

28th NOVEMBER 2016

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PO Box 573, Mascot, NSW 2020
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<https://www.facebook.com/groups/RAeSSydney/>



ROYAL
AERONAUTICAL
SOCIETY

2016 • CELEBRATING 150 YEARS

NEWSLETTER

AUSTRALIAN DIVISION SYDNEY BRANCH INC

Joint meeting with Australian Institute of Physics
"Aeronautics - Physics - All in the Pub!"



When: MONDAY 28th November 2016

18:00 for 18:30 hours sharp

Venue: 3 Wise Monkeys, 555 George St, Sydney

(second storey - Three blocks down George St from Town Hall Station towards Broadway on the right hand side)

EIGHT ACTS/PRESENTATIONS strictly limited to eight minutes each -
each act must include one gag, a graphic, relevance to the audience
an emotion - surprise, wonder, disappointment, confusion

Yes – they will be judged on these criteria

Physics where it reaches out and touches other sciences—Phabulous Physics!!

..and not to forget the "rego spotters" – "Steve's Famous Aviation Trivia Quiz"

All supplemented with 'cool beer and pizzas'

Topics will include:



Why Sailing Boats Fly?
A film review – What I learnt from Sully
How I missed the Eagle!



and five more.....PLUS

"Steve's Famous Aviation Trivia Quiz"

Attendance will attract 2 CPD hours

RSVP: Registration for the evening is preferred. Please register by clicking on/copying and pasting into your URL this link: <https://raesnov16.eventbrite.com.au> Your registration will be confirmed by email with an attached ticket. Please print the ticket and present the ticket at the door. Please note: Non members should enter the code NM if requested to enter a RAeS membership number.

Parking: Available in nearby parking stations. Please allow time to drive to the city, park, and walk to the venue.

Public Transport: All CDB train services stop at Town Hall Rail Station. For bus travellers please be aware that bus services within the CBD have changed. You may find it more convenient to catch a train from either Central Station or Wynyard Station to Town Hall Station and walk.

Members only event Nov 10: Tour of HMAS Canberra III (Landing Helicopter Dock (L02)) Registrations exceeded the maximum number of attendees for this event (20) and consequently a ballot was conducted. Successful registrants have already been advised together with the necessary information required to participate in the tour on 10th November, 2016.

STOP THE PRESS STOP THE PRESS:

SAVE THE DATE

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Wednesday 30th Nov 2016: Presentation by Mr David Lau, Head of Engineering, Jetstar, discussing the introduction and operation of the 787. Venue: University of Sydney. Further details to follow. Register at: <https://raesietstarnov16.eventbrite.com.au>

Your 2016 Committee: David Cox (Chair), David Adkins (Immediate Past Chair & Web Co-ord), John Vincent (Secretary), Jeff Lock (Treasurer), Ross Barkla, Ming Kai Chea Student Rep Syd Uni, Capt Brian Greeves, Abhijeet Kumar, Ying Luo, Peter Marosszeky, Bryan Stade, Debra Tan AvSoc UNSW Rep, Lea Vesic, Eugenia Wong, Student Rep UNSW, Editor: Jeff Lock (jeff.lock@bigpond.com)

Report on **The 58th Sir Charles Kingsford Smith Memorial Lecture and Annual Branch Dinner** which included the Celebrations of the **150th Anniversary of the Royal Aeronautical Society** and **100th Anniversary of the Boeing Company** held Tuesday 25th October, 2016 at the **Powerhouse Museum**.

This Prestigious event was proudly sponsored by:



Rolls-Royce

Our Chairman, Mr David Cox, commenced the evening by welcoming everyone and stating that we are gathered to honour three great, towering icons of the aviation industry.

“Firstly we are gathered here, as we do every year, to honour the memory of Sir Charles Kingsford Smith. Our second milestone is to celebrate the 150th anniversary of our great organisation, the Royal Aeronautical Society. Our third milestone is to celebrate the hundredth anniversary of the Boeing Co”

David added “The Royal Aeronautical Society is determined to play a full, relevant and active role in sustaining a lively and successful aerospace community here in Sydney and in Australia. The Societies’ Sydney Branch gladly takes up the challenge to do our part in helping to bring that future to life.”



David then introduced our speaker for the evening Mr Mike Sinnett FRAeS, Vice President, Boeing Commercial Airplanes Product Development and asked him to deliver his presentation which was entitled **“Building on the Legends of Boeing’s First Century”**.

