



**ROYAL
AERONAUTICAL
SOCIETY**

2016 • CELEBRATING 150 YEARS

**AUSTRALIAN DIVISION
SYDNEY BRANCH**

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NEWSLETTER



Fire-fighters 'drowning' the No. 1 engine with foam

'QF32 – The story behind the story'

Date: **Wednesday, 24th February 2016**

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

Venue: **Ainsworth Building J17, Lecture Theatre (G03)
University of New South Wales**

Refreshments will be available prior to the commencement of the meeting Attendance will attract 1 CPD hour



Profile: After graduating with Honours from Sydney University with a degree in aeronautical engineering in 1995, Paul worked for Aeronautical Engineers Australia (AEA) in Perth, Western Australia. During his time with the company, Paul worked in a range of capacities from a junior design engineer through to Engineering Manager. The work primarily consisted of the provision of design and Civil Aviation Regulation 35 (CAR 35) approvals for aircraft ranging from small training aircraft up to small to medium size transport category aircraft. This also included the provision of engineering and CAR 35 approval services to Eagle Aircraft for the Eagle 150 model aircraft. In 2004, Paul left AEA and joined the Australian Transport Safety Bureau (ATSB) as a Senior Transport Safety Investigator. Since joining Paul has been involved in a number of significant investigations, including the 2005 Lockhart River accident, and the 2009 Emirates A340 tail strike event in Melbourne, Victoria. In 2012, Paul graduated from Monash University with a Master of Materials Engineering.

Paul became involved in the QF32 investigation at an early stage to examine certification, design and manufacturing issues and remained active until the completion of the investigation and publication of the report. More recently, Paul represented Australia during the initial stages of both the MH370 and MH17 investigations.

Synopsis: 4 November 2010, Qantas flight QF32, an Airbus A380, had just departed Changi Airport, Singapore, bound for Sydney, Australia. On board were 5 flight crew, 24 cabin crew and 440 passengers. The aircraft was overhead Batam Island in Indonesia and climbing through about 7,000 ft when the crew heard 2 loud bangs followed by numerous warning messages about the No. 2 engine and multiple aircraft systems. What happened next is a story of a team working in a mature safety environment that resulted in a badly damaged aircraft safely returning to Changi Airport without harm to any of the passengers or crew.

