IEEE
NEW SOUTH WALES SECTION
ANNUAL REPORT

IEEE REGION 10 MEETING

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NEW SOUTH WALES SECTION, AUSTRALIA

THE INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS INC

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OFFICERS OF THE IEEE NEW SOUTH WALES SECTION 2003

2002 SECTION COMMITTEE

Chairman:	Andrew PARFITT
Vice-Chairman:	Graeme GWILLIAM
Secretary:	David BURGER
Treasurer:	David TIEN
Past-Chairman:	Trevor BIRD
Membership Development:	Bruce POON
Awards Chair:	Jim VASSELEU
Fellow Search:	Walter LACHS
Newsletter Editor:	Trevor BIRD
Student Activities:	Stephanie BOYD
Professional Activities:	Demetrios (Jim) LOGOTHETIS
Educational Activities:	Karu ESSELLE
Historian:	Ramutis (Zak) ZAKAREVICIUS
Nominations Committee	Trevor BIRD (Chair), Ramutis (Zak) ZAKAREVICIUS, Bruce POON
Committee Members:	Stefan MOZAR, Sam REISENFELD, Ian BOYD, Kate CARRUTHERS, All Chapter Chairmen (*ex-officio*)
Section Webmaster:	Jon AGNEW

2003 CHAPTER COMMITTEES

Computer Chapter

Chairman:	Stephanie BOYD
Vice-Chairman:	Kate MELNIK
Secretary/Treasurer:	Ian BOYD
Committee Members:	Stefan MOZAR, Phil CRAWFORD, Sean HE

Communications/Signal Processing Joint Chapter

Chairman:	Ollencia D'SOUZA

Microwave Theory Techniques/Antennas Propagation Joint Chapter

Chairman:	Trevor BIRD
Vice-Chairman:	Andrew PARFITT
Secretary:	Karu ESSELLE
Treasurer:	Graham TOWN
Committee Members:	Tim AUBRY, Alan McPHAIL

Power Engineering Chapter

Chairman:	Graeme GWILLIAM
Vice-Chairman:	Mark EDMUNDS
Secretary:	Antony ZAGLAS
Treasurer:	Dan CANDOTTI

Committee Members: Alex BAICH, Trevor BLACKBURN, John KAYE, Vic MORGAN, Hue OUTHRED, Walter LACHS, Jim LOGOTHETIS, Vic MORGAN, John ROBINSON, S. SATHIAKUMAR, Jim VASSELEU, Joseph ZHU

Industrial Applications/Power Electronics/Industrial Electronics Joint Chapter

Chairman: Faz RAHMAN

Circuits & Systems/Solid-State Circuits Joint Chapter

Chairman: Steven DUVALL
Secretary: Andre van SCHAIK

2002 AFFINITY GROUPS

Life Member

Chairman: Jim VASSELEU

GOLD

Chairman: Filita BARKER

PART A – SECTION SUMMARY

A.1 Executive Summary

Highlights of the year 2002 were:

- A GOLD Affinity Group was formed.
- Free Student Membership provided to over 200 new student members.
- Rejuvenation of the Circuits & Systems/Solid State Circuits joint Chapter.
- Installation of the new web site and its continued development.
- Celebration of the 30th anniversary of the formation of the Section.

A.2 Financial Summary

The Section remains in a sound financial position and this has enabled the Section Committee to undertake several new projects, some of which are reported below. On the negative side, the profit anticipated from PICA 2001 did not eventuate and, at the time this report was prepared, auditing of the accounts have not yet been completed.

PART B – ORGANISATION ACTIVITIES

B.1 Membership & Membership Development

At the end of 2001, the membership statistics for the New South Wales Section showed 2542 Active Members. This number consisted of 14 Fellows, 116 Senior Members, 37 Life Members, 331 Students and 257 Affiliates. The latest membership figure available for 30 October 2002 shows 2400 Members, which is 158 up on the number at the same time last year. This number consists of 12 Fellows, 124 Senior Members, 38 Life Members (includes Life Fellows, Senior Members and Members), 592 Students and 208 Affiliates. While the total number of Members is about the same as last year, Senior Member numbers are up 6% and Student numbers are up by a massive 62%, due mainly to the Section's initiative of funding a number of new Student memberships (see B.4 below).

