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AUSTRALIAN DIVISION SYDNEY BRANCH INC

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NEWSLETTER



Commodore Chris Smallhorn
The Commander Fleet Air Arm
Royal Australian Navy

discussing

'RAN Fleet Air Arm Tomorrow'

Date: **Tuesday 30th August, 2016**

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

Venue: **Mech Eng Theatre, Mech Eng Building**
University of Sydney



Light refreshments will be available prior to the commencement of the meeting Attendance will attract 1.5 CPD hour

Profile: Commodore Chris Smallhorn was born in Toowoomba, Queensland and attended the Toowoomba Grammar School before joining the Navy in 1987.

Chris graduated from the Australian Defence Force Academy and Royal Melbourne Institute of Technology with a Bachelor of Aerospace Engineering and completed his Aeronautical Engineering Certificate of Competency prior to conducting pilot training and earned his wings in 1993.

Chris conducted operational deployments flying the S-70B-2 Seahawk helicopter. He was selected for Experimental Test Pilot training at the United States Naval Test Pilot School in 1998, prior to being posted to the Navy's Aircraft Maintenance and Flight Trials Unit (AMAFTU). Whilst here he conducted flight testing on multiple Australian and international flight test projects, major aircraft acquisition, modification and research programs.

Chris was the Officer-in-Charge of AMAFTU in 2003 before being promoted to Commander when he became the Project Manager of the Super Seasprite acquisition program. He commanded 816 Squadron (Seahawk helicopters) throughout 2008 and 2009.

Following a short tour as the Commander of Operational Airworthiness and Standards at HQ Fleet Air Arm Chris was promoted to Captain and completed postings as the Chief of Staff Fleet Air Arm and Chief of Staff to the Chief of Navy. He graduated as a Fellow of the Centre for Defence and Strategic Studies in 2014 prior to assuming duties as the Director of the Maritime Safety Bureau in Jan, 2015.

CDRE Smallhorn maintains a keen interest in Civil Aviation safety. He is a Director of Safeskiies Australia, which delivers an international aviation safety conference in Australia on a bi-annual basis. He enjoys supporting not-for-profit emergency medical and search and rescue organisations and has flown their aircraft for numerous years on weekends and during leave periods, thus maintaining flying recency in aviation operations.

Commodore Smallhorn relinquished command as Director Maritime Safety Bureau in December 2015 and assumed duties as Commander Fleet Air Arm 20 January 2016.

Synopsis: Commodore Smallhorn will talk on the Royal Australian Navy's Fleet Air Arm.

Fleet Air Arm: The Fleet Air Arm, formerly known as the Australian Navy Aviation Group, is one of the Forces within Fleet Command. It brings together all the key elements which provide the RAN with its aviation force and provides the Naval Aviation capabilities required to fight and win at sea, and to

contribute to military support operations. The Forces' focus is on mission effectiveness, reliability, sustainability and safety. The group Headquarters is located at HMAS *Albatross*.

The Fleet Air Arm's responsibilities are to the Chief of Navy for the whole of life, whole of capability management of Naval Aviation, and to the Commander Australian Fleet for delivering aviation capability. HMAS *Albatross* operates the Naval Air Station which is integral to the development and operation of Naval Aviation. The collocation of the Navy Aviation Systems Program Office and the Training Authority - Aviation at Nowra has greatly improved the focus and delivery of Naval Aviation.

Current Aircraft: Following is a list of Aircraft currently commissioned into the Royal Australian Navy or currently undergoing trials and certification for acceptance into Australian service.

| Name | Type |
|-------------------|---|
| AS 350BA Squirrel | Light utility helicopter |
| Bell 429 | Training and utility helicopter |
| MH-60R Seahawk | Anti-submarine/ Anti-surface/ Search and Rescue |
| MRH-90 Taipan | Multi Role Helicopter |
| S-70B-2 Seahawk | Anti-submarine helicopter |

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://raesaug16.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 Commander Smallhorn to dinner at the nearby **Buon Gusto Italian Restaurant, 368 Abercrombie Street, Chippendale. Attendees are encouraged to join in. Cost will be approximately \$40 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.

