

The True Meaning of Failure

By Denise Groves

On Friday, July 7, somewhere over the Pacific Ocean, the United States will perform a third test of its National Missile Defense technology. Officially, the results will be used to determine the maturity of intercept technology and to decide whether deployment of NMD can begin. But in truth, the success or failure of the test is totally irrelevant: the decision to begin construction has already been made.

The July 7 test is certain to be dramatic and controversial. It is an experiment ostensibly designed to test the integration of the "system of systems" that will be coordinated to detect, track, and destroy an attacking missile from "states of concern" such as North Korea, Iran or Iraq (all formerly known as "rogue states"). The attack will be simulated by the launch of a 37 year-old Minuteman II missile from Vandenberg Air Force Base in California, equipped with one "balloon" decoy, and aimed towards the Marshall Islands. The launch will be detected by a satellite and the information will be relayed to the command center in Colorado Springs. The command center will interpret the data and authorize the missile defense crew on Kwajalein Island to launch the missile intercept, while at the same time instructing the X-band radar on the island to track the course of the missile through space. After the intercept missile is launched and the boost phases completed, the kill vehicle will be released. It must then orient itself in space by employing an onboard navigational system. The kill vehicle also uses an antenna to receive data from the X-band radar to locate the target. The kill vehicle is autonomous at this point and must use its sensors to discriminate

between the approaching warhead and the balloon decoy. If the kill vehicle is successful, it will identify the warhead, lock onto it, and collide with it at a velocity of 4.6 miles per second. The sheer force of the impact is designed to "ionize" the warhead and destroy it outside the earth's atmosphere. The entire test, from the initial launch at Vandenberg to the intercept, will last about 30 minutes. It will cost approximately \$100 million.

There are numerous reasons why this test fails to replicate real world conditions and will be subject to intense criticism. At least five problems immediately come to mind:

- First, the missile defense crew is fully briefed on the timing and direction of the fake attack, the type of missile used, and the number and type of countermeasures employed. Not a single one of these elements would be known in the event of a real attack.
- Second, the single decoy used is of a completely different shape and size than the warhead—factors that could make it easier for the kill vehicle to decide which mass it should target. The number of decoys the attacking missile will carry is also limited to one, instead of the nine used in an earlier test. Most experts agree that in the real world, attacking missiles would likely be equipped with multiple countermeasures.
- Third, the attacking missile will carry a beacon so that a radar in Hawaii will be able to detect it and monitor the overall test. The warhead will also be outfitted with a Global Positioning System (GPS).

The Pentagon maintains that these measures are necessary for safety reasons and that they will not be used to help the kill vehicle during the acquisition phase of the intercept test. Still, even if the radar in Hawaii does not help with targeting, it is intended to provide early warning data.

- Fourth, the radars used in this test are not the radars that will be employed in the final version of the NMD system; "surrogates" are being used in the interim.
- Fifth, the booster for the intercept missile is also a "surrogate" because the real (and controversial) booster is still in development. The Welch Committee, a government-appointed NMD oversight group, has expressed doubts whether the kill vehicle would be able to survive the rough flight of the fast, three-stage booster under development. For now, the Department of Defense is using a slower and smoother, two-phase booster as a substitute.

Despite all of the controls, complete briefings, and intense preparations, there is a fairly good chance the July 7 test will fail. Even Undersecretary of Defense Jacques Gansler has admitted that there is "not a high probability of being able to precisely get everything to work on this flight." Nevertheless, the Pentagon is already prepared to defend the integrity of the NMD program in case something does go wrong over the Pacific. Their expected response? A miss is not really a miss. That is, a failed intercept does not necessarily mean that Secretary of Defense William Cohen cannot recommend that deployment of NMD should begin. Rather, it depends on *what kind* of failure it is. The Pentagon hints that analysis of a failed test will show that it is still technologically possible to go ahead with deployment. The fact that this experiment is being conducted with a total disregard for scientific rigor becomes even more clear at this point. The DoD has postponed this test several times to resolve unexpected problems and has spent millions upon millions of dollars to make sure everything goes according to plan. And yet, one wonders, what is the point of the test if the conclusion will be the same anyway? Both a successful hit or "non-failure" failure of the technology will still be used to perform the Deployment Readiness Review, a review that is meant to examine the technological status or

maturity of the NMD program and its costs. More important, it will form the basis of the Secretary's recommendation to the President whether or not to proceed with deployment.

The Review has not yet even been conducted, but the Pentagon is already arguing that construction of the radar in Alaska must begin before next summer in order for the system to be ready by 2005—Year One for proponents of NMD who believe that North Korea will be poised to attack the US by then. Politicians from both parties also generally agree that the decision to deploy must be taken soon— primarily because NMD has become a hostage of election year politics. The same politics have rendered meaningless the Clinton Administration's promise to consider four separate factors in the decision to proceed toward deployment. This cannot be denied given what is already known about the astronomical cost of the NMD system, the widely advertised negative effects it could have on international security and arms control, and the dubious nature of the threat from "states of concern." Despite this knowledge, the Clinton Administration is already considering how it can begin pouring concrete in Alaska next summer without actually violating the ABM Treaty.

In light of the fact that officials are already preparing the ground to start construction, one can only conclude that the true failure of the July 7 test is already known: \$100 million will be wasted to conduct a rigged test whose results will have no practical effect either way on the decision to begin deployment. That's because the decision has already been made.

This Policy Note was written by Denise Groves, a researcher at the Berlin Information-center for Transatlantic Security.

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