IEEE New South Wales Section

192nd Executive Committee Meeting Agenda

Date:	Monday 04 April 2005
Time:	7.00pm – 9.00pm
Place:	Northern Sydney Institute of TAFE, Gore Hill Campus, Room AG20

The entrance is off Westbourne Avenue St Leonards, running east off the Pacific Highway. Enter via the staff gate, advise security guard over the intercom that you are attending an IEEE meeting in A-block. Enter Block A behind the cafeteria building.

AGENDA, Draft Resolutions

Page Nos

APOLOGIES
Apologies will be received by David Tien, Secretary, email dtien@csu.edu.au (before 5pm, 1 April) or phone/SMS 04 05 212 291 (after 2 April).

***1. STARRING OF ITEMS**
Items 5, 6, 11.5 and 12.2 are already starred. The Secretary will receive requests for the starring of additional items.

that the unstarred items on the agenda for the meeting of the Executive Committee held on Monday 07 March 2005 be adopted.

2. MINUTES OF PREVIOUS MEETING
pg 4 - 7 ***to adopt the minutes of the 191st Executive Committee Meeting held on Monday, 07 March 2005 as a correct record.***

3. BUSINESS ARISING FROM THE MINUTES
to be received.

4. CORRESPONDENCE
to be received.

***5. TREASURER'S REPORT**

5.1 Budget summary

acceptance of the report.

5.2 Future Auditing policy

Motion: to RECOMMEND TO THE SECTION COMMITTEE that the Section account auditing will be replaced by internal auditing.

***6. REPORT FROM THE PRESIDING OFFICER**
to receive the report from the Presiding Officer.

7. CIRCUIT REPORT
to be received.

8. COMMITTEE REPORTS (to be received)

8.1 FELLOW SEARCH
8.2 MEMBERSHIP DEVELOPMENT

8.3 PROFESSIONAL ACTIVITIES
8.4 FELLOW SEARCH
8.5 EDUCATIONAL ACTIVITIES
8.6 FELLOW SEARCH
8.7 STUDENT ACTIVITIES
8.8 AWARDS AND RECOGNITION
8.9 NOMINATIONS
8.10 HISTORIAN

9. AFFINITY GROUPS (to be received)

9.1 GOLD AFFINITY GROUP
9.2 LIFE MEMBER ACTIVITIES

10. CHAPTER REPORTS (to be received)

10.1 COMPUTER
10.2 ANTENNAS & PROPAGATION / MICROWAVE THEORY & TECHNIQUES
10.3 COMMUNICATIONS/SIGNAL PROCESSING
10.4 POWER ENGINEERING
10.5 POWER ELECTRONICS / INDUSTRIAL APPLICATIONS / INDUSTRIAL ELECTRONICS
10.6 CIRCUITS AND SYSTEMS/SOLID STATE CIRCUITS

11. CONFERENCES (report to be received)

11.1 ASIAN CONTROL CONFERENCE 2004 (MELBOURNE)
11.2 IEEE INTERNATIONAL SYMPOSIUM ON SPREAD SPECTRUM TECHNIQUES AND APPLICATIONS 2004 (SYDNEY)
11.3 INTERNATIONAL CONFERENCE IN IT AND APPLICATION (ICITA 2005) (SYDNEY)
11.4 CREATE REALITY: CONFERENCE IN SPACIAL INFORMATION (CRCSI 2007)
*11.5 REQUEST: CONFERENCE SUPPORT
Sam Reisenfeld will present details at the meeting.

12. OTHER BUSINESS

12.1 Chapter finance
Motion: to RECOMMEND TO THE SECTION COMMITTEE that the Treasurer keeps track of the extra income of each Chapter and that unspent extra income be carried to next year.

*12.2 Meeting place for the July meeting [David Tien]
Motion: to RECOMMEND TO THE SECTION COMMITTEE that the September Meeting (Sunday morning 6th November 2005) be held at Charles Sturt University in Bathurst.

12.3 A note of thanks
the Committee would like to thank Stephanie for her kindness in setting up a Coffee corner during the meetings.

13. FOR YOUR INFORMATION

13.1 Meeting place for the July meeting [David Tien]
due to the holiday closure of TAFE, the 4th July meeting will be held in Chinatown, details to be announced.

14. URGENT BUSINESS

Members wishing to introduce items of urgent business should discuss the items with the Secretary or Presiding Officer prior to the meeting.

15. NEXT MEETING

The next meeting of the IEEE Executive Committee will be held on Monday 02 May 2005, at 7.00pm Northern Sydney Institute of TAFE, Gore Hill Campus, Room AG20**.**

The agenda closing date is 5pm of the previous working day before the meeting. (29 April 2005).

