AGENDA

MONDAY, APRIL 14

1:00   **Golf Tournament**
Hamptons Golf Course

3:00 – 6:00   **Registration**
Main Lobby (First Level)

TUESDAY, APRIL 15

6:00 – 5:30   **Registration**
Main Lobby

6:30 – 8:00   **Continental Breakfast**
Main Lobby

7:00 – 10:00   **Exhibitor Move-In**
Exhibit Area – Conference Room AB

8:00 – 8:15   **MODSIM World 2014 Welcome and Opening Remarks –** Grand Ballroom BC (Second Level)
Keynote Speaker Introduction
Mrs. Irin Hall, MODSIM 2014 Conference Chair, Newport News Shipbuilding
RADM James Robb, USN (Ret); President, National Training and Simulation Association (NTSA)

8:15 – 9:00   **Keynote Speaker –** Grand Ballroom BC
Secretary Karen Jackson, Secretary of Technology, Commonwealth of Virginia

Secretary Jackson will speak about the various ways that the Commonwealth of Virginia supports the growth of modeling and simulation (M&S) as a technology, a tool, and an industry. The Secretary will discuss recent efforts to better understand how M&S is applied throughout the federal sector and commercial industry. The goal of this address is to help the audience better understand how Virginia is fostering innovation and growth of our "M&S Economy," with the opportunity to learn from our successes and failures.

9:00 – 10:00   **Special Event –** Grand Ballroom BC
The Simulation Century: Making Smarter Simulations
Panelists:
        Mr. Richard Boyd, SZL.IT Inc.
        Mr. David Smith, Lockheed Martin
        Mr. John Pietrzak, MASA Group
        Dr. Todd Griffith, Discovery Machine
        Mr. Jonathan Poltrack, ADL Co-Lab
        Mr. Doug Maxwell, U.S. Army Research, Development and Engineering Command (RDECOM)
        Mr. Tony Cerri, Training Brain Operations Center (TBOC)

10:00 – 7:00   **Exhibit Displays and Demonstrations**
Exhibit Area – Conference Rooms AB

10:00 – 10:30   **Break**
Exhibit Area – Conference Rooms AB

10:30 – 12:00   **Special Event – Rooms 201/202**
Preliminary Entrepreneur Competition
Moderators: *Mr. Thomas Flake and Mr. Thomas Reese*

10:30 – 12:00   PAPER SESSIONS:

10:30 – 11:30   **Using M&S for STEM Education: How Developers Can Evolve**

        EDUCATION TRACK – ROOMS 102/103
Special Guest - Mr. Ed Harvey

10:30 – 11:00   **Implementation of the ARC-231 Simulation to Support Multiple Training Types**

        TRAINING TRACK – ROOMS 108/109
Mr. Jimmy Moore

10:30 – 11:00   **Leveraging Terrain and Geospatial in Modeling and Simulation Applications via Open Standards**

        SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Mr. Peter Swan

10:30 – 11:00   **Unlocking Analytics' True Potential**

        ANALYTICS & DECISION MAKING TRACK - ROOMS 106/107
Special Guest - Dr. Kurt Kendall

11:00 – 11:30   **Large Scale Complex Planning for Simulated Exercises**

        TRAINING TRACK – ROOMS 108/109
Mr. Rick Stickkers

11:00 – 11:30   **Developing a Manufacturing Simulation as a Deliverable Product**

        SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Mr. Christopher Mook

11:00 – 11:30   **Equal but Different: Five Research Strategies for Improving Conclusions Drawn from Novice Populations**

        ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Dr. Stephanie Lackey

11:30 – 12:00   **The Quest for Knowledge: How MOOC's Provide Insight for Innovation in Modeling and Simulation**

        EDUCATION TRACK – ROOMS 102/103
Mr. Gerald (Jay) Gendron and Mr. Mark Friedman

11:30 – 12:00   **Developing Game-Based Training for the Military: Challenges and Opportunities**

        TRAINING TRACK – ROOMS 108/109
Dr. William Rebarick

11:30 – 12:00   **Automated User Interface Generation for Dynamically Integrated Simulations**

        SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Mr. Zachary Heath

11:30 – 12:00   **2013 Virginia Homeland Security Portfolio Value Model**

        ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Ms. Kaleen Lawsure

12:00 – 1:30   **Lunch and Exhibit Time**
Exhibit Area – Conference Rooms ABCD

Theme Legend

	PROTECTING THE NATION	**TOOLS AND TECHNIQUES**
SERIOUS GAMES AND GAMIFICATION	**MODSIM AND ARCHITECTURE**	**EMERGING TECHNOLOGIES**

AGENDA

1:30 – 3:00   **Panel:**   **The Role of Modeling and Simulation in the Integration of Unmanned Aerial Systems into the National Airspace** – Grand Ballroom BC
Introduction: Ms. Karen Jackson, Secretary of Technology, Commonwealth of Virginia
Panelists:
VADM David Architzel, USN (Ret), Old Dominion University, Office of the President
CAPT Jon Greene, USN (Ret), Virginia Tech Institute for Critical Technology and Applied Science (ICTAS)
Dr. Yiannis Papelis, Old Dominion University
Mr. Bruce Underwood, NASA Goddard's Wallops Flight Facility

3:00 – 3:30   **Break**
Exhibit Area – Conference Rooms AB

3:30 – 5:30   PAPER SESSIONS:

3:30 – 4:00   **Creating an Innovative Process for Medical / Healthcare Simulator Appraisal – Scholarship Takes a Page From Consumer Reports**
EDUCATION TRACK – ROOMS 102/103
Dr. Andrea Parodi

3:30 – 4:00   **Make Large-Scale Virtual Training a Reality**
TRAINING TRACK – ROOMS 108/109
Mr. Douglas Maxwell

3:30 – 4:00   **Serious Games for Engineering Education: An Achievable Reality or a Hopeless Dream?**
SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Special Guest - Dr. Rasha Morsi

3:30 – 4:00   **Resilience: Modeling for Conditions of Uncertainty and Change**
ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
COL Paul Roege, USA (Ret), Mr. Patrick Delaney and Mr. Tim Hope

4:00 – 4:30   **A Virtual Lab for Programmable Logic Controller Wing in Automation Control**
EDUCATION TRACK ROOMS 102/103
Dr. Yuzhong Shen

4:00 – 4:30   **Reflecting on Cognitive Process Models to Enhance Adaptive Training**
TRAINING TRACK – ROOMS 108/109
Ms. Mandira Hedge

4:00 – 4:30   **UAS – Systems Integration, Validation and Diagnostics**
SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Ms. Catherine Buttrill

4:00 – 4:30   **[Mini-Workshop] How to use R Software for Exploratory and Predictive Analysis.**
ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Mr. Gerald (Jay) Gendron

4:00 – 5:30   **Technology and Economic Development Leaders' Meeting: Branding a Region – Building an Economy**
Open to Invited Leaders, Additional Seating as Available
Rooms 201/202

4:30 – 5:00   **Simple Simulations for Virtual STEM Teacher Education: Making Online Align**
EDUCATION TRACK – ROOMS 102/103
Dr. Benjamin Bell and Dr. Judith Fraivillig

Theme Legend

SERIOUS GAMES AND GAMIFICATION	**PROTECTING THE NATION**	**TOOLS AND TECHNIQUES**
	MODSIM AND ARCHITECTURE	**EMERGING TECHNOLOGIES**

4:30 – 5:00   Integration and Application of the Natural Environment within the OpenEagles Simulation Framework

TRAINING TRACK – ROOMS 108/109
Dr. Karl Pfeiffer

4:30 – 5:00   Using Military Training Simulations in Support of Coalition Operability and Assurance Validation (CIAV) Events

SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Mr. Robert Boerjan

4:30 – 5:00   Automated Instruction: The Future of Clinical Skills Assessment

ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Ms. Elizabeth (Beth) Johnson

5:00 – 5:30   Measuring Visual Modalities' Effect on Performance in Mixed Reality Aerial Door Gunnery

TRAINING TRACK – ROOMS 108/109
LTC Jonathan Stevens

5:00 – 5:30   Developing an Ultrasonography Simulator Training Tool: From Platform to Interface to Graphics

SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Mr. William Richards

5:00 – 5:30   The Assisted Experimental Designer: A Decision Support System to Optimize Modeling and Simulation Experiment Design

ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Mr. Kenyon Riddle and Ms. Sylvain Bruni

