

# **3rd Asian/Australian Rotorcraft Forum and the 8th Australian Pacific Vertiflite Conference on Helicopter Technology 2014**

Melbourne, Australia  
18-19 December 2014

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## Conference Schedule

Theme: Issues and Challenges of Imported Design Technology

**Thursday 18 December 2014**

0700-0800	Registration	Conference organizers
0800-0815	Conference Briefing – Day 1	Dr Arvind Sinha, Conference Chair
0815-0830	Welcome Address N/A	Mr Mike Hirschberg, Executive Director, AHS International.
0830-0900	Opening Address N/A	RADM Tony Dalton Head, Helicopters, Tactical UAVs and Guided Weapons, Defence Materiel Organisation. (DMO)
0900-0930	Keynote Address 1 – Australian Helicopter Industry N/A	Charles Crocombe, Vice President, Government Helicopters, Airbus Group Australia Pacific.
0930-1015	Keynote Address 2 – Indigenous Technologies and Capabilities: Benefits and challenges in the Military N/A	Mr Somen Chowdhury, Aerosapce Engineering Consultant, Canada.
1015-1040	<b>Morning Tea and Coffee</b>	All Conference Attendees
1040-1105	Innovative Test Methodology Optimizing for Cost and Time Efficiency: NH90 NFH Helicopter-Ship Qualification across the Complete Dutch Fleet 1	Alrik Hoencamp, Netherlands Defence Academy. (Operations)
1105-1135	Introduction into Service of the New Zealand Air Force NH90 Capability: Challenges and Triumphs N/A	Shaun Johnson, WdCdr, Air Advisor, RNZAF, New Zealand. (Operations)
1135-1200	Integration of the MH-60R into the Navy Aviation System Program Office Engineering Management System 14	Alex Hale, Airframe Systems Engineer, NASPO- HMAS Albatross, Nowra, NSW. (Operations)
1200-1230	Military Training in Civil Environment 20	Capt Mike Becker, Director, Becker Helicopters.
1230-1330	<b>Lunch – Stand-Up Working Lunch</b>	All Conference attendees
1330-1400	Keynote address 3 – Army Aviation - Operations 37	BRIG Michael Pricor, Commander 16 Aviation Brigade, Australian Army.
1400-1430	Keynote address 4 – Army Aviation Systems - Technologies N/A	BRIG Andrew Mathewson, Director General Army Aviation Systems, DMO.
1430-1450	<b>Afternoon Tea and Coffee</b>	All Conference Attendees

1450-1515	Rotorcraft Flight Dynamics and Controls Research at NASA 44	Colin Theodore, NASA Ames Research Centre, USA. (Operations)
1515-1540	Recent Advances in Small Engine Technology 59	Sankar, Prasad and Jagoda, Georgia Institute of Technology, USA. (Propulsion)
1540-1605	Multidisciplinary design and optimization of conceptual powerplant configurations targeting improved rotorcraft operational performance 67	Fakhre Ali, Cranfield University, UK. (Propulsion)
1605-1630	Closed-form Solutions for Rotating Cantilever Non-uniform Rayleigh Beams 90	Korak Sarkar, Aerospace Engineering, Indian Institute of Science, Bangalore, India. (Structures and Materials)
1630-1655	Silane Coating for the Corrosion Protection of a Magnesium Alloy, ZE41 98	Raman Singh and P. Chakraborty Banerjee <sup>1</sup> , Departments of Mechanical and Aerospace Engineering, Monash University. (Structures and Materials)
1655-1720	Cross Sectional Analysis of Thick Tapered Composite Beam with Resin Rich Regions Using Variational Asymptotic Method N/A	Megha Tv and Professor Dineshkumar Harursampath, Department of Aerospace Engineering, Indian Institute of Science, Bangalore, India, J7948630. (Structures and Materials)
1900-2100	Conference Technology Presentation (Project Zero), Banquet & Awards N/A	Mr James Wang, Vice President Research & Technology, Agusta Westland, Italy. Dr Arvind Sinha, AHS President, Australian Chapter.

