

Military Modeling & Simulation Symposium 2011

(MMS 2011)

2011 Spring Simulation Multiconference 2011

**Boston, Massachusetts, USA
3-7 April 2011**

Editors:

Andrew Stricker

ISBN: 978-1-61782-841-6

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571
www.proceedings.com



Some format issues inherent in the e-media version may also appear in this print version.

© 2011 SIMULATION COUNCILS, INC.

Responsibility for the accuracy of all statement in each paper rests solely with the author(s). Statements are not necessarily representative of, nor endorsed by, The Society for Modeling and Simulation International.

Printed by Curran Associates, Inc. (2011)

Permission is granted to photocopy portions of this publication for personal use and for the use of students provided credit is given to the conference and publication. Permission does not extend to other types of reproduction nor to copying for incorporation into commercial advertising nor for any other profit-making purpose. Other publications are encouraged to include 300- to 500-word abstracts or excerpts from any paper contained in this book, provided credits are given to the author and the conference. For permission to publish a complete paper write: The Society for Modeling and Simulation International (SCS), P.O. Box 17900, San Diego, CA 92177, USA.

Additional copies of the Proceedings are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571
curran@proceedings.com
www.proceedings.com/0128.html

OR

The Society for Modeling
and Simulation International
2598 Fortune Way, Ste I
Vista, CA 92081 USA

ISBN: 978-1-61782-841-6
PRINTED IN THE UNITED STATES

MMS TABLE OF CONTENTS

TITLE/AUTHORS	PG#
Third-space Architecture for Learning in 3D Andrew Stricker, John Cook, Kimberly-Combs Hardy, Cynthia Calongne, Elizabeth Stricker, Kathryn Flitter, Toni Scribner and Fil Arenas (astricker@me.com)	3
Using a Constructive Simulation to Select a Camouflage Pattern for Use in OEF Joseph Venezia and Adam Peloquin (joseph.venezia@us.army.mil)	11
Task Degradation in Agent-based Simulation Daniel Rice and Mitha Andra (mitha.andra@tseboston.com)	19
The Modeling and Simulation of Non-lethal Weapons in Constructive Simulation Mitha Andra, Nazli Elsamaloty and Lew Farkas (mitha.andra@tseboston.com)	23
Measuring the Performance of Network Virtualization Tool N2N in the Design of a Cyber Warfare Training and Education Platform Kyle Stewart, Todd Andel and Jeffrey Humphries (todd.andel@afit.edu)	28
Command and Control: A low cost framework to remotely monitor military training Roberto de Beauclair Seixas and Daniel de Vasconcelos Campos (rbs@impa.br)	36
Organizational Adoption of Innovation - Background, Programs & A Descriptive Modeling Approach Jerry Couretas and Mehmet Ucal (mehmet.e.ucal@lmco.com)	44
Coalition Battle Management Language Extensions for Simulation Interoperability Robert Kewley, Samy Chatelet and Antione Helio (Robert.Kewley@usma.edu)	53
Virtual Reality as a Theme-Based Game Tool for Homeland Security Applications Sharad Sharma and Stephen Otunba (ssharma@bowiestate.edu)	61
Fuzzy Logic Injury Design for Crowd Modeling Emin Kugu, Jiang Li, Frederic D. McKenzie and Ozgur Koray Sahingoz (e.kugu@hho.edu.tr)	66
Taxonomy of Cyber Attacks and Simulation of Their Effects Ian M. Chapman, Sylvain P. Leblanc and Andrew Partington (ian.chapman@drdc-rddc.gc.ca)	73

TITLE/AUTHORS	PG#
A Methodology for Evaluating Shared Leadership in a Game Simulation Kit Linda Hamons, Cynthia Calongne D.CS., Andrew Stricker Ph.D. and Anne-Marie Armstrong Ph.D. (tech@lhtech.net)	81
Development of a Training Effects Algorithm for Modeling the Impact of Training in IMPRINT for 21st Century Air Force Needs Tristan Johnson and Rinat Rosenberg-Kima (tejohnson@fsu.edu)	86
An Overview of Cyber Attack and Computer Network Operations Simulation Sylvain Leblanc, Ian Chapman, Andrew Partington and Mélanie Bernier (sylvain.leblanc@rmc.ca)	92
The Application of MTWS in the Simulation of Non-Kinetic Environment Donald Herod and John LaCrosse (djherod@nps.edu)	101
Using a text analysis and categorization tool to generate Bayesian belief networks for use in cognitive social simulation from a document corpus Daniel McKaughan (dcmckaug@nps.edu)	108
Manual Wargaming as a Method for Training: An Analysis of the Commercial Wargame "Battle for Baghdad" Mike Stinchfield and Jason Caldwell (mkstinch@nps.edu)	116
Balancing Exploration and Exploitation Ratio in Reinforcement Learning Ozkan Ozcan, Claudio Coreixas de Moraes and Jonathan Alt (oozcan@nps.edu)	126
SpringSim'11 Consolidated Authors' Index	