



# NEWSLETTER



## Message from the President of the National Training and Simulation Association



RADM Fred Lewis, USN (Ret.)  
President, NTSA

While I/ITSEC is of course NTSA's flagship event, it is by no means the limit of our activities on behalf of our community of interest. A dynamic and rapidly evolving technology such as modeling and simulation demands constant surveillance to examine trends, detect new opportunities and in general to keep astride of each and every promising development. The numerous and varied events we sponsor throughout the year are therefore as significant in the sum of their contribution

to the body of knowledge as I/ITSEC itself. The past several months have witnessed several such events, each of which was remarkably successful in numbers of participants and well as in substance.

The Training and Simulation Industry Symposium (TSIS), held in Orlando in June, attracted attendance from all uniformed Services as well as a record number of participants. Topics covered included current R&D efforts, DARPA developments, medical simulation developments, and the latest on virtual worlds. Ideally placed between I/ITSECs, TSIS is perfectly situated to enable recalibration of knowledge, particularly as regards procurement opportunities within near and longer-term requirement frameworks and acquisition strategies.

The Advanced Distributed Learning Initiative "iFest" further contributed by addressing such diverse topics as prospects for intelligent systems, wounded warrior rehabilitation, games

*President, cont. on page 2*

## NTSA President Fred Lewis Receives Presidential Award From the Society for Modeling and Simulation International

Meeting in the Hague on June 26, the Board of Directors of the Society for Modeling and Simulation International (SCS) awarded its first-ever Presidential Award to NTSA President RADM Fred Lewis USN (Ret.), for "Enabling the Modeling and Simulation Discipline". The Award, which will be given at most once every three years, "recognizes a substantial contribution to establishing Modeling and Simulation as a discipline in academia, industry and/or the government".

Recipients of this award are typically policy makers or high-level managers who, through their policies, have spearheaded efforts in advancing the discipline of Modeling and Simulation and, through their actions, have supported researchers in this discipline in their respective research efforts, according to SCS criteria. The recipient of the Presidential Award is determined by the SCS Awards and Recognition Committee, as part of its Contribution to the Profession Awards program.

Responding to news of the award, Adm. Lewis stated "I am deeply honored by this action as well as grateful for the recognition it implies, particularly emanating as it does from such a prestigious international organization. If I merit such an honor, it is through my day-to-day activities, many of which are unexceptional in and of themselves. I would nevertheless like to think that over the past years, my efforts may have contributed in some measure to the advancement of modeling and simulation—a discipline about which I grow ever more enthusiastic and optimistic."

**MODELING & SIMULATION COALITION ESTABLISHED**  
**PAGE 7**

**I/ITSEC SCHOLARSHIP WINNERS**  
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**President from page 1**

in the ADL environment, and cultural training. Again, quality of discussion and participation was of the highest order.

These and other NTSA-sponsored events throughout the year guarantee a constant intellectual accrual to the overall community of practice that widely spaced annual events such as I/ITSEC, even with its hugely important conference content, cannot alone supply.

On another front, I was pleased and honored to be invited to appear on the Francis Rose interview program on Federal News Radio. Our hour-long conversation covered the current state of M&S, its enormous future potential, and the need of the modeling and simulation community to attract young people so that the United States can maintain its primacy in the field. Federal News Radio targets a key demographic for NTSA—the government, defense and contracting communities, as well as the Washington political establishment.

Finally, international activities and events continue at a brisk pace under the aegis of the International Training and Simulation Alliance. This grouping, comprised of simulation industry associations from Australia (the Simulation Industry Alliance of Australia-SIAA); KTSA (the Korean Training and Simulation Association); ETSA (the European Training and Simulation Association); and NTSA, promotes the worldwide furtherance of modeling and simulation technology through a series of conferences and other events. Recently, the Simulation Industry Association of Australia held SimTecT2011 in Melbourne—another in a series of very successful events organized and sponsored by SIAA as part of overall Alliance activities.

Finally, I'd like to comment briefly on the situation in which our industry finds itself as we pass through a challenging fiscal era. Regardless of how the current political/economic melodrama in Washington plays itself out, it is clear that Defense Department funding is in line for substantial reductions. Even without further cuts now quite possible, the Defense Department's FY 2012 funding request is almost 40 billion Dollars below 2011 levels. Further substantial reductions are envisioned for 2013 and beyond. This regardless of whether the threat environment—internal and external—has been reduced or not.

