



## Australian Acoustical Society

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A.C.N. 000 712 658

NEW SOUTH WALES DIVISION

# NOTICE OF 2012 ANNUAL GENERAL MEETING

The 42<sup>nd</sup> Annual General Meeting (AGM) of the NSW Division of the Australian Acoustical Society will be held on **Tuesday 30 October 2012** commencing at 6:30pm sharp at **National Acoustics Laboratory, 126 Greville Street, Chatswood**. This will be followed by a technical talk by Marion Burgess.

The minutes of the 41<sup>st</sup> AGM (2011), and the chairperson's report are attached. The audited accounts and auditor's report will be tabled at the meeting.

## AGENDA

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- 1 Opening
  - 2 Apologies
  - 3 Proxies
  - 4 Minutes of 2011 AGM
  - 5 Business
    - 5.1 Chairman's report
    - 5.2 Treasurer/Registrar's report
    - 5.3 Appointment of Auditor and Remuneration
  - 6 Election of five members to serve on the NSW Division Committee
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### 1. VOTING RIGHTS

Persons holding the grade of Fellow or Member have full voting rights, except they are not permitted to vote at the election of Associate, Subscriber or Student members to the Division Committee.

Persons holding the grade of Associate, Subscriber or Student may only (except as hereinafter provided) vote to elect not more than two of their numbers to the Division Committee. Associates, Subscribers or Student members serving on the Division Committee shall be entitled to vote at any General Meeting of the Society or their Division.

Votes may be submitted by Proxy and a Proxy Form is enclosed herewith. Please note the conditions of lodgement. Persons must be financial at the time of the AGM.

### 2. NOTICES OF MOTIONS OR BUSINESS

No motion or business other than the business brought forward by the Division shall come before the meeting unless notice thereof is received in writing at least 21 days beforehand.

### 3. NSW DIVISION COMMITTEE

Committee members who are up for retirement after serving two years are as follows:

Neil Gross**	Federal Councillor, Technical Subcommittee
Najah Ishac**	Technical Subcommittee
Rodney Stevens**	Treasurer
Nicole Kessissoglou**	Technical Subcommittee, Acoustics Australia Representative
Matthew Harrison**	Chairman

Committee members whose term will expire in 2013 are as follows:

Tracy Gowen	Vice-Chairman, Federal Councillor
Warwick Williams	Technical Subcommittee
Laura Allison	Secretary, Minutes Secretary, Members Representative
Jeff Parnell	Technical Subcommittee
John Wasserman	Technical Subcommittee

The members tagged \*\* have indicated that they are available for re-election.

If you wish to nominate somebody for election, please complete the attached Nomination Form and returned it to our Secretary by **Friday, 26<sup>th</sup> October 2012**. Nominations may also be made at the AGM.

*Laura Allison*  
*Secretary, NSW Division*  
*Australian Acoustical Society*  
*c/- AECOM*  
*Level 21, 420 George Street*  
*SYDNEY NSW 2000*  
*Fax: (02) 8934 0001*  
*Email: [Laura.Allison@aecom.com](mailto:Laura.Allison@aecom.com)*

### NOMINATION FORM 2012

I, .....of Grade.....

Nominate..... of Grade .....

to stand for election as a Committee member for a two year period from November 2012.

The person I am nominating has agreed to stand for election.

Signed.....Date.....

### PROXY FORM 2012

I, .....of.....

being a Fellow/Member of the Australian Acoustical Society, hereby appoint

.....of.....

as my Proxy to vote for me on my behalf at the Annual General Meeting of the NSW Division to be held on Tuesday 30<sup>th</sup> October 2012 at 6:30 pm and at any adjournment thereof.

Signed .....Date.....

To be valid, Proxy Forms must be forwarded to the Secretary, NSW Division AAS, c/- Laura Allison, AECOM, Level 12, 420 George Street SYDNEY NSW 2000 [Fax: (02) 8934 0001] by Friday, 26 October 2012. Proxy Forms can also be given to the Secretary or her representative at the meeting place before the commencement of the meeting.

