

The Melbourne Branch of the Royal Aeronautical Society

Newsletter

March 2011



From the Editor

The effort of volunteers in our profession continues to amaze me, with the success of our endeavours depending on their commitment and drive. On one particular note I would like to thank Luke Webb for his contribution to keeping our members informed about latest news and events.

It has been an amazing experience being part of the Royal Aeronautical Society and taking on the role of editor for Melbourne branch is one of my first achievements for this year. I hope to make this publication increasingly more useful for you in your professional and personal pursuits in aeronautics. As such, I'd be keen to hear your views and ideas .

Due to commitment with Avalon Airshow, this newsletter has been shortened. Next month, we will return with more latest news segments and events happening in Victoria.

You can send in your requests on what you would like us to include in your newsletter and I will be glad to incorporate them.

I wish you all the best.

Warm regards
Amit Menghani

Site Visit — Vote Now

RAeS Melbourne Branch is currently planning its next site visit, and we want your input! Tell us which of the following you'd prefer to visit:

1. GippsAero
2. Avalon Airport
3. Melbourne Airport

Send in your vote to:
raesnewsmelb@gmail.com

March Event

Advanced Composites Technologies for Heavy Lift Launch Vehicles

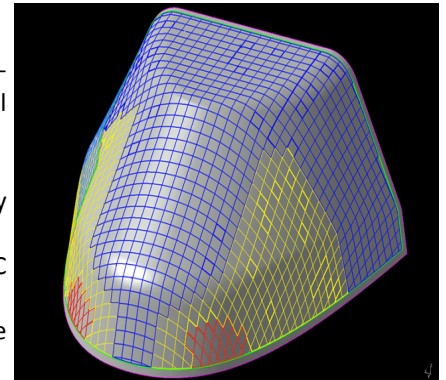
Hosted by: Royal Aeronautical Society Australian Division and College of Mechanical Engineering

Date: 7th March 2011

Time: Please arrive promptly at the facility by 5.30pm for a 6.00pm start

Where: Auditorium, Engineers Australia VIC Division, 21 Bedford St, North Melbourne

RSVP: Registrations required for this free event (see below)



The lecture will be presented by Dr. Mark Shuart, visiting Research Professor from Department of Material Science and Engineering at Virginia Tech. He also maintains a Senior Advisor position at the NASA Langley Research Centre. This presentation will describe the activities and plans for the LSSM Project. See the attached flyer for more details.

Calling all Engineers

Calling all engineers to work with High School Students on Science & Engineering Projects

Engineers Australia is working along with VSSEC to help Year 9 and 10 students take up science, technology and engineering projects as part of the Discover Engineering Program.

This program will enable them to work on various projects related to science and engineering. The training program starts on Wednesday, 6th April 2011 at VSSEC.

To join the program contact Sandra Perrett at Engineers Australia 03 9321 1725 or SPerrett@engineersaustralia.org.au or log on to www.vssec.vic.edu.au

Mr. D. C. Wakeman

The Society has been advised by Ms. Wakeman, that Mr. D. C. Wakeman CEng MRAeS passed away on 28th December 2010. He was 81 years old.

According to the Society's records, he had been a member of the Royal Aeronautical Society for 54 years.

The Branch extends its condolences to his family.

Branch Committee

Chairman: Domenico Lombardo

Hon. Secretary:

Andrew Harrington

Hon. Treasurer: Anthony Patti

Events Manager: Crystal Forrester

Asst. Events Manager: Cynthia Chen

Webmaster: Stratos Patsikatheodorou

Newsletter Editor: Amit Menghani

Membership Secretary:

Sherman Ting

Committee Members:

A/Prof. Cees Bil

Air Cdre Noel Schmidt

Benjamin A. Durance

Karen Trezise

Luke Webb

Contact Details

Post:

C/-Engineers Australia
Suite 201, 21 Bedford St
North Melbourne VIC 3051

Email:

melbournebranch@raes.org.au

Website (Aust. Division):

<http://www.raes.org.au>

Global Website:

<http://www.aerosociety.com>

Opinions expressed in this newsletter do not necessarily represent those of RAeS, the Melbourne Branch or the Editor. Promotion of external events does not imply endorsement by RAeS. Contributions and feedback are welcomed (however we cannot guarantee publication).