Faced with diminished revenues and a continued and varied threat environment, we clearly must make optimum use of the resources at our disposal. The 2012 DOD budget proposes some 204 billion Dollars be dedicated to the Operations and Maintenance account, for training, personnel, and base construction and maintenance costs. This again is a substantial reduction in what DOD itself identifies as its most important priority—the maintenance of high morale and training excellence.

This need to do more with less in training plays directly into modeling and simulation's strengths. The backbone of our national defense—and indeed our national security as a whole—is the excellence and dedication of our men and women in uniform. This excellence derives for the most part from superb training and recognition of the need for preparedness at all times. Meeting these conditions leads to high morale and the conviction that success is inevitable, regardless of the mission.

How these conditions are to be achieved in a time of austerity becomes a vital concern, and the contribution of modeling and simulation training in this context is invaluable. No other technique allows for the substitution of so many expensive resources—fuel, equipment, maintenance, man hours—while providing training experiences that are as effective, or more so, than real world environments.

Costs for simulation-based training are included within the overall training category, and are therefore inherently difficult to separate and identify. Nevertheless, it is commonly assumed that simulation training saves several billion Dollars over what would be required to achieve the same training levels using only live training. These funds then become available for other badly needed purposes, easing the burden on the overall defense budget.

Dramatic advances in simulation based training, as well as modeling of all kinds, only imply further uses, some of which have only become evident in the past several years. For these reasons I remain not only optimistic about both the present and future of our technology and community, but exceedingly proud of the crucial contribution it is making to our national security and welfare on many levels.

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## **New Version of the Joint Theater Level Simulation is Released**

The Joint Theater Level Simulation (JTLS®) maintenance version 3.4.8 was released on 16 August 2011 to the Joint Staff, NATO and R&A commercial and FMS clients. The primary purpose of this release was to update critical areas for imminent training exercises and add new capabilities. The NATO Joint Warfighting Center and the US JCS/J-7 Joint and Coalition Warfare were the proponents for the content of this JTLS release. There were 6 Engineering Change Proposals and 69 Software Trouble Reports included in JTLS 3.4.8.

JTLS is the world's premier theater level simulation. Its use includes decision analyses, contingency/management plan testing, experimentation, emergency preparedness training, command post exercise support, and coalition training among civil-military agencies. It has been used for analysis of border security, illegal immigration, and human trafficking issues. JTLS users gain insight into the problems and importance of effective information sharing, interoperability, and coordination in response to disasters requiring regional response efforts. The simulation can be connected to most Common Operational Pictures and easily interfaced with many C4ISR systems.

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# Subcommittee Reports



Bob Heinlein

## Education Subcommittee

by Bob Heinlein, Chair

Wow, it's hard to believe IITSEC 2011 is right around the corner! But as they say, time flies when you're having fun, and it's certainly been a real hoot having Dr. John "the Brit" Huddleston from Cranfield University as our outstanding (and I/ITSEC's first international) deputy chair this year, adding a much welcomed element of academic rigor, British vernacular, and humor to our proceedings. Our 29 member subcommittee is truly fortunate to be comprised of an outstanding, motivated, dedicated, insightful and experienced group of 15 industry, 13 government and 1 academia members. Combined, the group provides some of the very best expertise and insights from each of the military services, as well as a broad cross section from industry, including 8 PhDs adding significant academic and scientific rigor to our deliberations.

For the 2011 conference, we started the year with 52 abstracts submitted, of which we selected 38 to advance to paper review. With eight of the selected papers withdrawn for various of the usual reasons, we started our paper review in July with 30 papers submitted of which 24 were selected for presentation, with 12 paper presentations offering CEU credit. With much thanks to the dedication of our subcommittee birddogs supporting our authors' efforts, and very cooperative and appreciative authors, we noted a boost in the quality of papers submitted for review, making the subcommittee decisions much easier to achieve.

As a result, we have a total of 9 great paper sessions lined up for the conference, covering such topics as mobile and social media, medical stability and humanitarian operations, technology assessment, learning assessment and after action review, team training, knowledge management, and an interesting dive into individual training of cognitive and perceptual skills for irregular warfare operations. In addition, our subcommittee is once again pleased to support the Best Papers from Around the Globe session, in conjunction with the International Programs committee, featuring the best paper presentations from ITEC and SimTechT 2011. Finally, we are pleased to support an exciting Medical Simulation Special Event, which is sure to be a "must attend" item on your agenda.

The subcommittee has worked very hard to ensure that we have high quality papers and presentations for your benefit, and I am confident that once again our sessions will be invigorating, insightful, and very educational for the entire community. We look forward to seeing you at the conference!



