U.S. MISSILE DEFENSE PROGRAMS

Recommended Citation

MORE AMBITIOUS NATIONAL MISSILE DEFENSE CONCEPTS

The coverage zone of the boost-phase defense would be about 1,000 kilometers beyond the location of the interceptor. The initial weapons would be launched for about 70 seconds after launch, which puts them in a 'hit-to-kill' mode. This is because it is easier to put a boost phase defense system into operation than a terminal defense system, and fewer long-range interceptors are needed to cover a given area. The most useful boost phase interceptors are those that can destroy an ICBM more than 30 minutes after the launch of the ICBM, and can be adapted for use as a terminal defense system after its initial phase.(26)

The limited geographic scope of boost-phases defenses are at once one of the concept's greatest strengths and also its weaknesses. For example, land-based boost-phases defenses are likely to be easier to move if new threats develop. Sea-based defenses could be more effective, but sea-based defense systems are very expensive, and so are also subject to the same risk of being overcome. Boost phase systems can have a warhead that could be only of limited effect due to a lack of power. The United States would need to keep in mind that an enemy could launch strategic missiles at very short notice. Boost phase systems would also need a greater number of interceptors to be effective. But, this could also mean that the United States would have to develop a greater number of interceptors to be effective. Boost phase systems could also be used to defend against mid-course threats. For example, a missile could be launched from an ICBM, and then the boost phase of the ICBM could be intercepted. The interceptors could then move to the target area, and then the terminal phase of the ICBM could be intercepted.

While boost phase interceptors could be used to defend against mid-course threats, they could also be used to defend against terminal threats. In this case, the interceptors could be used to protect a region of outer space, air resistance will not have had a chance to separate out the generally lighter decoys from the heavier warheads. Even extremely light decoys would fly the same trajectory as true warheads, so speed could not be used to distinguish them. The value of the boost phase defense would be to limit the area where the decoys could enter, and so the boost phase defense would be effective. The ULPA systems could be used to detect, discriminate, and destroy enemy missile in space. The ULPA systems could have a greater number of interceptors to be effective. The ULPA systems could also be used to protect a region of outer space, and the ULPA systems could have a greater number of interceptors to be effective.

THE DECOY QUESTION

It seems likely that someday, hit-to-kill technology against an identifiable incoming reentry vehicle flying a clear trajectory would be achieved. If hit-to-kill technology were to be achieved, the United States would have to be ready to face the possibility of an enemy missile defense system. If the United States were to build an enemy missile defense system, the United States would be better off to build a system that could be used to defend against both boost phase and terminal phase threats. If the United States were to build a system that could be used to defend against both boost phase and terminal phase threats, the United States would be better off to build a system that could be used to defend against both boost phase and terminal phase threats. If the United States were to build a system that could be used to defend against both boost phase and terminal phase threats, the United States would be better off to build a system that could be used to defend against both boost phase and terminal phase threats.