Cato Institute Foreign Policy Briefing No. 10: Countdown to Disaster: The Threat of Ballistic Missile Proliferation

July 14, 1991

Channing R. Lukefahr

Channing R. Lukefahr is an associate defense policy analyst at the Cato Institute.

Executive Summary

Despite President Bush's rhetoric about a "new world order" governed by the rule of law, a new and potentially serious threat to the security of the American people is emerging. Several governments, including ruthless or unstable Third World regimes, seem determined to expand the destructive capability of their military arsenals. Such efforts frequently include programs to acquire and deploy long-range ballistic missiles.

In a May 18, 1989, report to Congress, CIA director William Webster revealed that at least 15 developing nations will possess ballistic missiles by the year 2000.[1] Nine of those 15 are thought to have nuclear weapons or active nuclear weapons programs, and 14 are known to possess chemical weapons. The days when weapons of mass destruction and the systems to deliver them are possessed by only the two super-powers and a short list of other major regional powers are rapidly drawing to a close.

Equally disconcerting is the nature of some of the governments that have joined or are about to join the ballistic missile club. The list includes several of the world's most notorious sponsors of state terrorism--Libya, North Korea, Iraq, and Iran, among others. Some defense analysts have predicted that within five years Libya will master the technology to produce an intercontinental ballistic missile with sufficient range to target American cities.[2] Even if it takes the government of Muammar Qaddafi somewhat longer to reach that point, the prospect will not make Americans sleep well at night.

North Korea, headed by Stalinist holdover Kim Il Sung, has been diligently working to extend the range of its Soviet-made rockets and to acquire more sophisticated missiles. Moreover, North Korea has an ongoing nuclear weapons program. Leonard Spector, director of the nuclear nonproliferation project at the Carnegie Endowment for International Peace, notes that the first of the facilities needed to produce nuclear arms has been in operation for three years. A second facility, which will extract plutonium produced from the reactor's uranium fuel, is under construction. According to Spector, "Together, the two plants could permit Kim Il Sung to build one nuclear weapon per year by the mid-199Os."[3] That program, combined with the effort to develop a reliable ballistic missile system, could make North Korea a small but highly dangerous nuclear power by the turn of the century.

Although viewed with less concern by the U.S. government, many "friendly" nations are also developing their missile technology. Such countries as Brazil, Argentina, India, Pakistan, Saudi Arabia, Egypt, South Africa, Israel, and South Korea all boast active missile research programs.[4] Several of those countries either already have small nuclear arsenals or are actively pursuing that goal. Although there is no imminent threat to the United States from any of those nations, continuation of that state of affairs cannot be guaranteed. The volatility of political systems in the Third World is reason for caution; an ally can become an enemy in a matter of months. At the beginning of 1978 the United States

and Iran had a close political and military relationship; less than two years later, Iranian radicals held the U.S. embassy staff in Tehran hostage with the connivance of a new Iranian government.

The Failing Nonproliferation System

While the threat that unstable or antagonistic regimes will achieve the ability to launch intercontinental ballistic missiles, possibly armed with nuclear or chemical warheads, moves rapidly toward reality, attempts to reverse that destabilizing trend have been merely exercises in delay. The dominant approach to the problem of weapons proliferation is symbolized by Washington's emphasis on the Nuclear Nonproliferation Treaty of 1968. The inability of the international community to enforce that agreement should make policymakers doubly cautious about employing the same strategy to address ballistic missile proliferation.

Attempts to enforce the Nuclear Nonproliferation Treaty have encountered several obstacles. Inspection procedures are weak and virtually unenforceable. Iraq is a signatory to the treaty, for example, but that did not stop Baghdad from pursuing a vigorous nuclear weapons program for several years. The Iraqi government managed to evade inspections that might have uncovered incriminating evidence. Other nations, such as North Korea, have refused to accept or have completely circumvented international monitoring. And many nations with nuclear weapons programs, including Israel, South Africa (until recently), Pakistan, and India, have simply refused to sign the treaty.[5]

The United States has not fared much better in inducing its allies to halt the spread of either nuclear or ballistic missile technology. The Persian Gulf crisis was instructive on that score. A number of German companies were deeply involved in the development of Iraq's chemical weapons arsenal and may have assisted Baghdad's nuclear weapons program as well. Some of those firms have been accused of aiding Qaddafi with the construction of two chemical weapons facilities.[6]

