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RESETTING MISSILE DEFENSES

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What's changed in the last few years? Pretty much both political parties now agree that missile defenses are integral to America's national security. They serve to protect and defend the homeland from the threat of ballistic missile attack. Defenses cover US deployed forces and assets overseas. They also safeguard friendly and allied nations.

There is consensus as well that there are threats worth defending against. Currently, at least 30 countries in the world have ballistic missile technologies. True, some of these nations are our friends. The mere fact, however, that ballistic programs have become so ubiquitous demonstrates that robust defenses should now also be axiomatic.

Sadly, they are not.

Today the trend in Washington is to accept "just enough" missile defense. That is a trend that needs to change or America will end the Obama years more at risk to missile threats than at any time since the end of the Cold War.

HOW WE GOT HERE FROM THERE

Reagan's rush to grab the ultimate high ground—a space-based global missile defense shield, faltered under the first Bush and fell into neutral under Clinton. President Clinton cut all the space-based missile defense programs. The Clinton Administration also tried to eliminate theater missile defense systems (which protect U.S. soldiers from short-range missiles) by negotiating missile defense limitation agreements with the Russians. However, due to opposition within the U.S. Senate, the Clinton Administration was not able to follow through with these plans.

In turn, Congress pressed for The National Missile Defense Act of 1999 to highlight the imperative of providing defenses against ballistic missile attack. The Act states that "It is the policy of the United States to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the territory of the United States against limited ballistic missile attack (whether accidental, unauthorized, or deliberate) with funding subject to the annual authorization of appropriations and the annual appropriation of funds for National Missile Defense." When G.W. Bush became president he came to office with every intention of following through on that commitment.

In 2001, the Bush Administration abandoned the 1972 Anti-Ballistic Missile Treaty because as the president declared "the ABM treaty hinders our government's ability to develop ways to protect our people from future terrorist or rogue state missile attacks." The Bush Administration increased funding for the U.S. ballistic defense program and announced a decision to field an initial capability to protect the U.S. homeland from a long-range threat by 2004.

Even Bush, however, could not restore all the momentum lost under Clinton. The Bush Administration's attempts to revive the U.S. space-based missile defense program failed due to Congressional opposition. For example, in 2006, the Missile Defense Agency requested $673 million between FY2008-2011 for designing, developing, and testing a space test bed. This space-based test bed would have been the initial step towards achieving the full coverage and protection of the United States from ballistic missile threats. However, this request was never appropriated.

Since taking office President Obama has chosen a more modest course. Despite the persistent growing danger and clear evidence that some states with ballistic capabilities are an increasingly serious concern for the United States, since taking office the Obama Administration has slow walked and curtailed the development and deployment of a more comprehensive,

integrated, and layered missile defense system. The administration has cut funding for research and development overall. It has canned promising programs and mothballed others.

The Obama Administration's course won't keep up with evolving threats. For example, by some estimates of the US intelligence community Iran will have a long-range missile by 2015. By the administration's own time line, emplacing a system in Europe to counter that threat won't happen till 2018. Some analysts believe defenses in Europe might not be ready till 2020 or after.

Furthermore, just keeping up with threats is not enough. The right missile defenses would significantly leapfrog emerging threats—discouraging potential proliferators from fielding expensive threats that could easily be countered by robust defenses.

WHAT WENT WRONG?

In his first year in office, President Obama immediately laid down his marker on missile defense by requesting $1.5 billion less for the Missile Defense Agency (the U.S. missile defense program coordinator) than the last budget request of G. W. Bush. By some accounts, the administration came into office envisioning much deeper cuts—as much as 50 percent.

The Pentagon talked the White House out of draconian cuts. Nevertheless, Obama cut the number of ground-based interceptors in Fort Greely, Alaska, and Vandenberg Air Force Base, California, intended to protect the U.S. homeland from strategic attack, from 44 to 30. This system is the only operationally deployed missile defense system currently protecting the U.S. homeland from ballistic missile attack from Iran, North Korea, or any other source of attack.

The administration then decided to cancel the European-based "third site" ballistic missile defense basing plan developed the Bush Administration, which planned for 10 two-stage ground-based interceptors in Poland and a high-powered X-Band radar in the Czech Republic. Obama's decision was not only wrongheaded, it was executed in an extremely careless manner embarrassing two staunch U.S. allies who had invested tremendous political capital to see this project through. The decision was also universally perceived as a concession to the Russians in anticipation of negotiations on the New START arms control agreement.

Citing "new findings" that Iran would not be able to threaten the U.S. with long-range missiles until 2020, and that the Iranian short-range missile threat (especially the Shahab-3 missile) was more immediate, Obama cancelled the third site deployment. The decision reflected the belief that the defense of U.S. allies in Europe against regional missile threats would be sufficient for both the short and medium term.

The stark contrast between the "new" intelligence assessment and a recently released Air Force assessment that Iran could have an ICBM by 2015 could not be more alarming.

