WebMemo
Published by The Heritage Foundation
No. 1335
February 1, 2007

A Successful Test Shows the Way Forward on Missile Defense

Peter Brookes and Baker Spring

A significant national security development took place last weekend that *barely* garnered a footnote in the national media: A U.S. missile defense interceptor hit—and destroyed—a target missile over the Pacific. This is a big step forward for the U.S.'s leverage against hostile regimes that would develop ballistic missiles.

The successful test of the Terminal High Altitude Area Defense (THAAD) system adds to U.S. land-based capabilities to counter the growing short and medium range ballistic missile and nuclear threats from rogue states like Iran and North Korea.

Ultimately, it will become an important component of the layered missile defense system the Bush Administration is pursuing for protecting the homeland, American troops deployed abroad, and U.S. friends and allies.

THAAD is unique. As a key component of the U.S.'s planned "layered" missile defense system, it is the only interceptor under development designed to destroy incoming short- and medium-range ballistic missiles both inside and outside the atmosphere with lethal hit-to-kill technology. (The January 26 test destroyed the target missile inside the atmosphere.)

The layered missile defense system will include components capable of intercepting missiles in all phases of flight, including the early boost-phase, the high-altitude midcourse phase, and the high-velocity terminal phase.

THAAD is designed to destroy a missile in its terminal phase as the missile approaches its target. THAAD will not only complement the land-based, terminal-phase Patriot (PAC-3) system, but it will also knock out incoming missiles at a higher altitude than Patriot, providing an added layer of security.

THAAD's higher altitude intercept capability will also provide a broader area of protection than the Patriot system. And THAAD's terminal defense will allow the U.S. missile defense system to deal with decoys, often deployed on ballistic missiles to confuse and overwhelm missile defenses. (Both Iran and North Korea are looking at lightweight decoys for their ballistic missiles.)

As the Department of Defense moves forward with THAAD, policymakers should keep in mind certain other good ideas as well. These are important for making the U.S. missile defense system as efficient and effective as possible in countering the missile—and nuclear—threat.

In the near-term, the THAAD tests should continue to be conducted by soldiers—as opposed to just contractors—to increase their experience with the system and provide an important feedback loop to the developers.

Also, in the future, the system should be tested against a target that is outside the atmosphere as

This paper, in its entirety, can be found at:
www.heritage.org/research/NationalSecurity/wm1335.cfm

Produced by the Douglas and Sarah Allison Center for Foreign Policy Studies

Published by The Heritage Foundation
214 Massachusetts Avenue, NE
Washington, DC 20002–4999
(202) 546-4400 • heritage.org

soon as possible to push the envelope on that important capability.

In the longer term, the Pentagon should improve THAAD's capability to counter even longer-range missiles with higher reentry speeds such as intercontinental ballistic missiles (ICBMs).

This will allow THAAD to add to the capability of the Ground-Based Midcourse Defense (GMD) interceptors already fielded in Alaska and California against ICBMs, which both Iran and North Korea are developing.

Finally, policymakers need to pay close attention to the development of a boost-phase intercept capability, which is lagging the midcourse and terminal component development. Boost-phase intercepts are the most effective way to counter ballistic missiles since this is the phase of flight when missiles are the most vulnerable.

Given the flight trajectories of ballistic missiles, the ideal deployment location for boost-phase interceptors is space. The U.S. should be moving as aggressively as possible to complement ground and sea-based missile defenses with the development and deployment programs for space-based interceptors.

The ballistic missile and nuclear threat to the homeland and U.S. friends and allies posed by states such as North Korea and Iran is real and growing. As a result, the U.S. ballistic missile defense program needs to move forward as quickly as possible.

Doing so will not only provide protection against hostile regimes in the possession of ballistic missiles and weapons of mass destruction, but may ultimately lead these regimes to question the utility of these programs and, hopefully, make the decision to peacefully abandon them.

—Peter Brookes is Chung Ju Yung Fellow for Policy Studies and Senior Fellow for National Security Affairs in the Kathryn and Shelby Cullom Davis Institute for International Studies at The Heritage Foundation. Baker Spring is F. M. Kirby Research Fellow in National Security Policy in the Douglas and Sarah Allison Center for Foreign Policy Studies, a division of the Kathryn and Shelby Cullom Davis Institute for International Studies, at the Heritage Foundation.