IEEE EXECUTIVE COMMITTEE DISTRIBUTION LIST FOR AGENDAS

IEEE NSW SECTION EXECUTIVE COMMITTEE

Current Membership 21

QUORUM 7

MEMBERS

Graeme Gwilliam	Chair
David Burger	Vice Chair / Presiding Officer (while Chair is away)
David Tien	Secretary
Ian Boyd	Treasurer
Trevor Bird	Nominations
Stephanie Boyd	Chair Computer Chapter / Student Activities
Karu Esselle	Educational Activities
Eddie Fong	Circuit Editor
Walter Lachs	Fellow Search
Jim Logothetis	Professional Activities
Stefan Mozar	Member
Lakshmi Narasimhan	Member
Bruce Poon	Membership Development
Faz Rahman	Power Elec/Indust. Elec/Indust. Applic Chapter Chair
Sam Reisenfeld	Comms/SigProc Chapter Chair
John Robinson	PES Chapter Treasurer
Ananda Sanagavarapu	Member
Graham Town	Chair AP/MTT
Jim Vasseleu	Awards and Recognition/Life Members
Sampath S. Windsor	Gold Affinity Group Chair
Ramutis Zakarevicius	Historian

IEEE New South Wales Section

191st Executive Committee Meeting

Minutes of the 191st Executive Committee Meeting, Monday, 7 March 2005
Room AG20, North Sydney TAFE, St Leonards, NSW 2065.

PRESENT

Graeme Gwilliam	Chair / Presiding Officer
David Burger	Vice Chair
David Tien	Secretary
Ian Boyd	Treasurer
Trevor Bird	Nominations
Stephanie Boyd	Chair Computer Chapter / Student Activities
Karu Esselle	Educational Activities
Eddie Fong	Circuit Editor
Walter Lachs	Fellow Search
Jim Logothetis	Professional Activities
Sam Reisenfeld	Comms/SigProc Chapter Chair
John Robinson	PES Chapter Treasurer
Ananda Sanagavarapu	Member
Graham Town	Chair AP/MTT
Jim Vasseleu	Awards and Recognition/Life Members
Sampath S. Windsor	Gold Affinity Group Chair
Ramutis Zakarevicius	Historian

APOLOGIES

Stefan Mozar	Member
Bruce Poon	Membership Development
Faz Rahman	Power Elec/Indust. Elec/Indust. Applic Chapter Chair
Ananda Sanagavarapu	Member

ABSENT

Lakshmi Narasimhan	Member

OPENING

The Presiding Officer opened the meeting at 7:00 pm.

MEMBERSHIP

the resignation of Steven Duvall, Ollencio D'Souza, Mark Edmunds, Philip Ogunbona, and Anthony Zaglas from the IEEE NSW Section Executive Committee was noted.

Ananda Sanagavarapu's membership status of Section Executive Committee was confirmed.

*1. **STARRING OF ITEMS**

Items 4, 5, 6, 11.5 & 12 were starred. The IEEE NSW Section Executive Committee agreed that the unstarred items on the agenda for the meeting of the Executive Committee held on Monday 07 March 2005 be adopted.

2. **MINUTES OF PREVIOUS MEETING**

The IEEE NSW Section Executive Committee agreed that the minutes of the 190th Executive Committee Meeting held on Monday, 07 February 2005 were a correct record.

3. BUSINESS ARISING FROM THE MINUTES

3.1 Attendance and Apologies

- ***Ramutis Zakarevicius was removed from the Present list to the Apologies list.***
- ***Sampath S. Windsor listed in the Apologies list.***

3.2 Item 10.4 PES

- ***change the word "lecturers" to "lectures".***

***4. CORRESPONDENCE**

4.1 Distinguished lecturer: expression of interest received.
Dr Daniel Yeung should contact the relevant Societies, Sections in Australia and and the Australian Council.

4.2 Request for fellow membership upgrade (IEAust)
the Committee advised Professor Lakshmi Narasimhan to contact the local branch of IEAust in Newcastle.

4.3 Request for IEEE senior membership upgrade
request was passed to David Burger to follow up.

4.3 MOU between IEEE and IEAust [David Burger]
matter was reported and will be followed up.

***5. TREASURER'S REPORT**

5.1 Budget summary
the Treasurer circulated the 2005 budget and he highlighted the fact that there is a 10K deficit in the budget. Trevor Bird noted that there has been an "under spending" during the past few years and a project 10K deficit is quite acceptable.

acceptance of the budget: moved Trevor Bird, 2nd David Tien, carried.

5.2 Future Auditing policy
the Treasurer circulated a document pointing out the (1) the high cost of the auditing; (2) no Sections in Australia have their accounts formally audited. suggestions were made to conduct internal auditing in the future or have the accounts audited every 3 years.

this item to remain pending further discussion during the next meeting.

