

Some Sensible Options for U.S. Missile Defense

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By Bruce G. Blair

A sensible, responsible plan for national missile defense requires that the system work and that it not provoke reactions that increase the net nuclear threat to the United States. Current U.S. plans fail on both counts. An alternative plan would feature boost-phase interceptors around threatening states such as North Korea, and extensive de-alerting of U.S. strategic missile forces to bolster Russian confidence in its nuclear deterrent.

Wisdom on national missile defense begins with an appreciation of how easily decoys and other simple countermeasures at the disposal of countries such as North Korea may confound and defeat U.S. interceptors based on U.S. territory. Having said this, the United States need not demand perfection or even high performance from its missile defense system. The standard of performance for a system designed to deal with a relatively small number of missiles can be far lower than the standard for one designed for a large threat.

To understand this critical point, recall that the original Star Wars program of the Reagan administration was supposed to be able to handle a deliberate Soviet first strike in which many thousands of warheads were launched against U.S. cities. Even a U.S. shield that might have destroyed 90 percent of the incoming warheads would still have allowed many hundreds to get through, resulting in the destruction of every major U.S. city. By contrast, if North Korea launched 10 missiles, each armed with one nuclear warhead, then the successful interception of even a single weapon (10 percent effectiveness) would be tantamount to saving a U.S. city from total devastation, averting the deaths of hundreds of thousands of its inhabitants. (This is, of course, a strictly hypothetical threat to illustrate the point. As far as I know, North Korea possesses less than 10 kilograms of plutonium - enough for one or two bombs - and its intercontinental-range ballistic missile program appears to be suspended.)

To achieve much higher effectiveness, the United States could design a new interceptor to field in the neighborhoods of the hostile states instead of situating them on U.S.

territory. U.S. interceptors on cargo ships or allied territory overseas could engage hostile long-range missiles soon after their launch, destroying them during their early boost stage of ascent. For instance, U.S. interceptors deployed on ships in the Sea of Japan could destroy North Korean missiles in the first few minutes of flight.

This type of theater missile defense would constitute a national missile defense by other means. It would protect the U.S. population yet would not threaten Russian strategic missiles except for sea-launch ballistic missiles deployed in the Pacific Fleet near Russia's coast, which represents a small and disappearing portion of Russia's strategic arsenal. For this reason, it could be successfully negotiated with Russia as an amendment to the ABM Treaty. Although China's nuclear missiles could be partially threatened by such a system, this is a manageable problem that China could solve by easy adjustments to its areas of missile deployment.

Enlisting Russia as a genuine partner in boost-phase defense would appeal to Russia. Besides serving to dispel Russian suspicion of U.S. designs, a partnership could channel U.S. resources into cash-strapped Russian defense enterprises that would otherwise pose a proliferation risk themselves. The partners would initially cooperate in curbing and countering proliferation by sharing intelligence and early warning information, a subject for presidential discussion during the Moscow summit. If Russia is not the target of the U.S. shield, as missile defense proponents claim, then the United States should be willing to integrate Russia into the U.S. system in ways that clarify this intention and that produce military benefits to Russia (including enhancing Russian protection against third-country ballistic missile threats to its territory).

The alternative to working cooperatively with Russia is to ride roughshod over its security concerns, which could all too readily redound to our grave disadvantage. Like it or not, Russia is the one nation on which American survival still depends completely. We must fashion a plan that averts a confrontation with Russia in which a U.S. missile defense actually increases the risk of an accidental or mistaken large-scale Russian launch. If this risk grows by even a fraction of 1 percent, then the additional peril to Americans would outweigh the benefit of partially protecting them from a North Korean strike.

It is essential to consider Russia's shocking calculation of the adverse effect of U.S. national missile defense on its national security. Russia today can barely cope with U.S. offensive power alone. On paper, a sudden U.S. strategic missile attack, an implausible but still basic scenario for Russian planning, could decimate Russia's strategic retaliatory forces. Today, fewer than 100 and perhaps as few as nine Russian warheads (out of an arsenal of 6,000) might survive (compared to 2,000 invulnerable weapons for the United States). Through Russian eyes, a U.S. missile shield around U.S. territory would threaten to mop up this residual force once it launched in retaliation.

To the extent that Russian planners do discount the performance of U.S. missile defense against their small second-strike force, it only reinforces their suspicion that the United States' real scheme is to lay the groundwork for a later fast thickening of the defenses that would negate their deterrent.

Russia may react to this anticipated threat by configuring its new Topol-M SS-27 force with multiple warheads, which it will seek to do anyway in order to maintain offensive parity with the United States if START III ceilings remain high (2,000 to 2,500 warheads, instead of the 1,500 ceiling sought by Russia). A more provocative option that would threaten the continuation of space as an arena of expansive commercial activity would be to pre-position space mines that could be detonated to destroy the U.S. NMD sensor system in crisis circumstances. Among other responses, Russia will strive to ensure that its missile forces carrying thousands of warheads get off the ground before incoming U.S. missiles can strike them. Russia would embrace the accident-prone options of striking first or launching on warning.

