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**ROYAL
AERONAUTICAL
SOCIETY**

Newsletter

Dedicated to Advancing Aeronautical Art, Science and Engineering

● MELBOURNE BRANCH ISSUE : OCT.

● VOLUME: 10

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Editorial Desk

Well this month will start off with Hargrave Lecture and Dinner on 19th October 2011 by Ian Honnery. He will be sharing his experience and knowledge around the theme of 'Mighty things from small beginnings grow', so be sure to register your seats and get in quick.

We all have worked on projects and we know they don't go well and sometimes we have felt powerless to make any changes. In our upcoming November lecture by David Ostler will highlight the lessons learnt from projects good and bad from a test pilots perspective. Surely it's a lecture not to be missed.

Lastly don't forget about the AGM that is coming up in December, so be sure to attend it and be a part of the Royal Aeronautical Society.

Enjoy the Hargrave lecture and dinner and we look forward to receiving your feedback.

Warm regards
Amit Menghani
Aeronautical Engineer
Young Victorian of the Year 2011

Up coming Lectures

Ian Honnery

Mighty things from small beginnings grow

Date: Wednesday, 19 October 2011

Venue: Rydges Melbourne

Address: 186 Exhibition Street, Melbourne

Time: 6 pm for 6:30 pm start

Registrations required—see page 2 for details.

David Ostler

Lessons learnt from projects good and bad—a test pilot's perspective

Date: Wednesday, 16 November 2011

Venue: Engineers Australia Auditorium

Address: 21 Bedford St, North Melbourne

Time: 6 pm for 6:30 pm start

2011 HARGRAVE LECTURE/DINNER

IAN HONNERY

MIGHTY THINGS FROM SMALL BEGINNINGS GROW

— [WEDNESDAY 19 OCT. 2011] —



**ROYAL
AERONAUTICAL
SOCIETY**

2011 ANNUAL HARGRAVE LECTURE & GALA DINNER

MIGHTY THINGS FROM SMALL BEGINNINGS GROW

Presented by: Ian Honne

Chief Executive of Aerospace Maritime and Defence Foundation of Australia Ltd., Aerospace Australia Ltd., Aviation Development Australia Ltd. and Maritime Australia Ltd.



WEDNESDAY 19 OCTOBER 2011

VENUE: RYDGES MELBOURNE

ADDRESS: 186 EXHIBITION STREET, MELBOURNE

TIME: 6:00 PM FOR A 6:30 PM START



Ian Honnery is Chief Executive, and a member of the Boards, of Aerospace Maritimes and Defence Foundation of Australia Limited and its affiliates, Aerospace Australia Limited, Aviation Development Australia Limited and Maritime Australia Limited. All four companies in the group are not-for-profit organisations established to promote the development of Australia's aviation, aerospace, maritime and defence resources.

A cornerstone activity of the group is the biennial Australian International Airshow and Aerospace & Defence Exposition held at Avalon Airport near Melbourne in Victoria. Ian has been the Chief Executive of the ten shows held since the inaugural event in 1992.

Originally a lawyer by profession, Ian was in private legal practice for 28 years before taking up his current full-time position. He also served in the RAAF Specialist Reserve for 25 years and was an active member of the aero club movement, playing a prominent role in the development of the successful Schofields Flying Club in western Sydney. He is currently chair of the Australian Industry Forum and is a Member of the Australian Institute of Company Directors, a Fellow of the Australian Institute of Management and a Fellow of the Royal Aeronautical Society.

The Annual Hargrave Lecture and Gala Dinner is the highlight of the Royal Aeronautical Society's (Melbourne Branch) calendar. This event is an opportunity to network and get to know other members and industry experts over a delicious three course meal. We encourage payments before the **4th October** at the following prices, to enable us to finalise the number of attendees with the hotel.

