

# 2011 Defence Human Sciences Symposium

## Wednesday 16 November

0830	Registration & Refreshments (Auditorium Break Out Area)
<b>Session 1 (09:30-10:30, Auditorium)</b>	
0930	Welcome <i>Dr Anne-Marie Grisogono, Human Sciences Hub Leader</i>
0935	Opening Address <i>Dr Simon Oldfield, Acting Deputy Chief Defence Scientist (PHS)</i>
0950	Keynote Address <i>AIRMSHL John Harvey, AM, Chief Capability Development Group</i>
1030	Morning Tea (Auditorium Break Out Area)
<b>Session 2 (11:00-12:30, Auditorium)</b> <b>Chair: Dr Philip Hughes</b>	
1100	The Human Environment of Warfare in the Networked Age <i>Chris Westwood*, Murray Smith and Jamie Watson</i>
1130	A Structured Approach to Work Domain Analysis: Case Study of its Application to the Royal Australian Air Force's Air Combat System <i>Alanna Treadwell* and Neelam Naikar</i>
1150	A Comparison of an Australian Army Unit to all of Army: Organisational Learning Culture, Attitudes towards Organisational Change and Organisational Trust <i>Maya Drobnjak, Christina Stothard*, Steven Talbot and Denise McDowall</i>
1210	Perceptions of Learning in the Australian Army: An Analysis of Comments Provided in the Army Learning Organisation Questionnaire <i>Steven Talbot*, Christina Stothard, Denise McDowall and Maya Drobnjak</i>
<b>Lunch and Poster Session I (12:30-13:30, Auditorium Break Out Area)</b>	
1230	The Impact of On-Road Motion on BMS Touch Screen Device Operation <i>Natassia Goode*, Michael Lenné and Paul Salmon</i>
1230	Modeling the Control of Attention in Visual Workspaces <i>Jason McCarley*, Kelly Steelman, and Christopher Wickens</i>
1230	Logical-Rule Models of Categorisation: A Synthesis of Mental-Architecture, Random-Walk, and Decision-Bound Approaches <i>Daniel Little</i>
1230	A Haptic Platform to Enable Fingertip Grasping and Manipulation <i>Quan-Zen Ang*, Ben Horan, Zoran Najdovski, and Saeid Nahavandi</i>
1230	A Prototype Syndromic Surveillance System for Detection of Biological Attacks against Australian Military Personnel <i>Peter Dawson*, Ralph Gailis, Chris Woodruff, Alex Skvortsov, Alaster Meehan and Russell Connell</i>
1230	Pupil Diameter, EEG, ECG and Self-Report Correlates of Task <i>Alistair Walsh*, Kingsley Fletcher and Gary Ewing</i>
1230	The Health and Cost Implication of High Body Mass Index among Australian Defence Force Personnel <i>Jonathan Peake*, Susan Gargett, Michael Waller, Ruth McLaughlin, Tegan Cosgrove, Gary Wittert, Peter Nasveld and Peter Warfe</i>