The centerpiece of Western efforts to halt ballistic missile proliferation is the Missile Technology Control Regime, an informal agreement among the United States and six of its allies: Canada, Germany, France, Italy, Japan, and the United Kingdom. Designed to restrict the exportation of missile components and technology to Third World nations, the MTCR bans or limits the sale of many missile-related technologies. Because each of the seven nations implements the MTCR controls independently, however, the vigor with which the restrictions are applied varies widely. Brazilian missiles, for example, rely on guidance systems that were sold by a French firm with the blessing of the French government. Although the United States and Britain protested the sale, Paris still declined to intervene.[7]

Several governments that have active missile programs are assisting other states that aspire to cross the ballistic missile threshold. Israel, for example, has reportedly worked with South Africa and Taiwan to propel the missile development efforts of those countries. Similarly, from the 1960s until 1989 Argentina, Iraq, and Egypt collaborated in an effort to manufacture a ballistic missile with a 500- to 600-mile range.[8]

Those examples highlight a more general problem. Former CIA director Webster notes that the globalization of economic markets has made the transfer of military technology increasingly easy.[9] Even the most sophisticated intelligence- gathering agencies could not begin to monitor all transactions that might violate pertinent statutes, treaties, or other international agreements. The transfer of military technology may be a problem that cannot be solved without creating so many barriers to the free flow of international funds and goods that the cure would be worse than the disease. But as missile technology becomes readily available, a growing number of regimes will enter the strategic arena armed with ballistic missiles.

Given the expanding demand for such goods, it has proven impossible for the MTCR to stem the flow of missile technologies. Western and non-Western companies have devised legal or clandestine schemes to bypass restrictions and market their deadly products abroad. Even such proponents of the MTCR system as Sen. Jeff Bingaman (D-N.M.) concede that "no strategy or combination of strategies is leak-proof." According to Binqaman:

Export controls will play a central role in this decade for buying time to deal with proliferation concerns, but export controls alone are insufficient. We must also be prepared to employ incentives and sanctions, as well as arms controls and diplomatic initiatives to reduce the underlying motivating factors in regional arms races.[10]

More than 20 years of experience with the Nuclear Non- proliferation Treaty has demonstrated that the international arms market will find a way to circumvent even the most elaborate controls and restrictions. Moreover, a fundamental shift in world arms trade is gradually taking place. The Soviet Union and the United States are slowly but inexorably being eclipsed by China and other nations as the primary purveyors of basic missile technology. That shift makes the market even less sensitive to the types of penalties any formal or informal international control regime can impose. Barring the emergence of a "new world despotism," no interna- tional agency or coalition will be effective in halting the spread of nuclear and missile technology.

Such a conclusion will surely be unpalatable to those officials and policy experts who long for the creation of a new world order presided over by a revitalized United Nations. But ballistic missile proliferation is and will continue to be a troublesome reality. In such a threatening international environment, the responsibility for protecting the American people from missile attacks rests with the U.S. government. The virtual inevitability of proliferation also demands that the United States seriously pursue the development and deployment of antiballistic missile (ABM) systems.

The Limits of Deterrence

Since the late 1960s the development of an ABM system for the United States has been a matter of great controversy. The 1972 ABM treaty between the United States and the Soviet Union deliberately sacrificed the goal of missile defenses to the doctrine of mutual assured destruction (MAD). According to the logic of MAD, the avoidance of a nuclear catastrophe is maximized by making deterrence as reliable as possible for both the Soviet Union and the United States. Missile defenses undermine deterrence by raising the possibility that the side possessing such a system might survive an attack. The credibility of deterrence, in other words, rests directly on the agreed-upon mutual vulnerability of the superpower rivals. That is why President Reagan's Strategic Defense Initiative was regarded as destabilizing by most mainstream arms control experts.

Deterrence is based on one crucial premise: an adversary will operate according to rational self-interest. Because a would-be aggressor knows that the massive U.S. arsenal will be used with devastating effect to avenge an attack on the United States (or on certain U.S. allies), such an attack would be suicidal, and will, therefore, never be launched. Deterrence theory collapses, however, if a leader is willing to accept the destruction of his own country by a retaliatory U.S. strike. Washington's policy has always assumed that such an action would be "irrational," and that the Soviet leadership (however brutal it might be) was calculating and rational.

