

conducted in a lab environment and in the field, involve the wider missile defense system community, to include the National Military Command Center, the Operational Test Agencies, and U.S. Northern Command. They teach us a great deal and give us confidence to move forward with our intercept tests.

We have had a string of successes with intercept tests involving the shorter-range defenses, Aegis BMD and THAAD. Aegis BMD completed four intercept tests and one allied sea-based intercept tests in 2007. In all Aegis BMD tests, we do not notify the ship's crew of the target launch time, forcing crew members to react to a dynamic situation. The December 2007 test off the coast of Kauai in Hawaii marked the first time an allied Navy ship successfully intercepted a medium-range separating target with the Aegis BMD midcourse engagement capability. Terminal High Altitude Area Defense completed three intercept flight tests against threat-representative short-range unitary targets in the atmosphere and in space.

In 2008 we are planning two system-level long-range intercept tests, and two more in 2009, all of which will push the edge of the envelope in testing complexity. The intermediate-range target used in the next test, and most subsequent tests of the Ground-based Midcourse Defense element, will have countermeasures. We also plan three Aegis BMD intercept tests and four THAAD intercept tests in 2008 and 2009. Each of these tests also will involve increased operational realism and complexity.

I would like to briefly address the subject of countermeasures. Our critics frequently state that unless we conduct flight tests against midcourse countermeasures, we cannot claim that we have tested the system under operationally realistic conditions.

This implication is that the targets we been using in our tests are not threat-representative. I disagree. There are, in fact, hundreds of ballistic missiles deployed by potential adversaries that do not have countermeasures. Obviously, it is wrong to conclude that these systems are not threat-representative. And while our test program will incorporate increasingly complex countermeasures into our upcoming tests, we are also demonstrating the capability of the system against current threat-representative ballistic missiles, many of which are unitary systems that do not carry countermeasures.

We do not take the countermeasures threat lightly. The experience of the United States with missile defense countermeasures is extensive and several decades old. Flight-testing conducted by the United States over many years has uncovered weaknesses in many simple and more sophisticated countermeasures. Many objects designed to be countermeasures cannot be relied on to act as expected, even in the near vacuum of space. Just because a countermeasure appears to be “simple” does not mean it is simple to engineer or employ. On the contrary, we have found that credible, complex missile defense countermeasures are costly and difficult to develop and make effective, whereas cheap attempts could be countered by the ballistic missile defense system. We have been and are continuing to address the countermeasures challenge, both in terms of developing software, sensor, and kill vehicle solutions to counter these threats and gaining a better understanding of what potential adversaries would actually be able to do.

ADDRESSING FUTURE THREATS

The proliferation of ballistic missile technologies and systems means we will face unexpected and more challenging threats in the future. We need to ensure America's ballistic missile defense system remains effective and reliable and a major element in our national defense strategy well into this century. I would like to highlight the major activities in our development program that are intended to keep the BMD system capable of countering future evolving threats. Each one of these efforts is critical to maintaining our defenses in the uncertain years ahead.

Destroying ballistic missiles in boost phase will deprive the adversary of opportunities to deploy in midcourse multiple reentry vehicles, sub-munitions, and countermeasures, thereby reducing the number of missiles and reentry vehicles having to be countered by our midcourse and terminal defenses. As part of our layered defense strategy, we are developing the Airborne Laser (ABL) and Kinetic Energy Interceptors (KEI). In 2007 the ABL program met all of our knowledge point expectations and cleared the way for the installation of the high-power laser on the aircraft by the end of 2008. We successfully demonstrated ABL's ability to detect, track, target, and engage non-cooperative airborne targets and look forward to a full demonstration and lethal shoot-down in 2009 of a threat-representative boosting target. The KEI program is on track to develop a high-acceleration booster for a mobile, surface-based kinetic kill interceptor to counter ballistic missiles in the boost, ascent or midcourse phases of flight.