<b>Session 3 (1330–1510, Parallel Sessions)</b>		
	<b>Session 3A (Conference Room)</b> <b>Chair: Dr Simon Parker</b>	<b>Session 3B (Auditorium)</b> <b>Chair: Dr Nick Beagley</b>
1330	Speed and Accuracy of MIL-STD-2525 Symbol Detection <i>Kingsley Fletcher*, Ashley Arnold and Susan Cockshell</i>	Electrophysiology, Military Deployment and Psychopathology <i>Andrew Lawrence*, Derek Brown*, Carol Davy, Alexander McFarlane and Annette Dobson</i>
1350	Interactions among Eccentricity, Saliency, and Expectancy in an Alert Detection Task <i>Kelly Steelman*, Jason McCarley and Christopher Wickens</i>	Deployment and the Mental Health of Australian Defence Force Personnel and their Families- Lessons from Research and a Comparative Country <i>Overview of Best Practice to Enhance Capability</i> <i>Philip Siebler</i>
1410	The Effectiveness of Auto-Detect Decision Aids Depends on Target Saliency <i>Bradley Wolfgang*, Russell Martin and Ken McAnally</i>	The Challenge of Making Accurate Epidemiological Estimates in Defence Populations: The Mental Health Prevalence Study <i>Miranda Van Hooff*, Alexander McFarlane*, Stephanie Hodson, Alan Verhagen, Nicole Steele and Helen Benassi</i>
1430	Developing a Strategic Common Picture in Defence <i>Stephen Hughes* and Michael Webb</i>	Understanding the Cellular Effects of Exposure to JP-8 Jet Fuel and Compounds Used During Deseal/Reseal of F-111 Aircraft <i>Rachelle Warner*, Elisa Jansen, Francis Bowling and Nigel Waterhouse</i>
1450	Human Identification using Faces: Towards an Understanding of the Factors that Impact on One-to-Many Face Matching <i>Rebecca Heyer*, Carolyn Semmler and Brett McLindin</i>	Re-Thinking our Approach to Alcohol: Is Social Marketing the Key to Unlock Behavioral Change in ADF Alcohol Management? <i>Sharyn Rundle-Thiele</i>
1510	Afternoon Tea (Auditorium Break Out Area)	
<b>Session 4 (1540-1700, Parallel Sessions)</b>		
	<b>Session 4A (Conference Room)</b> <b>Chair: Dr Peter Henley</b>	<b>Session 4B (Auditorium)</b> <b>Chair: Dr Michelle Grech</b>
1540	Round the Clock: Watch Keepers Perceptions on Sleep, Fatigue and Roster Design <i>Irena Ali*, Alexander Kalloniatis and Anthony Dekker</i>	A Comparison of SME-Based and User-Based Assessments of the Usability of Protected Mobility Vehicles <i>Amy Simpson*, Mark Edwards* and Alistair Furnell</i>
1600	Development of a Portable, Subjective Flicker Measurement System <i>Mark Schier</i>	A Method for the Quantification of External Vision in Protected Mobility Vehicles <i>Mark Edwards*, Alistair Furnell and Amy Simpson</i>
1620	Immune Responses to Exercise in the Heat Following Probiotics Supplementation <i>Jonathan Peake*, Cecilia Shing, David Briskey, Fabian Lim and Luis Vitetta</i>	Assessing the Usability of Protected Field Vehicles Through User Acceptance <i>Susannah Whitney*, Justin Fidock and Nicole Ferguson</i>
1640	Healthy Eating: An Examination of the Evidence Base in Young Adult Populations <i>Julia Carins*, and Sharyn Rundle-Thiele</i>	Occupational Noise Exposure Reduction Initiatives for Bases and Platforms across Defence <i>Peter Teague*, James Conomos and Martin Jennings</i>
<b>Close of Day 1 (1700)</b>		

## Thursday 17 November

### Session 5 (0900-1020, Parallel Sessions)

	<b>Session 5A (Conference Room)</b> <b>Chair: Dr Justin Fidock</b>	<b>Session 5B (Auditorium)</b> <b>Chair: Dr Mike Skinner</b>
0900	A New Anthropometric Standard for the Royal New Zealand Air Force <i>Gareth Iremonger*, Bryan Dobson and Allan Keefe</i>	Exploring Networked Team Behaviour Using Collaborative Games <i>Anthony Dekker</i>
0920	The Status of Aircraft and Aircrew Anthropometry in the Australian Defence Force <i>Bhupi Singh</i>	Measuring Situation Awareness in Simulated Submarine Track Management <i>Shayne Loft* and Daniel Morrell</i>
0940	Preliminary Comparison of Anthropometric Datasets for the Australian Defence Force <i>Jemma Coleman* and Peter Blanchonette</i>	Toward Objective Team Performance and Situation Awareness Measurement for Evaluation of Submarine Systems <i>Kate Ponton*, Daniel Morrell, Shayne Loft, and Sam Huf</i>
1000	A Meta Analysis of Current Clothing Correction Factor Data and Preliminary Study on Military Clothing Correction Factors for the Australian Defence Force (ADF) <i>Sheena Davis* and Alistair Furnell</i>	A Cognitive Work Analysis-Based Interface Design Process: Conceptual Design of an Interface for a New Submarine Periscope System <i>Megan Schmitt*, Dion Parera, and Peter Henley</i>