Lunch with Mr John Borghetti FRAeS: The second Australian Division Senior Business Leaders Lunch will be held in Sydney on **Thursday 1st September, 2016, 12:00 hrs sharp, Ballroom 1, Four Seasons Hotel, 199 George Street, Sydney.**

Mr John Borghetti FRAeS, Chief Executive Officer, Virgin Australia will be interviewed by media personality Ticky Fullerton. For full details please refer to the attachment including how to register for the event.

UPDATE: There will be one door prize of a return Business Class ticket to Los Angeles for two. The door prize will be drawn during the lunch and the winner must be in attendance.

Singapore Airshow 16– 21 February 2016 (continued): The 5th Singapore Airshow Aviation Leadership Summit 2016: The 5th Singapore Airshow Aviation Leadership Summit 2016 was held prior to the Airshow which brought together key stakeholders in aviation, top government representatives, civil aviation authorities, senior executives of airlines, aircraft manufacturers, and heads of International Civil Aviation Organisation, and International Air Transport Association. The theme was *Aviation Tomorrow: Managing New Challengers, Realising New Potentials*. At the opening dinner speech Mr Tharman

Shanmugaratnam, Deputy Prime Minister and Co-ordinating Minister for Economic and Social Policies commented:

- Aviation plays a special role in our economic future, globally;
- Aviation is a real opportunity, a bright spot in the future. It is a sector that even by conservative projections has the potential to grow substantially in the next decade and beyond;
- The reasons for this has to do with the changing face of Asia. Rising affluence and rapid expansion of the middle-class is growing the demand for travel exponentially. It is not surprising that China has made aviation links a key part of its 'One Belt, One Road' initiative.
- The lower oil price is a boom to airlines. The industry has to make use of this opportunity to capitalise on new technologies, For example, big data can be harnessed for predictive maintenance, analysis of customer habits to provide better relationships with customers, and to improve productivity at airports, in aerospace, in airlines, and to open the skies further – going beyond the significant advances of the last two years;
- Aviation safety must continue to take top priority in both domestic and international policy making, and we should not let politics lead us to decisions that compromise safety;
- Singapore's end-goal is not the success of Singapore Airlines, but the vibrance of the Singapore air hub. Today a good number of the routes out of Changi are served only by foreign airlines;
- Singapore is investing in a major expansion of airport capacity with a fourth and fifth passenger terminal, and a three runway system; and
- Skills have special importance for us in Singapore. The Government is working to develop talent for the aviation sector through our national SkillsFuture initiative. We are presenting SkillsFuture Aviation Study Awards to an inaugural batch of 20 mid-career individuals with an average age of 41, some with no previous tertiary education and some with degrees.

Rolls-Royce Developing New Engines in Singapore: Rolls-Royce is continuing to ramp up production at its Seletar Singapore, engine assembly plant at it works to develop the new Trent 7000 (that will power the Airbus A330neo) and new technologies for future engines. The Seletar plant assembled 80 engines last year, a mix of Trent 900s and Trent 1000s, and is working to achieve its target of 250 engines per annum by the end of 2017.

Rolls-Royce also make fan blades at Seletar for Trent 900, Trent 1000, and Trent XWB engines. Bicky Bhangu, Rolls-Royce Director for Singapore, says it produced 3,100 fan blades last year and is ramping up production to achieve annual production of 7,600 blades by end of 2017.

Seletar is an historic airport built for the Royal Air Force in 1928. It has grown from being in the shadow of Paya Lebar/Changi to being a major centre for business aviation, aerospace manufacturing and services, and maintenance repair and overhaul (MRO). It is the key facility surrounding Seletar Aerospace Park (SAP), which houses most of those industries, and is the premier cluster for Singapore's growing aerospace industry.

Low-cost Scoot is living the Dreamliner: Boeing has hailed Singapore based Scoot's switch to an all-787 fleet as proof that the Dreamliner is well suited to low-cost as well as full-service airlines.

At a press conference at the show Boeing Commercial Airplanes vice-president marketing Randy Tinseth said the 787 can be 'easily configured' for budget airlines. Scoot operates a fleet of 10 787s – six 9s and four 8s. It has another ten 787s on order. Scoot's 787-8s are configured in a 314 seat economy and 21 seat business, while its larger -9s have 340 economy and 35 business. Scoots had a new 787-9 at the airshow and we were able to view this configuration. Very compact but more suited to shorter flights rather than the 6+ hours flights to India.