That may well be true of current and previous Soviet leaders, but such a definition of rationality may not apply to the leaders of some of the nations that have begun to acquire nuclear weapons and ballistic missiles. Indeed, there are indications that some Third World regimes want missile fleets not so much to deter war as to blackmail other nations or, failing that, prevail in war. They seek not deterrence but enhanced war-fighting capabilities.[11] For example, more than 800 ballistic missiles were fired in a single month of the Iran-Iraq war.[12] In 1986 Libyan forces fired two missiles at a U.S. communications installation on the Italian island of Lampedusa. Equally ominous was Qaddafi's boast that if at the time of the U.S. air raid on Tripoli Libya had possessed a missile that could reach New York City, he would have used it.[13] That may have been a hollow threat, but Americans cannot be sanguine about the prospect of missile fleets with nuclear or chemical warheads under the control of a volatile political leader such as Qaddafi. MAD might then become a grim reality. Military analyst Seth Carus offers a chilling projection when he warns, "It is almost inevitable that in the future the U.S. military forces and installations will again be the target of long-range missiles fired by some Third World country."[14]

The United States cannot afford to rely on export controls, the deterrent effect of the U.S. strategic arsenal, or the rationality of adversaries to protect the American population from the threat posed by ballistic missile proliferation. Active development and deployment of an ABM system has become essential.

Faulty Objections

Opponents of efforts to build an ABM system typically argue that such a system is (1) too expensive, (2) technically infeasible, (3) undermining to deterrence, or (4) all of the above. Although the success of the Patriot missile in intercepting random Scud attacks by Iraq during the Persian Gulf War has spurred a new debate on the merits of missile defenses, the critics' arguments remain surprisingly constant.

In an era of acute budgetary problems, the cost of new military projects must, of course, be scrutinized carefully. But opponents' allegations that an ABM system would cost hundreds of billions of dollars are unfounded. The Bulletin of Atomic Scientists, in an attempt to distinguish the cost and the effectiveness of the Patriot missile system from those of SDI, claimed:

Compared to a nationwide SDI system costing perhaps hundreds of billions of dollars, the Patriot is a bargain. With an apparent success rate of at least 90 percent, the Patriot saved many lives. With a similar batting average, a deployed Brilliant Pebbles system . . . would still miss 100 nuclear war- heads out of 1,000 fired, more than enough to wreak enormous damage.[15]

Such inflated cost estimates and pessimistic conclusions about effectiveness rest on the fallacious assumption that an ABM system must be geared to defending against the improbable threat of an all-out Soviet onslaught instead of the far more probable limited threat posed by emerging Third World missile fleets. But even the Strategic Defense Initiative Organization is reorienting its policy objectives to focus on the latter mission. Instead of deploying an impenetrable "shield" to counter a massive Soviet first strike, President Bush has directed the SDIO to design a limited protection system, Global Protection Against Limited Strikes. The new emphasis on GPALS is estimated to substantially reduce the cost of deployment.[16]

Furthermore, one must ask what value should be placed on insulating the nation from the growing threat of missile terror. Former assistant secretary of defense Richard Perle succinctly summarized the heart of the case for building an ABM system.

Should the United States remain as vulnerable to ballistic missiles in the future as it is today? As vulnerable as Israel was before Patriot missiles were rushed to the defense of Israeli civilians? My answer is an emphatic no. We have been exposed and vulnerable long enough. This nation has the financial and technical resources to defend against ballistic missiles and it's time that we got on with the urgent task of developing a system to do so.[17]

The Constitution gives the federal government the responsibility of shielding the American people from external attack. Yet missile defense is consistently given a low priority in budgetary appropriations, despite the efforts of the Reagan and Bush administrations to gain greater funding for the Strategic Defense Initiative. Congress appropriated only $2.9 billion for all missile defense programs in FY 1991.[18] This year the House of Representatives exhibited a similar unresponsiveness to the need for missile defenses. Ignoring the president's request for $5.2 billion for SDI, both the Armed Services and Appropriations committees allocated only $2.7 billion for the program in the FY 1992 budget.[19] If those cuts are adopted by the Senate as well, even the existing, inadequate efforts to create an ABM system could be placed in jeopardy.