Non-members \$80 | EA / RAeS Members \$60 | Students \$45

After this date, registrations will be accepted until **17th October** at the following prices:

Non-members \$85 | EA / RAeS Members \$65 | Students \$50

The event includes:

- Hargrave lecture from 6:30pm to 7:30pm
- Pre-dinner drinks
- 3 course sit down meal including drinks package in private function room from 8:00pm

Registration: Please register by **17th October 2011**

Website Registration: log on to <http://www.engineersaustralia.org.au/divisions/victoria-division/events/>

Contact: Cynthia Chen on 0423 733 129 or cchen148@gmail.com

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Safeskies Aviation Safety Conference

The 10th biennial Safeskies Aviation Safety Conference will be held on Wednesday 26 and Thursday 27 October at the Hyatt Hotel in Canberra. It will be preceded by the Ansett Memorial Lecture 2011, which will be a joint presentation by Australian astronaut Dr Andy Thomas and his wife, fellow astronaut Dr Shannon Walker.

The conference will open on the Wednesday with a presentation by the Safeskies Aviation Policy Group, which comprises: Mike Mrdak, the Secretary of the Department of Infrastructure and Transport, Air Marshal Mark Binskin, Chief of Air Force, John McCormick, Director of CASA and Greg Russell, CEO of Airservices Australia.

Other high-profile speakers invited to contribute include:

- Kevin Humphrey, Director Safety Regulation, Irish Aviation Authority
- Martin Dolan, Chief Commissioner ATSB
- Dr Kathy Abbott, NASA Ames/FAA project
- Group Captain Alan Clements, Director Defence Aviation and Air Force Safety
- Lt Col Raymond E King, USAF
- Yanick Malinge, Head of Safety Airbus
- Greg Marshall, BHP Aviation, BARS Program Manager
- Vince Galotti, Deputy Head, Air Navigation Bureau, ICAO

Safeskies has a theme for each of its conferences, but the story that they most want to get across is that aviation safety doesn't happen by accident. Safeskies is not about "talking heads talking to talking heads", it is a conference that is accessible by, and of interest to, anyone working in aviation at any level.

Hence, the target audience of the conference is the people who need most to come, which is not heads of departments, but staff in the third and fourth level, working on anything to do with aviation.

For more information: www.safeskiesaustralia.org

Impact of Aviation on Environment

An international flight from Abu Dhabi and Sydney will take to the skies this weekend to demonstrate how improved air traffic management can reduce the impact of aviation on the environment. As part of the Indian Ocean Initiative to Reduce Emissions (INSPIRE) program, Airservices air traffic controllers, in cooperation with other air navigation service providers and airports in the region, will use technological innovation and best practice air traffic procedures during every phase of the flights, from gate to gate.

Virgin Australia flight VAU30, operated by a Boeing 777-300ER, will be given an unrestricted taxi and take-off when it leaves Abu Dhabi at 10.55am (local) on Saturday. The flight will then be given an uninterrupted climb to its initial cruise level, touching down at Sydney Airport at 6.20am on Sunday.

The INSPIRE flight aims to demonstrate efficiencies that can be achieved within the current Arabian Sea and Indian Ocean air traffic management environment by removing controllable system constraints as far as is practicable.

The reduction in emissions demonstrated through the INSPIRE program will serve as a basis for establishing a credible emissions reduction target level.

Results from the INSPIRE program will be used to establish a program that could ultimately lead to the achievement of these emissions savings on an ongoing basis.

Source: Dominic Perry, Flight Global.

ALL ABOUT THE ATLANTIS

NASA's fourth space-rated space shuttle, OV-104 "Atlantis," was named after the two-masted boat that served as the primary research vessel for the Woods Hole Oceanographic Institute in Massachusetts from 1930 to 1966. The crew also used the first electronic sounding devices to map the ocean floor.

Atlantis was completed in about half the time in man-hours spent on Columbia. This is largely attributed to the use of large thermal protection blankets on the orbiter's upper body, rather than individual tiles requiring more attention.

Weighing in at 151,315 pounds, Atlantis was nearly 3.5 tons lighter than Columbia.

