



## **MSIAC NEWSLETTER JUNE 2007**

Welcome to the June 2007 edition of the MSIAC M&S Newsletter. In this month's issue you will find a full slate of M&S articles and news from across the Department of Defense and beyond. We start with an article about the Modeling and Simulation Staff Officer Course (MSSOC), and then recap the Second Annual Modeling and Simulation Leadership Summit. This is followed by a complete listing of the winners of this year's DoD M&S Awards. Finally, we present several articles of sufficient variety to touch interests across all the communities within the wide world of M&S. I hope you will enjoy this month's issue, and I look forward to your comments.

Dane Mullenix  
Director  
[dmullenix@alionscience.com](mailto:dmullenix@alionscience.com)

### **MODELING AND SIMULATION STAFF OFFICER COURSE (MSSOC)**

MSIAC's three-day M&S Staff Officer Course (MSSOC) provides a broad overview of modeling and simulation (M&S) policy and activities of the Department of Defense (DoD), with discussion of how DoD employs M&S in support of training, analysis, acquisition of new products and systems, test and evaluation (T&E), planning, and experimentation. The course focuses on M&S terms, concepts, applications, and information resources, preparing attendees for positions that require conversancy in these topics. Students gain familiarity with major M&S concepts, policies, organizations, programs, activities, and issues within the Department of Defense. Two (2) Continuous Education Units (CEUs) are available for this course as well as twenty-one (21) Continuous Learning Points (CLPs).

The MSIAC M&S education team most recently presented an MSSOC at the Air Force Agency for Modeling and Simulation (AFAMS) on 15-17 May 2007. There were 29 students in the course. Attendees included mostly DoD civilians GS-15

through GS-09, 06 through E-8 military person, one Estonian military and one government contractor supporting DoD Programs. The students comprised a good cross section of M&S experience. Classroom sessions were highly interactive, with many instances of students sharing personal experiences for the benefit of the entire class. For more information about the following MSSOC courses visit: <http://education.dod-msiac.org/upcoming.asp>

Upcoming MSSOC courses:

10-12 July 2007  
Hanscom AFB, MA

21-23 August 2007  
Fort Eustis, VA

### **SECOND ANNUAL MODELING AND SIMULATION LEADERSHIP SUMMIT**

The Second Annual Modeling and Simulation Leadership Summit in Chesapeake, Virginia on February 26, 2007, brought over 260 attendees from almost 20 different states to discuss key policy issues facing the M&S industry. The gathering of leaders from industry, academia, and government was uniquely focused on M&S concerns with regard to public policy.

At the summit, Congressman Forbes (VA-04) announced his intention to introduce a Congressional resolution that highlights the importance of M&S and encourages the coordination and investment in M&S education. Further, the resolution will celebrate past contributions of M&S to the United States and also urge the Administration to address some of the obstacles that could impede the innovation of the M&S industry.

Roundtable discussion groups at the Summit were divided into four categories: Industrial Development, Business Practice, Professional Development, and Technology. The roundtable discussions led to initial recommendations for the M&S Caucus to advance during the 110th Congress. These recommendations were presented in preliminary form to the caucus





June 18, 2007

page 2

members who were present that day.

Rear Admiral Fred Lewis, U.S. Navy (retired), the President of NTSA, concluded the summit with a discussion of M&S as a national enterprise and committed to working on the proposals exclusive of Congressional action.

The Caucus will continue to work together with M&S leaders to implement the agenda recommendations being formulated by the [National Training and Simulation Association](#) (NTSA). The recommendations are being finalized by NTSA over the coming weeks and soon will be presented to caucus members on Capitol Hill. For original article visit: <http://randyforbes.house.gov>.

### **DoD ANNOUNCES WINNERS OF ANNUAL MODELING AND SIMULATION AWARDS**

The Department of Defense announced that 10 winners have been selected for the ninth annual Department of Defense Modeling and Simulation (M&S) Awards. The winners for each category are:

**Acquisition Community Winner:** Acquisition Modeling and Simulation Working Group (AMSWG) of the DoD Systems Engineering Forum, a body chartered by the Under Secretary of Defense for Acquisition, Technology, and Logistics, Washington, D.C., received the team award for leading the examination of the Department's M&S challenges in acquisition, fostering cooperative M&S activities, and creating an acquisition M&S master plan and business plan to improve M&S across the acquisition spectrum.