The SDIO estimates that the cost of developing the GPAL system would be $48 billion. The SDIO concludes that, if properly funded, the system would be operational by the end of the decade and able to thwart an attack of 10 to 200 missiles launched "from anywhere in the world to all parts of the world."[20] A system that would concentrate on the more rational objective of defending U.S. territory rather than the entire planet could in all likelihood be developed for an even more modest sum. Although such a system could not defend against a full-scale strike by the Soviet Union, it would be quite capable of parrying an attack by any Third World state.

As the horizontal proliferation of ballistic missile technology continues, the threat of an accidental launch rises. With a deployed ABM system, the United States would be able to shield its population from unintended missile launches that could occur as a result of technical or communications failures in the Soviet Union or in a Third World nation that has insufficient safeguard mechanisms.

The internal turmoil in the USSR is another important reason to develop an ABM system. As secessionist forces grow in strength, the central control of nuclear weapons by the Soviet leadership in Moscow may be undermined. The increasing possibility of nuclear missiles in the hands of contending political or military factions is a danger responsible U.S. officials dare not ignore. Defense analysts Ted Galen Carpenter and Rosemary Fiscarelli note that a limited ABM system might represent a crucial difference, for example, in case of an accidental launch of a few dozen or even a few hundred missiles. The same would be true of a limited launch by rogue elements in the USSR--a danger

that must be taken more seriously as the Soviet empire continues to unravel and Moscow's unchallenged control of nuclear weapons can no longer be taken for granted.[21]

Critics invariably cite the alleged technical limitations of a missile defense system and contend that they pose insurmountable obstacles. But since the early 1960s scientists and engineers in the most prestigious universities in the nation have worked to transform the concept of ballistic missile defense into reality. The Patriot system is merely one result of their early efforts. Yet as SDI research and development programs continue to reach milestones, opponents hold firm to the hoary objection that no defensive system can withstand a barrage of thousands of incoming warheads. That may well be true, but it is largely irrelevant to the feasibility of GPALS or a similar system designed to meet more limited threats. Sen. John Warner (R-Va.) was correct when he observed, "The question is no longer whether the country has the technical ability to build cost-effective missile defense; it is clear we do."[22]

The technical barriers to the development of a workable ABM system are, in fact, greatly exaggerated. Several experts have argued that existing technologies are sufficient to deploy an effective system. Contrary to the prevailing mythology, missile defenses do not have to await the emergence of exotic, futuristic technologies.[23] The principal barriers to the deployment of a workable ABM system are now congressional procrastination and the administration's lukewarm support.

The last mainstay of missile defense critics is their contention that an ABM system will undermine the theory of deterrence that has prevented a war between the superpowers for more than four decades. As noted previously, the principal concern in the future will probably not be a superpower nuclear Armageddon but smaller attacks from reckless or unstable regimes. Deterrence cannot be counted on to neutralize such threats.

Moreover, those who believe that the Soviet Union would not tolerate even a limited ABM system overlook the fact that the USSR has been actively developing its own version of SDI for more than a decade. GPALS, or a more limited version designed solely to protect U.S. cities, does not pose a threat to Soviet security and would be unlikely to be viewed as a threat by the Kremlin, since it could not absorb a full-scale Soviet attack. Additional steps could be taken to allay Soviet fears. A renegotiation of the ABM treaty to permit the development of systems designed to prevent small or medium- scale attacks, combined with comprehensive monitoring of SDI- related efforts and the exchange of pertinent information and technology, would help prevent misguided reactions by either superpower. Moscow might be quite receptive to such proposals, since the Soviets also have reason to worry about the dangers posed by ballistic missile proliferation.

Policy Options

Congress must now choose either to leave the United States exposed to the increasing threat of missile attack while clinging to the perversely comforting but obsolete notion of security through mutual vulnerability or to build an effective ABM system to protect the American people from a lethal danger. America's defense budget should reflect a new grand strategy appropriate for a changing international strategic environment. Now that Eastern Europe is no longer under Soviet domination, the weapons systems and military units developed for fighting a prolonged war in Europe can and should be eliminated. Additional savings can be realized by terminating other security commitments that were designed for a starkly bipolar cold-war world that no longer exists. Funding such items while neglecting missile defenses is an egregious misplacement of priorities.

If Congress abdicates its responsibility to build an ABM system, the American people will be left vulnerable to aggression and blackmail by hostile regimes around the globe. The end of the cold war does not imply the onset of perpetual international peace. A new danger is emerging, and that development should spur a shift in defense priorities. The United States must be able to defend the nation's population, not merely threaten retaliation.

