately after the Federal AGM and during the Annual Dinner. The main business was followed by a guest speaker who gave the members a commentary on some geophysical and more aptly neophysical horse races. The speaker would have approached the record for squeezing the most words into thirty minutes. The new executive elected were:

President:	Nick Sheard (CEC)
Secretary:	Nick Dunstan (SADME)
Treasurer:	Chris Anderson (CRA)

The next meeting of the Branch will be on the 7th May, starting at 5.30 pm in the AMF Annexe. The guest speaker will be R. Logan from I.P.S. in Brisbane. He will speak on "Image Processing in Geophysical Exploration."

West Australian Branch

The WA Branch held their AGM on the 18th March. The guest speaker at the meeting was Greg Street, WA Mines Dept. who gave an in depth view of the preparations for the 1987 ASEG Conference.

West Australian Branch (cont.)

The new Executive elected at the AGM are:

President: Noel Mattocks (Tesla-10)
Vice President: Andrew Mutton (Consultant)
Secretary: Anita Jones (Woodside)
Treasurer: Bill Peters (Consultant)

WA Branch Technical Meetings

On behalf of the Branch members thanks go to Dr. Geoff Dixon (G.O. Dixon & Assoc.); Bob Bacon (Landmark Graphics Corp.), and to Dr. Harry Seigel (President-Scintrex). Talks provided by them were all well attended. Special thanks are passed to Scintrex for wining and dining over 20 members after Dr. Seigel's two excellent presentations.

The following are forthcoming meetings of the WA Branch:

29th April: 5.00 pm WA Mines Dept. theatrette
Speaker: Prof. Don Russell, University of British Columbia
Subject: "Theory and practice Of modern fluxgate magnetometers."

8th May: 5.00 pm WA Mines Dept. theatrette
Speaker: Steve Tobin, Geosystems
Subject: "High Resolution Seismic for the Minerals Market."
—— Open Forum

29th May 12.15 pm WA Mines Dept. theatrette
Speaker: Neville Beston, Woodside
Subject: "Reservoir geological modelling of the North Rankin Field."

*** Special Announcement ***

Graham Sands Award

Cheques received so far this award are:

Timmins Geophysics Pty. Ltd.	\$500-00
TESLA-10	\$500-00
A.O. Rankin	\$50-00

The total thus received so far is \$1050-00.

Members are encouraged to contribute to this Award in memory of Graham. Please send cheques payable to the ASEG-Sands A/C.G.P.O. Box F369, Perth, W.A., 6001.

Queensland Branch

The Queensland Branch AGM was held on April 16th. The following members were elected into office:

President: Steve Hearn (Velocity Data)
Vice-Pres.: Randell Taylor (CSR)
Secretary: Russell Cuthbertson (Geol. Surv. Qnsld)
Treasurer: Ken Jenkinson (Velocity Data)

Meetings are held every 2 months on the second Wednesday of the month. The next meeting will be held in June.

Tasmanian Branch

An end-of year meeting was held in December at which the existing Executive agreed to go on for the following year. The continuing Executive are:

President/Treasurer: Bob Richardson (Tas. Geol. Surv.)
Secretary: David Leaman (Leaman Geophysics)

Meetings are held approximately every month.

Victorian Branch

The Victorian Branch AGM was held on the 17th April. The new Executive elected at the meeting are:

President: Tom Eadie (Aberfoyle)
Vice Pres.: Eric Allison (Shell)
Secretary: Mick Micenko (Texas Gas)
Treasurer: Lindsay Thomas (Univ. Melbourne)

The sub-committee on Downhole EM chaired by Tom Eadie is presently putting together the short papers derived from a seminar held last December which is ear-marked for Vol 17.No.3 of the Bulletin (Exploration Geophysics).

New South Wales Branch

The NSW Branch AGM is due to be held on the 24th April. The members nominated

New South Wales Branch (cont.)

for the Executive are:

President: Andrew James (Schlumberger)
Secretary: Cameron Blyth (Canada NW Oil)
Treasurer: Steve Webster (NSW Geol. Surv.)

The Branch has held some very successful meetings and has got off to a good start after its inauguration.