## Conference Schedule

Theme: Issues and Challenges of Imported Design Technology

**Thursday 19 December 2014**

0730-0800	Registration	Conference organizers
0815-0830	Conference Briefing – Day 2	Dr Arvind Sinha, Conference Chair
0830-0900	Keynote Address 5 – Naval Aviation - Operations N/A	CDRE Vince Di Pietro, Commander Fleet Air Arm, Royal Australian Navy
0900-0930	Effects of the Ship Air-wake on Helicopter Controls during Recovery Operations 99	Robert Toffoletto, Defence Science and Technology Organisation, Melbourne, Aust (Aerodynamics)
0930-1000	Verification of the Prediction Accuracy of Rotor Performance by rFlow3D 106	Hideaki Sugawara and Yasutada Tanabe, Ryoyu Systems, JAXA, Japan. (Aerodynamics)
1000-1025	<b>Morning Tea and Coffee</b>	All Conference attendees
1025-1050	Prediction of Wake Structure and Induced Velocity of a Helicopter Rotor in the Vortex Ring State using a Vortex Particle Method N/A	S H Park and D J Lee, Division of Aerospace Engineering , KAIST, Korea. (Aerodynamics)
1050-1115	Metamodeling Heliplane Take Off Trajectories for Aeroacoustic Analysis 108	J.V.R. Prasad and G. Jeram, Georgia Institute of Technology, USA. (Aerodynamics)
1115-1140	Numerical Analysis of the Downwash Caused by a Helicopter Rotor in Ground Effect N/A	Yasutada Tanabe, Masahiko Sugiura, and Hideaki Sugawara, JAXA, Japan. (Aerodynamics)
1140-1205	Numerical Simulations of Ice Accretion Based On a Physics-Based Methodology 117	Lakshmi Sankar, Jeewoong Kim, Georgia Institute of Technology, USA and Richard E Kreeger, NASA Glenn Research Centre, USA. (Aerodynamics)
1205-1230	BVI Noise Control Based on Pressure Signals on Blade N/A	Yasutada Tanabe, Masahiko Sugiura, Noboru Kobiki and Takashi Aoyama, JAXA, Japan. (Aerodynamics)
1230-1330	<b>Lunch – Stand-Up Working Lunch</b>	All Conference attendees
1330-1400	Keynote Address 6 – Naval Aviation Systems - Technologies N/A	CDRE Colin Lawrence, Director General Navy Aviation Systems, DMO
1400-1425	An Online Identification Method with Improved Robustness for Helicopter Flight Control System Design N/A	Wu Wei, College of Aerospace Engineering, Nanjing University of Aeronautics and Astronautics, Nanjing, China. (Operations)

1425-1450	Study of aerodynamic shape of a helicopter rotor blade shape in hover using multi fidelity optimization method N/A	Shigeru Takeda ,Masahiko Sugiura and Yasutada Tanabe, University of Tokyo, Japan. (Design)
1450- 1515		
1515-1540	Design and Performance Evaluation for Active Tab Design Mechanism for Mach Scaled Model Blade N/A	Presented by Yasutada Tanabe for Noboru Kobiki, JAXA, Japan, (Design)
1540-1605	Tiltrotor UAV Development in Korea and More Efforts to Enhance Performance 129	Youngshin Kang, Korea Aerospace Research Institute, Daejeon, Korea. (Aerodynamics)
1605-1630	A Study on Aerodynamic-Dynamic Characteristics of Helicopter during Maneuver Flight N/A	Yeon Bok Chu and Duck Joo Lee, Division of Aerospace Engineering , KAIST, Korea. (Aerodynamics)
1630-1700	AHS International Regional Meeting	By Invitation
1630-1700	ARF Executive Committee Meeting	By Invitation
1700-1715	Conference Closing Ceremony	President Australia & Singapore Chapter and ARF Executive Committee