

PRELIMINARY TIMETABLE

Sixth DSTO International Conference on Health and Usage Monitoring

Thirteenth Australian International Aerospace Congress, in conjunction with Australian International Airshow 2009

Monday 09 March 2009

1730 - 1930	Welcome Reception - River Room, Crown Melbourne
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Tuesday 10 March 2009

0800 - 0915	PLENARY - VENUE: LA TROBE THEATRE		Session Chair: David Graham, DSTO
	Congress Opening Address	<i>Hon. Warren Snowdon MP, Minister for Defence Science and Personnel</i>	
	Opening Keynote Speaker	<i>Major General AP (Tony) Fraser AM CSC, Head Helicopter Systems Division</i>	
0915 - 0930	Move between sessions		
0930 - 1000	CONCURRENT SESSIONS	HUMS - Opening Keynote VENUE: YOU YANGS 1	Session Chair: Joanna Kappas
		1. Getting The Right Things Done In Developing Enterprise Health Management Systems <i>Roger Vodicka, DSTO -AVD</i>	
1000 - 1030		Morning Tea	
		HUMS 1 - VENUE: YOU YANGS 1	HUMS 2 - VENUE: YOU YANGS 5
		Session Theme: Condition-Based-Maintenance	Session Theme: Usage Monitoring I
		Session Chair: Graham Forsyth	Session Chair: SGNLDR Brian Rowe, DGTA
1030 - 1100		2. An introduction to Condition Based Maintenance using reliability assessment methods <i>Pierre-Loic Maissonneuve, Eurocopter</i>	
		3. Super Hornet Usage Monitoring <i>Wing Commander Paul Parolo, Australian Super Hornet Project Office</i>	
1100 - 1130		4. Reading the Tea Leaves: Considerations for the Analysis of Aircraft Oil Filter Debris <i>Andy Becker, DSTO</i>	
		5. Characterization of Rotorcraft Recorded Maneuver/Regime Usage Variability <i>Suresh Moon, Air Vehicle Engineering, L-3 Communications</i>	
1130 - 1200	6. Prognostics-Based Product Reliability Monitoring <i>Michael Pecht, Uni of Maryland, USA</i>		
	7. Development of a Flight Manoeuvre Recognition Program for the S-70A-9 Black Hawk Helicopter Using Information from the Flight Data Recorder <i>Chris Dore, DSTO</i>		
1200 - 1300	Buffet Lunch		
1300 - 1400	PLENARY - VENUE: LA TROBE THEATRE		Session Chair: Don Love, GKN Aerospace
	Keynote Address	Flying in the Future: Greener faster or faster greener? <i>Prof Joachim Szodrach, DLR-German Aerospace Centre</i>	
	CONCURRENT SESSIONS	HUMS 1 - VENUE: YOU YANGS 1	HUMS 2 - VENUE: YOU YANGS 5
		Session Theme: Helicopter HUMS	Session Theme: Usage Monitoring II
		Session Chair: Andy Becker, DSTO	Session Chair: Nick Lieven, University of Bristol
1400 - 1430		8. Advanced HUMS Capabilities for Offshore Operations <i>Stephen Boakes, GE Aviation Systems Ltd</i>	
		9. Roadmap for Helicopter Life Usage <i>Catherine Cheung, National Research Council Canada, Institute For Aerospace Research</i>	
1430 - 1500		10. Advanced RTB data analysis <i>Richard Hunt, Helitune Ltd</i>	
		11. Architecture for Dynamic Component Life Tracking in Advanced HUMS, RFID, and Direct Load Sensor Environment <i>Nagaraha Iyyer, Technical Data Analysis, Inc.</i>	
1500 - 1530		12. A Description of the MRH 90 Health and Usage Monitoring System <i>James Fay, Australian Aerospace</i>	
		13. The Optimization of exploiting fatigue-life resources of the PZL-130 Orlik's structure <i>Andrzej Leski, Air Force Institute Of Technology, Poland</i>	
1530 - 1600		Afternoon Tea	
	HUMS 1 - VENUE: YOU YANGS 1	HUMS 2 - VENUE: YOU YANGS 5	
	Session Theme: Data Management	Session Theme: Sensor Technologies I	
	Session Chair: Graham Forsyth	Session Chair: David Forrester, DSTO	
1600 - 1630	14. HISDES: a shared multinational Helicopter Integrated Supportability Data Exchange System for the NH-90 <i>A.A. ten Have, NLR, The Netherlands</i>		
	15. WISD - Wireless Intelligent Sensing Devices <i>Dr Nick Lieven, University of Bristol</i>		
1630 - 1700	16. Open-Source Development of an Automated Maintenance Environment (AME) for lower cost, collaborative implementation of CBM+ <i>Joseph Schmidley, SPAWAR-Pacific</i>		
	17. Integrating Model-based Shaft Coupling Prognostics with Vibration Diagnostic Features <i>Carl Byington, Impact Technologies</i>		
1700 - 1730	18. The language of FMEA: on the effective use and reuse of FMEA data <i>Shoshanna Rudov-Clark, PHM Technology</i>		
	19. Gas Turbine Casing Response to Blade Vibrations: Analytical and Experimental results <i>Gareth Forbes, UNSW</i>		
1900 - 2330	Congress Dinner, Members Dining Room at the Melbourne Cricket Ground		
	Keynote Address	Dr Andrew Thomas, NASA Astronaut	

LOGO	 Australian Government Department of Defence Defence Science and Technology Organisation	SILVER	 DYTECNA Systems Engineering	BRONZE	 ETMC technologies		
	 semia Our purpose : To measure and to control vibrations		 QinetiQ		 TAE		
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Wednesday 11 March 2009