May 2-5 AUVSI's XPONENTIAL 2016:



The Association for Unmanned Vehicle Systems International hosted XPONENTIAL 2016 Unmanned Systems Show, in New Orleans, Louisiana, USA.

The host for all the formal sessions was Mr Miles O'Brien, PBS Newshour Journalist, and a veteran journalist who focuses on

Science, Technology and Aerospace. Born in Detroit, now a resident of Washington DC, Miles 56, lost his left arm in 2014 due to acute compartment syndrome after a heavy equipment case fell on it while on assignment in Asia. In January, 2016 he was honored with the Aviation Inspiration and Patriotism Award at the 13th Annual Living Legends of Aviation Awards.

Need a Job? Talk to Northrop: Northrop Grumman is hiring. That's the message for Xponential 2016. On their booth were examples of the company's groundbreaking work unmanned technology – model of

the Global Hawk – able to fly at 50,000 feet for up to 10,000 miles at a time and a model X-47B-the first unmanned craft to take off and land on an aircraft carrier. (Its aim was so precise that its wheels dug grooves into the ship's deck and the landing co-ordinates had to be changed.) The X-48B was the first UAS to be re-fueled in flight, by a manned tanker, last year. 'One of our focuses of the show is to attract talent' said Renee Freeland, Communications Manager, Autonomous Systems, MQ-4C Triton. 'The potential is all in the people we hire'. Northrop Grumman will be at Avalon2017. Renne can be contacted at: rene.freeland@ngc.com

2016 Diary: **Aug 18:** AIAA 2016 Distinguished Lecture Program: Presentation entitled 'The Future of US Planetary Exploration' by Dr. Randii Wessen: A-Team Lead Study Architect at NASA JPL Innovation Foundry. **Venue:** Abercrombie Building Auditorium, University of Sydney - Darlington Ln, Darlington - 18:15 for 18:30 hours start [Click here for registration, venue map and more information on Eventbrite.](#)

Aug 28: RAAF Air Training Corps / Australian Air Force Cadets - Freedom of Entry to the City of Sydney parade for No. 3 Wing AAFC at the Royal Botanical Gardens Parade Ground commencing 10:00 hours followed by a march along Macquarie Street to the Sydney Opera House where the challenge will take place. Celebrating 75 Years (1941-2016).

Sept 1: Australian Division luncheon with Mr John Borghetti FRAeS, CEO Virgin Australia, being interviewed by media personality Ticky Fullerton. Please refer to attached flyer for details. Registration can be made at: www.eventbrite.com/e/lunch-with-john-borghetti-tickets-25749099249

Sept 13: Engineers Australia has planned a visit to RAAF Base Richmond. Refer details at: <https://www.engineersaustralia.org.au/portal/event/raaf-base-richmond-technical-presentation-workshop-visit>

Sept 15-18: Australasian Society of Aerospace Medicine 2016 annual conference, Townsville Qld - refer details at: <http://event.icebergevents.com.au/asam-2016/cost-registration>

Sept 25-30: ICAS 2016 in Daejeon, Korea – refer details at: www.icas2016.com The Preliminary Programme is at: www.icas.org/media/ICAS%20Congress%202016%20Preliminary%20Programme.pdf

Oct 25: 58th Sir Charles Kingsford Smith Memorial Lecture to be given by Mr Mike Sinnett, Vice President of Engineering and the Chief Project Engineer for the 787 program, the Boeing Company. The evening will celebrate both the 100th Anniversary of the Boeing Company and the 150th Anniversary of the RAeS. Details being finalized.

Oct 25-27: APISAT 2016 in Toyama, Japan – refer details at: www.jsass.or.jp/apisat2016

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

Dec: Annual General Meeting and "Hot Aeros in the Pub". Venue: 3 Wise Monkeys.



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 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. Space probes are also vital to our understanding of the solar system and the far universe. The IAC2017 program addresses all of these topics and emphasises the important contribution that space makes to STEM education as well. Refer details at: iac2017.org/