**Analysis Community Winners:** World Class Models Initiative (WCM) of the Naval Operations' (OPNAV) Assessment Division (N81), U.S. Navy, Washington, D.C., received the team award for aggressively implementing WCM as an OPNAV enterprise-wide effort to improve readiness, manpower, strategic planning, C4ISR, and non-traditional warfare through an innovative mix of traditional M&S enhancements and exploratory "discovery" tasks. Its innovative and risk-balanced approach will expand the frontiers of

Navy M&S, and pay dividends for years to come.

Operational Reachback Team of the Weapons of Mass Destruction Division, Air Force Nuclear Weapons and Counterproliferation Agency at Kirtland Air Force Base, N.M., received team award for developing an innovative "end-to-end" M&S toolkit – Serpent – that provides warfighters with advanced counter-chemical biological, radiological, nuclear technologies and systems; consolidates the latest Air Force capabilities for the collateral effects and target defeat; provides a test bed for fielding future agent defeat weapon concepts; and gives an operational capability to joint commanders for "target defeat with minimal collateral hazards.

**Experimentation Community Winner:** Modeling and Simulation Division of the U.S. Joint Forces Command's Joint Innovation and Experimentation Directorate (J-9), Suffolk, Va., received the team award for development of a synthetic environment sufficient to conduct political, economic, social, informational, and infrastructure modeling. This tool helps revolutionize joint experimentation by allowing the critical elements of national power to be explicitly modeled as actions and perceived effects in an environment common to the military and U.S. inter-agency communities.

**Planning Community Winners:** Integrated Consumable Item Support (ICIS) Team of the Defense Logistics Agency, Ft. Belvoir, Va., received the team award for reengineering and redesigning the Joint Logistics Adaptive Planning and analysis tool into an Oracle-based system that improves accuracy and performance; saves time and resources; and does in minutes or hours what formerly took planners days, weeks, and even months to accomplish.

Adaptive Planning Implementation Team (APIT) of the Joint Staff, J-7, Washington, D.C., received the team award for developing a transformational adaptive planning process and an end-to-end suite of planning and execution tools that support all aspects of contingency and crisis planning for combatant commands, joint force commanders,





service/functional components, combat support agencies and the Joint Staff.

**Test and Evaluation Community Winner:** U.S. Navy's Next Generation Command and Control Processor (NGC2P) Test and Evaluation Team of the commander, Operational Test and Evaluation Force (COMOPTEVFOR), Norfolk, Va., received the team award for using the hardware-in-the-loop (HWIL) capability of the Navy's Distributed Engineering Plant to cost effectively support an operational assessment of NGC2P. This cooperative test effort permitted robust assessment of NGC2P's joint interoperability and demonstrated the cost-savings of using HWIL M&S facilities to provide in-depth joint operational and technical insight during systems development and acquisition.

**Training Community Winner:** U.S. Army Chief Warrant Officer Harvey Jackson, director of the Army's Wheel Vehicle Maintenance School, 187th Ordnance Battalion, Fort Jackson, S.C., received the individual award for his visionary efforts in transforming training. He spearheaded the use of interactive 3-D equipment simulations for training mechanics to increase the readiness of high mobility multipurpose wheeled vehicles (HMMWVs) for use in the Global War on Terrorism. As a result, commanders in the field saw an immediate reduction in previously common HMMWV problems, greater availability of the vehicles, and increased soldier safety.

**Common and Cross-Cutting Winners:** Ambiguity and Human Intelligence (HUMINT) Methodology Integrated Product Team of the U.S. Army Training and Doctrine Command Analysis Center, Ft. Leavenworth, Kan., received the team award for closing the gap in the development of means of incorporating HUMINT operations into DoD modeling needs.

Modeling and Simulation Branch (A5XS) of the Headquarters, Air Force Concepts, Strategy, and Wargaming Division, Washington, D.C. received the team award for ground-breaking work integrating modeling and simulation tools to support the

analytical and information technology needs of Air Force Title 10 and Joint wargaming. During the Unified Engagement 06 war game, the team delivered a war game information environment that seamlessly put powerful and intuitive information retrieval, analysis, and visualization tools in the hands of joint and coalition participants.