On Oct. 3, 1985, Atlantis launched on her first space flight, STS 51-J, with a classified payload for the U.S. Department of Defense. The vehicle went on to carry four more DOD payloads on later missions.

Atlantis also served as the in-orbit launch site for many noteworthy spacecraft. An impressive array of onboard science experiments took place during most missions to further enhance space research in low Earth orbit.

Starting with STS-71, Atlantis pioneered the Shuttle-Mir missions, flying the first seven missions to dock with the Russian space station. When linked, Atlantis and Mir together formed the largest spacecraft in orbit at the time. On STS-79, the fourth docking mission, Atlantis ferried astronaut Shannon Lucid back to Earth after her record-setting 188 days in orbit aboard Mir.

The most significant upgrades and new features included:

- Installation of the drag chute
- New plumbing lines and electrical connections configuring the orbiter for extended duration missions
- New insulation for the main landing gear doors
- Improved nosewheel steering
- Installation of the Multifunction Electronic Display System, or "glass cockpit"

Source: NASA

Branch Committee

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Opinions expressed in this newsletter do not necessarily represent those of RAeS, the Melbourne Branch.

Promotion of external events does not imply endorsement by RAeS. Contributions and feedback are welcomed.

AIAA 2011 Region - VII Australia Regional Student Conference

Call for Papers

24 - 25 November 2011

RMIT University

Lecture Theatre 207.3.3

Bundoora West Campus

Plenty Road

Bundoora, VIC 3083

AUSTRALIA

This is an AIAA undergraduate student paper competition, which is sponsored by AIAA.

Important Dates to remember:

Abstracts Due: 12 October 2011

www.aiaa.org

Papers Due: 26 October 2011

www.aiaa.org

Registration Deadline: 26 October 2011

<http://region7au.aiaastudentconference.org>

Conference Date: 24 - 25 November 2011

For details about the conference, please go to the Regional web site:

<http://region7au.aiaastudentconference.org>.

Registration and all logistics, please bookmark this site.

To submit an abstract and paper, you need to first register yourself. In this process you indicate that you will be making a presentation and can later add your abstract and presentation via the dedicated tab under 'My Registration'.

Students who are unable to present their paper in person, have the opportunity to present their paper via video link. You must inform the conference organisers in advance if you want to make use of this option.

The American Institute of Aeronautics and Astronautics (AIAA) sponsors student conferences in each AIAA Region as a means to encourage students in aerospace related fields to discuss research, exchange knowledge, and generate interest in the field of aerospace engineering. This Call for Papers solicits papers for the Region-VII Australia Regional Student Conference.

The prizes are as follows:

First place: \$500 USD and a trip to the Aerospace Sciences Meeting in January 2012 in Nashville, Tennessee, for one author to present the winning paper.

Second Place: \$300 USD

Third Place: \$250 USD

Rules for the AIAA Competition:

1) Participants must be student members of the AIAA.

2) The paper must be prepared according to the AIAA Author Kit www.aiaa.org/pdf/home/authorkit.pdf in a single column format. Paper, including tables, figures and acknowledgements can be no longer than 11 pages total.

3) There can only be two student authors listed on the paper. Faculty advisors from a University may be listed as co-authors. Please note that external advisors, etc. may NOT be listed as co-authors; they should instead be noted in the paper acknowledgement.

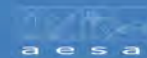
4) Papers submitted to the Regional Student Conferences should not be submitted for presentation or publication to any other conference or journal. If the paper is not the first place paper, the student may then submit it to other conferences and/or journals.

5) The winning author(s) must be able and available to travel to the Aerospace Sciences Meeting in Nashville in January 2012, and present the winning paper.

Interstate and international students may present their paper via videoconferencing. This needs to be notified to the conference organisers in advance.

The Region may fund additional prizes.

Questions? Contact the Conference Organizer: A/Prof Cees Bil, RMIT (bil@rmit.edu.au) or Dr Chao Chen, Monash (chao.chen@monash.edu)



MONASH University

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