We are pursuing parallel and complementary efforts to develop algorithms that improve current sensor and weapon performance to counter complex countermeasures. In the years ahead we expect our adversaries to have midcourse countermeasures. The

Multiple Kill Vehicle (MKV) program is developing a payload for integration on midcourse interceptors to address complex countermeasures by identifying and destroying all lethal objects in a cluster using a single interceptor.

We are also developing the Space Tracking and Surveillance System (STSS) to enable worldwide acquisition and tracking of threat missiles, which also could include midcourse countermeasures and multiple objects. Sensors on STSS satellites will provide fire control data for engagements of threat reentry vehicles and, when combined with radar data, will provide improved threat object discrimination.

MISSILE DEFENSE OVERSIGHT AND ACCOUNTABILITY

The management of the missile defense program is highly scrutinized by the Department of Defense, this Congress and past Congresses, and the Government Accountability Office.

The Defense Department continues to have significant oversight over the activities of the Missile Defense Agency. I report directly to the Under Secretary of Defense (Acquisition, Logistics, and Technology) on all missile defense matters and meet with him regularly to discuss major program decisions and issues. The Missile Defense Agency also provides the Under Secretary Quarterly Execution Reviews, or in-depth program execution updates and reviews of schedule, budget, and performance goals and baselines.

Every two months, we receive guidance and oversight from the Missile Defense Executive Board. This board makes recommendations to the Under Secretary of Defense

(AT&L) and the Director of the Missile Defense Agency and oversees implementation of the Agency's strategic policies and plans, program priorities, and investment options. Senior principals from the Services, the Department's independent test community, the Joint Staff, and officials from appropriate outside agencies are members of the board.

The Missile Defense Agency's recent establishment of a new block structure has helped better describe our program of work and communicate plans and baselines for missile defense elements to the Department and Members of Congress. Each block in the structure now represents a discrete program of work, which will allow us to report schedule delays, budget increases, and performance shortfalls as variances of capability, not time, as was the case with our previous block structure.

The Government Accountability Office (GAO) continues to be actively engaged in reviewing the Ballistic Missile Defense program. GAO conducted eight audits of the missile defense program in FY 2007 alone. To further increase transparency, beginning in Fiscal Year 2008, I have agreed to provide GAO with quarterly summaries that include integrated baseline review schedules, percent complete, six month cost performance index, fiscal year cost variance, and cumulative cost variance. This information will be summarized annually in the BMDS Selected Acquisition Report for Congress.

CLOSING

Mr. Chairman and members of the Committee, missile defense is expensive. There is no arguing that point. We deal with the most advanced technologies, employ the best and the most talented engineers and scientists in our program, execute intercept

flight tests that cost upwards of \$100 million each, deploy test interceptors and sensors and other site infrastructure across one-third of the globe, execute an aggressive research and development program to ensure that this nation remains the undisputed leader in missile defense, prepare and operate a manufacturing base, and operate agency facilities that employ thousands of people across the United States. We have to ensure that our quality controls are world-class, execute program activities that involve our allies, and live up to our obligations to account for all of our activities to the Department and the Congress. We were asked, on an urgent and top priority basis, to deploy a first-ever missile defense system to defend our country as soon as it is practicable and field mobile defenses to protect our forces and our allies worldwide. We are doing so. We could not have done this without substantial support from the Congress, particularly the Congressional defense committees, over several years through multiple administrations.

In the end, what we are doing in the missile defense program, or any other defense program, is not about cost. It is all about affordability. Can the nation afford the defenses we need? I believe it can. I believe it must. We have been good stewards of the taxpayers' dollars. To be sure, missile defense is not easy and it is not inexpensive. The good news is that our efforts over the past quarter century are proving that missile defense works, as we have demonstrated in our tests, and the system we have in place is already contributing to real-world national security situations. The bottom line is that, today, we can defend our cities against a limited ballistic missile attack, and that in itself has no cost comparison.