The annual awards recognize achievement in support of DoD M&S objectives. Ninety-nine nominations were received from across DoD. For original article visit:

<http://www.defenselink.mil/releases/release.aspx?releaseid=10806>

### **CIVILIANS TEST OUT NEW ROLLOVER TRAINER**

CAMP ARIFJAN, Kuwait – Civilian opinion leaders visiting here today got to take a whirl - literally - in a new training device that's teaching troops how to survive a rollover in top-heavy up-armored vehicles.

Participants in the Joint Civilian Orientation Conference, traveling through the U.S. Central Command operating area to observe military operations and meet troops, got an introduction today to the Humvee Egress Assistance Trainer, or HEAT.

The trainer was developed and built here, with the first training on it offered in February to help reduce rollovers and fatalities, Army Lt. Gen. Steve Whitcomb, commander of 3rd U.S. Army and Coalition Forces Land Component Command, told JCOC participants.

About 250 U.S. troops have been severely injured in rollovers since Operation Iraqi Freedom began in March 2003, with 90 of them dying from their injuries. Fourteen of those involved drownings, officials here said.

Intent on cutting these losses, Whitcomb got the idea for the HEAT after seeing a similar model at Fort McPherson, Ga. He got CFLCC staffers to build a similar model, taking a scrapped Humvee cab and mounting it to an elevated M-1 tank engine



maintenance stand. That, in turn, was mounted to an M-870A1 trailer so it could be transported to troop bases.

CFLCC now has three models with plans to add a fourth to its inventory soon. For complete article visit: <http://www.defenselink.mil/news/newsarticle.aspx?id=15358>

### **AIR FORCE TO DESIGN SPECIALIZED SIMULATIONS FOR TACTICAL TRAINING**

KIRTLAND AIR FORCE BASE, N.M. — The Air Force not only is shifting a percentage of live flying time into simulations but also small-unit tactical training.

In addition to the quarterly “Virtual Flag” exercises that train hundreds of airmen, soldiers, sailors and Marines across the United States and overseas, the Air Force will host smaller exercises, called Warfighter Focus events.

They will link 10 to 25 participants on up to seven weapon systems to train in a simulated environment.

“It’s our attempt to narrow down the focus of some of these events. Virtual Flag is a big theater-level exercise, but sometimes there are vignettes or threats that you want to practice in more detail,” says Maj. Brynt Query, deputy of operations for the 705th Combat Training Squadron.

The Warfighter Focus events will run like a one-day version of Virtual Flag.

Specialized units, such as reconnaissance, surveillance and long-range strike wings, will link into the training event through simulators at their home stations. They will fly a mission and then debrief via video teleconference. Then, they will re-fly the mission to reinforce lessons learned, says Query.

The initial five sessions include combat search and rescue, time-sensitive targeting and dissimilar aircraft combat training missions.

“You can do one of these and potentially go fly your

jet” immediately afterwards, says Lt. Col. Donald Drechsler, commander of the 705th Combat Training Squadron.

While some scenarios and environments can be borrowed or recycled from Virtual Flag exercises, others will need to be generated from scratch. For original article from the National Defense Magazine visit:

<http://www.nationaldefensemagazine.org/issues/2007/May/AirForcetoDesign.htm>

### **RECRUITS VIRTUALLY EXPERIENCE THE HIGH-TECH NAVY**

Five years into an ambitious program to overhaul an outdated training regimen rooted in the Cold War, the Navy appears to be making progress.

With sophisticated warships poised to enter its fleet during the next several years, the Navy is relying more and more on technology to train sailors. Ships also will have smaller crews so every sailor will be trained for multiple jobs, said Vice Adm. Kevin Moran, commander of Navy Education and Training Command, at a training and simulation conference. “We are building hybrid sailors,” he said.

That thinking is shaping the way recruits and sailors prepare for service.

At the recruit level, the Navy Service Training Command has focused on team-building and small arms weapons training, said Rear Adm. Arnold Lotring, commanding officer.

