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**NATIONAL DEFENSE UNIVERSITY
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**The ABM Treaty and TMD:
Scylla and Charybdis of US Defense Policy**

CORE COURSE 5 ESSAY

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The proliferation of nuclear, biological, chemical and ballistic missile technologies to hostile Third World countries with the willingness to use them makes missile defense more important now than ever
LTG Garner, Commander, Army Space & Strategic Defense Command (6, A14)

Misapplication of the 1972 Anti-Ballistic Missile (ABM) Treaty has presented the United States with a predicament of having to choose between accepting continued defenselessness against theater missile threats on the one hand and jeopardizing the START reductions in offensive nuclear arsenals on the other. This analysis focuses on the issues in addressing regional and theater threats, which are very likely to confront the United States and its interests, versus addressing strategic threats, which are less probable but which jeopardize U. S. national existence if manifested. The analysis also treats the concept of arms control as an instrument of defense strategy and its trade-offs with direct active military defense programs. The current state of play is examined and a prescription offered for reconciling the competing interests.

Policy Dilemma

Current United States policy sets the requirement to acquire adequate theater missile defenses at odds with the goal of maintaining strategic nuclear stability and pursuing deep cuts in the size of the residual strategic nuclear arsenal of the Former Soviet Union. This policy drift, with the tension it creates between goals, is a serious and wholly avoidable source of risk and inefficiency to important defense programs. It is the source of unnecessary cost, uncertainty and delay in the full spectrum of theater missile defense initiatives. It has introduced confrontation, miscommunication and friction in the diplomatic process surrounding the cooperation between the United States and Russia in the finalization and implementation of the START agreements.

The root of this dilemma is the theological approach to arms control on both sides

of the debate. The old guard of arms control regards strategic stability as critically dependent upon the ABM Treaty and the "mutual assured destruction" it was created to preserve. Any attempt to update the Treaty, its interpretation or its application is, to them, a dangerous tinkering with the cornerstone of nuclear peace. (1) Spurgeon Keeney characterizes the ABM Treaty as follows: "This barrier, which preserves mutual assured deterrence, has long been a fundamental pillar of U.S. security policy and a basic assumption of planners in Moscow and Beijing as well." (11, 3) Jack Mendelsohn and John Rhinelander add, "the ABM treaty is clearly the most important U.S. arms control agreement presently in force. For over 20 years it has been the keystone of the strategic nuclear relationship between the two countries." (18, 8)

The view of aggressive advocates for effective ballistic missile defenses is best stated by Frank Gaffney.

The Clinton administration's fealty to the ABM Treaty can only be described as bizarre and irresponsible in light of the fact that even those who created it -- President Richard Nixon and Secretary of State Henry Kissinger -- have acknowledged that the ABM Treaty has outlived its usefulness. The bipolar world in which only U.S. and Soviet strategic forces enjoyed ballistic missile capabilities has given way to one in which many potentially threatening arsenals contain these systems and increasingly include weapons of mass destruction that they can deliver. In light of these changed circumstances, the disappearance of the Soviet Union and Moscow's past violations of the ABM Treaty, the United States clearly should no longer permit it to preclude sensible steps toward effective missile defenses. (3, 1)

The Clinton administration has chosen to steer a middle course which satisfies neither side and has exacerbated the rancorous debate. In the 1993 quinquennial ABM Treaty Review, the United States with Belarus, Russia and Ukraine issued a joint communiqué. "Commitment to the ABM Treaty was reaffirmed and it was agreed that maintaining the viability of the Treaty in view of political and technological changes remains important. The delegations at the Review advocated continued efforts to strengthen the ABM Treaty." This diplomatese sought to paper over the

substantial differences. The ABM Treaty was to remain a "pillar" of arms control, but it was to be "strengthened" in view of political and technological changes. The Treaty was to be maintained but was to be trimmed to allow the United States to go forward with theater ballistic missile defense programs. (26, 1)

The Theater Ballistic Missile Threat

The United States need for theater ballistic missile defenses is uncontroversial. The threat or actual use of theater ballistic missiles is becoming increasingly characteristic of regional conflicts. In the Middle East and Southwest Asia, missiles have been employed by at least one side in four of the last six major wars. Ballistic missile capabilities are now in the hands of over twenty non-NATO countries. Moreover, weapons of mass destruction are being acquired by many of these countries that are either developing or acquiring ballistic missiles. By the end of this decade, nuclear weapons could be in the hands of five to ten developing nations. In addition, chemical weapons could be in the possession of up to twenty and biological weapons in the possession of up to ten developing countries. (28, EX-3 & EX-4; 25, 7-9)