Tammy Clark

## Human Performance Subcommittee

by Tammy Clark, Chair

From the Abstract Review in Palm Springs, CA and the Paper Review in Reno, NV, 2011 has been an exceptional year for the Human Performance Subcommittee. HP is comprised of 29 professionals representing the government (14 members) and industry (15 members). This team has worked hard in reviewing abstracts and papers, providing feedback to I/ITSEC authors, and supporting our subcommittee goals.

This talented group began preparing for this November's conference shortly after I/ITSEC 2010. Our members sought out and encouraged new and seasoned authors to submit abstracts for consideration. At the Abstract Review, we reviewed a total of 43 abstracts and accepted 27 for paper presentation and/or publication. Everyone rolled up their sleeves and served as birddogs to various authors.


The support of the birddogs to the authors was amazing; it's not often in business that you will have a professional that serves to champion for an individual's success.

*Subcommittees, cont. on page 8*

# 2011 I/ITSEC Accepted Papers



## EDUCATION

### ED1 We Are All in This Together

Force Preparation – New Techniques for Developing Collective Training Environment Specifications (11380)  →

Developing Remote Training Tools for Company Intelligence Teams (11325)  
Building Effective Leader Teams Faster (11242)





### ED2 Learning in the Palm of Your Hand

From eLearning to mLearning: The Effectiveness of Mobile Course Delivery (11053)  

Is Mobile Technology an Asset in the Education of Staff Officers? (11445) →

Educating the Acquisition Workforce Utilizing Social Media & Other Alternatives (11214)

### ED3 It's Not What You Know, But Who and How

Trends and Best Practices for Improving Knowledge Transfer Across the Globe (11195)    
After Action Review Best Practice: An International Review (11141)  →  
Leveraging Communities to Enhance Professional Development (11189) 





### ED4 You CAN Get There from Here!

The Future of Browser-based 3D – No Additional Plugins Needed! (11260)  
Unannounced Phishing Exercises and Targeted Training: Results and Lessons Learned (11342)  
The Great Migration: DAC Pioneers LMS Content Conversion (11212)



### ED5 Best Papers From Around the Globe

SimTecT 2011 Best Paper: Where is the Wii? The Application of Virtual Reality Simulation to Aircraft Marshalling – a Case Study →  
ITEC 2011 Excellence Award Winner: Distributed Training and Exercise Capability to Support Current Operations →  
ITEC 2011 Excellence Award Winner: Dynamic Terrain Management for Large Groundwarfare System →



### ED6 Virtually Better than Reality

Interpersonal and Leadership Skills: Using Virtual Humans to Teach New Officers (11358)    
Understanding the Impact of Intelligent Tutoring Agents on Real-time Training Simulations (11008)   
Integrating Adaptive Simulation into U.S. Army Classrooms (11027) 



### ED7 Are We Stable Yet?

Training on Cultural Aspects of Planning Humanitarian Assistance Operations (11132)  
OPERATION LOST PARADISE: A Low-cost Classroom Simulation for Medical Stability Operations in Medical Education (11088)  

### ED8 Are YOU Threatening ME?

Improving Soldier Threat Detection Skills in the Operational Environment (11196)   
Cognitive and Perceptual Skills Involved in Combat Hunter Expertise: Exploratory Evidence for a New Training Framework (11304)   
Developing Tactical Cunning (11164)

### ED9 Better Learning for Better Performance

Diagnostic Learning Progressions Framework to Improve Learning Outcomes of Training Initiatives (11364)   
Investigating the Impact of Training on Performance (11306)   
An Approach to Accelerated Learning and Psychophysiological Measures of Engagement (11121)

## PUBLISH ONLY

Through the Looking Glass Sideways: An Application Guide for the Eightfold Path Model (11066)  
Recommendations to Assist Cognitive Mapping in Adult Training with Technology (11184)


## EMERGING CONCEPTS & INNOVATIVE TECHNOLOGIES

### EC1 On a Clear Day You Can See Tomorrow






Leveraging Graphics Processor Capability to Uncover Hidden Terrain Database Errors (11070)

Explosive Fragment Engineering Visualization and Virtual Reality Demonstration Project (11139)  
Real Time Image Generation for Underwater Simulation (11290) →


### EC2 Immersive Technologies for Dismounted Soldiers

An Integrated Immersive Simulator for the Dismounted Soldier (11320)   
A Multidisciplinary Approach to Enhancing Infantry Training through Immersive Technologies (11060) →  
Application of Augmented Virtuality to Close Air Support JTAC Training (11075)