The administration's newfound optimism about Iran's lack of progress is questionable, especially considering the Intelligence Community's bad track record of predicting such developments in the past. It is presumptuous to think that the U.S. could predict the exact date (e.g., 2020) when Iran will achieve an ICBM capability to threaten the U.S. homeland. It could be earlier. Prudence dictates that it is best to be prepared in advance. President Obama also ignored, to a large degree, the positive role that missile defenses play in extended deterrence and reassurance to U.S. allies.

Furthermore, the Obama Administration replaced the Bush missile defense strategy for Europe with a new plan called the Phased Adaptive Approach (PAA). The President's initiative relies heavily on the Aegis sea-based component of the layered missile defense architecture. Unlike the Bush scheme that would have been built with proven radars and interceptors (the interceptor was a two-stage variant of the current three-stage ground-based interceptors), the Obama plan requires new missile technologies that have yet to be developed and expects them to be fielded on a very ambitious time line. Some analysts have argued that the deployment plan for the Phased Adaptive Approach is driven more by the agenda demanded by the White House than by a realistic assessment of what can actually be delivered.

In addition to "killing" the third site, the Obama Administration also chose to terminate the Multiple Kill Vehicle program (MKV). This planned missile defense program was slated to assist in the fielding of a new generation of Standard Missile-3 interceptors, an essential part of the layered *Aegis* ballistic missile defense program. The goal of the MKV program was to design, develop, and deploy multiple, small kinetic energy-based kill vehicles that could intercept and destroy multiple ballistic missiles, including decoy targets (penetration aids) and countermeasures that adversaries are developing.

The Administration's commitment to protect its allies and forward-deployed troops has also now been called into even greater question with the cancellation the Medium Extended Air Defense System (MEADS), a ground-based terminal ballistic missile defense system developed jointly by the United States, Italy, and Germany. Designed to replace Patriot systems in the United States and Germany, MEADS offers more firepower and is designed to protect maneuvering forces and fixed locations against

tactical ballistic missiles, cruise missiles, unmanned aerial vehicles and aircraft. This program is also cost-efficient: in fact, it is one of the few in which allies actually share the costs of research and development of the ballistic missile defense system.

By cancelling the third site and the earlier defense coverage it would have afforded the U.S. homeland, the administration is downplaying the growing threat from the proliferation of ballistic missile technology and particularly advances in Iran's ballistic missile program. Iran is achieving increasing range and payload capabilities. The White House has also failed to acknowledge that short-range and long-range missile programs are rarely pursued independently of each of other. Research programs are undertaken concurrently and the lessons learned from one are applied to the other. Case in point, Iran has already fielded a number of different short-range missiles and successfully launched a satellite in 2009.The technology for sending a satellite into an orbit is essentially the same as delivering a light warhead to any destination on the planet.

Moreover, states with short-range missiles can pursue alternative deployment options to give them the ability to attack the U.S. homeland. For example, short-range missile launchers can be placed on cargo vessels off the U.S. coast to launch a missile at the homeland (the so called scud-in-the-bucket scenario). Similarly, any single nuclear weapon detonated at high-altitude above the U.S. would create an electromagnetic pulse (EMP) effect, permanently disabling the electrical systems that run nearly all civilian and military infrastructures, tearing the very fabric of society and changing life as we know it.

An EMP attack is one of the greatest threats imaginable to the United States and the world. If a nuclear device were to explode high in the atmosphere above the United States with even a small nuclear weapon it would cause a catastrophe similar to a large urban blackout, the Haitian earthquake, or Hurricane Katrina. A ground-based midcourse missile defense is one of the few means of countering adversarial EMP-weapon programs.

Yet, the Obama Administration canceled the Airborne Laser (ABL)—one of a few programs that could be utilized to counter the scud-in-the-bucket threat in February of 2010. The ABL uses directed energy to destroy incoming ballistic missiles of all ranges in their boost, or initial, phase of flight when the missile is the slowest and therefore the most vulnerable. From an operational program, the Obama Administration returned the ABL program to a test-bed program. In FY2012, the Administration plans to invest $98 million—not enough for fully developing this system.

Finally, the Obama Administration negotiated The New START Treaty, a bilateral arms control treaty with Russia. The treaty, which entered into force in February 2011, is detrimental to U.S. national security. It directly and indirectly limits U.S. missile defense systems. The preamble of the treaty establishes a link between offensive and defensive arms, giving Russia a reason to object to the Administration's Phased Adaptive Approach execution. The treaty prohibits the conversion of offensive missile launchers into missile defense interceptor launchers and vice versa. In addition, the treaty requires both parties to share telemetric information (information transmitted by ballistic missiles and interceptors to the battle-space management center on the ground), which could make U.S. missile defenses less effective. Finally, New START creates the Bilateral Consultative Commission (BCC), the treaty's implementing body, with a very broad mandate that could be manipulated to further limit the capability of U.S. missile defenses.