One of its newest training technologies is Battle Stations 21, a facility that will test recruits’ capabilities and sailor-worthiness with an immersive 12-hour simulation beginning next month.

“It puts these young people into a team environment, so they understand how important it is in the Navy to work together and work across the group that they’ve been assigned,” said Lotring.



June 18, 2007

page 5

Previously, the Navy tested its recruits in a rudimentary fashion, running teams from drill to drill across the campus. Now with realistic simulations and special effects, it can appeal to a generation of tech-savvy recruits.

Battle Stations 21 more accurately reflects the environment recruits will see once they get into the fleet, retired Vice Adm. Alfred G. Harms, former commanding officer of the Navy Education and Training Command, said at the conference. With technologically advanced ships, such as the littoral combat ship, the next generation CVN-21 air combat ship, the next generation CVN-21 aircraft carrier and the DDG-1000 destroyer coming into the future Navy, knowing how to work together in smaller crews will be critical, he said.

"I think we're going to see more tools such as this for other pieces of Navy training," he added. For complete article from National Defense Magazine visit:

<http://www.nationaldefensemagazine.org/issues/2007/May/Recruitsvirtually.htm>

### **A HEAVIER LOAD - CANADA USES SIM TO BOOST RESUPPLY CAPABILITY**

Canadian defense scientists will use simulation to try to improve how naval ships can be resupplied at sea. The Atlantic laboratories of Defence Research and Development Canada (DRDC), the Canadian military's science organization, has started an 18-month project to determine whether it is not only possible to increase the weight of supplies being transferred between ships but also to accomplish that type of operation with fewer personnel.

Kevin McTaggart, the DRDC scientist overseeing the project, said researchers also hope that simulation will be able to determine how to improve the resupply of ships during rough seas.

Typically, replenishment between Canadian Navy ships is done using a cable stretched between the two vessels while they are underway. Supplies are then sent across that cable.

During the simulation of that procedure, researchers will input different variables such as sea conditions, the motion of the ships and the behavior of the replenishment systems, including the amount the cable stretches during the transfer procedure.

"One of our main concerns in this simulation is how the motions of the ships will influence things," said McTaggart, the group leader for ship structures and life-cycle management at DRDC Atlantic. "We want to determine if adverse events might occur, such as breakage of the replenishment gear."

Simulation will also be used to come up with ways to prevent the likelihood of the supplies being immersed in water. "What we're doing is simulating the payload hanging from the cables and, of course, if you get too much slack or the waves become too high, then it's possible that a wave can hit the payload as it's going across," McTaggart said. "

For complete article from the Training and Simulation Journal (T&SJ) Online visit:

<http://www.tsjonline.com/story.php?F=2552457>

### **CACCTUS TAKES ROOT- NEW MARINE SIM MOVES STAFF TRAINING FROM SAND TABLE TO PC**

For 20 years, the Combined Arms Staff Trainer, or CAST, has been the U.S. Marine Corps' training simulation for teaching staff coordination of fire support. Its centerpiece was a big terrain map — complete with miniature vehicles and cotton-ball explosions — that probably would have looked familiar to Gen. Dwight D. Eisenhower when he planned D-Day.

But CAST is getting a facelift through CACCTUS (Combined Arms Command and Control Trainer Upgrade System), a computerized system.

"CACCTUS takes CAST to the next level," said Maj. J.P. McDonough, modeling and simulation for Training and Education Command, and requirements officer for CACCTUS.

CACCTUS is scheduled for initial operational capability in 2008 and full capability in 2011. The



June 18, 2007

page 6

CAST facility at the Marine Corps Air Ground Combat Center at Twentynine Palms, Calif., is being used as the CACCTUS for testing.

The existing CAST facility consists of a big terrain map surrounded by a few rather archaic-looking instructor terminals. There are little model tanks, and red and green laser lights on the ceiling aim colored dots on the terrain board to show the location of fires (although sometimes cotton balls are used). The Marines have five CAST facilities, at Twentynine Palms; Camp Lejeune, N.C.; Camp Pendleton, Calif.; in Hawaii; and in Okinawa, Japan.