Mike covered the history of Boeing from the Red Barn and former Boat-shed, where the company began to today with a Boeing 787 and a FA18 superimposed on the background of photo of the Boeing technicians building plywood aircraft. His presentation was not only a great insight into but also a wonderfully personal view of the Boeing

operation. Listening to someone like Mike makes you remember why people like working for Boeing. You cannot fail to draw inspiration from people like him.

Many comments were made by those in attendance and a sample are included below:

- I'd rate the lecture one of the best on both content and presentation.
- I think an excellent choice of venue. I found a lot of Mike’s historical details fascinating.
- That was a most enjoyable and interesting presentation. Worthy of the key event of the year.

The speech in reply was delivered by Mr Abhijeet Kumar, from the Sydney Branch Committee who complimented Mike’s on his presentation.

Mike has returned to Seattle and we understand that ‘He said it was fun to do and the audience was very gracious!’

During the evening the following RAeS Fellows were presented with their Fellowship Certificates:

- Maureen Dougherty FRAeS President, Boeing Australia Holdings Pty Ltd
- Michael de La Chapelle FRAeS Senior Technical Fellow, The Boeing Company
- Capt Michael Galvin FRAeS Head of Fleet Operations, Qantas Airways Limited
- Capt George Hendry FRAeS Retired
- Dr KC Wong FRAeS Associate Professor, School of Aerospace Mechanical and Mechatronic Engineering, University of Sydney

Lawrence Hargrave Award

This year is the sesquicentenary of the establishment of the Royal Aeronautical Society which occurred on January 12, 1866, in the United Kingdom. One of the ways of acknowledging that anniversary by the Australian Division of the Royal Aeronautical Society is the Lawrence Hargrave Award which recognises achievement at all levels and in all disciplines of aerospace within Australia.

The Lawrence Hargrave Award honours one of the true pioneers of flight. Hargrave's experiments with box kites at Stanwell Park near Sydney in the 1890s proved to be one of the most significant early developments in aviation.

The Award follows in the tradition of the Society's UK-based awards which have long been regarded as the pinnacle of achievement in the aviation industry. The winner will be announced at the Australian International Airshow and Aerospace & Defence Exposition at Avalon on Tuesday, 28th February, 2017. The Award will be presented in Melbourne at the 17th Australian International Aerospace Congress dinner.

I am attaching a Call for Nominations form in the event you wish to put forward an individual or resubmit any previous application who might qualify for this Award. Any Australian working in, or retired from, a discipline involved in the support of air and space flight in Australia is eligible. The award can recognise individuals at any stage in their career. The website <https://raes.org.au/index.php/news-feed/207-lawrence-hargrave-award-2017> also contains the nomination form and other details.

Please note the closing date for receipt of such nominations is 25th November 2016, which should be forwarded to the Royal Aeronautical Society Australian Div, PO Box 573, MASCOT NSW 2020 or Email:- barrycupitt@bigpond.com Barry C. Cupitt, Chairman, Awards Committee

NOMINATION FORM

LAWRENCE HARGRAVE AWARD - 2016

Any Australian working in, or retired from, a discipline involved in the facilitation of air and space flight in Australia is eligible. Current residency is not necessary. The award recognizes individuals at various stages of their careers.

Nomination is invited to be made no later than Friday, 25th November, 2016. Nomination may be proposed by any person (member or non member of the Society) but preferably occupying, or retired from, an aerospace industry position.

All nominations are treated in strictest confidence and proposers are asked to ensure that nominees are not advised of their nomination.

I would like to nominate (name):

Proposer's contact details (name, address, telephone/fax, e-mail)

Nominee's career history (dates, positions held, nature of responsibility):

Specific achievement/s upon which this nomination is based (in no more than 250 words describe the nominee's involvement in an operation initiative or event which provided a significant contribution to the Australian Aerospace Industry. **Please use a separate page for this résumé):**

Please complete and lodge nominations **no later than 25th November, 2016** to:

Chairperson Award Committee, The Royal Aeronautical Society Australian Division

PO Box 573 Mascot NSW 2020.