5:30 – 7:00   Attendee Networking Event
Exhibit Area – Conference Rooms AB

WEDNESDAY, APRIL 16

7:00 – 5:30   **Registration**
Main Lobby

7:00 – 8:00   **Continental Breakfast**
Main Lobby

8:00 – 8:15   **MODSIM World 2014 Administrative Remarks**
Mrs. Irin Hall, MODSIM 2014 Conference Chair, Newport News Shipbuilding
Grand Ballroom BC

8:15 – 9:00   **Keynote Speaker** – Grand Ballroom BC
Diversification or Desperation – What Are We as Defense / Government Contractors Doing to not just Survive, but Thrive?
Mr. Waymon Armstrong, Engineering & Computer Simulations, Inc.

9:00 – 10:00   **Entrepreneur Competition** – Grand Ballroom BC

10:00 – 4:00   **Exhibit Displays and Demonstrations**
Exhibit Area – Conference Rooms AB

10:00 – 10:30   **Break**
Exhibit Area – Conference Rooms AB

Theme Legend

	PROTECTING THE NATION	TOOLS AND TECHNIQUES
SERIOUS GAMES AND GAMIFICATION	MODSIM AND ARCHITECTURE	EMERGING TECHNOLOGIES

AGENDA

10:30 – 12:00   PAPER SESSIONS:

10:30 – 11:00   **Game-Oriented Technology and Simulation to Re-design Driver Training and Education Using Backward Design**

EDUCATION TRACK – ROOMS 102/103
Dr. Kevin Hulme

10:30 – 11:00   **Virtual Reality Based Collaborative Training for Hospital Incident Command System Skills Development**

TRAINING TRACK – ROOMS 108/109
Mr. Victor Cid

10:30 – 11:00   **Adaptive Attacker Strategy Development against Moving Target Cyber Defenses**

SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Dr. Kevin Carter

10:30 – 11:00   **Point-based Methods for Medical Modeling and Simulation**

ENTERTAINMENT, SPORTS, MEDIA & VISUALIZATION TRACK – ROOMS 201/202
Mr. Rifat Aras

10:30 – 11:00   **[Mid-Track Perspectives] Thinking through Models: 20 Models in 20 Minutes**

ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Mr. Gerald (Jay) Gendron

11:00 – 11:30   **On Developing a Taxonomy of Perceptual Cognitive Skills for use in Military Training**

EDUCATION TRACK – ROOMS 102/103
Dr. Sae Schatz

11:00 – 11:30   **Developing Blended Technology Systems to Support Air Force Medical Modeling and Simulation Training**

TRAINING TRACK – ROOMS 108/109
Mr. Michael Raines

11:00 – 11:30   **Modeling and Simulation of Inertial Navigation Systems with Automated Interface Checking and Post-processing Support**

SCIENCE AND ENGINEERING TRACK – ROOMS 104/105
Dr. Yiannis Papelis

11:00 – 11:30   **Open Source Visualization Tools: Some Favorites Demonstrated**

ENTERTAINMENT, SPORTS, MEDIA & VISUALIZATION TRACK – ROOMS 201/202
Mr. Gerald (Jay) Gendron

11:00 – 11:30   **Discrete Event Simulation for Supporting Production Planning and Scheduling Decisions in Job Share Facilities**

ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Mr. Ashton Allen and Mr. Ioannis Sakiotis

11:30 – 12:00   **Behavior Authoring and Run-time Management of Computer Agents for Virtual Operating Room Training Environment**

EDUCATION TRACK – ROOMS 102/103
Dr. Yiannis Papelis

Theme Legend

SERIOUS GAMES AND GAMIFICATION	
PROTECTING THE NATION	TOOLS AND TECHNIQUES
MODSIM AND ARCHITECTURE	EMERGING TECHNOLOGIES

11:30 – 12:00 **Virtual Reality Simulation for Teaching Office-based Medical Emergencies**

TRAINING TRACK – ROOMS 108/109
Dr. Alexander Lemheney

11:30 – 12:00 **Conversion Challenges of an Autonomous Maritime Platform: Using Military Technology to Improve Civilian Security**

SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Mr. Jesse Barboza

11:30 – 12:00 **Date on Demand: Building a Framework to Support Platform-independent Visualization (PIV)**