### EC3 911: Motion, Models, and Mockups

Markerless Full Body Tracking: Depth-sensing Technology within Virtual Environments (11363)    
Cost-effective, Simulated, Representative (Human) High-Fidelity Organosilicate Models (11328)   
Virtual Preceptor and Virtual Patient Medical Records: an Effective, Realistic, Low-cost Alternative to Virtual Patients (11199)  


### EC4 Digital Native Learning


Social Training in the Military (11313)  
Personal Learning Environment (PLE): A Learner and Data Centric Approach (11220)  
Virtual Learning: Taking Advantage of All Channels to Learning (11149) 

### EC5 Emerging Cyber Security Concepts



Applying Training Analysis and Game-based Learning toward the Design of a Cyber Warfare Real-time Strategy Training Game (11181)  
Optimizing Risk and Value in Simulated Training Exercise Design (11054)   
Supporting Cyber Security: Social Media Network Analysis Using NodeXL (11029) 

### EC6 Innovate, Navigate, Communicate



A Critical Decision Making Training Framework for Leadership Development (11091) 

Urban Area Design Analysis for Optimization (11338)   
Studying Listener Comprehension of Sonifications through Visual Replication (11227)


### EC7 Adaptive Training for Teams

Challenges and Emerging Concepts in the Development of Adaptive, Computer-based Tutoring Systems for Team Training (11007)  
Developing Systems for the Rapid Modeling of Team Neurodynamics (11097)    
Automated Support for Learning in Simulation: Intelligent Tutoring of Shiphandling (11343)





### EC8 Do You Have the Right Frame of Mind?

The Cognitive Skill-Stance Hierarchy: a “New” Training Framework (11137)   
A Data-driven Approach to Ontology Discovery (11063)   
Cognitive Map-based Modeling and Simulation for Tactical Decision Training (11105)

### EC9 Learner Modeling

Modeling Trainee Affective and Cognitive State Using Low Cost Sensors (11215)  
Exploring e-Portfolios and Independent Open Learner Models: Toward Army Learning Concept 2015 (11361)   
Measuring Trainee Intent Using Low-cost, High-impact Cognitive Models (11211)

### EC10 Games, Virtual Worlds and Constructive Simulations for Training the Warfighter

Shared Reality: Integrating Virtual Worlds, Constructive Simulations, and Collaborative Tools in a Web Browser (11143)    
The Virtual World Ecosystem Framework (11014)  

### EC11 Gesture Technology for Dismounted Soldiers




Recognition of Hand Signal Gestures Utilizing Inertial Sensor Inputs (11175)  
Natural Full Body Interaction for Navigation in Dismounted Soldier Training (11120)

Toward Dimensional Reality: Animatronics and Other Practical Mechanical Effects in Simulation Training (11222)


### EC12 Software for the Rest of Us

Next Generation of Distributed Training Utilizing SOA, Cloud Computing, and Virtualization (11080)

Modeling Irregular Warfare: a Framework to Connect the Dots (11345)

Experiences in Leveraging M&S Expertise by Hiding Software Complexity (11236)   

### EC13 Virtual Friends and Simulation

SimCoach: An Intelligent Virtual Human System for Providing Healthcare Information and Support (11263) 

Avatars, Media Usage, and the Linkages to E-learning Effectiveness (11357)


### EC14 Learning in the 3rd Dimension!

3D Engines for Mobile Platforms (11382)


Reflective Redo from the Point of Failure in Virtual Environments (11177)

ADL 3D Repository: A Blueprint for Discovery and Access (11366)


### EC15 Adventures in Distributed Learning

The Bridge Project: Open Source Transformation from S1000DTM to SCORM® (11253) 

The Learning Registry: Sharing Federal Learning Resources (11259)

ADL: Preliminary Systems and Content Integration Research within the Next Generation Learning Environment (11324) 

### Publish Only




Creating a Generic Game Engine for Distributed Collaboration using Cloud Technology (11018) 

## HUMAN PERFORMANCE

### HP1 Measuring Performance: A Tech Approach



An Examination of the Effectiveness of Simulations as Performance Assessment Instruments (11286)



Simulating a Vigilance Task: Technology for Homeland Security Research (11044)

Analyzing the Impact of Stress: A Comparison Between a Factor Analytic and a Composite Measurement of Allostatic Load (11258)   


### HP2 Countering Bombs and Pirates

Assessing Learning from a Mixed-media, Mobile Counter-IED Trainer (11058)