Currently theater ballistic missiles with ranges of 1000 kilometers or less account for 97 percent of the threat, but the threat is projected to grow not only in the number of nations possessing ballistic missiles and the number of missiles possessed; the range lethality and sophistication of the systems are all increasing as well. China (CSS-2), India (Angi) and North Korea (No Dong/Taepo Dong) have all tested theater ballistic missiles with ranges well in excess of 1000 kilometers and Libya and Iran are developing such capabilities. Moreover, China has already export-

ed the CSS-2 and despite assurances that they will refrain from proliferating arms sales, all three countries have past records which are cause for concern. This raises the volatile possibility that potential regional adversaries could leap to the top end of theater ballistic missile capabilities by buying what they would be unable to develop. (28, EX-3 & EX-4; 25, 7-9; 2, 11)

As long as the United States lacks an effective active theater ballistic missile defense, its ability to project power and to intervene effectively when its national interests are threatened by regional conflict will be severely constrained in an environment of proliferated theater ballistic missile threat. The concern caused by Saddam Hussein's Scuds during Desert Storm underscores this point. The disproportionate effort that had to be devoted to hunting for the launchers, the incentive for Israel to retaliate independently and the stress on the coalition whose members were either under the gun or wary of the escalation all point to the effectiveness of the missiles in altering the terms of the conflict. If the build-up of Desert Shield had been actively opposed by theater ballistic missiles, it would have been vastly more difficult for the United States to amass the overwhelming in-theater logistical resources that facilitated success. Indeed it might have been extremely difficult to gain the access to ports and air fields that the build-up required. Regional powers that possess theater ballistic missiles to delay and disrupt deployments and to terrorize and destabilize allies and rear areas could effectively upset the timing, intensity and effectiveness of United States intervention.

Given the immediacy, importance and growing proportions of the threat, the Clinton Administration made theater ballistic defense the number one priority of the Ballistic Missile Defense Organization which replaced the Strategic Defense Initiative

Organization. The programs undertaken to develop, test and deploy effective theater ballistic missile defenses encompass Corps-SAM, Patriot Mod-3, THAAD, Navy Lower Tier, Navy Upper Tier and air-based boost phase interceptors. These include basing on land, air and sea; they cover near-term upgrades to existing systems through development of advanced technologies to counter emerging threats; and they envision engagements over the full course of long and short trajectories--from initial boost to terminal phase--exoatmospheric as well as endoatmospheric. (20; 27)

The ABM Treaty

The Anti-Ballistic Missile Treaty of 1972 was created to maintain stability between the super powers in the context of what, in the days of Defense Secretary McNamara, was termed "mutual assured destruction." It was intended to preserve crisis stability and arms race stability. Strategic defenses were viewed as potentially destabilizing in a crisis as they might lead a power to believe it could launch a first strike and count on its ABM defenses to protect it against its adversary's retaliatory forces which survived. By ensuring that both remained defenseless against strategic nuclear forces, both super powers were protected against a first strike since the initiator would be dissuaded by the certain expectation of massive retaliation. Strategic defenses were viewed as destabilizing to the arms race since they would introduce a series of new rounds of acquisition of defenses and compensating increases in offensive arsenals as each side sought to deny its adversary a potentially fatal advantage.

The ABM Treaty accomplished its purpose by strictly limiting the numbers and locations of strategic defenses. One site with one hundred interceptors is allowed for

each side--Moscow for the USSR and Grand Forks for the United States. In addition, the ABM Treaty prohibits mobile land-, sea-, air-, or space-based ABM defenses and defenses using new technologies (e.g. lasers). Article VIa of the Treaty prohibits the parties from giving non-ABMs (e.g. permitted air defenses like Patriot) "capabilities to counter strategic missiles or their elements in flight trajectory." It further prohibits testing non-ABMs "in an ABM mode." It is Article VIa which has become a stumbling block for United States theater missile defenses.

