

## **31 ISMOR PROGRAMME**

### **TUESDAY 29TH JULY 2014**

08.30-09.30 Registration in Moore Building

09.30 Welcome by Peter Starkey, ISMOR Chair

09.45 Keynote address by Major General Nick Pope CBE, Director General Capability, Army HQ

10.30 Refreshments

#### **OR and the wider defence enterprise**

11.00 Extended readiness and capability regeneration - helping the MOD to understand the true implications of cost savings. Emma Matthews, CORDA, BAE Systems, UK.

11.30 Developing capabilities in performance-based contracting – a pre-study of Swedish defence acquisition. Thomas Ekstrom, FOI, Sweden.

12.00 Optimisation of the Turkish Air Force personnel-course assignment process. Capt Cem Malyemez, Air Force Command, Turkey.

12.30 Discussion

12.45 Lunch in Moore Building

#### **Systems and capability session 1**

13.30 The dilemma of early warning against debris caused by successful ballistic missile interception. Dima Kanevsky, Rafael, Israel.

14.00 System maps – helping MOD optimize the generation of capability. Ed Aubrey, CORDA, BAE Systems, UK.

14.30 Implementing the National Security Through Technology white paper – how to deliver capability in an uncertain world. David Dean, Dstl, UK.

15.00 Discussion

15.15 Refreshments

#### **Command and control**

15.45 The purposes of operations planning: an analytical framework. Paddy Turner, QinetiQ, Dr Lorraine Dodd, Cranfield University and Geoff Markham, UK.

16.15 Whither command and control? Analysis or crystal ball? Dr John Catherall, Edward Kennedy, David Lewthwaite, Paul Pearce, Dr Paul Syms and Ian Tamm, Dstl, UK.

16.45 Modelling human reasoning in dynamic time-constrained environments: the pros and cons of folk psychology. Dr Emma Norling, Manchester Metropolitan University, UK and Dr Clint Heinze, DSTO, Australia.

17.15 Discussion

19.30 BBQ Dinner in Crosslands and South Quad, Founder's Building. Cash bar

**Informal evening session (in Crosslands)**

21.00 Patterns of piracy. Dr David Sloggett, UK.

**WEDNESDAY 30TH JULY 2014**

08.30 Registration and refreshments for those attending only today (Moore Building)

<b>Cornwallis XIX: Analysis of Commercial and Market Force Roles in Conflict Management and Mitigation</b> (open to all ISMOR delegates)	<b>Workshops and tutorials</b>	
<b>08.40</b> Introduction to Cornwallis workshop. Tony Hopkin, Cornwallis Chair.		
<b>09.00</b> Balancing Regular and Non Regular forces to achieve Military Effect. Al Lawrence, Dstl, UK.	<b>09.00</b> Portfolio management exercise. Dr Craig Smith, MBDA(UK).	<b>09.00</b> New approaches to validation. Alan Robinson, Dstl, UK.
<b>10.00</b> Operational Analysis after Afghanistan, Graham Brownbill, Dstl, UK.		<b>10.00</b> Cyber conflict campaign level wargame. Jeremy Smith, Cranfield University, UK.
<b>11.00 Refreshments</b>		
<b>11.30</b> Analysis informs redeployment of materiel from Afghanistan. Rene Nevola, Dstl, UK.	<b>11.30</b> Anatomy of an insurgency – Syria case study. Dr David Sloggett, UK.	
<b>12.30 lunch and poster session</b>		
<b>14.00</b> The impact of contractor support on operational risk. Andrzej Frank, Head of OA Branch, ARRC	<b>14.00</b> Portfolio management exercise. Dr Craig Smith, MBDA(UK).	<b>14.00</b> Managing defence OR. Dr Roger Forder, UK.
<b>15.00</b> Instituting a Value Engineering (VE) Program to Reduce Costs of both Products and Services at the Defense Information Systems Agency (DISA). Dr Bill McDaniel, Eric Whittington, Johns Hopkins University Applied Physics Lab, John Rosbrugh, Defense Information Systems Agency, US.		
<b>16.00 Refreshments</b>		
<b>16.30</b> Clausewitzian Friction on the modern battlefield. Gene Visco, USA.	<b>16.30</b> New approaches to validation. Alan Robinson, Dstl, UK.	<b>16.30</b> Cyber conflict campaign level wargame. Jeremy Smith, Cranfield University, UK.
<b>17.30 Close of workshop session</b>		

Optional afternoon visit to Windsor: details to be available at the symposium

19.30 Dinner in Crosslands and South Quad, Founder's Building. Cash bar.

**Informal evening session (in Crosslands)**

21.00 A Short History of Chinese Military Operations Research. Chuck Hawkins, USA.

### **Poster session presenters**

Naval Platform Design Capability Assessment Toolset. Barry Thorne, BMT, UK.

