



# 77<sup>th</sup> MORS Symposium

## MORSS Monday Tutorials



US Army Command & General Staff College  
Lewis and Clark Center  
Fort Leavenworth, Kansas



Monday, 15 June 2009, Start Times: **0800**, **1300**, and **1500**, Rooms TBA

Tutorial Chair: Michael W. Garrambone, General Dynamics; Advisor: Gregory T. Hutto, 43<sup>rd</sup> Test Wing  
Co-Chairs: Cynthia L. Ballard, MSE Team Lead, F-35 PMO; Rafael E. Matos, WBB Consulting; William H. Dunn, Alion Science and Technology; Gregory A. Keethler, Lockheed Martin; Renee G. Carlucci, Center for Army Analysis; Derek, Scot & Tara Garrambone, St. Thomas Univ. & WSU; Dr. Andrew G. Loerch, FS, GMU; William M. Kroshl, JHUAPL

**Hot Topics, Outstanding Instructors**

**Monday Program of Instruction**

**Complete Abstracts On-line**

### **Agent-Based Modeling and Simulation (An 8-hour AM - continued PM presentation)**

*This tutorial describes the foundations of (ABMS), identifies software toolkits, methods, and approaches for developing agent models, from spreadsheets to computer systems.*

**Dr. Michael J. North & Dr. Charles M. Macal**  
Center for Complex Adaptive Agent Systems Simulation, ARL

### **Design of Experiments (DOE) Tutorial and Overview (AM Presentation)**

*This half-day course introduces to Design of Experiments -- a powerful methodology for test and evaluation. We address its history, describe how to deploy it, & conduct in-class experiments to demonstrate how it works.*

**Dr. James R. Simpson**  
53d Test Management Group

### **Crime Analysis Techniques to Forecast Insurgent Attacks in Iraq and Afghanistan**

*This tutorial describes how the United States Marine Corps applies crime analysis techniques to reconstruct insurgent decision models and forecast the location and timing of insurgent attacks.*

**Mr. Joseph A. Mlakar**  
Marine Corps Combat Development Command

### **Multi-Disciplinary Approach to Modeling and Simulation of Military Command & Control**

*Learn how to bring together the talents of Operations Researchers, Human Factors Specialist, Military Service Operators, and Computer Scientists to model crew-man-machine interactions and the performance of Military C<sup>2</sup>.*

**Mr. Thomas C. Hughes & Mr. Bret R. Givens:**  
Infoscitex; **Mr. Michael S. Goodman, & Mr. Evan P. Rolek,** General Dynamics

### **Introduction to Wargaming: An Operations Research Approach (PM Presentation)**

*Designed for wargame beginners, future gamers, or new players who want to explore insights derived by analysts who support military decision makers—be ready to play.*

**Mr. Mike Garrambone, General Dynamics**  
**Ms. Cynthia L. Ballard, MSE Tm Ld, F-35 PMO**

### **Making Excel Think: Artificial Intelligence in Excel for Decision Making**

*This tutorial examines the uses of Microsoft Excel as an AI Inference Engine to automatically screen critical information and identify viable alternatives.*

**Mr. Michael S. David**  
Army Logistics Management College

### **Attack and Defense of Network Infrastructures**

*Described is the use of mathematical programs in the systematic assessment of optimal attack and defense strategies for network systems where the behavior of an intelligent system operator uses domain-specific knowledge to manage system behavior.*

**Drs. David L. Alderson, Jerry Brown,**  
**Matt Carlyle, & Kevin Wood, NPS**

### **Design of Experiments (DOE) for Real World Problems (PM Presentation follow-on)**

*Building on the introductory morning Design of Experiments (DOE) tutorial, this half-day seminar will demonstrate solutions to many real-world DOE problems. Many topics and Issues will be addressed.*

**Dr. Tom Donnelly**  
SAS Institute Inc.

**08:00 Start**

**13:00 Start**

**15:00 Start**

### **An Overview of MORS and the 77th MORS Symposium (1500 Presentation)**

*An overview of all the wonderful opportunities that the Military Operations Research Society (MORS) and the MORS annual Symposium has to offer. It includes how the society operates, things it does, and how events are organized.*

**Mr. Dennis R. Baer, FS, WBB Consulting**

**All Free to MORS Members**

**\$75.00 for Non-MORS Members**