Russia already relies too heavily on quick-launch options. Given the deterioration of Russia's early warning satellites and ground radar, the U.S. should be creating conditions that reduce Russia's reliance on a hair-trigger posture.

NMD will put growing pressure on Russia because of the gloomy prognosis for its deterrent forces. Its strategic arsenal will shrink dramatically over the next 10 to 15 years. Economic pressures could easily drive the numbers of strategic nuclear warheads down to the low hundreds, most of which will sit on vulnerable land missiles. In this situation, Russia could not count on enough warheads penetrating U.S. territorial defense to underwrite deterrence under any scenario of Russian retaliation including launch on warning. With a U.S. missile shield in place, Russia could readily conclude that its small deterrent arsenal will be checkmated.

Understanding the Russian dilemma should motivate the United States to seek missile defense options that cause minimal disruption to U.S.-Russian relations and strategic stability. A promising formula for striking a stable balance between offense and defense is to cut deeply the size of the U.S. and Russian missile arsenals and to take silo-busting U.S. strategic weapons off high alert. By de-alerting most or all of the current 2,500 U.S. weapons on high alert, a U.S. national missile defense would appear far less threatening to a Russian planner. Russian strategic missiles would be far less vulnerable to U.S. offensive forces, and thus far more capable of dealing with U.S. national missile defense. Russia would be able to take reciprocal de-alerting steps, moreover, and thus reduce the most serious nuclear threat to the United States: a mistaken or unauthorized Russian missile attack.

To further avert potential instability, any decision to begin pouring concrete soon for NMD should direct construction to North Dakota instead of Alaska. A system there could provide some coverage of all 50 states while preserving the integrity of the ABM Treaty. U.S. President Bill Clinton could claim that the system would be commensurate with the current nebulous, uncertain threat and that it could be tuned from 20 to as many as 100 interceptors if a threat does emerge. Meanwhile, to hedge against the unlikely event of a growing North Korea threat that the United States seeks seriously to neutralize using missile defense, the U.S. should pursue vigorous research and development for boost-phase defense and negotiate a protocol to the ABM Treaty that allows the fielding of such a system near North Korea. An ABM Treaty modification with Russia that strictly limits the number of geographic dispersion of boost-phase interceptors seems very possible, especially if the actual deployment is made conditional upon the actual emergence of a serious North Korean threat that Russia could readily verify. A boost-phase program would defuse domestic political criticism because it advances a plausibly effective solution to a potential threat, and indeed bipartisan support would exist because the Republican U.S. Congress endorses such programs. However, this would remain an R & D program unless and until a real threat loomed, and this lack of final commitment to deploy it would rankle the opposition.

The current negotiating stalemate could be resolved by an adjustment of the U.S. NMD program to emphasize a North Dakota system (a poetic repetition of history's mistakes perhaps) and boost-phase research, by permitting Russian MIRVing of land-based Topol M rockets, de-alerting, and deep cuts down to 1,500 warheads on each side. Various options combining these elements into packages that stand a good chance of successful negotiation with Russia are outlined below.

A. START III ceiling of 2,000-2,500 warheads.

-Russia Topol M allowed multiple warheads (three per missile).

-United States allowed CONUS 2-site BMD per 1972 ABM Treaty (Alaska site disallowed).

-Reciprocal U.S.-Russian de-alerting desirable.

B. START III ceiling of 2,000-2,500 warheads.

-Russia Topol M allowed multiple warheads (three per missile).

-United States allowed 2-site BMD per revised ABM Treaty (Alaska as well as North Dakota allowed) in exchange for (beyond START II requirements): (1.) de-alerting Minuteman III and removing W-87 warheads; removing W-88 warheads from SSBNS (for shore storage); and (2.) ceasing Trident W-76 warhead fuse modernization.

-Reciprocal Russian de-alerting required.

C. START III ceiling of 2,000-2,500 warheads.

-Russia Topol M allowed multiple warheads (three per missile).

-United States allowed Boost-Phase System near North Korea plus CONUS

1-site BMD (North Dakota).

-Reciprocal U.S.-Russian de-alerting desirable.

D. START III ceiling of 2,000-2,500 warheads.

-Russia Topol M disallowed multiple warheads.

-United States allowed Boost-Phase System near North Korea plus CONUS 1-site BMD (North Dakota).

-United States agrees to extensive de-alerting measures (beyond START II requirements): de-alerting Minuteman III; removing W-88 warheads from SSBNS (for shore storage); and ceasing Trident W-76 warhead fuse modernization.

-Reciprocal Russian de-alerting required.

E. START III ceiling of 1,500 warheads (best option).

-Russia Topol M disallowed multiple warheads.

-United States allowed Boost-Phase System near North Korea plus CONUS 1-site BMD (North Dakota).

-Reciprocal U.S.-Russian de-alerting required.

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