Development of Scenario-based Pre-deployment Counter-IED Training (11190)  

Building a Game to Educate Senior Officers in Counter-piracy (11353)  

### HP3 Prepare for the Future

Enhancing Performance through Pedagogy and Feedback: Domain Considerations for ITSs (11010) 

Crowdsourcing Expert Performance to Improve Training at Cyber Speed (11116)  




### HP4 Information Flow for Command and Control Systems

Disaster Response: Factors Influencing Emergency Operations Center Team Performance (11009)

Training Collaboration for an Army Digital System (11079)

Using Human Centered Design to Improve Flight Condition Situational Awareness (11042)

### HP5 Applications for Myth Busting

Effects of Motion Cueing on Components of Helicopter Pilot Workload (11239)   


Evaluating the Impact of Dynamic Fidelity on Performance (11157)



Mitigating Visual Anomalies for Binocular HMDs Integrated with Faceted Simulators (11114) 

## POLICY, STANDARDS, MANAGEMENT & ACQUISITION


### P1 We Know It All!

Distributed Mission Operations Cross Domain Solution Remote Management in Practice (11039)  


Towards a Modeling and Simulation Interoperability Standard for Cybersecurity (11046) 

Proven Strategies for Securely Sustaining Simulators and Training Systems (11089)  



### P2 Acquisition: Decisions/Decisions

Predicting Business Process Performance with “Real World” Queuing (11206) 



Towards a Decision Support System for Simulation Training Display Requirements (11207)

Avoiding Legal Peril: Tips for Simulation Companies Dealing with Governments (11224) 

### P3 Managing M&S Success

Improving Virtual/Constructive Training and Experimentation with Human Adjudication (11106)  

A Plausible Approach to Open Source Development in a Department of Defense (DoD) Environment: Open Technology Development (OTD) (11134)

Can Acquiring Structured Data Improve a Learning Content Development Environment? (11254)  

### P4 M&S in Da Hood

Next Generation Modeling and Simulation Architecture (11281)


M&S Asset Discovery: Services, Tools and Metadata (11341)

The M&S Community of Interest: Technical Collaboration Across the Enterprise (11389)

### P5 Reality or Fantasy?

Employing the Second Generation Software Product-line for Live Training Transformation (11083)

Development of Embedded Live, Virtual, and Constructive Training: The Imperatives for Successful Implementation of Embedded Training with the System Platform Developer (11198) 


Development Challenges for Adoption of ARINC Functionality in UAS Trainer (11268) 

## SIMULATION



### S1 Realistic Human Simulation: the Good, the Bad, and the Ugly



Biofidelic Virtual Terrorist: A Modeling and Simulation Tool for Human Threat Recognition Training (11246)


Improving Trainee Engagement Levels through Adaptive Entity Behaviors (11279)

Creating Micro-expressions and Nuanced Nonverbal Communication in Synthetic Cultural Characters and Environments (11372) 

### S2 “GATEWAY ARCH”itectures

Advances in Gateway Products and Processes for LVC Simulation Environments (11022)  


Utilization of Service Oriented Architecture (SOA)-based Commercial Standards to Address Live, Virtual, Constructive (LVC) Interoperability Challenges (11021)  

Best of Both Worlds: DIS Identifiers in an HLA Federation (11065) 


### S3 Gaming the Systems


Rapid Simulation Development Using a Game Engine-enhanced Dynamic Geo-social Environment (EDGE) (11298) 




Optimizing Network Performance in Simulation Games Using P2P (11073) 

Modeling and Simulation for Joint Fires Support (11288) 


### S4 More Convincing Simulated Humans



Pluggable Brains: Separating the Intelligent Behavior from the Simulated Player (11148) 


SmartObjects and Agents for Autonomous High Population Simulated Environments (11098) 

A Game AI Approach to Autonomous Control of Virtual Characters (11136)   


### S5 It's a Small World After All!

Open Streaming Terrain for Modeling and Simulation (11102) 

Rendering Large Scale Synthetic Urban Terrain (11049)  

An Instructor-centered Declarative Approach to Modeling Synthetic Environments (11171) 

### S6 The Building Blocks of Reality

A Tool for VR Training Simulators Development using Dataflow Architecture (11295) 

Are Current Modeling Architectures Viable for Rapid Human Behavior Modeling? (11129)

Improving Scalability of Large Federations That Use UDP Multicast (11034)