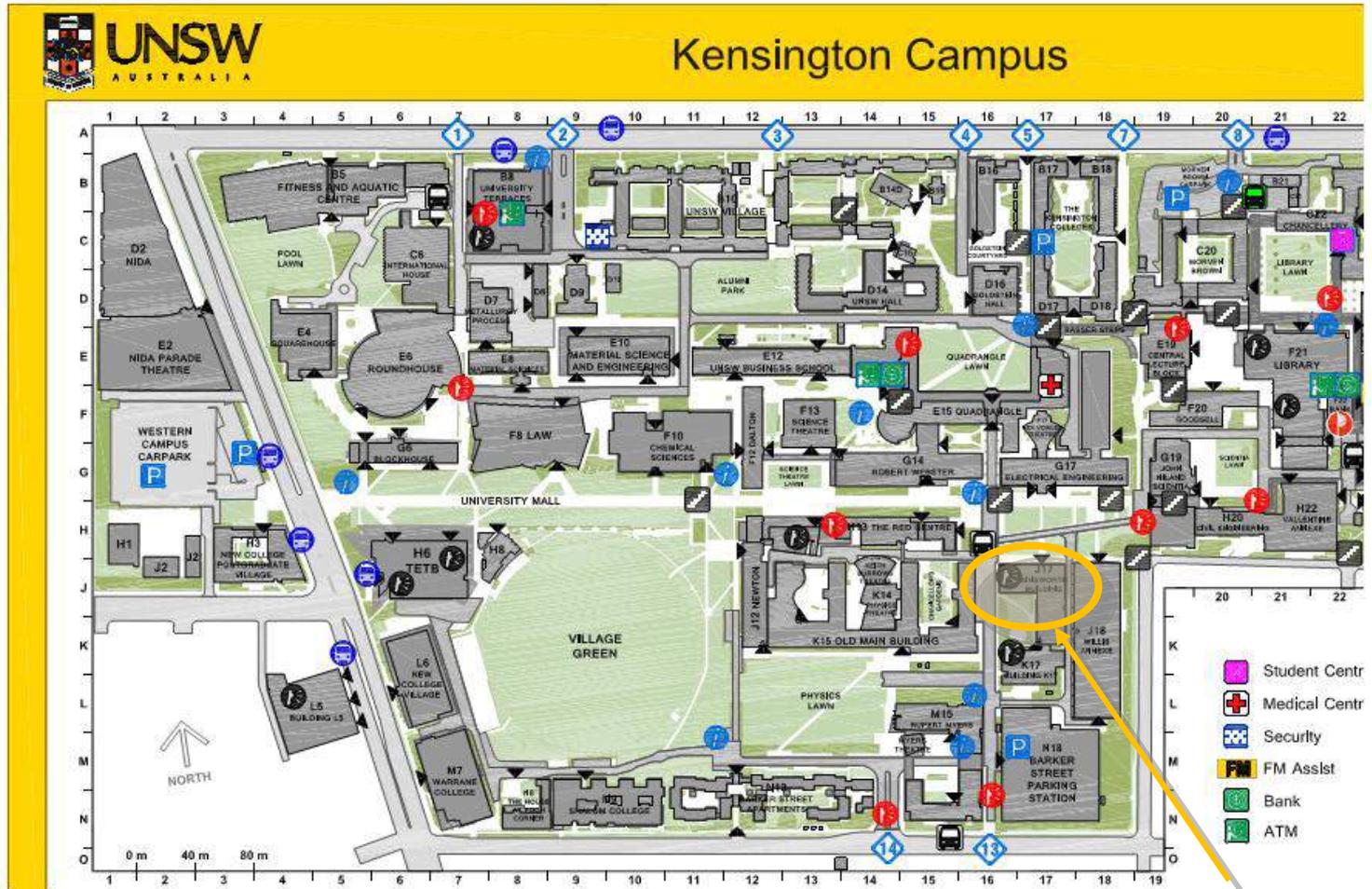
This story has been well covered in a number of forms, including television programs, in the time since the occurrence. Paul will provide a presentation on the story behind this story. That is, the story of the events that resulted in an uncontained engine failure.

This is a story of how the ATSB worked backwards from the events on the flight to determine how a thin wall on an oil pipe led to an uncontained engine failure that damaged the world's largest commercial airliner. Even then, the story is more than just a defective pipe, it is about the importance of ensuring that quality systems in design and manufacture function in the manner in which they were intended.

RSVP: Whilst attendance is free - registration for the evening **is required**. Please register by clicking on/copying and pasting into your URL this link: <http://raesfeb16.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.

Light supper: *Following the presentation light supper (pizzas) will be provided to give the speaker and attendees the opportunity to mingle and to continue discussions.*

Parking: Limited parking is available in surrounding streets with paid parking within the Uni of NSW car park tower, entry from Barker Street. Please observe parking restrictions and allow time to drive to the University of NSW, park and walk to the venue. (Refer to map and also www.facilities.unsw.edu.au/sites/all/files/KENC%20Campus%20Map_5.pdf - ref J17)



Public Transport: Regular buses (391, 392, 393, 394, 396, 397, 399, M10) leave from outside Museum train station in Liverpool Street, and the 395 and M50 in Elizabeth St, opposite Central Station. Please allow time to travel by public transport, including waiting time, and time to walk to the venue from the UNSW bus stops. There are a number of other buses such as the 400 and 370 that travel to and from suburbs on the outskirts of the CBD and stop at the UNSW. Please refer for further details: www.sydneybuses.info/routes/timetables-route-maps

Southern Hemisphere Space Studies Program being held University of South Australia