Eminent Speaker: Dr Mark Stuart

EMINENT SPEAKER SERIES 2010-2011

Hosted By: COLLEGE OF MECHANICAL ENGINEERING & The ROYAL AERONAUTICAL SOCIETY AUSTRALIAN DIVISION

Dr Mark Stuart

Senior Advisor for Composites & Structures,
NASA Langley Research Center, USA

To RSVP for all sessions:

<http://www.engineersaustralia.org.au/eminentspeaker/>

(Please note there is a \$10 charge for Non-Members to attend these presentations. There is no charge however for RAeS & RAeS Affiliate Members)



Advanced Composites Technologies for Heavy Lift Launch Vehicles

The NASA's Lightweight Spacecraft Structures & Materials (LSSM) Project has the potential to develop composite materials and structures technologies for the largest composite aerospace structures ever made. The objective of the LSSM Project is to develop mid-technology readiness level (TRL) composite materials and structures technologies that would contribute to TRL 6 for specific heavy lift launch vehicle applications. To accomplish this objective, the LSSM Project has three major technical elements: materials and manufacturing; structural concepts development and assessment of lightweight components; and testing and evaluation. The Project uses capabilities from across NASA to form multi-disciplinary, cross-centre teams to meet the milestones of these technical elements.

This presentation will describe the activities and plans for the LSSM Project. Studies from the first execution year of the project will be summarised including results from materials selection and structural concept evaluation studies. Plans for continuing activities include studies for nondestructive evaluation/structural health monitoring, damage tolerance, joints, and material and structural testing, and these studies will be described. A major emphasis this fiscal year is the start of work on manufacturing a demonstration barrel. This structure will be comprised of six 5-m-diameter, 3-m-long curved panels that when assembled, result in a 10-m-diameter barrel. Activities related to the development of this structure will also be described.

Dr Mark Stuart is a Research Professor in the Department of Materials Science and Engineering at Virginia Tech and maintains a Senior Advisor position at the NASA Langley Research Center after various senior management positions at the Center for 32 years. Dr Stuart is an internationally recognised authority on the behaviour of composite materials and structures and has worked on major aircraft structures projects with Boeing, the former McDonnell Douglas and Lockheed-Martin. He has authored a number of publications and given keynote addresses at a number of conferences. He was awarded the NASA Outstanding Leadership Medal for his contributions to structures & materials research and is also an Associate Fellow of the American Institute of Aeronautics and Astronautics.

Mark will also be speaking at the Australian International Aerospace Congress in Melbourne, 28th Feb – 3rd Mar 2011 in Melbourne: www.aiac14.com and the Composites Conference, 16th – 18th Mar 2011 on the Goldcoast: www.compositesconference.com

Supported By:



PRESENTATIONS

Melbourne

Monday 7th March

Adelaide

Tuesday 8th March

Sydney

Wednesday 9th March

Brisbane

Thursday 10th March

Cairns

Friday 11th March

Newcastle

Monday 14th March

Canberra

Tuesday 15th March

Please see the website for all presentation time & venue details.

2010-2011 SERIES SUPPORTING PARTNERS:



Members of Engineers Australia can claim CPD hours for attendance at this event. Members should refer to Engineers Australia's CPD Policy for requirement details and conditions.

If undeliverable return to:

ROYAL AERONAUTICAL SOCIETY
MELBOURNE BRANCH

P.O. Box 6229

St. Kilda Road Central. Vic 3004

Print Post Approved

PP381691/00015



SURFACE
MAIL

POSTAGE
PAID
AUSTRALIA