Three new IEEE Fellows were elected from NSW in 2002.

B.2 Professional and Continuing Education Activities and Conferences

The Section has once again worked closely with kindred professional societies, the IEAust. and IEE. In many respects, NSW has shown how the existing tripartite agreement between IEEE, IE Aust and IEE can operate not only in spirit but also in practice. Joint technical meetings with these institutions contribute to the promotion of professional and continuing education activities. The Section plays an active role in the development and implementation of the lecture program and, in 2002, it contributed four of the sixteen lectures. Once again we were represented on the Professional Engineers Promotion (PEP) committee, for which the major event is National Engineering Week, held this year from 14 to 21 July. For the first time, the Section contributed $1,000 to help finance the event. We also arranged the speaker for the Harricks address that launches Engineering Week. Prof. Ron Ekers of CSIRO spoke on "Space exploration and the future of radio astronomy – A square kilometer array".

The President of the Sydney Division of the Institution of Engineers Australia, Bruce Howard, and the Honorary Secretary, John Gebler, were present at the Section's 30th anniversary dinner, which was held in

September (see below). Their attendance at this event symbolised the excellent relationship that exists with sister Institutions in NSW.

The NSW Section was a technical co-sponsor of the First International Conference on Information Technology and Applications (ICITA 2002), held in Bathurst from 24 to 28 November 2002.

B.3 Recognized Educational Programs

At the end of 2001, New South Wales universities that offer electrical engineering, electronics, applied science and computer science were asked to provide details of courses for continuing accreditation by IEEE. Unfortunately, little response was received. This lack of response is of concern because much of the data available on courses is out of date or irrelevant and future accreditation could be in doubt. We will need to contact all universities in 2003 to obtain the required course information.

The Education Committee is continuing to develop an information package on Electrical Engineering as a career for distribution to school and university students in New South Wales. Some of the material in the package is being obtained locally but the majority will be obtained from the IEEE and its Societies. We have approached the Sydney Division of IE Aust. to work with us on this project.

B.4 Students Activities

As an initiative to promote IEEE in New South Wales, the Section Committee agreed in March to fund about 200 new Student members in 2002. The offer was open for two weeks in May to student members in approved courses. The call for applications was organized by the Student Counsellor, David Tien, with the help of an academic staff member at universities in New South Wales. When applications closed at the end of May, about 220 applications had been received. Unlike other similar schemes, a follow-up strategy is planned to assist the students make the transition from Student to full Member.

David Tien commenced a process of improving contacts between the Section and the Student Chapters which will be continued in 2003 by Stephanie Boyd.

David Pollum, a postgraduate student at the University of Wollongong, was selected by the Section to represent it at the first Region 10 Student Congress that was organized by the Singapore Student Chapter from 17 to 21 July 2002. The aims of the Congress, which is intended to be an annual event, are to exchange ideas, to encourage student participation in IEEE and to develop a student network in Region 10. David brought back many useful insights and suggestions from the Congress that were reported at the August Committee Meeting.

Two new Student Chapters are in the process of being formed, at Charles Sturt University, Bathurst, and at Macquarie University.

The Section offers the Max Simons award for the best student paper submitted from New South Wales to the IEEE Australia Council Best Paper competition. In 2002, the Max Simons award went to Mr Yuehe Ge, a postgraduate student of Macquarie University, for his paper entitled "Efficient Analysis of Microstrip Circuits Using New Closed-Form Green's Functions".

The Section gave an award for the best student studying for the Advanced Certificate in Information Technology, Networking at the TAFE North Sydney Institute. The Chair gave an address at the student graduation on 25 June and presented this year’s award to Gavin Amm.

Bruce Poon once again attended the Marist Brothers, Parramatta, Careers Day on 4 September for promoting the profession and representing IEEE.

B.5 E-mail and Newsletter Activities, Home Page

Three newsletters (*Circuit*) were mailed to all Section members in 2002. The newsletters were also posted on the Section Web page by the Webmaster, Jon Agnew. During the year, *Circuit* was given a face lift with the addition of more local and IEEE news, photos and advertising.

Jon Agnew has completely upgraded the Section web site (http://ewh.ieee.org/r10/nsw) and it now has a very professional appearance. The web site gives easy access to Section information including upcoming events and the history of the Section.