OR E-mail: barrycupitt@bigpond.com

2016 Diary: **Nov 6:** Host **Ray Martin** presents live on stage, Apollo Legend and Mars advocate **Buzz Aldrin**, with leading authorities from US and European global space agencies including **Prof. Mark McCaughrean** Senior Science Advisor European Space Agency – Hordern Pavilion, 1 Driver Ave, Moore Park, Sydney. Refer details at:

http://events.nationalgeographic.com/speakers/2016/11/06/mars-sydney/?utm_source=NatGeocom&utm_medium=Email&utm_content=NG_Live_AU_20160814&utm_campaign=Events&utm_rd=2001867487

To take advantage of a 20% discount to the ticket price go to: <http://tinyurl.com/jc6y6pm>

Nov 25: Nominations close for the Lawrence Hargrave Award - 2016 – Refer above for details.

Nov 30: David Lau, Head of Engineering, Jetstar - discussing the introduction and operation of the 787. Venue UNSW. **SAVE THE DATE - Further details to follow.**

Jan 8 – 13, 2017: The XXXIII OSTIV Congress will take place in Benalla NSW in conjunction with



the 34th FAI World Gliding Championships in the Open, 18m and 15m Classes. There are 3 OSTIV panels:

Meteorology, Sailplane Development, and Training and Safety. Much of the technology used in gliders today has been influenced by the work and shared knowledge of these panels – refer details at: <http://ostiv.org>

Feb 22: AGM – tentative date and venue to be advised.

Feb 26 – Mar 2, 2017: In conjunction with AVALON2017 (see below) will be the 17th Australian International Aerospace Congress (AIAC17) being held at Melbourne Cricket Ground on 26 – 28 February 2017 and the Technology Presentations at AVALON2017, 1 - 2 Mar 17. Refer details at: aiac17.com/

Feb 28- Mar 5, 2017: AVALON2017 – Australian International Airshow and Aerospace & Defence Exposition – The Essential Aerospace Forum – is open for business. Refer details at: airshow.com.au/airshow2017/enews/AS2017-Newsletter-ED3.html

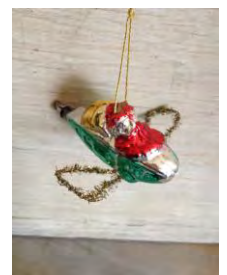
Aug 14-29, 2017: ‘Total Solar Eclipse Tour’ Including visits to famous USA Astronomical and Aerospace Facilities. For further details please contact The Sutherland Astronomical Society Inc. Email: info@sasi.net.au

Sept 25-29, 2017: The 68th International Astronautical Congress – **Unlocking imagination, fostering innovation and strengthening security**-- is being held in Adelaide. Thousands of scientists, including some 200 astronauts, will participate in the international space congress. The global economy and security of many nations depends on assured and secure access to satellites that provide communications, timing and navigation services and remote sensing data. Refer details

at: iac2017.org/



**The Committee wishes you all the best
for the Festive Season
and the New Year**





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..and not to forget the "rego spotters" – "Steve's Famous Aviation Trivia Quiz"

All supplemented with 'cool beer and pizzas'

Topics will include:



David Cox (USYD) - Why Sailing Boats Fly?
Stephen Kuhl (RAeS) - A film review – What I learnt from Sully

Geraint Lewis (USYD) - While symmetry is at the heart of the universe, we would not be here without its beautiful scars. Find out why

the ugly side of the cosmos is essential for our very existence.

Joe Callingham (USYD) - is a radio astronomer with antennas for eyes. He's going to show you what the sky looks like to him.

Boris Jovanovic (Aviator & Engineer) - is a glider pilot who knows how to make a quick turn to miss an eagle in flight. But he wants to fly in space which is tricky, cos there's no air. So, is it possible to turn a spaceship the way the Star Wars pilots do?

Solomon Freer (UNSW) - is going to explore astrology, & present the case against, & maybe for?!

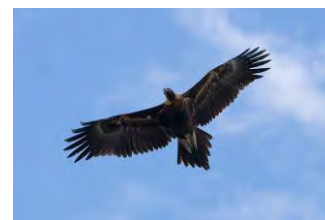
Phil Dooley (Phil Up On Science) - is going to update Tom Lehrer's elements song. With apologies to Kurt Cobain.

Peter Rohde (UTS) - says you can deduce any answer from first principles using Quantum Mechanics. Bring your curliest questions and test him out!PLUS

"Steve's Famous Aviation Trivia Quiz"

Your Host Phil Dooley (Phil Up On Science & ANU) will put the fizz into physics, the art into party, and the fun into fundamental sciences

Attendance will attract 2 CPD hours



RSVP: Registration for the evening **is preferred**. Please register by clicking on/copying and pasting into your URL this link: <https://raesnov16.eventbrite.com.au> Your registration will be confirmed by email with an attached ticket. **Please print the ticket and present the ticket at the door. Please note:** Non members should enter the code **NM** if requested to enter a RAeS membership number.