# Chairperson's Report

## 2011- 2012

This report is presented for consideration at the NSW Division Annual General Meeting - 30<sup>th</sup> October 2012.

### 1. Division Committee

There are currently 10 members of the committee, which means that the committee is at its 10 person maximum. If, however, you are interested in being part of the committee and feel that you have something to offer, please make yourself know one of the Committee members. We might just be able to find a place for you!

At present the committee is structured as follows:

- Matthew Harrison                      Chairman,
- Tracy Gowen                              Vice-Chairman, Federal Councillor
- Laura Allison                             Secretary, Minutes Secretary, Membership Grading
- Neil Gross                                 Federal Councillor, Technical Subcommittee
- Rodney Stevens                         Treasurer
- Nicole Kessissoglou                     Acoustics Australia Rep, Technical Convenor
- Jeff Parnell                                Technical Convenor
- John Wasserman                         Technical Subcommittee
- Najah Ishac                                Technical Subcommittee
- Warwick Williams                        Technical Subcommittee

The major work of the committee during this year has been:

- Organising and running the technical program, thanks mainly to Tracy Gowen, Nicole Kessissoglou and Jeff Parnell for an excellent program over the last 12 months.
- Regular membership/administration issues.
- Award of the NSW Student Travel Award to 6 students to attend the AAS 2012 conference in Perth in November of this year. These students are:
  - Hongjian Wu
  - Michael Coats
  - Manuj Yadav
  - Noel Hanna
  - Jian Chen
  - Joel Mortimer
- Award of the AAS NSW Acoustics Prize to the best undergraduate student in the Macquarie University's Audiology course.

## 2. Technical / Social Activities

There were seven technical meetings held in Sydney.

### 27th October 2011 **Bridge maintenance and repair – can you see the light?**

**Joon-Pil Hwang** ('JP') of **SLR Consulting**, gave a

This presentation describes a method of quantifying physical damage to a pin mounting plate critical to a lifting span of a bridge. The results form the basis of subsequent nonlinear finite element analysis in order to assess the stresses at the pin/plate joint interface plane. The quantification of deformation to the mounting plate was carried out by use of 'white light scanning' techniques, which are especially beneficial in accurate, in-situ determination of contact conditions between the deformed plate and the bearing pins. This would have been difficult to investigate using traditional methods. The finite element (FE) models were then used to assess changes to the loading conditions in both the pins as well as the plate. Changes to the loading conditions as a result of the observed damage were identified and stresses within the pins and plate were quantified using the FE models. The results of this study were then used to determine the most appropriate course of action in terms of repairs and maintenance work.

1st November 2011 **Acoustic Seminar on Properties and applications of micro-perforated materials** presented by German acoustician **Dr. Christian Nocke** with key focus on micro – perforated materials including **Barrisol** acoustic finishes. In his presentation, Dr. Nocke outlined the theoretical background of micro-perforated materials and the application of these to stretch membrane materials. He also detailed the sound absorption coefficient results of various laboratory based tests with micro-perforated stretch membranes he has conducted (with & without additional acoustic materials) and finally presented some examples of room acoustics before and after the installation of micro-perforated ceiling and wall membranes.

### 1st December 2011 **Meeting Noise & Vibration Requirements for Cruise Ship Propellers – From Predictions to Full-Scale Trials** by **Dr Roger Kinns**

Modern cruise ships have demanding requirements for noise and vibration, while having maximum speeds that can exceed 25 knots. Accommodation for as many as 3,000 passengers extends the full length of the ship and it is common to have principal dining and recreation areas directly above the propellers. Accurate prediction of noise and vibration due to cavitating propellers is key to a successful design. Although podded electric motors with tractor propellers have been used, conventional twin-screw layouts have considerable attractions in terms of cost and maintainability. The propellers then operate in a flow that is disturbed by shafts and their support brackets. Increasingly sophisticated numerical models of hull and propeller characteristics are complemented by model-scale measurements in towing tanks and cavitation tunnels. In this talk, full-scale measurements during sea trials was compared with predictions for

twin-screw ships, including a case where propeller rotation direction was changed during the service life of a ship to improve the vibration environment at high speeds.