***6. REPORT FROM THE PRESIDING OFFICER**

6.1 Vote on the List of "Issues for NSW Section" (Agenda item 12.2)
the Chair reported that the voting on the list has indicated the need to promote links with other professional organisations; to review by-law; facilitate industrial liaison and improve member service (placing job ad etc).

there is a need to increase our profile through the media by offering our expertise and advice in different EE areas. Suggestions were made to submit a list of people and their areas to different media organisations.

6.2 Financial support for additional delegates to attend R10 meeting (Agenda item 5.3)
Motion: "for meetings (R10 or Section Congress) held outside Australia, the Section will provide a certain amount of funding for a 2nd person to attend. Priority will be given to members of the Executive Committee, providing that the same person is not funded twice in a row." Moved Trevor, 2nd Karu Esselle, carried.

Motion: "to send and fully fund David Burger as the additional delegate to attend R10 meeting in Singapore." Moved Ramutis Zakarevicius, 2nd Trevor, carried.

7. CIRCUIT REPORT

- ***need all to provide their input as an on-going process – the editor needs a month to finalise the Circuit – new due date is 1st June 2005 – the next mail will be sent through the post.***
- ***handling and promotion process for Circuit – effort is needed to go out and get advertising in and hence generate extra income for the Committee.***
- ***the Committee expressed thanks to the editor for his excellent work. Moved by Jim Vasseleu, seconded by David Tien, carried.***

8. COMMITTEE REPORTS

8.1 FELLOW SEARCH

no report.

8.2 MEMBERSHIP DEVELOPMENT

- ***report received from Bruce.***
- ***now only active members are listed***

8.3 PROFESSIONAL ACTIVITIES

- ***Jim Logothetis reported that there will be 4 Joint meetings each year. However, there is a concern regarding the low turn out rate.***
- ***the Committee needs new blood and support, there are only 3 people in the committee.***
- ***there is a need to involve schools in Engineering Week – call for volunteers to speak to schools.***

8.4 EDUCATIONAL ACTIVITIES

Karu: Convert CD programme into a student project, there is a need to promote engineering to combat the decline of engineering graduates.

8.5 STUDENT ACTIVITIES

Stephanie: free membership programme has received 6 applications so far only and 30 March is the deadline.

8.6 AWARDS AND RECOGNITION

none of the nominations we submitted were successful.

8.7 NOMINATIONS

no report.

8.8 HISTORIAN

no report.

9. AFFINITY GROUPS

9.1 GOLD AFFINITY GROUP

- ***Sampath (chair): problem with forming a committee – will contact them, current members: 333***
- ***Hope to have more activities organised***
- ***A list of the activities and budget request will be given during the next meeting.***

9.2 LIFE MEMBER ACTIVITIES

there are four new life members bring the total to 46.

10. CHAPTER REPORTS

10.1 COMPUTER

no report.

10.2 ANTENNAS & PROPAGATION / MICROWAVE THEORY & TECHNIQUES

- ***Graham Town (Chair), David Burger (Secretary), chair has requested the inclusion of details of 2004 Chapter report in the minutes (please see attached page 8-9).***

- ***A note of thanks was expressed by Graham Town to Karu for his management during Graham's sabbatical leave.***

10.3 COMMUNICATIONS/SIGNAL PROCESSING
a lecture on speech processing was given.

10.4 POWER ENGINEERING
no report.

10.5 POWER ELECTRONICS / INDUSTRIAL APPLICATIONS / INDUSTRIAL ELECTRONICS
The following report has been received via the email from Faz Rahman:

- ***Faz Rahman (Chair) will not be able to attend the meeting on Mondays this session because of his lecture commitment.***
- ***Members currently serving are: Trevor Blackburn (UNSW), Mahmood Nagrial (UWS) and the Committee is seeking expression of interest for joining the Chapter committee from all members in the Chapter.***
- ***DL: Fax has requested the following IEEE DLs to visit Sydney and Australia: Professor T. Jahns (University of Wisconsin, USA), Professor Alfio Consoli (University of Catania, Italy) and Professor B. K. Bose (University of Tennessee, USA). Although none has given a confirmed date, Professor Consoli has agreed to come here as a DL some time during this year, Professor Jahns has indicated June/July 2005, and Bose in 2006.***
- ***SCVB is helping the Chair to lodge a bid for the IAS Annual conference in Sydney in 2010. It has already discussed the matter of this bid with other interested academics in Australia. An early bid is to be sent this month, followed, possibly, by a presentation of the bid by me at the IAS conference in October 2005 in Hong Kong..***

10.6 CIRCUITS AND SYSTEMS/SOLID STATE CIRCUITS

- ***IEEE student branch was also s sponsor for the meeting of February 23's talk. (speaker: Professor Petru Eles from Linkoping University, Sweden; topic: "Analysis and optimisation of distributed real-time embedded systems)***

11. CONFERENCES

11.1 ASIAN CONTROL CONFERENCE 2004 (MELBOURNE)
the Committee is waiting for financial report .

11.2 IEEE INTERNATIONAL SYMPOSIUM ON SPREAD SPECTRUM TECHNIQUES AND APPLICATIONS 2004 (SYDNEY)
the Committee is waiting for financial report .

