

Ballistic Missile Defense

A National Priority

Jeff Sessions

A SIGNIFICANT ANNIVERSARY in our nation's history passed recently, although most Americans probably did not realize it. 23 March 2008 marked the twenty-fifth anniversary of Ronald Reagan's Strategic Defense Initiative (SDI), or "Star Wars," speech. Addressing the American people from the Oval Office on prime-time television, President Reagan challenged the notion that the security of our nation had to rely entirely on so-called mutually assured destruction (MAD). The president argued that "the human spirit must be capable of rising above dealing with other nations and human beings by threatening their existence." While acknowledging the technological challenges inherent in missile defense, often compared to "hitting a bullet with a bullet," Reagan nevertheless "call[ed] upon the scientific community in our country, those who gave us nuclear weapons, to turn their great talents now to the cause of mankind and world peace, to give us the means of rendering these nuclear weapons impotent and obsolete." President Reagan's SDI speech a quarter century ago was certainly one of the highlights of his great presidency. The speech galvanized the American people, and the White House was overwhelmed with phone calls from the general public, over 80 percent of which were supportive of SDI.¹ The Soviets also took notice, publicly denouncing the speech in hysterical tones while, internally, wondering what it meant for the future of their crumbling Communist system. As Vice President Cheney recently said, "Reagan's vision of missile defense surely helped accelerate our victory in the Cold War. There was simply no way the Soviet Union was going to defeat an America so confident in its purposes and so determined to defend itself against nuclear terror. This outcome alone is enough to place Ronald Reagan among our greatest presidents."²

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The anniversary of President Reagan's momentous speech has caused me to reflect a great deal on the subject of missile defense—what we have accomplished and what we have yet to do. In the pages that follow I would like to discuss the nature of the threat America faces from ballistic missiles, the Ballistic Missile Defense System that we have built, the technologies for the future, and the political environment facing missile defense today.

The Evolving Missile Threat

Opponents of missile defense today often argue that foreign ballistic missiles are not a serious enough threat to justify the effort and expenditure required to deploy antimissile defenses. Terrorists and rogue states, these skeptics argue, are more likely to use unconventional means to deliver weapons of mass destruction, such as container ships or so-called suitcase nukes. But many hostile states are actively pursuing sophisticated ballistic missile capabilities. There were over 120 foreign ballistic missile launches in 2007, which greatly exceed what has been seen in recent years. North Korea and Iran have recently demonstrated the ability to undertake complex missile operations requiring multiple and simultaneous launches of different ranges of missiles.³ Other nations, such as Syria and Pakistan, are expanding the number and range of their missiles.

North Korea is perhaps the most dangerous of America's enemies because it has long-range missiles, a demonstrated nuclear weapons capability, and a history of selling sensitive technologies to other rogue regimes. Calling North Korea's missile program "a threat which cannot be ignored," Gen B. B. Bell, commander of US forces in Korea, recently told the Senate Armed Services Committee that "as a leading supplier of missile-related technologies with known export programs to Syria, Iran and other nations of concern, North Korea continues to build missiles of increasing range, lethality and accuracy, bolstering its current stockpile of 800 missiles for its defense and external sales."⁴ This assessment was backed up by retired vice admiral Mike McConnell, our Director of National Intelligence, who testified before the Senate Intelligence Committee that "we assess that North Korea's Taepo Dong-2, which failed in its flight test in July 2006, probably has the potential capability to deliver a nuclear-weapon-sized payload to the continental United States."⁵ Our global missile defense system is now available to neutralize this threat to the US homeland.

Iran also poses a growing threat to the US homeland, our allies, and our forward-deployed forces. Gen Bantz J. Craddock, commander of US European Command, recently stated that “Iran already possesses ballistic missiles that can reach parts of Europe and is developing missiles that can reach most of Europe. By 2015 Iran may also deploy an Inter-Continental Ballistic Missile (ICBM) capable of reaching all of Europe and parts of the U.S.”⁶ The United States currently has no means of protecting our territory, or that of our NATO allies, from such missiles launched from Iran. For that reason, President Bush has proposed, and the Congress has supported, the building of a ground-based missile defense system in Eastern Europe (often called the “third site”). Plans call for a powerful missile-tracking radar to be moved from the Pacific theater and placed in the Czech Republic, along with 10 ground-based interceptors based in silos in Poland. Our government continues to make progress on basing agreements for this system, and I am hopeful that we can get it up and running by the Missile Defense Agency’s (MDA) stated goal of 2012. Because our intelligence community believes that Iran may have a nuclear-armed ICBM deployed by 2015, any delay in the third site could mean that we would be unprotected when the Iranian threat matures.

