

## Air Operations Center – Weapons System (AOC-WS)

### Executive Summary

- An adequate Air Operations Center – Weapons System (AOC-WS) Operational Utility Evaluation (OUE) in February 2005, with regression testing in March 2005, demonstrated the system is operationally effective. However, the system does not meet all suitability requirements.

### System

- The system is the Air and Space Operations Center (AOC) AN/USQ-163 Falconer.
- It is fielded at five operational locations.
- The AOC-WS consists of:
  - Computers
  - Software including the Theater Battle Management Core System that comprises 90 percent of the AOC-WS functionality
  - Other systems that accept, process, correlate, and fuse data from multiple sources and share it through multiple communications systems
- Increment 10.1 will standardize architectures and configurations across the existing Falconers. Increment 10.2 will make it more net-centric and Increment 10.3 will focus on future functionality.

### Mission

- Joint Forces Air Component Commanders use the AOC-WS for planning, executing, and assessing air and space operations.



- AOC-WS provides operational-level command and control of air and space forces and enables:
  - Joint theater air and missile defense
  - Time sensitive targeting
  - Intelligence, surveillance, and reconnaissance management

### Activity

- The Air Force Operational Test and Evaluation Center (AFOTEC) lead a Block 10 multi-Service OUE of the AOC-WS 10.1 in February 2005 and regression testing in March 2005.
- AFOTEC conducted the OUE in conjunction with the operational test of the Theater Battle Management Core System 1.1.3.

### Assessment

- The system demonstrated it was operationally effective. Testing was done in accordance with DOT&E-approved test plans. AOC-WS operational testing identified 10 significant interface problems, which were corrected then verified during regression testing.
- Lack of system administration manuals, computer security work area experts, and system administrators and help desk personnel shortfalls were identified in the OUE.

- Fielded AOC-WS 10.1's have not met all suitability requirements.
  - There was progress in achieving software version standardization when properly installed and configured, but there were last minute configuration changes.
  - Continuity of operations for recovery following catastrophic failure will need additional testing.

### Recommendations

The Air Force should:

1. Develop mature system administration manuals prior to loading and configuring the system in order to reduce errors and unexplained slowdowns.
2. Improve computer security by maintaining detailed documentation and following documented procedures.

## AIR FORCE PROGRAMS

3. Each AOC-WS operational work area needs a minimum number of experts to ensure all members correctly follow established processes.
4. System administrators and help desk personnel must attain a very high level of proficiency for time sensitive operations.