The Treaty offers no definition either of "strategic missiles" or of "in an ABM mode." This creates an ambiguity with regard to the standard which the Treaty imposes as a legal limit on the technological capabilities the parties can employ in theater missile defenses. When the ABM Treaty was signed, the relevant gap was between air defenses on the one hand and defenses against strategic ballistic missiles on the other. This gap was so wide as to obviate the necessity to clarify distinctions. But today the question is the difference between defenses against theater vice strategic missiles, and the distinctions are critical and not at all clear. (1; 8, 20)

This ambiguity creates a gray area at the limit of what capabilities are allowed for theater ballistic missiles. The problem is exacerbated by the intrinsic asymmetries of Treaty implementation. With perfect knowledge of its own defense systems and a policy of scrupulous adherence to treaties, the United States tends to limit programs which would infringe on the gray area. The United States is generally unwilling to pursue programs which are not manifestly treaty compliant. In observing the compliance of the other parties, the United States has far less full knowledge of the capabilities of the system. National technical means are the only formal source for such information under the provisions of the ABM Treaty. In addition, the United

States is reluctant to accuse another party of noncompliance unless the suspect activity is far into or completely through the gray area. (1)

Demarcation Negotiation Efforts

The United States theater missile defense programs not only challenge the limits of technology, they challenge the prevailing interpretations of the ABM Treaty as well. From the inception, the administration had to grapple with the problem of how to proceed with effective theater ballistic missile defenses without doing violence to the ABM Treaty. Clinton's problem was simplified by his willingness to abandon the more ambitious missile defense plans of its predecessor. Following the general Bottom-Up Review, Clinton's DoD assigned top missile defense priority to addressing regional theater threats, downgraded limited national missile defense to a technology readiness program, and gave bottom priority to development of advanced national defense technologies. In the Standing Consultative Commission (SCC), the negotiating forum of the ABM Treaty, Clinton's representative withdrew the Bush proposals: to remove restrictions on developing, and testing ABM technologies; to remove limitations on radars and sensors; to remove limits on ABM technology transfers; and to expand the number of allowed ABM sites and the number of allowed launchers and interceptors at each site. In addition, the United States agreed to multilateral succession to the ABM Treaty by the states of the Former Soviet Union. (10)

The Clinton SCC offered to clarify both the "capabilities to counter" and the "tested in an ABM mode" provisions by renewing the Bush proposal to specify that the conditions would be satisfied if no tests of theater ballistic defense systems were

conducted against targets with maximum velocity greater than five kilometers per second. This velocity limit corresponds to a target missile range limit of about 3500 kilometers. The START and INF treaties draw the line between strategic and theater ballistic missiles at the range of 5500 kilometers. Modern strategic ballistic missiles have maximum velocities of seven kilometers per second and more. The proposal offered a buffer to give reassurance to the ABM parties that the "demarcation" between theater and strategic defenses would ensure the integrity of the Treaty. (1; 8, 20)

The Russian response was to accept the validity of the proposed test-target limits but to insist that additional direct limits on theater ballistic missile defense systems would be necessary to prevent possible circumvention scenarios. The result was a withering barrage of proposals for direct limits on the technical parameters of theater ballistic missile defense systems. All participants in the negotiations offered proposals for technical limits to be added to or substituted for the proposals of other sides. Parameter limits already accepted by the United States in the SCC negotiations include: limit of 5.5 km/sec for air-based and land-based interceptors; limit of 3.0 km/sec for deployed sea-based interceptors with six tests per year of sea-based interceptors up to 4.5 km/sec; limit air-based interceptors to volume of two cubic meters and interception range of 600 kilometers, prohibition of deploying interceptors on heavy bombers. In addition, the Russians seek to block all deployment of air-based systems; prohibit use of one type of defense system for both ascent and descent intercepts; place numerous technical and operational limits on system radars; and to limit the total number of theater defense systems. In sum, such a "demarcation agreement" would be a theater ballistic missile defense treaty far more complex,

technical, rigid and proscriptive than the original ABM Treaty it seeks to clarify. (1; 3, 27; 13, 16; 15, 24; 16, 20; 24, 1; 29, 3-4)

The effect of such an outcome would be to erect a series of difficult obstacles in the path of United States efforts to develop, test and deploy effective theater missile defenses. First, the proposed limits impact directly on the capabilities that are legally open for use in theater defenses. To the extent that such limits are meaningful in affecting "capabilities to counter" they will bind the effectiveness of future systems. Moreover, since the theater missile defense technologies are still developmental, the impact of legal limits is difficult to forecast. The SCC negotiators are dealing in legal limits on parameters of systems that are barely on the drawing board. What may seem to be a reasonable proposal in a Geneva conference room today may turn out to be a show stopper on a White Sands test range in a few years. And perhaps most important is the effect on the essential reactive nature of defense technology. Theater missile defenses must be free to develop to meet evolving threats. Legal limits that prohibit certain kinds of defense technologies are a convenient signal to potential proliferators; they can invest in offensive technologies with the security of legal prohibition against effective countermeasures. (1)