*Papers, cont. on page 6*

## Papers from page 5

### S7 Blood, Barf, and Bang

Raising the Bar on Medical Part-task Trainers (11041) 📖

Holistic Design Approach to Analyze Simulator Sickness in Motion-based Environments (11011) 📖

3D Spatial Audio Extraction and Presentation from Immersive Game Based Simulations (11159) 📖 📖

### S8 Reduce, Re-use, and Recycle

Automating MSDL Scenario Generation and Entity Integration for Simulation Events (11006) 📖 📖

Ensuring Forward Compatibility on Networked Simulations (11045)

Rapid Data Generation for Modeling and Simulation (11163)

## PUBLISH ONLY

Interoperability-ready, Training-focused Architecture for Command and Control Systems (11074) →

## TRAINING

### T1 LIVE from Orlando

Live Training Instrumentation for Unmanned Systems: Challenges and Lessons Learned (11071)

Leveraging Service-oriented Architectures (SOA) within Live Training: an Assessment (11122) 📖  
Pistols Skills Transfer from a Synthetic Environment to Real World Setting (11322) ✍️ →

### T2 Training for the Unknown: Decisions, Decisions, Decisions

Decision-centered Scenario Design Tool for Counterinsurgency Training (11226) 📖

Case-based Next Generation Cognitive Training Solutions (11202) 📖

Evaluating Training Effectiveness: Instructional Support Software from Squads to Schoolhouses (11072) ✍️ 📖

### T3 Calling Agent 99: Get Smart

Using Civilian Simulation Centers for Reserve Component Medical Unit Training (11030) 📖

Herding CATS: The Making of Combined Arms Training Strategies (11250) 📖

Enhancing After Action Reviews Through Transparent AI Knowledge Representations (11277)

### T4 Novus Ordo Seclorum: Ordering Your Performance

Examining Operational Skill Decay: Look Beyond the Null? (11155) 📖  
The Selection of Realistic Training Environments for Tactical Aircrew Training (11147) →  
Streamlining Information Assurance Testing with Automation (11024) 📖

### T5 On the Road Again

MH60/R Helicopter Multi-platform & Web-based Trainer with Dipper Acoustics (11111)  
Use of the Apple iPod Touch for Live Training (11296)  
Mobile Interactive Training: Tablets, Readers, and Phones—Oh, My! (11038) 📖 📖

### T6 See Me....Feel Me

Usability Analysis of Prototype Partial Task Tourniquet Trainers (11249) 📖  
Haptics-based Combat Medical Training Effectiveness (11172) 📖  
Simulation-based Training for Burr Hole Creation (11241) 📖

### T7 Moving Theory into Practice: Pull Up the Van

Recommendations for Designing Effective Learning Events in 3D Virtual Worlds (11261) 📖  
Item Response Theory Facilitates Adaptive Training for Disparately Skilled Trainees (11035) 📖  
Persistent Learning Capability: It's Your MOVE (11179)

### T8 Hidden in Plain Sight: Training Perceptual Skills

Finding the Truth: Interview and Interrogation Training Simulations (11186)  
Analysis of Augmented Reality Cueing as a Tool for Perceptual Training (11218) 📖

### T9 History Repeats Itself; or NOT

Executing Next Generation Training in Combat Identification (11158) 📖  
The Final Countdown: a Review of Three Decades of Flight Controller Training Methods for Space Shuttle Mission Operations (11005)

## PUBLISH ONLY

Integration of Coalition Training into a Mission Network (11174)

# 2011 NTSA Modeling & Simulation Awards/2011 Governor's Award

Each year, NTSA presents Awards for Outstanding Achievement in Modeling & Simulation. This year's awards will be presented at the annual NTSA Leadership Reception & Executive Dinner (an invitation-only event) to be held on Tuesday, November 29, 2011, in conjunction with I/ITSEC 2011. The most outstanding nominee, selected from the pool of the NTSA M&S Award winners, will receive the 2011 Governor's Award.

Submissions should be no more than 750 words, and should clearly explain why the nominated individual or team is worthy of special recognition. What was especially noteworthy about their/your work in terms of innovation, creativity, management of resources, timeliness, cost savings, etc.? You are encouraged to include customer references and testimonials. Please remember that these awards are for outstanding achievement or innovations by individuals or teams of individuals — no marketing materials, please.

Don't miss this chance to showcase your achievements in Modeling & Simulation!