A Marine briefing paper lists a multitude of problems with CAST, which it describes as an outdated facility that can train a battalion staff but is more often used for training forward observers and forward air controllers in combined arms.

“A ceiling-mounted green-and-red laser system receives an aim point from a DOS-based program,” the paper says. “Effects of fires are interpreted by controllers/facilitators. There is no 3-D depiction of aircraft, besides the representative but inaccurate use of a plane on the end of a stick. While it makes the teaching point of the aircraft moving toward the target from the appropriate inbound point, it does not make the teaching point well — or elegantly.” CAST also suffers from having a voice-only communications system — basically a cluster of telephones — that was supposed to simulate a battalion and regimental communications network.

However, the biggest problem is that CAST is not suited for training a full Marine Air-Ground Task Force staff. Originally designed for battalion-level exercises, the upgraded CAST can accommodate a Marine Expeditionary Brigade-level staff distributed among multiple CAST facilities.

CACCTUS — which is an upgrade; the facilities will still be known as CAST — will add computer consoles so users can see 3-D visualizations of the training area. In addition, big screens will display after-action reviews. For complete article from the Training and Simulation Journal (T&SJ) Online please visit:  
<http://www.tsjonline.com/story.php?F=2611009>

## **VERTICAL MOTION SIMULATOR VISUAL SYSTEM UPGRADE**

NASA SimLabs has nearly completed a major upgrade to the Vertical Motion Simulator (VMS) flight simulator visual systems. The system upgrade includes new image generators and display systems that will deliver orders of magnitude increases in the fidelity of out-the-window visual scenes. The new displays are Liquid Crystal on Silicon (LCOS) projectors which offer significant enhancements in contrast, resolution and brightness.

The image generator includes a database generation system that employs commercial-off-the-shelf tools such as Adobe Photoshop and MultiGen Creator, and outputs in both proprietary and Open Flight industry standard formats.

The new image generator has area-based, subpixel, full-screen anti-aliasing, for improved pilot cues and object recognition. NASA astronauts training in the VMS should notice a major improvement in the depiction of ground lights required by the Orbiter during night landings at Kennedy Space Center.

Two gigabytes of dedicated texture memory will provide very high resolution for VMS photo imagery-based databases. High fidelity weather and atmospheric effects, will provide more realistic multiple textured layered clouds and fog. Multiple Phong light sources will allow the VMS to represent light lobes, flares, specular highlights, and spotlights.

The first simulation to employ the new visual system will be the Lunar Lander Simulation Project. For original article visit:

[http://www.simlabs.arc.nasa.gov/newsletter/news.html#vms\\_upgrade](http://www.simlabs.arc.nasa.gov/newsletter/news.html#vms_upgrade)

## **NASA'S CLOSE-UP LOOK AT A HURRICANE'S EYE REVEALS A NEW 'FUEL'**

In the eye of a furious hurricane, the weather is often quite calm and sunny. But new NASA research is providing clues about how the seemingly subtle



movement of air within and around this region provides energy to keep this central 'powerhouse' functioning.

Using computer simulations and observations of 1998's Hurricane Bonnie in southern North Carolina, scientists were able to get a detailed view of pockets of swirling, warm humid air moving from the eye of the storm to the ring of strong thunderstorms in the eyewall that contributed to the intensification of the hurricane.

The findings suggest that the flow of air parcels between the eye and eye wall - largely believed trivial in the past - is a key element in hurricane intensity and that there's more to consider than just the classic "in-up-and-out" flow pattern. The classic pattern says as air parcels flow "in" to the hurricane's circulation, they rise "up," form precipitating clouds and transport warm air to the upper atmosphere before moving "out" into surrounding environmental air.

"Our results improve understanding of the mechanisms that play significant roles in hurricane intensity," said Scott Braun, research meteorologist at NASA's Goddard Space Flight Center, Greenbelt, Md. "The spinning flow of air parcels - or vortices - in the eye can carry very warm, moist eye air into the eyewall that acts as a turbocharger for the hurricane heat engine." The research appears in the June 2007 issue of the American Meteorological Society's Journal of the Atmospheric Sciences.