Arms Control as an Instrument of Security Policy

The essence of this policy dilemma is that it is a forced choice between two falsely presented alternatives. The advocates of the competing goals have set them up as absolutely essential to national security and at the same time mutually exclusive. Theater ballistic missile defenses are absolutely essential if the United States is to remain capable of projecting power and intervening effectively when its national

interests are threatened in regional conflicts. Strategic stability with Russia is necessary as long as it alone in the world possesses the means to threaten United States national existence. But the ABM Treaty, which is the "cornerstone" of strategic stability, limits the development, testing and deployment of effective missile defense technologies. The two necessary ends are mutually exclusive.

Thus, the dilemma is based on faulty premises in both its parts: the ABM Treaty is not the cornerstone of strategic stability, and it does not prohibit development of highly effective theater missile defense technologies.

ABM Treaty is an Anachronism

If the ABM Treaty was ever the cornerstone of strategic stability, the circumstances have so altered since its inception (in the heyday of the Cold War) as to eliminate the premises which once gave it credibility. It is no longer necessary to preserve the ABM Treaty to prevent an offense/defense runaway escalation of the arms race. Russia cannot afford to surreptitiously develop and deploy an extensive ABM system; neither, likely can the United States. So the demise of the Soviet Union, the comparative liberalization of the Russian political system, and the impoverishment of the Russian economy have combined to achieve what the United States intended in negotiating the ABM Treaty--eliminate the possibility that Russia would field defenses which might prompt a first-strike response to a crisis and, in any event, force a costly effort for the United States to match them.

Deputy Defense Secretary Deutch misstates the problem raised by the impasse in "demarcation" negotiation: "My worry is it risks the ABM Treaty." (22, A1) The ABM Treaty is an anachronism, and thus, risks to it are not of consequence per se.

What matters is that both the START I and Start II Treaties make direct reference to the ABM Treaty as essentially a prerequisite. The explicit link between these treaties and the fragile political situation in Russia mean that the treatment of the demarcation issue could tip the balance for ratification of START II in the Duma and even for implementation by the Russians of the provisions of the already-in-force START I. (22, A1) The START reductions serve the strategic interests of the United States. In any case, it is economically and politically certain that the United States will effect the START reductions of its forces almost without regard to the compliance of the Russians. Clearly, then the United States has a strong interest in the ABM Treaty not as an end but as a means of helping keep the START process on track. (17, 33)

Effective Theater Ballistic Missile Defense Not Prohibited

The ABM Treaty was from its inception an instrument of strategic nuclear stability. The Treaty is, then, threatened when a party acquires defenses which would undermine strategic crisis stability--that is, create a situation in which a preemptive first strike would become more attractive to the defended party. No theater ballistic missile defense the United States is currently considering comes remotely close to having such an effect--even in the most abstract and theoretical sense. The more advanced systems are still in the concept development stage, years away from operational testing and still farther away from actual deployment. In fact, the development of these systems is going ahead while the negotiations are stalled. In an ironic twist, the United States actions to pursue necessary weapons development have not raised undue concern in the Kremlin; the negotiations designed to smooth the way have excited opposition

Even when the most advanced theater ballistic missile defense systems are developed, tested and deployed, they will pose no threat to strategic stability. They will not be designed or tested against very high speed strategic offensive missiles. They will not be procured or deployed in numbers which would meaningfully affect a strategic deterrent force numbering in the thousands. These limitations will be magnified by the massive simultaneous nature of the missile strikes in a deliberate strategic attack; the necessity of engaging each attacking missile with multiple interceptors to achieve a high probability of kill; and the fratricide and control breakdown in the tactical structure designed for light theater attacks. Finally, United States theater missile defenses will not be geographically deployed in a manner upsetting to strategic stability. They will protect allies and deployed forces, not United States cities and silo fields.

If It Ain't Broke...

Instead of rushing to raise theoretical and legal debates in Geneva in order to protect the letter of the obsolete ABM Treaty, the United States should proceed quietly with the business of acquiring theater defenses. The ABM Treaty does not merit fixing for its own sake and the United States programs do it no violence in any case. As a symbol, it is a helpful means to the ends of START, but as a symbol it is hurt more than helped by legalistic diplomatic wrangling. Rather than indulge in theoretical debate over hypothetical circumventions which can never be satisfactorily responded to, the United States should pursue concrete actions toward compliant programs and be prepared to answer such legitimate inquiries or objections as may arise.

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