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STRATEGIC FORCES**

**TESTIMONY OF**

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

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Madame Chairwoman, Congressman Everett, and 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 cover five areas.

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

Second, I will discuss the factor that limited my ability to provide a thorough assessment as required by the Fiscal Year 2006 National Defense Authorization Act.

Third, I will discuss the sufficiency and adequacy of the BMDS test and evaluation program during the past year.

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

Finally, I will describe how the Missile Defense Agency, or the MDA, is a pathfinder for the implementation of Section 231 language from the Fiscal Year 2007 National Defense Authorization Act.

**First: My Assessment.**

As General Obering has already pointed out, the MDA had a good year of testing in 2007.

Patriot demonstrated that it generally meets its operational requirements with some limitations for specific threat missiles. Aegis Ballistic Missile Defense demonstrated the capability to detect, track, and engage short- and medium-range ballistic missile targets in the midcourse phase with Standard Missile-3 missiles. Although Ground-based Midcourse Defense is still developmental in nature, it demonstrated to some degree many of the functions required for system effectiveness.

As a result, I can state that the BMDS has a limited capability to defend against simple, ballistic missile threats launched from North Korea toward the United States.

**Second: The Limitation.**

Mr. Chairman, as I told this committee last year, I was particularly concerned that verified, validated, and accredited models and simulations would not be available to help me complete my assessment of BMDS capability. My concern was well-founded.

Because of the same concern, General Obering diverted MDA resources to meet our mutual modeling and simulation requirements. He had his team create an ensemble of models and simulations, called Performance Assessment 07, to replicate system-level BMDS performance. Unfortunately, the effort and changes required were too great for the time available to accomplish them. Although many MDA element models are well along toward verification and validation,

integrating them into a system-level BMDS performance model that can be verified, validated, and accredited did not happen and will not happen quickly.

Between the Performance Assessment 07 and the FY 2007 ground test program, the BMDS Operational Test Agency Team attempted to accredit 33 models and simulations to support my assessment. The Team was able to partially accredit, with caveats, only 5 of these models. From this attempt, however, the MDA learned many valuable lessons about adequate and effective verification and validation that it can apply to this continuing effort. It will be some time before these models are ready and sufficient flight test data exists to anchor them so they can be properly verified, validated, and accredited for use.

**Third: The Test Program.**

The pace and content of the MDA test program are proper for the developmental nature and maturity level of the various elements that constitute the BMDS. Although some would like to test more frequently, General Obering's deliberate approach to test-analyze-fix-test is warranted for this highly complex system. Analysis of large volumes of test data, frequently measured in terabytes, is an important step in this process that cannot be short-changed. It is very important to understand the results of one complex test before proceeding to the next test. I strongly support his approach.

Unfortunately, the slower test pace results in limited test data for use in verifying, validating, and accrediting models and simulations. As I discussed previously, this has impacted my ability to characterize BMDS performance.

Target availability, reliability, and performance have also been factors frustrating the flight test program and impacting test adequacy. During the 18 month period concluding December 31<sup>st</sup>, 2007, MDA suffered 4 target failures during 20 flight tests conducted by various elements of the BMDS. These failures not only impacted critical data collection, but also forced changes to flight test schedules.

To be fair, the MDA is not alone in this experience with a target program. Targets are a Department-wide problem impacting, ground, sea and air programs, both for acquisition and training. The targets we need to adequately test the systems we are acquiring are nearly as sophisticated and costly as the threats they are trying to replicate and the weapons we are developing to counter them.

On a positive note, my office and the BMDS Operational Test Agency Team are active participants in the MDA's test planning and execution processes. The MDA implements many of our recommendations into the combined developmental and operational test program. Every ground and flight test includes both developmental and operational test objectives. As a group, we attempt to maximize operational realism in each test without impacting developmental objectives. In lieu of independent operational testing, this has been a valuable and effective approach to give warfighters time to operate the system and test their tactics, techniques, and procedures.

**Fourth: The Recommendations.**

Mr. Chairman, in your invitation to address the committee, you asked me to provide an assessment of the 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. Four recommendations are still open, and the 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 were 15 new recommendations in the Fiscal Year 2006 annual report. Six of these recommendations remain open; all are being worked by the MDA. Four involve demonstrations of specific capabilities during actual intercept tests, one involves Information Assurance, and one involves targets.

There are 5 new recommendations in the Fiscal Year 2007 annual report. All are still open and being actively worked by the MDA. One involves targets, one involves on-going data collection, one is scheduled for completion during the next Ground-based Midcourse Defense flight test this summer, one involves modeling and simulation, and one requires a review of previously completed testing.

The year by year reduction in the number of recommendations made by DOT&E is indicative of the progress the MDA is making in the BMDS developmental test program.

As you know, I only advise the MDA on its developmental test program. General Obering and his staff recognize the value of our suggestions and

recommendations. A more capable BMDS is our mutual goal. I am satisfied with the MDA's response to the recommendations in our annual reports.

**Finally: The Pathfinder.**

On December 22, 2007, Under Secretary John Young and I signed a revision to Department of Defense Test and Evaluation Policy. The new policy was a response to the requirement in the Fiscal Year 2007 National Defense Authorization Act, to review and reaffirm or modify test and evaluation policy as appropriate.

This new made developmental testing, or DT, and operational testing, or OT, integrated and seamless throughout the system life cycle.

Although we didn't have the MDA in mind when we developed this policy, the MDA is a model for this approach today as it develops, tests, and fields the BMDS. Several years ago, General Obering created a combined test force that embeds the operational test organization with his developmental test organization while maintaining the operational test organization's independence. This has worked well. As a result, the MDA has been able to transition to combined DT/OT as early as possible during the development and acquisition of the BMDS. As BMDS weapons elements mature, combined DT/OT test objectives are moving from a developmental emphasis to an operational emphasis.

The MDA is a pathfinder for demonstrating integrated and seamless DT and OT in the department. The warfighters are, and will continue to be, the clear beneficiaries of this new policy.

**In conclusion,**

The MDA experienced another good year with its ground and flight test programs. Hit-to-kill is no longer a technological uncertainty; it is a reality, being successfully demonstrated many times over the past few years. The challenge now is to demonstrate hit-to-kill in more complex target scenes that include not only target deployment artifacts but countermeasures as well. General Obering has this in his future test plans.

Individual element successes indicate their growing capabilities. Integrated ground testing of the BMDS continues to demonstrate that the warfighters understand and can operate the system confidently and effectively. There is still a long way to go, but the MDA's disciplined and principled approach to flight and ground tests is continuing to pay real dividends.

This concludes my remarks and I welcome your questions.