

**FOR OFFICIAL USE ONLY  
UNTIL RELEASED BY THE  
SENATE ARMED SERVICES  
SUBCOMMITTEE ON  
STRATEGIC FORCES**

**TESTIMONY OF**

**DR. CHARLES E. MCQUEARY  
DIRECTOR, OPERATIONAL TEST AND EVALUATION  
OFFICE OF THE SECRETARY OF DEFENSE**

**BEFORE THE UNITED STATES SENATE  
ARMED SERVICES SUBCOMMITTEE ON STRATEGIC FORCES**

**APRIL 11, 2007**

**FOR OFFICIAL USE ONLY  
UNTIL RELEASED BY THE  
SENATE ARMED SERVICES  
SUBCOMMITTEE ON  
STRATEGIC FORCES**

**Dr. Charles E. McQueary**  
**Director, Operational Test and Evaluation**  
**Office of the Secretary of Defense**

Mr. Chairman, Senator Sessions, distinguished Members of the Committee, good afternoon. I am pleased to have this opportunity to speak to you about the testing of the Ballistic Missile Defense System, or BMDS. I will briefly cover four areas.

First, I will review what I believe are the major Missile Defense Agency's test accomplishments during the past year.

Second, I will give you my current assessment of the capability of BMDS.

Third, I will provide a review of the implementation of DOT&E recommendations made to the Missile Defense Agency.

Fourth, I will discuss the factors that will limit my ability to provide a thorough Block 6 assessment as required by the Fiscal Year 2006 National Defense Authorization Act.

**First: The Results**

MDA had a good year of testing in 2006.

For the first time in the Ground-based Midcourse Defense program, MDA successfully intercepted a "simple" threat-representative target with an operational booster carrying an operational kill vehicle. Also, for the first time, MDA used data from an operational radar to generate the weapon task plan sent to the interceptor by the fire control system.

Aegis Ballistic Missile Defense was two for two in intercepts of medium-range separating targets. Using Aegis cruisers, operational connectivity, and simulated targets, MDA demonstrated simultaneous ballistic missile defense and ship self-defense capabilities in preparation for a live flight test in 2007.

From November 2005 through January 2007, the Terminal High Altitude Area Defense was four for four on successful flights of the production interceptor. Two of these test flights involved intercept of targets, and both of those intercept flight tests were successful hits.

MDA's ground test program was active, robust, and disciplined, demonstrating BMDS capability and interoperability.

### **Second: My Assessment**

At the 2005 hearing, DOT&E reported that the integrated ground test results indicated the testbed had the potential to defend against a limited attack, under certain conditions. However, difficulties in the flight test program delayed confirmation of that capability.

During the 2006 hearing, DOT&E reported that the results of the ground tests demonstrated that integration, interoperability, tactics, doctrine, and procedures, were adequate to increase confidence in these aspects of the system. The MDA testing program during 2005 was adequate and appropriate to the developmental maturity of the BMDS.

Today, I can state that the BMDS has demonstrated a limited capability against a simple foreign threat. Coupled with the success of other element-level testing and MDA's integrated ground tests, the BMDS is definitely maturing.

My assessment is bolstered by the fact that MDA is increasing the operational realism of each successive test.

### **Third: The Recommendations**

Mr. Chairman, in your invitation to address the committee, you asked me to provide an assessment of MDA's implementation of DOT&E recommendations made to the Agency. I will do that now.

There were 26 recommendations in the Fiscal Year 2005 annual report. Only 4 recommendations are still open, and MDA is acting on each of them. Two involve on-going data collection, one involves the future test schedule, and one deals with the test planning process.

There are 15 new recommendations in the Fiscal Year 2006 annual report. Many of these new recommendations involve demonstrations of specific capabilities during actual intercept tests. MDA is actively considering these recommendations, and has already added several to its test schedule.

As you know, I only advise MDA on its developmental test program. I am satisfied with MDA's response to the recommendations in our annual reports. I am pleased that General Obering and his staff recognize the value of our suggestions and recommendations. A more capable BMDS is our mutual goal.

#### **Fourth: The Challenges**

Despite these successes, BMDS is still maturing as a system which makes it difficult for me to assess Block 06 capability as required by the Fiscal Year 2006 National Defense Authorization Act.

First, to be confident in my assessment of effectiveness I need validated models and simulations for the BMDS. They don't exist today because MDA doesn't have enough flight test data to anchor them. MDA, the multi-service BMDS Operational Test Agency team, and DOT&E personnel are working together to solve this problem. However, there may be insufficient time to fix this problem before we finalize the Block 06 report.

While these models and simulations will be essential to proving the operational capability of BMDS, we cannot use models and simulations as substitutes for live testing. Both General Obering and I agree on this important issue. MDA's testing must be sufficient to have high confidence that the models and simulations are valid representations of the actual performance and capability of the BMDS.

Second, I will have difficulty assessing suitability. BMDS has not operated long enough to gather statistically significant data on its reliability, availability, and maintainability, although the tests to date are very encouraging. MDA and the warfighters are collecting the data, but the amount may be insufficient to reach any confident conclusions about the suitability of BMDS.

In conclusion, MDA experienced a good year with its ground and flight test programs. Individual element successes indicate their capabilities. Integrated ground testing of the BMDS is demonstrating that the warfighters understand and can operate the system confidently and effectively. There is still a long way to go, but MDA's disciplined and principled approach to flight and ground tests is starting to pay real dividends.

This concludes my remarks and I welcome your questions.