1020 Morning Tea (Auditorium Break Out Area)

### Session 6 (1050-1210, Parallel Sessions)

	<b>Session 6A (Conference Room)</b> <b>Chair: Dr Denise Linnane</b>	<b>Session 6B (Auditorium)</b> <b>Chair: Dr Sam Huf</b>
1050	Do Generic Fitness Assessments Predict Strength Requirements in Combat Employment Categories? <i>Greg Carstairs*, Stuart Best, Robert Savage and Daniel Ham</i>	Simulator-Based Driver and Vehicle Crew Training: Applications, Efficacy and Future Directions <i>Natassia Goode*, Michael Lenné and Paul Salmon</i>
1110	A Comparison Between Two Short-Duration, High-Intensity Military Physical Fitness Assessments <i>Paul Tofari*, Aaron Silk and Andrew Hunt</i>	Use of Synthetic Training Environments in Ab Initio Pilot Training <i>Greg McLean*, Tim Mavin, Sandra Lambeth, Michael Skinner, Helen Pongracic, Philip Hughes and Paul Bates</i>
1130	Heart Rate Predictions of Whole-body Metabolic Rates: Limitations under Controlled Laboratory Conditions <i>Sean Notley*, Gregory Peoples and Nigel Taylor</i>	A Perceptual Learning Module for Pilot Instrument Scans <i>Lisa Wise*, Greg McLean, Ben Williams and Mike Skinner</i>
1150	Predicting Success on a Special Forces Selection Course: Identifying Entry Tests and Establishing Standards <i>Andrew Hunt*, Daniel Billing and Robin Orr</i>	Reduction in Human Task Performance due to Motion Sickness <i>Iain Brown*, Omio Abedin, and Hamish MacDougall</i>
1210	Predicting Success on a Special Forces Selection Course: Validating Standards <i>Robin Orr*, Andrew Hunt and Daniel Billing</i>	

<b>Lunch and Poster Session II (12:30-13:30, Auditorium Break Out Area)</b>	
1230	An Investigation into How the Placement of the Occupant in Commercial Design Practices can be Applied to Military Vehicles <i>Bill Humphreys</i>
1230	Assessing Maritime Platform Habitability Requirements Using the Integrated Platforms System Model <i>Simon Demediuk*, and Bruce Riding</i>
1230	Human System Integration is worth the money and effort: A review of the literature <i>Robin Burgess-Limerick, PJ Fleming*, Cristina Cote, and Eva Pietrzak</i>
1230	The Impact of Thoracic Load Carriage on Ventilatory Function <i>Daniel Lee*, Sean Notley, Nigel Taylor, and Gregory Peoples</i>
1230	Vitamin Fortification of a Freeze Dried Product: A Preliminary Study <i>Lan Bui* and Ross Coad</i>
<b>Session 7 (13:30-15:10, Auditorium)</b>	
<b>Chair: Mr Mike Bonner</b>	
1330	Using Task Network Modelling to Investigate and Analyse Human-System Performance <i>Robert King*, Geoff Eberle, Joyanto Mukerjee, Simon Hosking and Eleanore Tracey</i>
1350	Human Performance Assessment, Modelling and Optimisation Associated with the Use of RWS in Armoured Fighting Vehicles <i>Nick Coleman*, Kayla Johnson, Vic Demczuk, Gary Ewing, David Unrau and Chris Martin</i>
1410	Testing a Model of Dynamic Decision Making in Air Traffic Control <i>Anita Vuckovic*, Peter Kwantes, and Andrew Neal</i>
1430	Simulating Human Performance in Escape and Evacuation at Sea <i>Michelle Grech*, Warren Roberts, Grant Gamble and Zenka Mathys</i>
1450	Human Sciences Hub <i>Dr Anne-Marie Grisogono, Human Sciences Hub Leader</i>
1455	Leoni Warne Memorial Best Presentation Award and Closing Remarks <i>Dr Todd Mansell, Chief Air Operations Division</i>
<b>Close of Symposium (1510)</b>	

**Key:**

- \* Presenter
- Held in the Auditorium Break Out Area
- Held in the Auditorium
- Held in the Conference Room