ENTERTAINMENT, SPORTS, MEDIA & VISUALIZATION TRACK – ROOMS 201/202
Ms. Tracy Lenuik

11:30 – 12:00 **An Adaptive Planning Tool for Air Craft Carrier Specialized Tank Inspection and Overhaul**

ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Mr. Jeremy Hancock and Mr. Nick Drucker

12:00 – 1:30 **Lunch and Exhibit Time**
Exhibit Area – Conference Rooms ABCD

1:30 – 2:30 **Technology Showcase**
Exhibit Area – Conference Rooms AB

2:30 – 3:00 **Break**
Exhibit Area – Conference Rooms AB

3:00 – 5:00 PAPER SESSIONS:

3:00 – 3:30 **Simulation Based Clinical Education: The Need for a New Way to Train and Evaluate Trauma Training for Nurses**

EDUCATION TRACK – ROOMS 102/103
Dr. Andrea Parodi

3:00 – 3:30 **What's Trending in NATO Commercial Technologies and Games: Ten Years of Work and What We See**

TRAINING TRACK – ROOMS 108/109
Mr. Gerald (Jay) Gendron

3:00 – 3:30 **Push the Performance Limit – Building Effective Mobile Simulations for Performance Support**

SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Mr. James Xu

3:00 – 4:00 **Meteorological Modeling and Simulation for Weather Forecasting at WTKR (local CBS station)**

ENTERTAINMENT, SPORTS, MEDIA & VISUALIZATION TRACK – ROOMS 201/202
Special Guest - Mr. Myles Henderson

3:00 – 3:30 **Massed Exposure Improves Response Time for Detection of Nervous Human Behaviors in Robot-Aided ISR Missions**

ANALYTICS & DECISION MAKING TRACK – ROOMS 108/109
Dr. Stephanie Lackey

3:30 – 4:00 **The Games War: Redefining Gaming for Army Soldier and Leader Development**

EDUCATION TRACK – ROOMS 102/103
LTC Joseph Nolan

Theme Legend

PROTECTING THE NATION	**TOOLS AND TECHNIQUES**
SERIOUS GAMES AND GAMIFICATION	**MODSIM AND ARCHITECTURE**	**EMERGING TECHNOLOGIES**

AGENDA

3:30 – 4:00 | **Next Generation of Flight Training**
TRAINING TRACK – ROOMS 108/109
Mr. Kenneth Ginader

3:30 – 4:00 | **A Pilot Study Investigating College Students Majoring in STEM: A System Dynamic Approach**
SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Ms. Ginger Watson

3:30 – 4:00 | **Evidence Based Decision Making: Techniques for Adding Rigor to Decision Support Processes in Complex Organizations**
ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Dr. Chris Hase

4:00 – 4:30 | **Enhancing Joint Training through Blended Learning – Training: Simulation, Mission Command and a Learning Continuum**
EDUCATION TRACK – ROOMS 102/103
Dr. Sae Schatz

4:00 – 4:30 | **Utilizing Real Test Sets on Maintenance Training Devices**
TRAINING TRACK – ROOMS 108/109
Mr. Andy Ferrell

4:00 – 4:30 | **Research-Driven Recommendations for Implementing Biometric Cues in Virtual Environments**
SCIENCE & ENGINEERING TRACK – ROOMS 104/105
Dr. Stephanie Lackey

4:00 –4:30 | **AIMS Computational Challenges – Computational Challenges to Using Gaming Technology for Accuracy Measurements of Clinical Procedures**
ENTERTAINMENT, SPORTS, MEDIA & VISUALIZATION TRACK – ROOMS 201/202
Mr. Ben Cawrse

4:00 – 4:30 | **Practical Human-Systems Integration for Medical Simulation Lifecycle Costing**
ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Mr. John P. Killilea

4:30 – 5:00 | **Source Selection Process Improvement and Workforce Education / Training Concept**
EDUCATION TRACK – ROOMS 102/103
Ms. Ginger Rosacia

4:30 – 5:00 | **Exploring the "Whys" of Simulation Visualization**
ENTERTAINMENT, SPORTS, MEDIA & VISUALIZATION TRACK – ROOMS 201/202
Mr. Andrew Collins

4:30 – 5:00 | **Population Generation from Statistics Using genetic Algorithms with MIST + INSPYRED**
ANALYTICS & DECISION MAKING TRACK – ROOMS 106/107
Dr. Aaron Garrett and Mr. Jacob Barhak