0830 - 0930	PLENARY - VENUE: LA TROBE THEATRE Session Chair: David Graham, DSTO		
	Keynote Address The Globalisation of Aerospace Technology <i>Don Winter, Boeing Research & Technology</i>		
	CONCURRENT SESSIONS	HUMS - VENUE: YOU YANGS 1 Session Theme: HUMS Applications Session Chair: Joanna Kappas	
0930 - 1000		20. HUMS as a Service <i>Dr Auryn Hughes, Dytecnica Systems Engineering</i>	
1000 - 1030		21. Rapid Operational Loads Monitoring capability - CMPLE (Compact Multi-Parameter Loads Evaluation system) <i>Steve Galea, DSTO</i>	
1030 - 1100		Morning Tea	
		HUMS 1 - VENUE: YOU YANGS 1 Session Theme: Structural Health Monitoring I Session Chair: Carl Byington, Impact Technologies	HUMS 2 - VENUE: YOU YANGS 5 Session Theme: Land Vehicles HUMS Session Chair: Keith Mowbray, Dytecnica
1100 - 1130		22. Strain predictions using Artificial Neural Networks for a full-scale fatigue monitoring system <i>Javier Gomez-Escalonilla, EADS MTAD</i>	23. The Research, Development, and Fielding Of A HUMS As An Enabler For Condition-Based Maintenance On U.S. Army Wheeled Ground Vehicles <i>Craig Hershey, CBM Maintenance Team, U.S. Army Materiel Systems Analysis Act</i>
1130 - 1200	24. In Situ Structural Health Monitoring for Aircraft Structures <i>Steve Galea, DSTO</i>	25. Event-based HUMs for Land-Vehicles <i>Chris Doran, Industrea</i>	
1200 - 1300	Buffet Lunch		
1300 - 1400	PLENARY - VENUE: LA TROBE THEATRE Session Chair: David Graham, DSTO		
	Keynote Address F-35-defining the next frontier in Multi Role Fighter Development and Operation <i>Tom Burbage, Lockheed Martin Aeronautics Company</i>		
	CONCURRENT SESSIONS	HUMS 1 - VENUE: YOU YANGS 1 Session Theme: Structural Health Monitoring II Session Chair: Simon Barter, DSTO	HUMS 2 - VENUE: YOU YANGS 5 Session Theme: Sensor Technologies II Session Chair: tbc
1400 - 1430		26. SEI Structural Data Recording System <i>George Grove, Systems & Electronics, Inc.</i>	27. Combination of Fusion and Preprocessing Techniques to Enhance Air Vehicle HUMS <i>Carl Byington, Impact Technologies</i>
1430 - 1500		28. Crack Initiation Detection and Crack Growth Monitoring with DMI Technology <i>Vachon Reginald, Direct Measurements, Inc.</i>	29. Automated design and optimisation of sensor sets for system monitoring <i>Shoshanna Rudov-Clark, PHM Technology</i>
1500 - 1530		30. Structural Integrity Assessment of Plates Using Vibration Monitoring <i>Krishnakumar Shankar, UNSW, Australian Defence Force Academy</i>	31. Towards Wireless Sensor Usage and Health Monitoring of Helicopter Rotor Components <i>Nick Lieven, University of Bristol</i>
1530 - 1600	Afternoon Tea		
	CONCURRENT SESSIONS	HUMS 1 - VENUE: YOU YANGS 1 Session Theme: TBC Session Chair: tbc	HUMS 2 - VENUE: YOU YANGS 5 Session Theme: Sensor Technologies III Session Chair: Tony Galati, DSTO
1600 - 1630		32. TBC	33. Effects of limiting the bandwidth of the vibration signal on bearing fault detection and diagnosis using state of the art techniques <i>Nader Sawalhi, UNSW</i>
1630 - 1650		HUMS 1 - VENUE: YOU YANGS 1 HUMS2009 Conference wrap-up and Feedback Session Chair: Joanna Kappas	
1700 - 1730	PLENARY - VENUE: LA TROBE THEATRE Session Chair: David Graham, DSTO		
	Congress Closing		
1830 - 2300	HUMS DSTO Conference Dinner, Melbourne Immigration Museum (Old Customs House)		

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Thursday 12 March 2009 Technical Briefings at Avalon Airshow

0830 – 0910 First Bus to Airshow

Session Room: Conference Room 1 (located externally, opposite Hall B entrance)

0915 – 0930	Coffee Available outside Conference Room 1	
		Session Chair: tbc
0930 – 1000	34. ACRA Control and/or HEIM data acquisition equipment, <i>ETMC</i>	
1000 – 1030	35. C-130J-30 Propeller Balancing Software, <i>QinetiQ Australia</i>	
1030 – 1100	36. TAE Management of RAAF F111 TF30 Engine Condition Monitoring Data, <i>Matt Williams, TAE</i>	
		Session Chair: tbc
1100 – 1130	37. Demonstration of MADE software, <i>Mr Stecki, PHM Technology</i>	
1130 – 1200	38. HUMS - A Hands on Approach, <i>ACRA CONTROL</i>	
1200 – 1230	39. Demonstration of the CAMEO System - an Open-Source Automated Maintenance, Environment (AME) A38, <i>Joseph Schmidley, SPAWAR-Pacific</i>	

1500 – 1545 first bus back to Melbourne

1700 – 1755 last bus back to Melbourne

NOTES

- 1 Conference Centre is adjacent to Exhibitor Centre
- 2 Papers of these sessions will not normally appear on CD-ROM
- 3 Presentations are in 30 minute slots without gaps as two groups of 3
- 4 Bus must be booked

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