Internal virtual simulations model a variety of Command, Control, Intelligence, Surveillance and Reconnaissance (C2ISR), fighter aircraft, remotely piloted aircraft and Joint Terminal Attack Controller (JTAC) weapon systems. DMOC’s constructive simulations provide Blue and Red air and ground assets as force multipliers. Voice and video systems provide realistic combat communications and a robust brief/debrief capability to enhance the training experience.

Virtual Flag, DMOC’s large-force distributed mission operation (DMO) exercise, has trained thousands of joint and coalition Warfighters since its inception in 2003. With realistic scenarios created specifically to meet the Warfighter’s training objectives, Virtual Flag allows weapon system operators to interact in an integrated LVC wartime environment to prepare for challenging real-world missions.

The DMOC supports five primary applications:
• Training
• Mission Familiarization
• Cross-Domain Solutions / Multi-level Security
• Support Tactics, Techniques and Procedure Development
• Joint and Coalition Interoperability

Lockheed Martin roles and responsibilities at the DMOC:
• Infrastructure
• Exercise Support
• Software Development
• Engineering
• Joint, International and Combat Air Force DMO Standards

The 705th Combat Training Squadron (705 CTS), located at Kirtland Air Force Base, N.M., owns and operates the U.S. Air Force Distributed Mission Operations Center (DMOC). The 705 CTS reports to the 505 Test & Evaluation Group at Nellis Air Force Base, N.V.; 505th Command and Control Wing at Hurlburt Field, Fla.; and USAF Warfare Center at Nellis Air Force Base.

DMOC brings training, testing and experimentation to realization in a modeling and simulation center for Air Force, joint and coalition Warfighters. The DMOC provides agile integration of geographically separate live, virtual and constructive (LVC) assets to create a synthetic battlespace that operates as a virtual range in support of air, sea, ground and space weapon systems.

DMOC’s battlespace infrastructure includes over 2,000 computer, network, voice and video systems integrated to create a real-time environment. The extensive network architecture, with over 200 local area networks and access to 15 wide area networks, provides connectivity to a diverse set of training, test, experimentation, research and engineering assets throughout the United States and around the world.