



**ROYAL  
AERONAUTICAL  
SOCIETY**

AUSTRALIAN DIVISION  
SYDNEY BRANCH

Vol 2011-12

PO Box 573, Mascot, NSW 2020

# NEWSLETTER

## DECEMBER 2011

Email: [sydneybranch@raes.org.au](mailto:sydneybranch@raes.org.au)[www.raes.org.au](http://www.raes.org.au)

**The 53<sup>rd</sup> Sir Charles Kingsford Smith Lecture  
followed by the Annual Sydney Branch Dinner**

**Date: Wednesday, 30<sup>th</sup> November, 2011**

**Time: 18:00 for 18:30 hours**

**Where: The Lakes Golf Club, Eastlakes**  
(See enclosed flyer for details)

### Annual General Meeting

**Date: Wednesday, 14<sup>th</sup> December, 2011**

**Time: 17:30 for 18:00 hours**

**Refer overleaf for AGM Agenda and Nomination form**  
(Refreshments will be available prior to the commencement of the AGM)

**Venue: Mechanical Lecture Theatre  
Mechanical Engineering Building  
University of Sydney**

**followed by presentations from  
Robert Stevens and Capt Ron Houghton  
discussing  
'Vickers Armstrongs Ltd, the Wellington  
Bomber and Sir Barnes Wallis'**

**PROFILES** **Robert (Bob) Stevens** is a Chartered Engineer and Fellow of the Royal Aeronautical Society. He served an apprenticeship with Vickers-Armstrong's Ltd, Weybridge, England in the WW2 years and beyond until 1950. The apprenticeship involved three months factory work in each manufacturing area from the machine shop to the final assembly line. One day each week and three evenings were spent at College. After three years in the factory Bob transferred to the design office working on such aircraft as the Windsor, Viking and Viscount. This presentation will only cover the period 1939 to 1950.

**Dr. Ron Houghton** joined the RAAF in 1941 and completed pilot training in Australia. After wings graduation he was posted to UK. Next step was a refresher on Oxfords then on to Operational Training Unit (OTU), flying Wellingtons, which were part of Bomber Command. Commenced operations against the enemy on Wellingtons and then was posted to a Halifax squadron. Dr. Houghton has a BSc(Hons), MSc, PhD (aeronautical engineering) and has completed an Incident and Accident Investigation programme. Dr. Houghton is currently working part time at Sydney University in Aeronautical Engineering.

**SYNOPSIS:** Bob's presentation covers his time at Vickers-Armstrong's Ltd - 1939 to 1950.

Dr Ron's presentation: The Wellington's origin commenced with the Air Ministry Specification B.9/32, issued in October 1932. This called for a new twin engine, monoplane medium bomber. From this spec came the Vickers prototype K4049, which made its first flight on 15<sup>th</sup> June, 1936 from Brooklands, Weybridge, UK. First production maiden flight was 23<sup>rd</sup> December 1937.

Service requirements: enclosed power operated gun turrets in the nose, tail and belly positions. A bomb bay installation capable of carrying 4500 lbs bomb load – not much

compared with the Halifax and Lancaster however the Wellingtons did the job before the 4 engine bombers entered service in 1942.

Power plants: a range of engines were used throughout the life of the Wellington. Initially 2 Bristol Pegasus XX with 1050 HP were fitted. Following on were Rolls-Royce Merlin X with 1145 HP, next Bristol Hercules 111 with 1375 HP, next P&W twin Wasp with 1200 HP, next Rolls-Royce Merlin R6sm with 1600 HP and finally Bristol Hercules V1/XV1 With 1675 HP.

The last Wellington built was in October 1945, with a final production tally of 11460 aircraft. This was the greatest number of British bombers ever built.

Various roles: bomber –short and long range; Coastal command – attacking U boats; Transport roll – trooping version; Torpedo bombing; Training – navigation, and OTU. Development: Leading on from the Wellington was the Vickers-Armstrong Warwick and the V-A Windsor.



**PARKING:** Parking is available in the Sheppard St Car Park - free parking after 18:00 hours, which is next door to the Mechanical Engineering Building. Please observe parking restrictions and allow time to drive to the University of Sydney, park and walk to the venue. (Refer map)

**SUPPER:** Our traditional Christmas supper will follow at the conclusion of Robert Stevens and Capt Ron

Houghton's discussions.

**RSVP:** Attendance registration for the AGM and following presentations is essential. Please register by clicking on this link: [www.raes.org.au/events](http://www.raes.org.au/events) or email/mail by lunchtime Wed 14<sup>th</sup> December to: [sydneybranch@raes.org.au](mailto:sydneybranch@raes.org.au)

### Early Editions of Scientific American Journals

In case you are not aware – the early editions of Scientific American are available for free download during this month (November, 2011) only. For example:

**FIRST SUCCESSFUL FLIGHTS OF BLERIOT'S NO.8 MONOPLANE -**  
<http://www.nature.com/scientificamerican/journal/v99/n3/pdf/scientificamerican07181908-44.pdf>

The full index of the Journals is available at:

<http://www.nature.com/scientificamerican/journal/v99/n3/index.html>

Hope you all enjoy. (Contributed by Damien Lock, School of Technology for the Arts, Republic Polytechnic, Singapore)

**RAeS Ties, Coffee Mugs, and Lapel Pins:** Selection of RAeS silk Ties direct from London - \$30 each; Sydney Branch coffee mugs & lapel pins available at Branch meetings for \$10 each.