ACT Branch

The ACT (Australian Capital Territory) Branch held their AGM on 17th April. The new Executive elected at the meeting are:

President: Steve Mudge (Goldfields)
Secretary: Bruce Goleby (EMR)
Treasurer: Tim Barton (EMR)
PESA Rep.: Mike Bradshaw (EMR)
Vice Pres.: Mike Sexton (EMR)
Educ. Off.: Tim Muirhead

*** ANNOUNCEMENTS ***

Workshop Fourier Seismic Methods

A workshop on Fourier Seismic Methods is being organized for 15-16 May, 1986. Interested persons should contact Assoc. Professor Harvey Holmes, School of Electrical Engineering and Computer Science, University of New South Wales, Box 1, Kensington, N.S.W. 2033. Tel. (02) 697 4033 or (020 697 4000 (messages).

Metronix Agency

Metronix GmbH would like to hear from groups interested in acting as agent for their magnetotelluric (MT) systems. Their Manager, Dr. Rüdiger Karmann, formed the company 10 years ago after completing his Doctorate in Electrical Engineering. His dissertation, at the Braunschweig Technical University, was on the optimization of MT sensors. Metronix is now one of the world's leading manufacturers of MT equipment, widely used to explore for oil and gas, deep minerals and geothermal resources. Interested parties are asked to contact Dr. Karmann at Metronix, Petzvalstrasse 36a, D-3300 Braunschweig, West Germany.

AUSGRAPH 86 - Computer Graphics for Exploration and Mapping

The Ausgraph conference and exhibition on Computer Graphics, now in its fourth year, has an unparalleled record of bringing new developments and technical updates to Australian professionals. The Ausgraph '86 Conference, to be held in Sydney from July 7-11, will consist of ten professional programs each specially designed to cover a particular field of professional interest.

For further details see the enclosed brochure.

*** COMING EVENTS ***

ASEG - 5th Geophysical Conference and Exhibition

The 5th Geophysical Conference and Exhibition will be held in Perth during 22-26 February, 1987. Members are reminded that intending speakers should have their 300 word summary into the technical papers committee by June 30th, 1986. Abstracts should be sent to Perth '87 Conference, Technical papers Committee, G.P.O. Box F369, Perth, 6001, W.A..

SEG - 56th Annual International Meeting and Exposition

The 56th AIME will be held in Houston, Texas, November 2-6, 1986.

*** OTHER EVENTS ***

- * Third International Conference on Geoscience Information, 1-6 June Adelaide, S.A.. 1986.
- * EAEG - 48th Meeting and Technical Exhibition, 3-6 June 1986, Oostende, Belgium.
- * AMPLA - 10th Annual Conference, 9-12 July, 1986, Melbourne, Victoria.
- * Geocongress '86 - An International Earth Science Congress, 7-11 July, 1986. Johannesburg, South Africa.
- * ANZAAS - 56th ANZAAS Congress, "Science in a changing Society", Palmerston North, New Zealand. 26-30 January, 1987.
- * Pacific Rim Congress '87 - The Geological Structure, Mineralization, and Economics of the Pacific Rim, Gold Coast, Australia, 26-29 August, 1987.
- * Exploration '87 - Third Decennial International Conference on Geophysical and Geochemical Exploration for Minerals and Groundwater, Toronto, Canada, Sept. 27-Oct. 1, 1987. (see page 9).
- * Bicentennial Gold 88 - Australia's first International Convention on the Geology of Gold Deposits, 16-20 May, 1988. Melbourne, Victoria.

*** EXTRA ***

Department of Mines and Energy, NT

The Northern Territory Geological Survey now has available the results of its Petermann airborne survey, flown in 1985 by Austirex International Ltd.. The area covered consists of six 1:100,000 mapsheets between Latitudes 24° 30' and 26° 00', and Longitudes 129° 00'/130° 00'. Flightlines were N-S, with lines spacing 500m and a mean terrain clearance of 100m. Members interested in obtaining TMI magnetic contours or stacked profiles should contact: Northern Territory Geological Survey, G.P.O. Box 2901, Darwin NT 5794. Tel. (089) 81 5844.

There are now some 37 1:100 000 NTGS airborne survey mapsheets, covering: Litchfield Province, Litchfield South, Barrow Creek, Huckitta, Huckitta East, Kulgera, and Petermann.