The 2016 Southern Hemisphere Space Studies Program (SH-SSP), being held 11th January to 12th February, 2016, is an intensive, five week, live-in experience in the southern hemisphere summer, involving the international intercultural, and interdisciplinary philosophy for which the International Space University (ISU) is renowned. Open to qualified Australian and International participants from all disciplines, the fifth annual program is being conducted at the University of South Australia's Mawson Lakes Campus. 149 participants completed the first four programs of which 52% were from Australia. Additionally, each year there are a series of public lectures during the period of the 2016 Program. The first was an International Astronaut Panel held Thursday 14th January. This event is a long-standing highlight in ISU sessions. Some 200 members of the general public attended and had the opportunity to ask a broad range of



questions to the invited astronauts and obtain their autographs. This international astronaut panel comprised former Canadian Astronaut and medical specialist, Dr Bob Thirsk, and former French Space Agency (CNES) Astronaut and scientist, Dr Jean-Jacques Favier who are astronauts from different organisations and space missions. They provided varying insights and opinions, with a particular emphasis on the human factors involved in spaceflight as humans gain more experience in long-duration missions in order to prepare for inter-planetary travel. The panel was moderated by Dr Walter Peeters, President of the International Space University and were joined by the internationally renowned spaceflight human factors expert, Dr Gilles Clement, and former NASA Exploration Chief Scientist and Director of the Southern Hemisphere Space Studies Program, John Connolly. At the conclusion of the evening the two astronauts autographed their own photographs for all attendees.



Dr Bob Thirsk



Dr Jean-Jacques Favier

This important program is a lead up to the International Astronautical Congress (IAC) which is to be held in Adelaide September 2017. You can view the full proceedings of the International Astronaut Panel by clicking on: www.youtube.com/watch?v=FvsJf-KRP9Qti

Vale Brian Blacker Affiliate 1927 - 2015: Brian Blacker passed away on 24 August 2015, due to complications after tripping over an obstacle a few months earlier. He was 88 1/2 years old. Up until that time he had enjoyed a full life, being a man with many interests and talents. Brian had a love of cameras, books, cars and as an engineering draftsman liked to understand how things worked. His love of cars included a 1924 Minerva which he had for about 65 years. Betty and Brian celebrated their 60th wedding anniversary earlier in 2015. As well as a loving husband, he was also a proud father and grandfather and a real gentleman. Brian enjoyed attending RAeS meetings and the friendships with other members over the years. (Provided by his daughter Wendy Telfer.)

Nominations for the 2016 Society Honours, Medals & Awards now open: "The most prestigious and long-standing awards in global aerospace honouring achievement, innovation and excellence".

The Society awards Honours, Medals and Specialist Awards to both individuals and teams. The Specialist Awards are intended to cover the full range of aerospace disciplines. See details at:

aerosociety.com/About-Us/medalsawards

To nominate simply complete the [Nomination Form](#) and return it to the Society. Nominations must be received by 31st March 2016 to be included in the 2016 round of Royal Aeronautical Society Honours, Medals and Awards nominations. Those received after this date will be carried forwards for inclusion in the 2017 round.



Advanced Information

Who runs the Wings Awards? The Wings Awards are run jointly by the Australian Division of the Royal Aeronautical Society and *Australian Flying* magazine.

When do entries open?

Entries open Monday 28 March 2016.

When do entries close?

Entries close Friday 1 July 2016.

What do the Wings Awards recognise? The Wings Awards take a panoramic view of the general aviation (GA) industry by recognising the achievements of aviators, aero clubs, instructors and training organisations that form the backbone of the GA industry. Excellence will be recognised across four categories:

- Col Pay Lifetime of Service to General Aviation
- Aero Club of the Year
- Flying Training Organisation of the Year
- Flying Instructor of the Year

What is the Col Pay Award? The most prestigious Wings Award is the Col Pay Lifetime of Service to

General Aviation Award, which recognises significant contributions to GA over long careers. The Col Pay Award is named after GA legend Col Pay, a well-known aviation pioneer who specialised in agricultural aviation and warbirds from his home base in Scone, NSW. Nominations for the Col Pay Award are perpetual; once someone is nominated, but does not win, the submission will be considered again in the following years. This doesn't happen with any other Wings Awards categories.