**DIARY 2011 14-19 Feb 2012:** Singapore Airshow 2012 - [www.airshow.com.au](http://www.airshow.com.au)

**29 Feb:** Tony Blackman – The Nimrod.

**March:** International Eminent Speaker, Mr Doug Arbuckle of the FAA. The topic will be 'The New Air Traffic Control System for North America' - date in March to be advised.

**April:** Mr Andrew Dudgeon – Rolls-Royce Environmental Initiatives – date in April to be advised.

**30 May:** Capt Val St Leon - The Lockheed L1049 Super Constellation.

**23-28 September, 2012:** 28<sup>th</sup> Congress of the International Council of the Aeronautical Sciences, Brisbane, QLD  
[www.icas.org](http://www.icas.org)

**2011 AGM AGENDA**

The Annual General Meeting of the Royal Aeronautical Society Australian Division - Sydney Branch Inc will be held on Wednesday 14<sup>th</sup> December 2011, commencing at 18:00 hours, in the Mechanical Engineering Theatre, Mechanical Engineering Building, The University of Sydney.

- PRESENT: Members to sign attendance book.
APOLOGIES:
PREVIOUS MINUTES: Minutes of the 2010 AGM, discussion and motion to accept.
BUSINESS ARISING: Discussion and motion to accept.
BRANCH RULES: Updated Branch Rules – for approval. (The updated Sydney Branch Rules are available from our website; www.raes.org.au/assets/Sydney-Branch-Rules-June-2011R1-JV13August.doc. Printed copies will be available prior to the AGM).
CHAIRMAN’S REPORT: Annual report, discussion and motion to accept.
TREASURER’S REPORT: Presentation of 2011 financial statement. (Audited report will be sent with the February Newsletter). Discussion and motion to accept.
ANNUAL ELECTIONS: The Hon Sec to report on Nominations received for the classes of Committee by the due date 23<sup>rd</sup> November 2011 and, should there have been more Nominations received than positions available for any of the classes, the result of elections.
APPOINTMENT OF HONORARY AUDITOR: Mr Stephen Howard, Harrison and Howard.
GENERAL BUSINESS: Any business raised and accepted by the Chairman.
CLOSE OF MEETING: Thank you for attending, and best wishes for the Festive Season. Close of AGM.
PRESENTATION: Robert Stevens and Capt Ron Houghton, Vickers-Armstrongs Ltd’s Wellington Bomber and Sir Barnes Wallis (To commence 18:30 hours)

Refreshments will follow the conclusion of Robert Stevens and Capt Ron Houghton’s presentation.

**2012 Committee Nomination Form**

Send to: The Honorary Secretary, RAeS Aust Division – Sydney Branch, 88 Trafalgar St, ANNANDALE NSW 2038/email: sydneybranch@raes.org.au / Fax: 9905 2579 (please ensure that nomination forms have been correctly signed before forwarding)

The Sydney Branch AGM is to be held 18:00 hours, Wednesday, 14<sup>th</sup> December 2011 at the Mechanical Engineering Theatre, The University of Sydney.

In accordance with the proposed Branch Rules (2011) of the Sydney Branch of the Royal Aeronautical Society (subject to approval at 2011 AGM), nominations for the Committee are called and shall be made in writing and signed by one member of the Branch and countersigned by the Nominee. The committee consists of one Chairman, 11 Ordinary Committee Members and 2 Student Representatives (in total 14 people). Should the proposed rules not be approved at the 2011 AGM then elections will be held under the current rules, which do not provide for the election of 2 Student Representatives. In this case any nominations received for Student Representatives will assume to be ‘Ordinary Committee’ nominations.

Please forward completed Nomination Forms to the Branch Honorary Secretary at the address above by Wednesday, 24<sup>th</sup> November, 2011 which is at least twenty one (21) days prior to the 2011 Annual General Meeting.

I ..... (Nominator’s Full Name)
of ..... (Nominator’s Address)
nominate ..... (Nominee’s Full name)
of ..... (Nominee’s Address)

as an: Ordinary Committee Member/Student Representative/Chairman (delete 2 of these classes as appropriate) for the Sydney Branch of the Royal Aeronautical Society for the Year 2012.

Signed: ..... Date: ..... Member Number: ..... (Nominator)

Signed: ..... Date: ..... Member Number: ..... (Nominee)

Tel contact: ..... (Nominee) email: ..... (Nominee)

NOTE: PLEASE USE ONE FORM FOR EACH POSITION BEING NOMINATED

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Office Use Only: Nomination received by the Sydney Branch Hon Sec: ..... (Initials) ..... (Date)