**The nomination deadline is Friday, October 21.**

For complete details, including lists of past winners, and to submit a nomination, please visit

<http://www.trainingsystems.org/nomform.cfm>

### Awards may be given in the following categories:

- Training
- Analysis
- Acquisition
- Cross-Function (multiple uses)
- Individual/Lifetime Achievement

# 2011 I/ITSEC Scholarship Winners



Marissa Shuffler

## Doctoral Degree Scholarship

Marissa L. Shuffler has over seven years of experience conducting basic and applied research in the areas of individual and team training design, development, and evaluation. Ms. Shuffler is a graduate research associate at the Institute for Simulation and Training at the University of Central Florida. In addition to training, other areas of her expertise include leadership and leader development, intercultural collaboration, virtual and geographically distributed teams, multi-team systems, and decision-making/adaptation, with an emphasis on military environments.

Ms. Shuffler is currently student scientific lead on several major projects at IST, including the design of a computer-based training tool for improving critical social thinking training for Soldiers and the development of a simulation based performance assessment tool, as well as the design of training interventions aimed at improving multiteam system coordination and functioning. Additionally, Ms. Shuffler is currently working on her dissertation research, which involves investigating individual difference factors that predict the enactment of leadership behaviors in virtual and distributed decision making teams.

Ms. Shuffler has conducted this and similar research for a range of government, military, and other organizations, including the U.S. Army Research Institute, the Department of Labor, the Center for Army Leadership, the Department of Homeland Security, the U.S. Air Force, TIAA-CREF, and the Four Seasons Hotel. Her work to date includes over 75 publications and presentations at professional conferences. Ms. Shuffler is a doctoral student in the Industrial

and Organizational Psychology program at The University of Central Florida (UCF). She earned a B.A. from Pfeiffer University with a triple major in Psychology, Organizational Communications, and English, and a M.A. in Industrial/Organizational Psychology from George Mason University.



Brice Pollock

## Masters Degree Scholarship

I am currently pursuing my Master of Science in Human Computer Interaction and Mechanical Engineering at Iowa State University and completed my Bachelor of Science in Mechanical Engineering at Iowa State University. I have worked as a researcher at the Virtual Reality Application Center since 2009 and am primarily funded on a U.S. Army simulation grant from RDECOM/STTC involving live, virtual and constructive training of the dismounted warfighter. Previously I have interned in Promontory, Utah at ATK space systems where I worked as a design and analysis intern on human space flight and commercial rocketry projects.

I spend hundreds of hours each year promoting Science, Technology, Engineering, and Mathematics (STEM) initiatives throughout the Midwestern United States to inspire students to pursue technical disciplines. In this goal I have helped run FIRST LEGO League (FLL) in Iowa since 2008, acted as master of ceremonies for the past two years of the Iowa 4-H Robotics Championship and founded my own outreach organization STEM-spire. I fill my personal time with my passions for running, mountaineering, music and brewing.

## Modeling & Simulation Coalition Established

An invitational meeting of the National Modeling and Simulation Stakeholders was held in February 2011. At this meeting, it was discussed and determined that an inter-disciplinary, inter-agency, inter-organizational organization be created to further the national goals and objectives of the modeling and simulation industry. This organization has been established and is called the National Modeling and Simulation Coalition (NMSC). This Coalition is intended to further integrate and highlight the use of modeling and simulation to meet our national objectives. An interim board has been established, and the vision, mission and overarching objectives for the NMSC have been developed in preparation for the Inaugural Congress to be held in February 2012.

The National Modeling & Simulation Coalition is the capstone organization to promote and leverage Modeling and Simulation (M&S) to better the human condition and to strengthen the national well-being. Its mission is to create a unified national

community of individuals and organizations around the Modeling and Simulation (M&S) discipline and professional practice and to be the principal advocate for M&S. The intended purpose of the NMSC is to serve as a voice for the industry in order to expand modeling and simulation as a profession, as an industry, and in the marketplace. The Coalition provides a vehicle for dialog and furtherance of the discipline in the areas of professional knowledge, education and workforce development, and technology development and application through a campaign of public awareness.

The First Inaugural Congress of the NMSC will be held in Washington DC in February 2012. The event will be open to all with an interest in modeling and simulation, and will provide an opportunity for all constituents and stakeholders to establish the agenda and business objectives of this organization. Watch for further information on this groundbreaking national event in the coming weeks.

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### **Subcommittee from page 3**

That is exactly what each birddog did. All of our members made themselves available for draft paper reviews in July, where they offered in-depth knowledge about the paper's subject and direction.

At the conclusion of the Paper Review, HP accepted 14 papers for presentation at I/ITSEC 2011. The birddogs will continue their support as the presentations are developed. In addition, they will be preparing for their roles as session chairs and deputies during the I/ITSEC conference.