Clearly, our enemies’ expanding missile programs are meant to be directed at some target. If Iranian president Mahmoud Ahmadinejad and North Korean dictator Kim Jong-Il believe that ballistic missiles are still relevant in the post-9/11 world, it would behoove us to act as if they are. Today we face a much broader range of missile threats than we did during the Cold War, posed by a much more diverse, and less predictable, group of enemies. Can Iran be counted on not to launch an ICBM at the United States or our allies, or not to pass it to a terrorist group that would? Without defenses in place, we may face the unenviable choice between preemptively attacking states with ballistic missiles and leaving our population vulnerable to them. The good news is that today’s rogue regimes do not have, and probably never will have, anything approaching the number of ICBMs that the Soviets held at the peak of their power. Missile defenses can therefore have even more deterrent and defensive power against these regimes.

Progress to Date

Though we have accomplished much over the past 25 years, we spent much of that time hamstrung by the strictures of the Anti-Ballistic Missile (ABM) Treaty. The treaty, negotiated with the Soviet Union in 1972, limited the signatories to two interceptor sites within their national territories, and the parties eventually agreed to cut that number to one each. The central purpose of the treaty was to prohibit the deployment of a national missile defense system. Thankfully, after consultation with Russian president Putin and other foreign partners, President Bush took the decisive, essential step of withdrawing from this outdated agreement in 2002. Facing down those with fevered brows, he recognized the reality that we needed to deploy a missile defense system and that it could not be done with the treaty in force.

The Missile Defense Agency now employs more than 8,000 full-time and contract staff dedicated to defending America from ballistic missile attack. In 2002 President Bush charged the MDA with developing and deploying missile defenses as rapidly as possible. He gave it special flexibility in its acquisition processes so that missile defense would not get bogged down and drawn out like so many other defense programs have in the past. The results speak for themselves. The MDA has fielded an initial missile defense capability built upon four tested and proven programs: Ground-Based Mid-course Defense (GMD), Aegis Ballistic Missile Defense (BMD), Patriot Advanced Capability-3 (PAC-3), and the Theater High-Altitude Area Defense (THAAD) system. As General Obering recently testified: "None of this capability existed as recently as June 2004. This rapid fielding would never have been possible unless I had the integrated decision authority over requirements, acquisition, and budget. I think it is fair to say that this capability would have taken 2 to 3 times longer to field under standard Department practices."⁷

Unlike earlier missile defense systems such as Nike-Zeus, Safeguard, and the first-generation Patriot missile, today's missile defense platforms all operate on the principle of "hit-to-kill." These systems must and do work flawlessly in real time, a monumental accomplishment that some have compared to that of landing a man on the moon. As of today, the MDA demonstrated hit-to-kill in 34 of 42 attempts since 2001. In 2007 it conducted 25 major tests and successfully met its primary test objectives in 18 of 20 flight tests. Of those 2007 tests for which a missile intercept was the objective, success was achieved in 10 of 10 attempts.⁸ According

to Charles McQueary, the Pentagon's chief weapons tester: "Hit-to-kill is no longer a technological uncertainty; it is a reality, being successfully demonstrated many times over the past few years. The challenge now is to demonstrate hit-to-kill in more complex target scenes that include not only target deployment artifacts but countermeasures as well. [MDA director] General Obering has this in his future test plans."⁹

The centerpiece of the present architecture is the GMD system, consisting of 24 ground-based interceptors sitting in silos at Ft. Greely, Alaska, and Vandenberg AFB, California. GMD is tied together by a command and control suite and cued by a host of powerful radars based on land, sea, and space. When the North Koreans prepared to launch their Taepodong-2 missile in July of 2006, the GMD system was placed on alert 24 hours a day. The North Korean missile ultimately failed early in flight, but the demonstration of American defensive capability marked a signal success for the MDA. Though the North Korean test was a failure, Admiral McConnell has testified that, with continued testing, the Taepodong-2 "probably has the potential capability to deliver a nuclear-weapon-sized payload to the continental United States."¹⁰

Our allies and forces deployed abroad are currently protected, in part, by 17 Aegis BMD warships capable of long-range radar surveillance and tracking, of which 12 are also capable of missile intercepts. Aegis BMD warships fire the Standard Missile-3, which has achieved more successful intercepts than any other missile defense system in our inventory, including a recent test against two targets at once. Aegis and the SM-3 missile are perhaps most notable as the duo responsible for the February 2007 tracking and shooting down of a malfunctioning reconnaissance satellite that was set to crash to Earth, possibly spreading its toxic fuel in a populated area. Aegis warships can also fire the SM-3 Block IV, which can intercept the kinds of short-range missiles that are proliferated all over the Middle East.