22<sup>nd</sup> February 2012 **Development of the NSW Planning Guidelines: Wind Farms**

**Yolande Stone**, Director of Policy Planning Systems and Reform, NSW Department of Planning and Infrastructure and **Jeff Parnell**, Noise Specialist, **NSW Department of Planning and Infrastructure** (and NSW AAS Committee Member!!) gave a talk on the Draft NSW Planning Guidelines: Wind Farms that have been prepared to ensure effective consultation with local communities and to deliver improved consistency, transparency and rigour in the planning assessment process. The guidelines were prepared in consultation with the community and energy industry to provide a regulatory framework to guide investment in wind farms across NSW, while minimising and avoiding any potential impacts on local communities. Yolande gave an overview of the NSW planning process and how issues such as noise from wind farms become a major priority for the Government. Jeff discussed the science underpinning the draft guidelines and the objective of the document.

20<sup>th</sup> March 2012 **Draft Rail Infrastructure Noise Guideline**

**Paul Maddock**, Noise Policy Section, **Office of Environment and Heritage**, Department of Premier and Cabinet presented on the Draft Rail Infrastructure Noise Guideline (RING). The Interim guideline for the assessment of noise from rail infrastructure projects (IGANRIP) was published in 2007. Its purpose was to assist the ongoing expansion of rail transport by streamlining the approvals process for rail infrastructure projects while ensuring that potential noise and vibration impacts are assessed in a consistent way and minimised as far as possible. RING is an update to IGANRIP. It has been amended to reflect feedback from transport, planning, infrastructure construction and rail industries. Paul provided an overview of the draft guideline and identified the key changes and objectives of the document.

25<sup>th</sup> July 2012 **Vibration Mitigation of a Bridge by use of a Tuned Mass Damper**

**Andrew Parker** and **Joon-Pil Hwang** of **SLR Consulting Australia Pty Ltd** gave a talk on how bridge structures may suffer from greatly amplified dynamic responses due to a range of excitation sources at or near their resonant frequencies. This in turn can cause undesirably high accelerations or displacements of the structure, which can then lead to elevated stresses and potential fatigue problems as well as discomfort to bridge users. Tuned mass dampers (TMDs) are often used in large structures such as tall towers to mitigate their dynamic responses to external excitations such as wind and ground vibration or internal excitations such as footfalls. This presentation discusses a case study of the measurement, modeling and analysis techniques implemented to design a TMD for reducing footfall vibration on a pedestrian/cycle bridge recently opened in Sydney.

25<sup>th</sup> Sept 2012

**Assessing environmental noise compliance of upgrade projects within long-term existing industrial sites** by **Colin Tickell** of **Hatch Associates**

Many large industrial sites have a long historical presence at the same location and regularly upgrade process plant and equipment to maintain economics of their operation. Such upgrades require development approval supported by an EIS and associated studies. Environmental noise can be a significant aspect of some projects or sites because of the nature of their proposed operation or location. The NSW Industrial Noise Policy is the guiding document for identifying environmental noise objectives and for assessing the proposal. Post commissioning, compliance is assessed by identifying the noise contribution from the new plant items and comparing this to the objectives. The rest of the plant on site may contribute higher sound levels in receiver areas. This talk will describe how this has been done for major projects at two sites - BlueScope Steel Port Kembla steelworks, and Boral Berrima Cement Plant. Both companies have operations that have continued at the same sites since the 1930's and have many older items of plant. The talk described how noise objectives were established for new projects whilst existing plant on the sites were operating 24-hours / 7-days per week, how objectives for new plant items were set, and how compliance with the contribution objectives was demonstrated.