Parking: Available in nearby parking stations. Please allow time to drive to the city, park, and walk to the venue.

Public Transport: All CDB train services stop at Town Hall Rail Station. For bus travellers please be aware that bus services within the CBD have changed. You may find it more convenient to catch a train from either Central Station or Wynyard Station to Town Hall Station and walk.

Mr David Lau
Head of Engineering for Jetstar
Australia & New Zealand



discussing

“Low Cost Carrier (LCC) Engineering Myth-Busting”

When: **Wednesday 30th November 2016**

18:00 for 18:30 hours sharp

Venue: **PNR Farrell Lecture Theatre, J02 Darlington Campus**
University of Sydney

Map refer: <http://sydney.edu.au/maps/campuses/?area=CAMDAR> (on left hand side of the map search for 'PNR Building' and the red pointer will appear above the location)

Attendance will attract 1.5 CPD hours



Profile: Qualifications include Bachelor of Aeronautical Engineering from the University of Sydney, and a Mechanical Aircraft Maintenance Engineering trade certificate. An experienced engineering aviation professional with 22 years in the industry. Ranging from 10 years in aircraft line & base maintenance support, new aircraft performance, fleet planning & analysis, operational supply distribution & logistics for Qantas. 2 ½ years as the Maintenance Controller for Jetconnect in NZ. The last 9 years spent with Jetstar leading special projects in the business such as fleet

retrofit campaigns, aircraft spec and delivery, strategic engineering developments, major supplier selection and agreements, 787 EIS readiness. His main focus now has been leading the engineering business supporting a fleet of 70 aircraft (A320 and 787) ensuring a sustainable and competitive engineering & maintenance operations delivering safe & reliable performance. David is married to Cindy, and has 2 young boys Matthew (7) and Timothy (3).

Synopsis: Cheap & nasty or embracing new technologies to drive efficiencies & outcomes? Being the innovator or being the quick leap frogger? A jack of all trades is the master of none, but often times better than the master of one. Sharing some insights and real life examples that highlight both the opportunities and challenges whilst supporting this growing LCC market segment, ranging from the experience thus far with the fantastic plastic (787) 3 years in-service, the A320 NEO vs CEO difference debate, and the need for engineering team capability to constantly solve an array of complex problems (not all technical)

RSVP: Whilst attendance is free - registration for the evening **is required**. Please register by clicking on/copying and pasting into your URL this link: <https://raesjetstarnov16.eventbrite.com.au> Your registration will be confirmed by email with an attached ticket. **Please print the ticket and**

present the ticket at the door. Please note: Non-members should enter the code **NM** if requested to enter a RAeS membership number. Any member who does not have access to the internet can send a letter to Mr Jeff Lock, 4 Hillcrest Place, North Manly NSW 2100 with your name (plus names of accompanying persons), membership number or state 'Friend' if you are a Friend of the Branch, and phone number.

Dinner: Following the presentation the Committee will take David to dinner at the nearby **Buon Gusto Italian Restaurant, 368 Abercrombie Street, Chippendale. Attendees are encouraged to join in. Cost will be approximately \$45 pp including soft drink & wine.**

Parking: is available in the Shepherd Street multi-story car park, located on the corner of Cleveland St and Shepherd St. The rate is \$2 per hour (up to \$6 maximum), but note that only gold coins are accepted in some machines. Parking is also available in University of Sydney On-Campus Parking for \$2 per hour (up to \$6 maximum). Additionally, free parking is available in surrounding streets. Please observe parking restrictions and allow time to drive to the University of Sydney, park, and walk to the venue.

Public Transport: The closest train station is Redfern station, which is a 10 minute walk away from the venue. From Railway Square near central station any 42X bus (e.g. 422, 426...) and the M30 will take you to the University of Sydney (on City Road). Please allow time to travel by public transport, including waiting time, and time to walk to the venue.

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Complementary Student Tickets for the 2017 Avalon Airshow "Aerospace Student Professional" – Self-Education Opportunity

Registration for the 2017 Avalon Airshow – Aerospace Student Professional (ASP) Program is now OPEN!