PAC-3 and THAAD are theater defense systems, providing protection against short- and some medium-range missiles. PAC-3 engages short-range missiles inside the earth's atmosphere (endoatmospheric) while THAAD can destroy short- and medium-range missiles either inside or outside (exoatmospheric) the atmosphere. Together, they will provide our forces abroad and our allies with protection against a range of threats. The MDA has also worked closely with allied nations on missile defense projects, and the agency currently is engaged with some form of cooperation with 18 nations.

The Future of Missile Defense

Looking to the future, I believe that we will see important agreements signed with our allies in Poland and the Czech Republic, allowing us to base elements of our ground-based system in Eastern Europe as a defense for all of Europe and the United States against the growing Iranian threat. Maintaining funding for the European site is one of the most important battles we will have to fight this year, but it is a battle we must win. It is one of the highest legislative priorities for the Bush administration, and for me personally. It is unconscionable to me that we would pull the rug out from under allied governments and leaders who have courageously stood with us against the protests of their domestic leftists and the intimidating behavior of Putin's Russia. And I don't think we will.

Just over the horizon is a new generation of even more powerful missile defense technologies, including more capable SM-3 missiles; better defenses against short-range rockets, artillery, and mortars (counter-RAM); and the development of Kinetic Energy Interceptors (KEI) that can strike missiles as they are boosting off the launchpad. We may also see boost-phase missile defense applications for directed energy weapons as well, via the Airborne Laser (ABL) program. Our midcourse interceptors will be more capable in the next decade. Multiple-kill vehicles (MKV) that place multiple interceptors on a single booster will better allow our missile defense systems to overcome countermeasures, such as balloons and decoys. Ultimately, protecting this nation from ballistic missile attack may also require putting defense assets in space. For reasons that elude me, some of my colleagues in Congress continue to prevent us from even funding basic research into these space-based BMD technologies.

The president's total missile defense funding request for fiscal year 2009 is \$10.8 billion. That is a significant sum of money, to be sure, but by no means is it out of proportion to other critical national defense programs. By way of comparison, \$8.8 billion was requested this year for defense satellite programs, \$4.6 billion for a next-generation aircraft carrier, and \$6.9 billion for the Joint Strike Fighter. Our momentum must not be lost through further cuts to current levels of missile defense funding. Our systems must get more robust and more capable because history teaches us that our enemies will not stand still. It is also important to note that, as the Government Accountability Office recently found, cost growth on MDA programs has averaged only around 5 to 6 percent.¹¹ So-called Nunn-McCurdy rules, which require the

Defense Department to issue waivers for programs whose costs are spiraling out of control, do not kick in until cost growth reaches 25 percent.

The Political Environment

When President Reagan unveiled his Strategic Defense proposal 25 years ago, he faced a torrent of reflexive, antimissile defense rhetoric from the liberal intelligentsia in this country. The Atlanta *Constitution* criticized Reagan for “raising the remote possibility of a sci-fi defense against Soviet missiles” and argued that, in the process, Reagan “risked destabilizing the U.S.-Soviet military balance—already dangerously tenuous.”¹² Kosta Tsipis, codirector of a program in science and technology at the Massachusetts Institute of Technology, called the program “a cruel hoax,” and physicist Howard Garcia said that “if [the SDI] is finally developed or even pursued in earnest, it surely will engender the most counterproductive, senseless waste of intellect, labor and treasure in human history.”¹³ A group of former foreign policy eminences, including Robert McNamara and McGeorge Bundy, predicted that “unless it is radically constrained during the next four years [the SDI] will bring vast new costs and dangers to our country and to mankind.”

These self-proclaimed “experts” made arguments that were, on their face, self-contradictory. They argued that missile defense would be ineffective—that it was a technological impossibility. Yet, in the next breath, they would claim that missile defense was going to destabilize the US-Soviet nuclear balance and drive Moscow to take drastic measures. How both of these things could be true is beyond me. In fact, both arguments proved false. America pursued missile defenses while simultaneously improving relations with the USSR.

President Reagan believed that American unpreparedness was the greatest threat to peace and stability. While many of his opponents felt that investing in missile defenses would lead to a destabilizing “spiral” of arms racing, Reagan argued in his SDI address that “we can’t afford to believe that we will never be threatened. There have been two world wars in my lifetime. We didn’t start them and, indeed, did everything we could to avoid being drawn into them. But we were ill-prepared for both. Had we been better prepared, peace might have been preserved.” Reagan turned out to be right, of course. His pursuit of defenses may have hastened the downfall of the Communist regime, the arms race was no worse after than it had been before the speech,

and Reagan's signal of determination to prepare was taken as an unambiguous sign of American strength by the Soviets.

