

**Readiness Through LVC** 



## Enabling Live Virtual Constructive (LVC) training Achieve the proficiency you need



## **LVC** benefits

- > Enhanced training effectiveness
- > Allows wider training boundaries
- > Optimal for distributed joint exercises
- > Greater safety
- > Cost efficient



Building trust every day



# **Blended Training**

Cubic Global Defense is driving secure, interoperable solutions for operating in a Live, Virtual and Constructive (LVC) training environment. Visit our Operation Blended Warrior booth where we will be demonstrating the integration of LVC assets used in military/civilian operations, including:

- P5 Combat Training System<sup>™</sup> (P5CTS)
- Cubic Miniature Encryptor<sup>™</sup> (CME)
- Individual Combat Aircrew Display System<sup>™</sup> (ICADS) and L-3 Link SimuStrike<sup>™</sup> F-16 simulator
- Engagement Skills Trainer (EST) 3000<sup>™</sup>
- Reconfigurable Vehicle Simulator
- Social Media Replication Toolkit<sup>™</sup>

Visit us at I/ITSEC in booths #1748 and #249





CAE is a global leader in delivery of training for the civil aviation, defense, and healthcare markets. At I/ITSEC 2015, two of CAE's business units – Defense & Security and Healthcare – will participate in the Operation Blended Warrior (OBW) Live-Virtual-Constructive (LVC) event.

CAE's Defense & Security business unit focuses on helping prepare customers to develop and maintain the highest levels of mission readiness. The company is a world-class training systems integrator offering a comprehensive portfolio of training centers, training services and simulation products across the air, land, sea and public safety market segments.

CAE Healthcare is a medical simulation business unit with a mission to improve healthcare education and patient safety. The company designs and builds products for patient simulation, surgical simulation, ultrasound simulation and clinical simulation management. CAE Healthcare's global adjunct faculty and clinicians develop medical simulation scenarios for medicine, nursing, health sciences, hospital systems and the military.

# CAE and the OBW LVC Event

### CAE will showcase two solutions as part of Operation Blended Warrior.



#### **MQ-9 Reaper UAS Mission Trainer**

CAE's MQ-9 Reaper UAS mission trainer will be used to provide intelligence, surveillance and reconnaissance (ISR) as well as strike capabilities during the OBW LVC mission. This UAS simulator comes complete with an immersive synthetic environment that provides an ideal platform for ab-initio training, pilot training, and sensor operator training. The MQ-9 Reaper UAS mission trainer features aircraft-specific operational scenarios tailored to customers' training needs; high-fidelity, accurate sensor simulation; Common Database (CDB); physics-based computer generated forces (CGF); and support for distributed mission operations (DMO) and training. As the prime contractor supporting the U.S. Air Force's MQ-1 Predator and MQ-9 Reaper training program, CAE has a range of experience delivering classroom, simulator, and live flying training for these remotely piloted aircraft. CAE also provides the USAF with courseware development for the MQ-1/MQ-9 training program, and is currently developing a high-fidelity Predator/Reaper UAS mission trainer for the Italian Air Force.



#### Aeromedical Evacuation Training System

CAE's Aeromedical Evacuation Training System will be featured during the OBW LVC aeromedical evacuation scenario. CAE's demonstration will include a C-130 fuselage trainer measuring approximately 28 feet in length and outfitted for the aeromedical evacuation mission. This particular C-130 fuselage trainer will be delivered to the U.S. Air Force and used at Dobbins Air Force Reserve Command immediately following I/ITSEC. Inside the C-130 fuselage trainer will be human patient simulators developed by CAE Healthcare. The medical manikins from CAE Healthcare to be demonstrated include:

- ✓ iStan, an advanced wireless patient simulator certified for inflight use aboard major military aircraft;
- ✓ Caesar, a patient simulator built for trauma, disaster response and combat casualty care;
- Lucina, a childbirth simulator developed to prepare teams for normal deliveries as well as childbirth complications and obstetrical emergencies;
- ✓ CAE Replay, a streamlined audiovisual solution for intelligent recording and easy debrief.

### Summary

CAE firmly believes that integrated Live-Virtual-Constructive training capabilities will be an increasing requirement from global defense forces, and many are putting the foundation in place to enable more LVC training. This is evidenced by recent exercises such as Coalition Virtual Flag (CVF), which was held in parallel with Exercise Red Flag so that live-flying and simulated aircraft could participate in the joint, multi-national air combat training exercise. CAE supported the Royal Australian Air Force's participation in CVF, and this type of LVC training is not without technical challenges related to networking, interoperability, and security. CAE has focused much of its internal research and development efforts in recent years to distributed mission operations and integrated LVC training, which we believe will be increasingly important to military customers. We are pleased the NTSA has spearheaded the Operation Blended Warrior LVC Event during I/ITSEC so that government, academia and industry can continue to advance this critical capability.

CAE Booth #: 1734

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L-3 Link Simulation & Training, a Total Training Solution provider, is proud to participate in Operational Blended Warrior. Integrating virtual aircrew training products into the Live-Virtual-Constructive (LVC) training event demonstrates L-3 Link's expertise and versatility to maximize LVC training effectiveness. Guided by achievement of cost-effectiveness and combat realism, Link provides LVC tailored Total Training Solutions able to use existing infrastructure and integrate with current and future training capabilities to generate the best training possible to meet your unit level or large force exercise training requirements. Stop by Booth 1449 to discover more.



# How do you connect all of the elements of an LVC event?

### Cisco provides the networking solutions for next generation LVC training





### **Networking**

High capacity, low latency secure networks ensure the highest fidelity

### **Collaboration**

Brief, debrief and pause events with VTC, Voice Mission playback

### **Data Center**

Computing power to store events for Analysis, Playback and Lessons Learned

## **Security**

Security across the entire enterprise with real-time network monitoring

## **Cross Domain Solutions**

Seamlessly operate across Unclassified, Secret, Top-Secret and Coalition networks with Cisco Next Generation Encryption

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**Connecting Live, Virtual and Constructive** 

www.cisco.com/go/defense