SA Branch Meetings

May 7	"Image Processing in Geophysical Exploration", R. Logan I.P.S. (Brisbane)
June 11	Quiz Night
June ?	"EM Modelling", Prof. G.W. Hohman, University of Utah
August 13	Panel Discussion and open forum on new geophysical techniques
October 8	To be advised.
November 19	Student's Night
December 10	Christmas Party
February 11	S.A. Abstracts for ASEG Perth Conference-Dry Run.

****28th International Geological Congress ****

Call for symposium topics for 28th International Geological Congress. To be held in Washington D.C., U.S.A. 9-19 July, 1989. Members should forward suggestions for Symposium topics to: P.O. Box 1001, Herndon, VA 22070, U.S.A..
Telex: 248418. Tel. (703) 860-6418.



Prospection **РАЗВЕДКА**
Exploration 87
Exploracion **勘探**

Toronto, Canada, September 27 to October 1, 1987

222 Snidercroft Rd, Concord, Ontario, Canada L4K 1B5
or reply directly to:

NEWS RELEASE

Following conferences held in Niagara Falls and Ottawa in 1967 and 1977 which were attended by delegates from about 70 countries, the Canadian mineral exploration community is pleased to announce that plans are well underway for:

**Third Decennial International
Conference on Geophysical and
Geochemical Exploration for
Minerals and Groundwater**

**Toronto, Canada,
September 27 to October 1, 1987**

The following subjects, among others, will be addressed in seminars and poster displays:

1. The state-of-art in exploration geophysical and geochemical methods, instrumentation, data processing and interpretation.
2. The application of geophysics and geochemistry in mineral, groundwater and geothermal exploration, particularly as illustrated by case histories.
3. Exploration in the future.

An exhibition of the latest exploration instrumentation and services will be held. Other activities include a field training school, the opportunity of visiting several instrument manufacturing and service companies, and social events and tourism, in particular the opportunity of visiting Niagara Falls and the Ontario Science Centre.

To express preliminary interest in attending, exhibiting or presenting a technical paper, please write to Exploration '87, c/o 222 Snidercroft Road, Concord, Ontario, Canada, L4K 1B5

Third Decennial International Conference on Geophysical and Geochemical Exploration for Minerals and Groundwater

Committees: General Chairman, Harold O. Seigel; Exhibits, John R. Needham; Publicity, Jon G. Baird; Local Arrangements, Laurie E. Reed; Secretary-Treasurer, Roger Barlow.
Technical Program: Chairman, Norman R. Paterson; Publications, George D. Garland; Geophysics, Gordon West; Geochemistry, Ian Nichol; Case Histories, Arthur G. Darnley; Field School, Dave Jones.

PACIFIC RIM



CONGRESS 87

AN INTERNATIONAL
CONGRESS ON THE GEOLOGY STRUCTURE,
MINERALIZATION AND ECONOMICS
OF THE PACIFIC RIM.

CALL FOR PAPERS

Gold Coast, Australia
26-29 August 1987

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AUSTRALIA
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JOINT UNSW-CSIRO WORKSHOP ON
FOURIER SEISMIC METHODS
15TH-16TH MAY, 1986

PRELIMINARY PROGRAM

Session	Topic	Presenter
1	Review of 2D Fourier transform theory.	Dr J.F. Price, School of Mathematics, UNSW.
2	A Fourier description of some image reconstruction techniques, including tomography and holography.	Mr Glynn Rogers, CSIRO Division of Radiographics.
3	Deconvolution methods in seismology.	Assoc. Prof. Harvey Holmes, School of Electrical Engineering & Computer Science, UNSW.
4	Seismic Inversion, including Born inversion and diffraction tomography.	Dr Steve Edwards, School of Earth Sciences, Monash University, and Ms Jeanne Young, School of Earth Sciences, Macquarie University.
5	Seismic Migration.	Dr Peter Buchen, Department of Applied Mathematics, Sydney University.
6	Stacking, spatial filtering, and beamforming.	Assoc. Prof. Harvey Holmes, and Mr R.D. Dowle, School of Electrical Engineering & Computer Science, UNSW.
7	Image Reconstruction in In-Seam Seismology.	Dr Peter Hornby, ACIRL Ltd.
8	General Discussion.	