The committee is always looking for presenters and topics for the technical talks. If you have any feedback on the technical talks, or any ideas for new topics and more importantly presenters, please let the committee know.

### 3. Membership

The NSW Division Membership numbers for September 2012 and for proceedings years are given in the following table, and show that member numbers are slightly up on last year (13% increase).

	September 2012	September 2011	September 2010
Fellows	10	10	10
Members	196	177	165
Graduates	7	4	3
Associates	12	13	12
Subscribers	8	8	8
Students	13	7	15
<b>TOTAL</b>	<b>249</b>	<b>219</b>	<b>213</b>

### 4. Acoustics Australia

Nicole Kessissoglou (editor) and Tracy Gowen (treasurer) – with some assistance from Marion Burgess as news editor – continue to shine with their sterling efforts in putting out high quality issues of the Acoustic Australia journal.

Acoustics Australia continues to request for articles and technical notes to be submitted by the membership for inclusion in the journal. If members have worked on an interesting project, please consider writing it up for publication as a technical note. In addition, the presenters of the technical talks are encouraged to write up their presentation as a technical note for publication in the journal.

## 5. Awards and Grants

In 2012, the NSW Division awarded the AAS NSW Travel Award to 6 students to attend the AAS 2012 conference in Perth. The amount of each award is \$1200 and is to be spent towards the conference registration fee, travel to and from the conference venue, and accommodation. The successful awardees will provide a short report (up to 300 words) on their experiences at the Conference for the December 2012 issue of the Acoustics Australia journal.

The AAS NSW Division Acoustics Prize was awarded to the best undergraduate student in the CAUD803 Theoretical Bases of Audiology course, Macquarie University.

The award consists of a cash prize of \$250 and one year's subscription to the Australian Acoustical Society. The objectives of this education prize are to encourage undergraduate students into the field of acoustics and provide exposure for the Society at the university prize giving ceremonies.

## 6. ACT Division Activities 2011-2012 – to September 2102

Over the last year there has been a revival of the ACT group activities. The membership has grown and there is now the opportunity to hold viable meetings of the ACT Group as well as arranging for joint meetings with other organisations in the ACT.

**The 84th meeting**, was a joint meeting with the Royal Aeronautical Society and held on 11 October 2011. The topic *Airservices Noise and Flight Path Monitoring System* was presented by Ian McLeod. This was a well attended especially with members from the Aeronautical Society

**The 85th meeting** was a discussion on 18 June 2012 with representatives from ACT EPA Rodney Dix and Jacqui Balazs on *draft guidelines for the preparation of noise management plans* that the ACT Gov is preparing. Following the meeting, a consolidated list of comments was submitted to ACT Gov. This meeting was attended by 15, was considered a worthwhile activity and the ACT Group will be again consulted as the guidelines are developed.

**The 86th meeting** was held on 4 September 2012, attended by 15 and comprised two parts:

*Demonstration of DUO sound level/noise monitor from 01dB* By Steve Plant and Ian Wallbank

*From the Outside Looking In –Thoughts from a Retired Environmental Noise Bureaucrat* presented by David Southgate.



Finally, I would like to take this opportunity to provide a special thank you to the members of the NSW Committee who continue to offer their valuable personal time in running the NSW Division of the Society. Tracy has been particularly generous with her time in organising the Technical Presentations (and making sure we have enough food and drink), and Laura continues to shoulder a major share of the Committee workload in vetting membership applications and fulfilling her responsibilities as Secretary and Nicole still contributes to the committee at a very high level (despite adding a third child to the family).

As in the past, a special thank you also needs to go out to the presenters of the technical meetings. We are keenly aware of the benefit you provide our members.

I'm looking forward to seeing you at the AGM on 30<sup>th</sup> October 2012.

Best regards,

A handwritten signature in black ink, appearing to read 'Matthew Harrison', with a stylized flourish at the end.

Matthew Harrison  
Chairman  
NSW Division - Australian Acoustical Society