

**Tuesday 11<sup>th</sup> February, 2003 to Friday 14<sup>th</sup> February, 2003**  
**Avalon Airfield, near Geelong,**  
**Trade Entry to Australian International Airshow**

**Friday 14<sup>th</sup> February, 2003 Avalon Airfield, near Geelong**

From:	To:	
09:30	10:30	HUMS Demonstration Session*
10:30	11:00	Coffee

*\* Attendance at the Demonstration must be pre-booked and is subject to a limit.  
 Follow Signs to the Conference Centre, Conference Room 1, Adjacent to Hall B North  
 Note that this is next to Airshow Headquarters (info centre) and the Media Centre.  
 Please aim to be on time; 9:30 is the commence time not arrive time.*

**Sunday 16<sup>th</sup> February, 2003– Duxton Hotel– 328 Flinders Street Melbourne**

From:	To:	
18:30	19:30	Collect Badge
20:00	22:30	Cocktail Reception

Proceedings of this conference were pre-published as DSTO-GD-0348. This website has this document at two resolutions, called [Screen](#) and [Print](#). Papers listed with numbers beginning with 4 are in this document. Papers are also available separately by clicking on the paper in the [MENU](#).



**TIMETABLE and MENU**  
**Third DSTO International Conference on Health & Usage Monitoring – HUMS2003**

**Monday 17<sup>th</sup> February, 2003 – Duxton Hotel – 328 Flinders Street Melbourne**

From:	To:		
8:30	9:00	<b>Registration</b>	
9:00	9:15	<b>Official Welcome: Air CDRE N Schmidt – DGTA-ADF</b>	
9:15	9:55	4-12. Andy Evans (United Kingdom Civil Aviation Authority) <i>Managing a Successful HUMS Operation</i>	
9:55		4-1. Ken Pipe (HUMAWARE) <i>Measuring the Performance of a HUM System - the Features that Count</i>	
10:25	10:50	<i>Morning Tea Break</i>	
10:50	11:30	5-14. H. Silverman (RSL Electronics) <i>RSL's AH64 T-HUMS - The HUMS that does the Job!</i>	
11:30		5-6. SQNLDR Paul Parolo (ADF DGTA) <i>Certification of Engine Health &amp; Usage Monitoring Systems on Military Aircraft</i>	
12:00	12:30	<b>Panel A: "Testing Requirements for a Generic HUMS", Panel TBA – a panel of 4 speakers will discuss and answer questions on this topic.</b>	
12:30	13:45	<i>Lunch (included)</i>	
		<b>Duxton B</b>	<b>Duxton A</b>
13:45	14:25	4-4. C.S. Byington et al (Impact Tech) and Robab Safa-Bakhsh (Boeing) <i>Metrics Evaluation and Tool Development for Health &amp; Usage Monitoring System Technology</i>	
14:25		5-3. François Cantegreil (SEMIA Fr) <i>Engine Vibration Control: a step by step way to HUMS</i>	
14:55	15:25	5-7. Graham F. Forsyth and Eric CJ Lee (DSTO Australia) <i>HUMSSAVE 4 - An Upgraded Econometric Model for Cost/Benefit Studies of HUMS</i>	
15:25		4-9. Lt Cdr Jon Milsom RN (RAF Wyton), Nick Toulas and Phil Irving (Cranfield University) <i>A Study of Usage Variability and Failure Probability in a Military Helicopter</i>	
15:25	15:55	<i>Afternoon Tea Break</i>	
15:55	16:25	5-5. Mick Richmond (Australian Army, Rotary Wing A/c Maint. School) <i>Training Techniques and Methodologies for Helicopter RT&amp;B</i>	
16:25		5-4. L. Molent (DSTO Australia) <i>Considering the Role of Health Mon... in Fixed Wing Aircraft HUMS</i>	
16:55	17:25	5-16. Mal Davies (Helitune Ltd) <i>Keeping Track of the Future</i>	
17:25		4-3. Stephen Moore et al (ADFA) <i>Model Updating and Determination of Structural Dynamic Behaviour in the Presence of a 2nd Source of Excitation</i>	
18:30	19:30	<b>Drinks</b>	
20:00	22:30	<b>Conference Dinner</b>	



TIMETABLE and MENU

Third DSTO International Conference on Health & Usage Monitoring – HUMS2003

Tuesday 18<sup>th</sup> February, 2003– DuxtonHotel – 328 Flinders Street Melbourne

From:	To:		
9:00	9:15	<b>Registration</b>	
9:15	9:55	Chair: TBA	4-8. Alan Draper and Cdr James Gourlay RN (MOD United Kingdom) <i>The Operational Benefits of Health&amp; Usage Monitoring Systems in UK Military Helicopters</i>
9:55	10:25		5-15. Errol Farr (Smiths Aerospace) <i>Maintenance Analysis, Safety and Training (MAST) Program) A Comprehensive Application of Digital Flight Data</i>
10:25	10:50	<i>Morning Tea Break</i>	
10:50	11:30	Chair: TBA	5-8. David Haas (US Navy NSWC) & Treven Baker (US Army AATD) <i>Joint Advanced Health and Usage Monitoring System (JAHUMS) Advanced Concept Technology Demonstration (ACTD) Program</i>
11:30	12:00		4-13. David White (Westar), Michael McFalls (US Army) & David Largess(COBRO) <i>U.S. Army Lead The Fleet Usage Analysis</i>
12:00	12:30	Panel B: "What Needs to be done to make HUMS better", panel TBA – a panel of 4 speakers will discuss and answer questions on this topic.	
12:30	13:45	<i>Lunch (included)</i>	
		<b>Duxton B</b>	<b>Duxton A</b>
13:45	14:25	5-13. S Galea, A Wilson, C Scala & A Wong (DSTO) <i>Smart Structures &amp; Materials: A DSTO Key Initiative</i>	5-1. Adam Forsyth (VAMtec - GPS Online) <i>vHUMS System Architecture</i>
14:25	14:55	4-10. Richard Fielding & Aaron McNelis (ACRA Control) <i>Applying Rules for Isochronous Sampling Within Acquisition Cycles to Airborne DAS</i>	5-2. Keith Mowbray (VAMtec -Dytecna) <i>vHUMS Applications in the UK</i>
14:55	15:25	4-11. P. N. Trathen and B. R. W. Hinton (DSTO Australia) <i>A Sensor for Monitoring Corrosive Environments on Military Aircraft</i>	4-5. Thomas Stadterman, Alan Peltz et al <i>Physics of Failure-based Approach... - Part 1 - Life-consumption Monitoring for Military Vehicles</i>
15:25	15:55	<i>Afternoon Tea Break</i>	
15:55	16:25	Chair: 5-12. Dr. Balázs Bagó & Wolfgang Isermann (HEIM Systems) <i>High Precision and Bandwidth Efficient Data Recording Format</i>	Chair: 4-6. Roger Harris (UK DSTL) and Ian McNee (QinetiQ) <i>Physics of Failure - Part 2 - Sensors used for Terrain &amp; Vibration Severity Mon...</i>
16:25	16:55	6-1. R.B. Randall (UNSW) & J. Antoni (UT Compiègne, Fr) <i>A New Efficient Technique for Separating Gear and Bearing Signals In Helicopter Gearbox Diag</i>	5-11. Peter W. House (Ultra) <i>Use of Conductance Measurement for Battery Health Monitoring</i>
16:55	17:15	<b>CLOSING</b>	

Numbers before papers are Chapters in Proceedings. Chapter 4-x is a full paper; 5-x abstract only, 6-x is new.