"While the 'in-up-and out' pattern has been the prevailing paradigm for the past five decades, when you closely examine intense hurricanes it's apparent that a second family of moist air parcels often travels from the border of the eyewall to the eye, where it picks up moisture from the ocean surface," said co-author Michael Montgomery, professor of meteorology at the U.S. Naval Postgraduate School, Monterey, Calif. "These moisture-enriched air parcels then rather quickly return to the main eyewall and collectively raise the heat content of the lower eyewall cloud, similar to increasing the octane level in auto fuel."

The researchers analyzed thousands of virtual particles to track the movement of air between the eye and eyewall, and between the eyewall and its outside environment. To uncover the impact of these particles on storm intensity, they used a simulation of Hurricane Bonnie from a sophisticated computer model and data gathered during the NASA Convection and Moisture Experiment (CAMEX). For complete article visit:

[http://www.nasa.gov/centers/goddard/news/topstory/2007/eye\\_fuelsource.html](http://www.nasa.gov/centers/goddard/news/topstory/2007/eye_fuelsource.html)

### ***TRIAL BY FIRE - EXERCISE WILL PUT FCS NETWORK VISION TO THE TEST***

The U.S. Army has begun to outfit about 100 Bradley fighting vehicles, Humvee utility vehicles and M1 Abrams tanks with radios and wireless networking gear in preparation for the first live, large-scale test of the Future Combat Systems (FCS) program.

In the limited-user test, to be held in July 2008 at Fort Bliss, Texas, some 900 soldiers will use several dozen of the newly networked vehicles in mock combat. Fighting a combination of simulated threats and live players armed with gun-simulating lasers, they will put the FCS networking gear to use in roadside attacks, battles with insurgents hiding in caves and buildings, and other scenarios.

"The tests will represent how the units would have to react in a tactical situation that is representative of today's operational situation," said Allan Resnick, who directs requirements integration at the Capabilities Integration Center of the Army's Training and Doctrine Command (TRADOC).

This summer and fall, the Fort Bliss troops will practice with their updated vehicles while Army officials do technical testing and formal force development test and evaluation. The 2008 test will steer the development of the world's largest land-warfare program, a two-decade effort. Specifically, it is intended to help FCS officials decide which technologies will be ready for service in the next few years.

Boeing and SAIC are the lead systems integrators of





June 18, 2007

page 8

a team of more than 25 industry partners and 600 suppliers.

It will also be key to persuading U.S. lawmakers to continue funding the program, which has come under fire for its long duration and high cost, said Loren Thompson, defense analyst with the Lexington Institute in Virginia. For complete article from C4ISR Journal visit:

<http://www.isrjournal.com/story.php?F=2600892>

### **U.S. JOINT FORCES COMMAND BEGINS NEW EXPERIMENTATION CAMPAIGN**

U.S. Joint Forces Command, or JFCOM, is tasked with training and providing mission-ready Joint-capable conventional forces to the U.S. military. In addition it serves as the military's hub for Joint Experimentation, a process of developing new doctrinal and operational concepts and recommending better solutions to integrate combatant commands' warfighting capabilities.

JFCOM's Joint Innovation and Experimentation Directorate, or J9, has just finished the first in a multi-year series of experiments aimed at enhancing U.S. homeland defense by improving military support to civil authorities both before and after natural or man-made disasters. The first of the four planned experiments in the Noble Resolve Campaign, Noble Resolve 07-1, was conducted from April 23<sup>rd</sup> through April 27<sup>th</sup> 2007.

The scenario for Noble Resolve 07-1 was a natural disaster event (a hurricane) coupled with a homeland defense potential maritime disaster (a hijacked super tanker). The exercise examined DoD support to both local and regional governments and to the Department of Homeland Security. The JFCOM expectations for this experiment were primarily three-fold: one, to discover existing deficiencies in responses; two, to use the experimentation process to explore new capabilities and concepts; and three, to continue to advance the art and science of experimentation.

One of the biggest components of Noble Resolve 07-1 was an examination of the ability of DoD to fuse

disparate pieces of information from both military and civil agencies into useful knowledge, and subsequently, how well that knowledge could be quickly and accurately communicated to the military and civil partners that needed it. The processing of raw data into organized information and then into credible knowledge that can be acted upon is one of the capabilities expected to improve both homeland defense-in-depth and DoD support to civil authorities.