Estimating the lifespan of major defence equipment. Alistair Morley, MBDA(UK).

MOD seeks strategic business partner for long-term relationship. David Lowe and Dr Louise Martingale, Dstl, UK.

How Vulnerable Are You? Robert Fryer, J Hare and J Breeze, Dstl, UK.

30 Years of Military OR. Ben Ludford, CORDA, BAE Systems, UK.

Implementing the National Security Through Technology white paper – how to deliver capability in an uncertain world. David Dean, Dstl, UK.

Rationalising spend on Training ICT across Defence. Dr Melissa Goodman, Actica Consulting, UK.

Understanding A to B: MOD's logistics modelling capability. Anjna Kashyap, Dstl, UK.

## **THURSDAY 31ST JULY 2014**

### **Analysis in practice**

09.00 Recognising when your analysis is having an impact. Andy Caldwell, Dstl, UK.

10.00 Overseeing relations between analyst, practitioner and policy-maker: a meta-view of planning and designing for agility in a complex world. Dr Lorraine Dodd, Cranfield University, Geoff Markham and Paddy Turner, QinetiQ, UK.

10.30 Discussion

10.45 Refreshments

### **Capability and systems session 2**

11.15 Concentration and asymmetry in air power: historical lessons for the defensive employment of small air forces. Dr Niall Mackay, University of York and Dr Chris Price, York St John University, UK.

12.15 Strategic cyber cost benefit analysis. Robin Smith, Arke Ltd, UK.

12.45 A capability-led approach to collaborative technology planning. Kevin Smith, BAE Systems and Jenny Young, MBDA(UK), UK.

13.15 Lunch in Moore Building

14.00 Support to operations: recent history and future trends. Andrzej Frank, Head of OA Branch, ARRC

### **New frontiers in modelling and gaming**

14.30 On the changing nature of air combat: real and simulated. Dr Michael Papisimeon and Dr Clint Heinze, DSTO, Australia.

15.00 Artificial intelligence algorithms and new approaches to wargaming simulation. Dr Stephen Lucek, Newman and Spurr Consultancy, UK.

15.30 Refreshments

16.00 Searching for the ISR Holy Grail. Ruth Carpenter, Dstl, UK.

16.30 Time latency of information in networked operations: effect of “human in the loop”. Dr Kevin Ng, Dr Roy Mitchell, Dr B. Solomon, DRDC and Dr Natalie Lam, University of Ottawa, Canada.

17.00 Discussion

**19.00 Drinks Reception, kindly sponsored by CORDA (outside Picture Gallery, Founder’s Building)**

**19.45 Symposium Dinner including the Professor Ronnie Shephard Memorial Address by Mr Eugene Visco FS (in Picture Gallery)**

Cash bar open in Crosslands after the dinner.

## **FRIDAY 1ST AUGUST 2014**

### **OR in defence and security**

09.00 In search of proxies for measuring fleet readiness. Matthew Macleod and Dr Andrew Billyard, DRDC, Canada.

09.30 Measuring the Relationship between Energy Use and Military Capability: Historical Perspectives. David Bangert and John Shimell, Polaris Consulting Ltd, and Neil Davies, Defence Economics Ltd, UK.

10.00 Re-finding NATO doctrine – Analysis in support of the NATO doctrine development process. Simon Purton, Allied Command Transformation, NATO.

10.30 Discussion

10.45 Refreshments

### **Closing session**

11.15 Report back from the Cornwallis and Managing Defence OR workshops. Tony Hopkin, Dstl and Dr Roger Forder, UK.

11.45 31 ISMOR: themes and trends. Dr Tony Sinden, Decision Analysis Services Ltd, UK.

12.15 Awards for best poster and best paper

12.30 Lunch in Moore Building

### **Symposium ends after lunch**

Unless otherwise stated, breakfast will be in the Founder's Dining Hall, Founder's Building, above the reception, from 07.30 to 08.30. Lunch will be in the Moore Building. Dinner will be in Crosslands (Tuesday and Wednesday) or the Picture Gallery (Thursday), Founder's Building.

Morning and afternoon refreshments will be in the Moore Building.

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