5:30 – 7:30 | **Offsite Networking Event**
Offsite – Park Lane Tavern
4200 Kilgore Avenue
Hampton, VA
757-838-2748
- **Pre-registration and pre-payment are required for this event.**

Theme Legend

Protecting the Nation (orange)	**Tools and Techniques** (blue)
Serious Games and Gamification (pink)	**MODSIM and Architecture** (green)
	Emerging Technologies (yellow)

THURSDAY, APRIL 17

7:00 – 4:30   **Registration**
Main Lobby

7:00 – 8:00   **Continental Breakfast**
Main Lobby

8:00 – 8:15   **Administrative Remarks**
Mrs. Irin Hall, MODSIM 2014 Conference Chair, Newport News Shipbuilding
Grand Ballroom BC

8:15 – 12:15   **Industry Workshops:**

- **Defense: Strengthen DoD Stewardship and Application of M&S**
  Rooms 102/103
  Moderator: *Mr. Gregory Knapp*, ODASD (Readiness)
      Panelists:
      Mr. Frank DiGiovanni, Office of the Deputy Assistant Secretary of Defense for Readiness
      Dr. Terry Allard, Office of Naval Research
      Mr. Jesse Citizen, Modeling and Simulation Coordination Office (M&SCO)
      Mr. Brad Medairy, Booz Allen Hamilton
      Dr. Ed Degnan, Air Force Agency for Modeling and Simulation (AFAMS)
      Mr. Mark Phillips, Lockheed Martin
      Mr. Jack Sheehan, Former DMSO
      Dr. Andreas Tolk, SimIS, Inc.
- **Healthcare: ModSim in Healthcare – Challenges and Opportunities**
  Rooms 108/109
      Mr. Bob Armstrong, Eastern Virginia Medical School
- **Manufacturing: Advanced Manufacturing Systems – The Economic Game Changer**
  Rooms 104/105
  Moderator: *Ms. Kim Humphrey*, Southeast Region AME
      Panelists:
      Dr. Barry Johnson, University of Virginia
      Dr. Bob Fagan, Commonwealth Advanced Manufacturing Consortium
      Mr. Mark Manasco, Commonwealth Advanced Logistics Consortium
      Mr. Michael Casey, TRAX International
      Mr. Glenn Marshall, Revitalization of North American Manufacturing
      Mr. Patrick Ryan, Newport News Shipbuilding
      Dr. Mileta Tomovic, Old Dominion University
      Mr. Larry Bemis, Siemens
- **Energy: Untapped Potential for M&S in Energy**
  Rooms 106/107
  Moderator: *Mr. John Kenney*, TRAX International
      Panelists:
      Mr. Kent Kozak, TRAX International
      Mr. Keith Mann, TRAX International
      Mr. Vic Fregonese, AREVA Inc.
      Mr. Bob Timberlake, AREVA Inc.
      Mr. Bob Bailey, Center for Advanced Engineering and Research (CAER)
      Mr. Thomas Graham, X-Energy
- **SARMA Short Course: Security Risk Analysis Using Oracles Crystal Ball**
  - **Pre-registration and pre-payment are required for this event.**
  Rooms 201/202
      Dr. Barry Ezell, VMASC - Old Dominion University

AGENDA

10:00 – 12:00   **Student STEM Event**
Conference Rooms AB

12:15 – 1:30   **Lunch**
Conference Rooms CD

1:30 – 2:00   **Workshops Recap**
Grand Ballroom BC

2:00 – 2:30   **Awards, Acknowledgements and MODSIM 2014 Closing Remarks** – Grand Ballroom BC
Mrs. Irin Hall, MODSIM 2014 Conference Chair, Newport News Shipbuilding

2:30 – 4:30   **National Modeling and Simulation Coalition (NMSC) Event: Creation of a NAICS Code for Modeling and Simulation**
Rooms 102/103

         Moderator: Mr. Bill Waite, AEgis Technologies Group, Inc.

            Panelists:
RADM James Robb, USN (Ret); President, National Training and Simulation Association (NTSA)
Dr. Linda Brent, National Training and Simulation Association, The ASTA Group, LLC
BG Stephen Seay, USA (Ret), Seay Business Solutions, LLC
Ms. Beverly Seay, CAE Integrated Enterprise Solutions