The certainty that long-range missiles, armed with either nuclear or chemical warheads, will someday be in the hands of Saddam Hussein, Muammar Qaddafi, Kim Il Sunq or their ideological successors should be enough to spur even the most complacent officials to action. As numerous nations approach the ballistic missile threshold, a commitment by the United States to deploy an ABM system is crucial to "providing for the common defense" in the coming decades.

Notes

1. William Webster, "Nuclear and Missile Proliferation," hearing before the Committee on Governmental Affairs, United States Senate, May 18, 1989 (Washington: Government Printing Office, 1990), p. 12.

2. Paul Bedard, "Libya Making Nerve Gas," Washinqton Times, March 8, 1990, p. A1.

3. Leonard Spector, "The North Korean Nuclear Threat," Wall Street Journal, April 19, 1991, p. A4.

4. For more detailed descriptions of these nations' missile programs, see Kathleen C. Bailey, "Can Missile Proliferation Be Reversed?" Orbis 35 (Winter 1991): 5-8.

5. Avner Cohen and Benjamin Frankel, "Opaque Nuclear Proliferation," Journal of Strategic Studies 13, no. 3 (April 1989): 16.

6. "Inside Bonn's Middle East Arms Bazaar," U.S. News & World Report, May 28, 1990.

7. "Control Efforts Fail to Prevent Ballistic Missile Proliferation," Defense Electronics, August 1988, pp. 17-18.

8. Janne E. Nolan and Albert D. Wheelon, "Third World Ballistic Missiles," Scientific American, August 1990, pp. 37-38.

9. William H. Webster, "The Role of Intelligence in a Changing World," remarks at the Kennedy Political Union, American University, Washington, D.C., March 20, 1990, unpublished typescript, p. 7.

10. "Restrictions Needed to Curb Weapons Technology Spread: Bingamen," Aerospace Daily, April 28, 1991, p. 163.

11. See, for example, Martin Navias, "Ballistic Missile Proliferation in the Third World," Adelphi Paper no. 252 (International Institute for Strategic Studies, London, 1990), pp. 4, 11-13.

12. James Hackett, "The Globe Going Ballistic?" Washinqton Times, January 2, 1990, p. D1.

13. "NBC Nightly News," transcript of broadcast of April 21, 1990, p. 5. See also, Uzi Rubin, "How Much Does Missile Proliferation Matter?" Orbis 35 (Winter 1991): 38.

14. W. Seth Carus, testimony before a joint hearing of the House Foreign Affairs Subcommittee on Arms Control, Interna- tional Security, and the Subcommittee on Science and Interna- tional Economic Policy and Trade, July 12, 1989, unpublished typescript, p. 4.

15. The Bulletin of Atomic Scientists, April 1991, p. 4.

16. Philip Finnegan, "Officials May Pare SDI, Focus on Third World," Defense News, October 8, 1990, p. 3.

17. Richard Perle, testimony before a joint hearing of the House Armed Services Committee Defense Panel and the Procure- ment Subcommittee, April 16, 1991, Federal News Service tran- script.

18. Malcolm O'Neill and Robert Snyder, "FY 92-93 Budget Brief," February 2, 1991, unpublished SDIO briefing.

19. The House committees did approve another $858 million for "defense against shorter range tactical missiles." But such a system would amount to little more than an upgraded version of the Patriot. The proposed limited tactical defense might enhance U.S. battlefield capabilities in future Third World interventionist campaigns, but it would contribute virtually nothing to protecting population centers in the United States.

20. "SDIO Chief Says $48 Billion Needed to Deploy Limited Defense System by 2000," Inside the Pentaqon, February 14, 1991, p. 5.

21. Ted Galen Carpenter and Rosemary Fiscarelli, America's Peace Dividend, Cato Institute White Paper, August 7, 1990, p. 31.

22. "We Still Need Missile Defenses," New York Times, June 18, 1990.

23. See, for example, Angelo Codevilla, While Others Build: The Commonsense Approach to the Strateqic Defense Initiative (New York: Free Press, 1988), and James A. Abrahamson, "The SDI Technology Program," in SDI at the Turninq Point: Readying Strateqic Defenses for the 1990s and Beyond, eds. Kim Holmes and Baker Spring (Washington: Heritage Foundation, 1990).