During the year we have notified members via *Circuit* that, from 2003, *Circuit* will be mailed to only those members requesting a printed copy or those who do not have email access. However, recently the Committee decided to mail one issue per year at mid-year to correspond with the call for Section committee nominations. This decision resulted from the experiences of some other IEEE Sections which already have electronic newsletters. All members with email will be notified when the newsletter is available on the web.

The first email version of *Circuit* was issued in February 2003.

B.6 IEEE Awards to Members

The NSW Section Secretary, Andrew Parfitt, was awarded an outstanding volunteer award by Region 10. Andrew has provided over thirteen years' service to the South Australia and New South Wales Sections. He was presented with a certificate at the April Committee meeting.

In response to suggestions from IEEE Region 10, the Section has decided to establish the NSW Section Outstanding Volunteer Award(s). The most outstanding volunteer would become the Section's nominee for the corresponding Region 10 award. The conditions are the same as for the Region 10 award. The Awards and Nominations Committee has selected Bruce Poon to be the first recipient of this award.

On Friday 27 September, the NSW Section celebrated its thirtieth anniversary with a dinner at the Royal Sydney Yacht Squadron, Kirribilli. Plaques were presented to members who have served continuously on the Section Committee for ten years or more. These members were: Bruce Poon, Sam Reisenfeld, Ramutis (Zak) Zakarevicius, John Robinson, Walter Lachs, Jim Logothetis and Jim Vasseleu.

B.7 Chapter & Affinity Group Activities

Most Chapters were active during the year, holding activities such as lectures, seminars and workshops, and utilising IEEE Distinguished Lecturers on some occasions.

The future of the NSW Chapter for Circuits & Systems/Solid State Circuits was in doubt until early this year, as no meeting has been held since its formation in early 2000. As a result of an article in the February issue of *Circuit* regarding possible delisting, Steven Duvall agreed to Chair the Chapter in 2002. A Committee was formed and two events were held during the year.

A GOLD (graduates of the last decade) affinity group has now been formed in NSW. The Coordinator of the GOLD Affinity Group, Filita Barker, received notification of this from Cecelia Jankowski, Managing Director, IEEE Regional Activities. Ms Jankowski wrote, "On behalf of the IEEE Executive Director, Dan Senese, it is a pleasure to inform you that the requirements of the IEEE Bylaws have been met, and the Graduates Of the Last Decade Affinity Group of the New South Wales Section has been formed. The effective formation date of this Affinity Group is 16 April, 2002."

The first function of the GOLD Affinity Group was a dinner held on Friday, 1 November, at the Duxton Hotel, North Sydney, which was attended by 21 people.

B.8 Organization

In 2002, the NSW Section Committee met on the first Monday of each month from February through to November, with the exception of September and October when we met on the second Monday.

The Section Committee worked on three main goals in 2002. The first was to reinvigorate activities at the Student member and recent graduate stage. This has achieved through sponsoring a number of new student memberships and also the establishment of GOLD. However, this work will need to continue in the 2003 to make gains from these initiatives. The second goal was to improve communications to Section members. Some progress has been made in this with improvements to *Circuit* and the Section web site. The third goal was to develop a long-term strategy for the Section. While some progress towards this goal has been made, there is still much to be done.

A number of goals were suggested in the Chair's report at the 2001 AGM. Progress against these goals is summarised below.

Area	**Goal**	**Progress to Date**
Major Conferences	Plan to hold at least one major International Conference in Sydney every year.	One conference planned in 2004.
Seminars & Workshops	Attract more IEEE Distinguished Lecturers to Sydney.	5 Distinguished Lecturers in Sydney in 2002.
Affinity Groups	Establish a GOLD affinity group and have at least two successful meetings.	Completed.
Education and Professional Activities	Prepare a CDROM promoting the profession and IEEE for distribution to schools and universities.	About 10% complete.
Students' Activities	Revitalise the activities of our existing Student branches and recruit 100 new Student Members.	Revitalisation in early stage. Over 200 new Student Members in 2002.
Senior Grade Membership	Upgrade ten Members to Senior grade in 2002.	Eight additional Senior Members.
Engineering Management Society	Submit a petition to establish this new chapter.	Not done.
Chapter Activities	Encourage greater Chapter activity through a range of new initiatives.	Little progress. Modest Chapter activity only.
E-mail and Newsletter Activities, Home Page	Work towards placing all member communications on the Section website.	Substantially complete.
Long Range Planning and Finances	Develop a long-term strategy for the Section for providing better member activities and services.	Commenced.