Well, our missile defense systems may have come a long way since 1983, but the arguments of the naysayers have not. In 2002 Prof. Ted Postol of MIT claimed that the MDA had "concealed from the American people and Congress the fact that a weapon system paid for by hard-earned tax dollars to defend our country cannot work." Yet, after dozens of successful tests, Dr. Postol now claims that our proposed missile defense site in Europe may be so capable that it could make Russia insecure. He wrote in October of last year that, in the future, "the European defense might be able to engage many hundreds of targets, thereby, in conjunction with other U.S. systems, threatening Russia's nuclear deterrent."¹⁴ Once again, these criticisms are both self-contradictory and demonstrably false. Missile defense works, and it is a force for stability rather than instability in the world.

While some continue to oppose even funding basic research for some of these technologies, the good news is that, unlike in Reagan's time, voices like Dr. Postol's are few in number and no longer part of the mainstream debate on either side of the aisle. We have, I believe, crossed the Rubicon. The Democrats on our defense committees have used their newly gained majority to nibble away at some missile defense funding, but not to slash it. In their first year back in charge, the Democratic majority cut the Missile Defense Agency request about 3 percent. Their decision speaks volumes: it says missile defense is now not just a conservative cause, a Reagan star wars vision, but it has become a national commitment that we must complete. The American people want this security, and the Congress will not deny it to them.

This hard-won consensus would never have been possible if not for the vision of Ronald Reagan, just as the incredible capabilities we have developed over the past quarter century would not exist without the dedicated military and civilian personnel of the MDA and its predecessor organizations. The United States is the world leader in missile defense technology and is dedicated to expanding its ever-improving defensive umbrella to friends and allies around the world. As Ronald Reagan saw well before most, missile defense is a potent force for security and stability in the world. It is a powerful weapon for peace-loving nations that refuse to be bullied by despots and dictators armed with weapons of terror. Edward Teller, the famous Hungarian scientist who originally convinced Reagan of the need to launch SDI, put it this way: "I love my grandchildren. I

want to be sure that they will be able to live out their lives without facing the terrible choice between slavery and Armageddon.”¹⁵ Today the Missile Defense Agency and its supporters around the country are making sure that we can all live in such a world. 

Notes

1. Walter Isaacson, “Archive: Reagan for the Defense,” *Time.com*, 21 March 2008, <http://www.time.com/time/magazine/article/0,9171,923443,00.html>.

2. Vice Pres. Richard Cheney, “Remarks at the Heritage Foundation Dinner Commemorating the 25th Anniversary of President Reagan’s Strategic Defense Initiative” (address, Four Seasons Hotel, Washington, DC, 11 March 2008), <http://www.whitehouse.gov/news/releases/2008/03/20080311-9.html>.

3. Senate, Armed Services Committee, Statement of Lt Gen Henry A. Obering III, USAF, MDA director, “Missile Defense Program and Fiscal Year 2009 Budget,” *Hearing of the Strategic Forces Subcommittee of the Senate Armed Services Committee: Ballistic Missile Defense Programs in Review of the Defense Authorization Request for FY2008 and the Future Years Defense Program*, 110th Cong., 1st sess., 1 April 2008.

4. House, Armed Services Committee, “Statement of General B. B. Bell, Commander, United Nations Command, Commander, Republic of Korea-United States Combined Forces Command and Commander, United States Forces Korea,” 110th Cong., 1st sess., 12 March 2008.

5. Senate, Select Committee on Intelligence, Testimony of Adm J. Michael McConnell, director of national intelligence, “Annual Threat Assessment of the Director of National Intelligence for the Senate Select Committee on Intelligence,” 100th Cong., 1st sess., 5 February 2008.

6. House, Armed Services Committee, “Statement of General Bantz J. Craddock, USA, Commander, United States European Command,” 110th Cong., 1st sess., 13 March 2008, 21.

7. Senate, Armed Services Committee, Statement of Lt Gen Henry A. Obering III.

8. Ibid.

9. Senate, Armed Services Committee, Hon. Charles E. McQueary, director, Operational Test and Evaluation, Department of Defense, “Prepared Statement for the Hearing before the Strategic Forces Subcommittee of the Senate Armed Services Committee,” 1 April 2008.

10. Senate, Select Committee on Intelligence, McConnell, “Annual Threat Assessment.”

11. Senate, Armed Services Committee, Statement of Paul Francis, director, acquisition and sourcing management, “Defense Acquisitions: Assessment of Progress Made on Block 2006 Missile Defense Capabilities and Oversight,” 110th Cong., 1st sess., 1 April 2008.

12. Isaacson, “Archive: Reagan for the Defense.”

13. Howard A. Garcia, “Shooting Down ‘Star Wars,’ ” *Denver Post*, 6 April 1986.

14. George N. Lewis and Theodore A. Postol, “European Missile Defense: The Technological Basis of Russian Concerns,” *Arms Control Today* 37, no. 8 (October 2007): 13–18.

15. Anthony P. X. Blothwell, “Teller Looks to the Future; Star Wars for Peace,” *National Review* 37 (9 August 1985): 33.