A unique aspect of the JFCOM experiment technical environment is the large number of specialized and commercial simulation products in use at the J9 facility and the ability of this equipment to take in, distribute, and utilize a large quantity of both simulated and real data from numerous global sources. The result is a high-performance experimentation environment that allows complex electronic collaboration across multiple areas of interest in both experimentation and real and emerging threats.

Noble Resolve 07-1 will be followed by Noble Resolve 07-2 in late August 2007. This new exercise will expand on the original Noble Resolve objectives.

### **JOINT WARFARE CENTER TESTS NEW TOOL IN EXERCISE**

RAMSTEIN AIR BASE, Germany (AFNEWS) - The Joint Warfare Center in Stavanger, Norway, might be half a world away from Afghanistan, but it's where the journey begins for a NATO battle staff headed downrange to fight the war on terrorism.

The JWC relies on exercises like Enabler 2007 to prepare those officers for the challenges that await them in Afghanistan.

"This particular experiment is time-sensitive targeting," said Col. David Royal, an Air Doctrine staff officer with the JWC. "We're trying to build situational awareness using some of these new concepts and tools."

This exercise tests these new tools that will eventually be used in upcoming and bigger exercises





June 18, 2007

page 9

at the JWC. It's a way to make sure those new tools are going to be effective when it really counts.

"The future of the NATO alliance, I believe, lies in information management and expansion of technology," said Lt. Col. Chuck Engel, the JWC Lessons Learned branch chief.

"This is an experimentation in using collaborative tools to allow members from different nations to work together in order to achieve the unity of effort and success that's going to be required on the battlefield in the future," he said. For original article visit:

<http://www.af.mil/news/story.asp?id=123046522>

#### **MARK YOUR CALENDARS!**

#### **[2007 INCOSE INTERNATIONAL SYMPOSIUM](#)**

24-28 June 2007  
San Diego, CA

#### **[SUMMER SIMULATION MULTICONFERENCE](#)**

14-19 July 2007  
San Diego, CA

#### **[SECOND ANNUAL CONGRESSIONAL MODELING & SIMULATION EXPO](#)**

19 July 2007  
345 Cannon House Office Building,  
Washington, D.C.

#### **[FALL SIMULATION INTEROPERABILITY WORKSHOP \(SIW\)](#)**

16-21 September 2007  
Orlando, FL

#### **[NDIA's 10<sup>th</sup> ANNUAL SYSTEMS ENGINEERING CONFERENCE](#)**

22-25 October 2007  
San Diego, CA

#### **[IITSEC](#)**

26-29 November 2007  
Orlando, FL

#### **MSIAC JOURNAL ONLINE CALL FOR PAPERS**

*The MSIAC is currently accepting articles and papers for the MSIAC Journal Online. The Journal is a quarterly published electronic document of papers by individuals in the US DoD M&S community who wish to publish. It is presented as a forum for new ideas and philosophy coming from the M&S Community.*

*For information on how to subscribe and/or submit articles/papers to the Journal Online email [MSIACHelpDesk@dod-msiac.org](mailto:MSIACHelpDesk@dod-msiac.org) or visit: <http://www.dod-msiac.org/>*

#### **MSIAC M&S NEWSLETTER**

*The MSIAC M&S Newsletter is compiled from various news sources, periodicals, and reports and is offered as a service by the MSIAC solely for informational purposes. For comments and questions please send an email to MSIAC Help Desk [MSIACHelpDesk@dod-msiac.org](mailto:MSIACHelpDesk@dod-msiac.org).*

*The appearance of an article in the MSIAC M&S Newsletter does not constitute an endorsement by the DoD, the Modeling and Simulation Information Analysis Center (MSIAC), the Modeling and Simulation Coordination Office (M&S CO), or the Defense Technical Information Center (DTIC), or any of the affiliated government contractors.*

*Articles contained in the MSIAC M&S Newsletter have been selected from DoD and Service news releases that have been cleared for public release. The inclusion of non-DoD articles does not reflect official endorsement. Further, reproduction of non-DoD articles is subject to original copyright restrictions. Distribution Statement A: Approved for public release: distribution unlimited.*