The Section Chairman represented the Section at the 2002 Region 10 Meeting of Sections and Council Chairs that was held at Grand Hyatt Erawan Bangkok hotel, Thailand, from 5 to 6 April 2002.

He was also the Section's primary delegate at the 2002 Sections Congress "Creating a Global Community" which was held at the J.W. Marriott Hotel, Pennsylvania Avenue, Washington DC, from Friday 18 to Monday 21 October. Unlike previous Sections Congresses, this year it featured both

administrative officer training and leadership training for the delegates. On the Sunday, the Regions met to develop four recommendations each for bringing to the plenary Sections meeting on the Monday. These recommendations were voted on by the Primary Delegates, of which there were about 250. Based on what he heard during the Congress, the Chair made several recommendations to the Section Committee for achieving best practice. These are:

1. The NSW Section should create a Senior Member upgrade committee.

2. The Section revise its by-laws in 2003.

3. The Chair of the Nominations Committee should be the immediate past-Chair of the Section.
4. The Section immediately introduce the NSW Section Outstanding Volunteer Award(s). (Adopted at November meeting.)

5. We vary our proposed approach in 2003 to the introduction of an electronic newsletter to have mostly electronic newsletter. Have one mail-out per year in mid-year to correspond with a call for Section committee nominations. All members with email to be notified when the newsletter is available on the web. (Adopted at November meeting.)

6. The Section create a position of Section Historian. The purpose of this role will be to keep key records, fill in any gaps of detail and maintain the Section History on the web site.

7. The NSW Section consider establishing a Sister Section Agreement with another Section.

The Section Committee has recommended to IEEE Headquarters that the NSW Hunter Valley Sub-section be delisted due to an inability to form an active committee in the Hunter.

During the year, Tim Hesketh resigned from the Section Committee.

PART C- GOALS AND PLANS FOR 2003

C.1 Goals

Notwithstanding the continuing activities identified in B.8 above, the Section Executive Committee has started the year with the aim of identifying key issues that need to be addressed in the next 12 months. In a “brainstorming” session at the first committee meeting, the following issues were identified:

- Complete the CD ROM promotional material project
- Enhance student councilor links with Universities and with student branches.
- High school career material distribution
- Joint seminar/Joint University functions
- Senior Member promotion
- Review section by-laws – 3 year review.
- Plan joint conferences between chapters
- Promote distinguished lecturers
- Industrial liaison / vacational experience programs
- Enhance membership services including job advertising
- Consider a consultants exchange program
- Mutual incentives, marketing material, cross-program discounts
- Establish linkages with Australian Computer Society and others
- Look at non-student branch University interaction
- Improve student paper awards coordination / networking, student model contest
- Bid for major international conference
- Media commentary exposure (expert media commentary)
- Cross fertilization with other institutions and IEEE groups
- Establish an annual IEEE Conference exhibition

- Improve IEEE Section – newsletter exchange
- Professional recognition program
- Establish a Sister Section relationship

C.2 Detailed Implementation Plans

The Section Executive Committee is currently prioritizing the above issues with a view to tackling a number of them in the near term.

A new task group has been established to progress the completion of the CD ROM to be used for the promotion of Electrical Engineering and Computer Science in NSW.

C.3 Budget

Due to the changeover in the Section Treasurer position, no budget is currently available. However, it is anticipated that the operating budget will not differ significantly from that of 2002, with the exception of funds being set aside to address the priority items that will be identified in the process of C.2.

PART D – OTHER

D.1 Relationship with National Societies

The Joint Membership Agreement, which was signed in August 1998 between The Institution of Engineers, Australia (IEAust), the Institute of Electrical Engineers UK (IEE) and IEEE, is being revised with the intention of having a new agreement in place early in 2003.

D.2 Special Events

On Friday 27 September, the NSW Section celebrated its thirtieth anniversary with a dinner at the Royal Sydney Yacht Squadron, Kirribilli.

D.3 Problems to be Anticipated

None.

A.J. Parfitt

28 February 2003