If you are interested in HP topics such as Human Systems Integration (HSI), decision support systems, knowledge management tools, immersive simulations, or just curious, you are sure to enjoy our presentation sessions this year. With session titles like "Countering Bombs and Pirates", which includes paper topics from counter-IEDs to counter-piracy, you will certainly enjoy each HP presentation.

In conclusion, I would like to thank the members of the HP subcommittee for all of their hard work. Each member has contributed to the field of HP by ensuring we have representation of papers that showcase the HP domain through data gathered from innovative, scientifically valid experiments. I sincerely thank my trusted deputy, Catherine Emerick, who has supported me and the subcommittee from when we began this adventure. I look forward to another outstanding I/ITSEC conference this November!

## **Policy, Standards, Management, and Acquisition (PSMA) Subcommittee**

*By Jerry L. Stahl, Chair*

It's with great pleasure that I serve as this year's Chair of the PSMA Subcommittee. I'm truly privileged to lead such a diverse group of talented professionals from all walks of the training and simulation community. The Subcommittee is comprised of 29 members, 18 of whom are from industry and 11 from government. Several of our members have served in other key I/ITSEC leadership positions, including prior Conference Chairs and other subcommittee chairs. Further, two members also currently serve on the Operations Subcommittee, which assists in the day-to-day activities during the conference itself.

I'd like to start by thanking all of these representatives for bringing their advice, counsel, wisdom, and practical experience to the PSMA Subcommittee. Let me also offer special thanks to my deputy chair, Bob Kleinhample, for his keen assistance during both the Abstract and Paper Review sessions. The team's hands-on experience, unique personalities, and cross-domain knowledge have made the PSMA Subcommittee a fun and productive place to be. Without the dedication and commitment of these true professionals, I/ITSEC simply wouldn't be the world-class conference it has become.

One of the PSMA Subcommittee goals this year is to strengthen the process for helping authors progress toward successful papers...and one way in which we do this is to ensure we have a Birddog assigned to each abstract and paper. The PSMA Birddogs this year have been especially proactive, providing constructive feedback and recommendations

in helping authors strive for the Best Paper award. Another clear goal is the emphasis on quality versus quantity, and our Birddogs play a key role – to include providing feedback to authors whose abstracts and papers were not accepted in order to help them prepare for resubmittals in future years.

Our PSMA professionals are chartered with reading each abstract and paper and deciding whether or not they are of the requisite quality to proceed toward a presentation at the conference. This is a task not taken lightly by anyone on the Subcommittee. We are all very keenly aware of how much time authors put into writing abstracts and papers...and I can assure all authors that each abstract and paper received by this Subcommittee was given a complete, thorough, and fair assessment.

Speaking on behalf of the entire PSMA team, let me express our sincere appreciation to each of the 33 well-qualified authors who submitted abstracts for our review this year. Each Subcommittee member independently reviewed and evaluated each of these 33 abstracts – and after group discussion, we selected 28 (85% acceptance rate) for development into comprehensive papers.

Unfortunately, 6 authors withdrew their papers from consideration prior to the July paper review meeting in Reno, leaving us with 22 papers to review and assess. Of those 22 submitted papers, the Subcommittee accepted 15 for presentation at I/ITSEC 2011. And of the 15 accepted papers, 7 were deemed eligible for Continuing Education Units, or CEU, credit. But the role of our PSMA Birddogs is not over...it will continue right up to and through the conference, with a key task of helping our authors prepare a hard-hitting and comprehensive presentation to be given at the conference.

Finally, let me also say a word of thanks to our I/ITSEC leadership team, especially our Conference and Program Chairs, who continue to push all of us in "raising the bar." Thanks once again to all who play such an important role in this great conference, and I look forward to seeing you all at I/ITSEC 2011. But let's not forget about the ultimate reason we have an I/ITSEC...it's all about our Warfighters! Keep them in your heart and in the forefront of your mind as we pursue this year's theme of "Prepare the Force – Secure the Force."

## **Future Events**

**OCT 11-14, 2011** • MODSIM World • Virginia Beach Convention Center • Virginia Beach, VA

**NOV 28 - DEC 1, 2011** • Interservice/Industry, Training, Simulation and Education Conference (I/ITSEC) • Orange County Convention Center • Orlando, FL

**FEB 21-22, 2012** • Testing & Training Cross Talk Forum: Maximizing Test & Training Collaboration on Sharing of Range Resources • Sandestin Golf and Beach Resort • Destin, FL