



*The Royal Society of New South Wales*

***Southern Highlands Branch 16<sup>th</sup> May 2013 Lecture***



**Rik Heslehurst, PhD.**

School of Engineering and Information Technology  
University College, UNSW and **Australian Defence Force Academy**

Rik has a Bachelor of Engineering (Aeronautical) degree, with Honours, and a Master of Engineering degree, both from the Royal Melbourne Institute of Technology, and he also has a PhD from the UNSW. Rik is the current chair of the Australian Chapter of SAMPE and chair of the Canberra Branch of the Australian Composite Structures Society. He has also been involved with the Canberra Branch of the Royal Aeronautical Society and the Canberra Division of Engineers Australia

Rik Heslehurst is a former aeronautical engineering officer in the Royal Australian Air Force (RAAF). During his 16 years military service Rik was in-charge of the RAAF Material and Process Engineering Section and earlier an airworthiness engineer on the F/A-18 Hornet aircraft. Currently

Rik is a Senior Lecturer in the School of Engineering and Information Technology of the University College, UNSW at the Australian Defence Force Academy.

Rik lectures in aircraft design, airframe design and analysis, structural joining methods, damage analysis and repair design, and composite structural design.

Rik is currently the Senior Engineer for Abaris Training - Reno NV, and a consultant engineer for Raytheon Australia and DARcorp – Lawrence, KS, he has also consulted for the Australian Defence Force, Civil Aviation Safety Authority, Raytheon Missile Systems, NASA, USAF, Boeing Airplane Company, Bombardier Aerospace, Australian Space Safety Office and SP Systems-UK

**TOPIC: ADVANCES IN AVIATION**

Since the dawn of powered flight aviation has been at the forefront of scientific and technological development. This presentation will be a short trip down the lane of technical development in aviation through the eyes of an aerospace engineer with a passion for aircraft and flight. From the heyday of the technical genius of the Wright Brothers through to the impulse of World War One and the glamour of flying in the 1930's we see the importance of innovation. We are then thrown into the technical thrust of the needs of World War II and the challenges of high speed flight of the 1950's, followed by elegance of long range flight and the mystic of space travel. Our journey continues with the quest for both high and low speed flight and the continuing need to fly at the edge of the envelope and beyond. Our journey concludes with what we can only imagine, but know will eventuate, for our drive for safer, faster and more economical travel in air.

**DATE:** Thursday 16<sup>th</sup> May 2013      **TIME:** 6.30 PM

**VENUE:** Performing Arts Centre. Chevalier College Bowral  
**Enter off Charlotte St. Doors open 6 pm.**

**PRICES:** Lecture only: Non-members \$10 (RS Members \$5) only students are free.  
Following the lecture, there will be a dinner open to members and non-members at **BRIARS BURRADOO** -Booking for dinner by Monday May 13th is essential.  
Any other queries please contact Hub 0411192917