The Royal Aeronautical Society in association with the 2017 Avalon Airshow organisers is continuing to provide free entry to the 2017 Avalon Airshow to benefit, in particular, senior students to engage with Aerospace Industry Professionals. A special invitation is extended to "Aerospace Student Professionals" to attend the 2017 Avalon Airshow, as Accredited Trade Visitors, for one-

day only and at no cost, on either the **Trade Day of Tuesday 28 February, Wednesday 1 March or Thursday 2 March 2017.**

An "Aerospace Student Professional" is defined as any Undergraduate and Postgraduate University, or TAFE student undertaking tertiary courses throughout Australia in aerospace engineering, aviation sciences or technology or Management, who shows a keen interest in pursuing a career in the Aerospace, Aviation or related high technology Defence industries. Undergraduates who take up this invitation will be formally accredited as an "Aerospace Student Professional". This will include the issue of a distinctive badge to assist Exhibitors to identify them from other Trade Visitors.

The process to seek accreditation as an "Aerospace Student Professional" for a nominated Trade Day have been developed by Aerospace Australia Limited and the Royal Aeronautical Society (RAeS), with assistance from Engineers Australia. Full details of this application and accreditation process are available from the Royal Aeronautical Society - Australian Division website at <https://www.raes.org.au/index.php/events/conferences/asp-program-2017> – This accreditation process is being managed through the Melbourne Branch of the RAeS.

Subject to all accreditation requirements being met, this admission will provide "aerospace student professionals" with a unique self-education opportunity. This also includes access to pre-reading material (via selected website links). Additionally, accredited "aerospace student professionals" will be able to attend, at no charge, some of the conferences, symposiums and forums being conducted at Avalon on the nominated Trade Day subject to availability space as determined by the conference manager.

Please note that the closing date for Registrations is Wednesday 22nd February, 2017.

2016 Diary: Nov 24: AIAA has organised a panel discussion on '**Drones as a tool, business and service**' with the aim to uncover the full capability that UAVs will provide to businesses that traditionally may or may not have had a use for them, as well as the state of the art in UAV technology today. All are welcomed to attend. For further information and to register:

<https://www.eventbrite.com.au/e/drones-as-a-tool-service-and-business-tickets-29237215298>

Venue: Case Study Lecture Theatre 1060, The University of Sydney Business School, Abercrombie Building, commencing 19:00 hours sharp.

Dec 2: Nominations close for the Lawrence Hargrave Award - 2016 – Refer above for details.



Jan 8 – 13, 2017: The XXXIII OSTIV Congress will take place in Benalla NSW in conjunction with the 34th FAI World

Gliding Championships in the Open, 18m and 15m Classes. There are 3 OSTIV panels: Meteorology, Sailplane Development, and Training and Safety. Much of the technology used in gliders today has been influenced by the work and shared knowledge of these panels – refer details at: <http://ostiv.org>

Jan 12: The 6th Annual Southern Hemisphere Space Studies Program 2017 (SH-SSP2017) will be conducted over the period 9th Jan – 10th February, 2017, is open to qualified Australian and International participants from all disciplines, and will be conducted at the University of South Australia's Mawson Lakes Campus. On the evening of Thursday 12th Jan, the 2017 SH-SSP will hold an International Astronaut Panel, featuring former Canadian Space Agency astronaut Dr Bob Thirsk, and Dr Soyeon Yi, South Korea's first astronaut, at the City West Campus of UniSA from 18.00 to 19.30 hours. Refer further details: <http://www.unisa.edu.au/spaceprogram>

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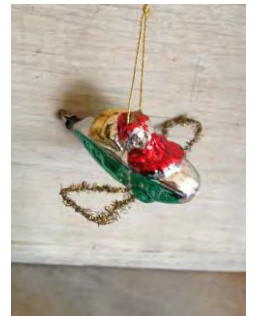
Mar 13: An evening with Dr Sivaguru Sritharan, Provost and Vice Chancellor of the US Air Force Institute of Technology, who is the International Eminent Speaker for 2017. Details being finalised.

Aug 14-29, 2017: 'Total Solar Eclipse Tour' Including visits to famous USA Astronomical and Aerospace Facilities. For further details please contact The Sutherland Astronomical Society Inc. Email: info@sasi.net.au

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The Committee wishes you all the best for the Festive Season and the New Year



Thanks Boeing for your help – at our recent 'Workshop Strategy Day' the yearly risk assessment for the 'next Run' identified that Rudolph was getting older and slower and the concept of breeding 'faster' reindeer was identified.

Proudly Supported by Corporate Partners of the Australian Division