11.3 INTERNATIONAL CONFERENCE IN IT AND APPLICATION (ICITA 2005) (SYDNEY)
no report .

11.4 CREATE REALITY: CONFERENCE ON SPACIAL INFORMATION (CRCSI 2007)
no report .

*11.5 REQUEST: CONFERENCE SUPPORT
Sam Reisenfeld will present details at the next meeting.

12. OTHER BUSINESS

*12.1 Chapter finance [by Graham Town]
the issue of chapter finance will be further discussed during the next meeting. The case regarding APS/MTT chapter has been taken out of the agenda.

13. FOR YOUR INFORMATION

13.1 Joint Electrical Branch / YEAS lecture [David Burger]
listed on the Event Calendar, IEEE logo can be used.

14. URGENT BUSINESS

There was no urgent business.

15. NEXT MEETING

The next meeting of the IEEE Executive Committee will be held on Monday 04 April 2005, at 7.00pm Northern Sydney Institute of TAFE, Gore Hill Campus, Room AG20**.**

The agenda closing date is 5pm of the previous working day before the meeting. (1 April 2005).

CLOSURE

There being no further business, the Presiding Officer declared the meeting closed at 9:01pm.

Signed as a true and correct record:

_____ / /

Presiding Officer Date

IEEE NSW Section

Antennas & Propagation / Microwave Theory & Techniques Joint Chapter

Report of Activities in 2004

Committee:

Chairman: A/Prof Graham Town
Vice Chairman: Dr Andrew Parfitt
Secretary/Treasurer: A/Prof. Karu Esselle
Members: Dr Tim Aubrey, A/Prof Tony Parker, Dr Trevor Bird

Membership

As at November 2004 there was a total of 79 members of the AP and MTT Societies in New South Wales, including 2 Associate Members, 10 Student Members, 52 Members, 8 Senior Members, 3 Fellows, and 2 Life Members.

Technical Meetings

Three meetings were held in 2004, as follows.

1. CELLULAR BASESTATION ANTENNAS, Dr Bevan Jones – Thursday 25th May 2004.

Increasingly developments in cellular basestation antennas are being driven by the difficulty and cost of acquiring antenna sites and by increasing traffic densities. These factors have lead to a need for antenna features such as polarization diversity, adjustable electrical downtilt, reduced passive intermodulation , multiband operation and case-by-case special solutions. This talk will cover some of the design challenges and techniques used to achieve these features in basestation antennas.

Attendance: 15 members 18 Non-members

2. OPTICAL FEED FOR MICROWAVE ANTENNAS, Professor Tibor Bercelli - Tuesday 21st September 2004.

The combination of optical and microwave techniques offers new approaches for feeding microwave antennas. That is made possible by the very high bandwidth of the optical devices and the very low attenuation of the optical fibre. The new approaches give new and advantageous features. The lecture will provide a survey of the new optical methods for microwave antennas feeders. The main applications are in antenna remoting and phased arrays.

Attendance: 10 members 21 Non-members

3. EMERGING ISSUES WITH MILLIMETRE-WAVE DEVICES FOR TELECOMMUNICATIONS APPLICATIONS, Dr Jim Rathmell & Mr Peter Blockley (for A/Prof Tony Parker) – Thursday 28th October 2004.

The GaAs integrated circuit sector typically utilises external foundry facilities that fabricate devices according to a specific (usually proprietary) transistor technology. Circuits are designed to suit that technology to meet criteria critical to market need. The criteria, which depend of the application,

include low noise generation for receiving weak signals, high efficiency for transmitting high-power signals, and high linearity to reduce distortion. The number of foundries is limited, so improvements and cost reduction to meet market needs can only be met by extracting the best performance from the technology on offer at the time.

For small-signal applications, distortion and intermodulation is involved and is complicated by effects over a full spectrum of frequencies. This presentation will outline recent work that has investigated the nature of the frequency dependence of distortion and its impact in broadband applications. Issues for large-signal applications include transistor instability, which produces an unusable operating region usually at the high-currents and low-voltage, and breakdown, which is often poorly modelled. These problems are exacerbated in large devices used for high-power application and transistors used for millimetre-wave frequencies. This presentation will review these problems and avenues of investigation to overcome them.

Attendance: approx. 10 members 15 Non-members

Three technical meetings are currently scheduled for 2005.

General

I thank the speakers in 2004 and the Chapter Committee, particularly A/Prof Karu Esselle for his assistance during my extended absence in the second half of the year.

Graham E. Town
Chair

10th January 2005