Who is eligible to enter the Wings Awards 2016 and where do I need to submit my nomination for a Wings Award?

Each award has a different submission, criteria and process to follow. It is recommended entrants first read these prior to nominating by visiting <http://www.australianflying.com.au/wings-awards> **from 28 March 2016** to submit your nomination.

How much does it cost to enter the Wings Awards 2016?

There are no costs in nominating an entrant across any of the categories.

How long does the online nomination process take?

If you have pre-prepared all of the requirements outlined in the submission, process and criteria, it shouldn't be a long and difficult process.

Can I nominate into a category more than once?

Yes. Individuals putting forward nominations can make submissions in more than one category.

Can I nominate the same person/club/instructor/school for more than one award?

Each category has a different submission, procedure and criteria and requires a separate entry, but you are welcome to nominate as many as you like.

How will the winners be announced?

The winners will be announced in the November-December 2016 issue of *Australian Flying* and on the website www.australianflying.com.au.

**CAPTAIN RICHARD PETER CHAMPION DE CRESPIGNY FRAeS
MEMBER (AM) IN THE GENERAL DIVISION OF THE ORDER OF AUSTRALIA**

The Sydney Branch acknowledges Captain Richard de Crespigny AM FRAeS, 2016 Australia Day Award - for significant service to the aviation industry both nationally and internationally, particularly to flight safety, and to the community. His service includes Pilot, A380 Airbus, QANTAS Airways, since 1986.

As Captain and Pilot in Command he played a major role in saving the lives of 469 passengers and crew on board Qantas Flight 32 out of Singapore on 4th November 2010 after one of its Rolls-Royce Trent 900 engines exploded causing a major fire and extreme danger to the A380 aircraft itself and all on board. Captain Richard's full citation can be found at:

[www.gg.gov.au/sites/default/files/files/honours/ad/ad2016/dvvsf4sc1d05nwqt/Media%20Notes%20-20AM%20\(A-L\)\(1\).pdf](http://www.gg.gov.au/sites/default/files/files/honours/ad/ad2016/dvvsf4sc1d05nwqt/Media%20Notes%20-20AM%20(A-L)(1).pdf) (Page 17 within the PDF)

BOEING 737 MAX - FIRST FLIGHT - 29th January, 2016 - The First New Boeing Aircraft of Boeing's Second Century:

Please click on: <http://bit.ly/1VIGqck> to view the first flight of Boeing's new aircraft – The 737 MAX.

As you are aware the design of all planes is a trade-off. The 737's shorter undercarriage means luggage can be loaded by ramp workers standing on the ground, meaning a quicker and cheaper turnaround. The penalty is that space under the wing for a larger diameter fan is restricted, hence the flattened nacelle.

2016 Diary: Feb 16-21: Singapore Airshow 2016 is Asia's largest and one of the most important aerospace and defence exhibitions in the world where the latest state-of-the-art systems and equipment, together with their related technologies and developments, are displayed by top aerospace companies around the world. Three additional events will be held during the week of the show namely: the Singapore Airshow Aviation Leadership Summit, the A*STAR Aerospace Technology Leadership Forum, and the Singapore Aerospace Technology and Engineering Conference. Refer to the website for further details: www.singaporeairshow.com

March 28: Nominations for 'The 2016 Wings Awards' open – refer for further information: www.australianflying.com.au/wings-awards

March 31: Nominations for the '2016 Society Honours, Medals & Awards' close – refer details at: aerosociety.com/About-Us/medalsawards

April 6: Gail Iles, UNSW, Mechanical Engineering Lecture Hall – '.....so you still want to be an astronaut.'

July 1: Nominations for 'The 2016 Wings Awards' close.

Sept 25-30: CAS 2016 in Daejeon, Korea - refer for further details: www.icas2016.com

Oct 25-27: APISAT 2016 in Toyama, Japan. Call for papers close 20/5/2016 – refer for further details: www.isass.or.jp/apisat2016

Sept 2017: International Astronautical Congress to be held in Adelaide. Thousands of scientists, including some 200 astronauts, will participate in the international space congress. Further details will be advised when available.