WHERE WE NEED TO GO

While Obama has put the brakes on missile defense, slowing the program at exactly the wrong time, it is not too late to hit the gas pedal again.

The essential first step that needs to be taken, to mitigate the threat of a ballistic missile attack, is restoration of funding for the Missile Defense Agency to the FY2010 level of $10.9 billion. This level of funding could be easily achieved if overall defense budgets were adequate. Funding the core defense program at prudent levels would cost an average of approximately $720 billion per year for the five-year period from FY 2012 to FY 2016. A budget sustained at this level through FY 2016 would allow the Department of Defense to adequately fund research and development for missile defense, as well as conventional forces, space, command and control, cyberspace, and sensor technologies.

An average core defense funding level of $720 billion per year is reasonable. It represents spending only around 4 percent of the nation's gross domestic product to meet the federal government's primary constitutional obligation. More specifically, it means marginally increasing defense spending from 3.9 percent of GDP in FY 2010 to 4 percent of GDP by FY 2015 and maintaining spending at 4 percent of GDP for the next few years.

Sustaining adequate funding for missile defense as well as for other defenses in the current constrained fiscal environment will require: (1) reducing growth in entitlement spending; (2) slowing the rise in defense manpower costs; and (3) reducing wasteful, unnecessary, and inefficient expenditures. These are difficult cost-saving and budgetary measures that the Congress and the Administration must undertake to ensure adequate funding, not just for missile defense, but also for achieving sufficient defense spending overall.

Getting the federal budget and defense priorities in order is only the start. There are follow-on actions that could be made to

shore up defenses for both the short and the long term.

For starters we need a broader bottom-up consensus on the need for a comprehensive ballistic missile defense and educate the public on the importance of missile defenses and its stabilizing role in conflict situations. To do this Congress should hold a series of public hearings to educate the public. Hearings would emphasize the importance of missile defense in national security issues and prepare Congress to take legislative action to counter the threat of ballistic missiles. These actions would allow Congress to build and endorse a bipartisan national consensus for robust layered missile defenses.

Meanwhile, for the short-term, the *Aegis* sea-based missile defense with Standard Missile 3 (SM-3) interceptors provides the U.S. with the most promising opportunities to remain protected in the face of the evolving threat. The Obama Administration should increase a number of SM-3 interceptors, including their newest version—SM-3 Block IB. Last year, Secretary of Defense Robert Gates stated that Iran could potentially attack Europe with hundreds of missiles. Increasing defensive capabilities in the European theater is essential for the protection of U.S. allies, interests, and forward-deployed troops. If these missiles are properly networked with the existing radars and adequate command and control arrangements in place (these steps are also known under the "engage on remote" header), the inherent long-range capability of SM-3 interceptors can be further improved.

Furthermore, a smaller, lighter kill vehicle in SM-3 missiles would make the interceptor faster and more capable. Technologies for smaller kill vehicles were developed during the Reagan-era Strategic Defense Initiative. These can be revived, adjusted and used for contemporary uses.

Missile defense also presents a great opportunity for cooperation between the U.S. and its allies. Significant steps have already been taken, for example when the North Atlantic Treaty Organization (NATO) decided in its 2010 Strategic Concept to "develop the capability to defend our populations and territories against ballistic missile attack as a core element of our collective defense, which contributes to the indivisible security of the Alliance." Europe is already part of the Obama Administration's PAA. That is not enough. Cooperation should extend to other activities, such as the joint development of missile defense systems, establishing command and control systems, and preparing operational plans. NATO should field a variety of land, air, sea, and ultimately space-based systems. More robust and multinational missile defenses would be capable of intercepting ballistic missiles in all three stages of flight: the boost phase, the midcourse phase, and the terminal phase. A division of labor, within allied cooperation, would help to insure maximum interoperability, flexibility, adaptability, and affordability. To that end, the Administration can begin to take a step in the right direction by restoring and committing to the fielding of the MEADS program.

For the long-term, we need to reopen the debate over putting defenses in space. Space-based missile defenses offer significant advantages to protecting the United States and its allies from a ballistic missile attack. First, space missile defense is the most cost efficient option for protecting the United States and its allies. A global constellation of 1,000 space-based hit-to-kill interceptors, along with replacements, would cost less than $20 billion to build, launch, operate, and maintain over a 20-year period. Second, space interceptors allow us to disable an incoming missile at an earlier stage of flight, when the missile is slowest and therefore the most vulnerable to an attack. Third, interceptors in space are the least vulnerable to an attack by adversaries. The current U.S. missile defense infrastructure (silos and radars essential for cueing interceptors) is mostly ground-based, and, therefore, more vulnerable to an attack. Some countries (e.g., China and Russia) have a rudimentary capability to shoot down space-based interceptors, but they are not capable of disabling all interceptors in space.

RESET—MISSILE DEFENSE, MR. PRESIDENT

The Obama Administration has complicated the ability of the United States to protect against an incoming missile attack despite evidence of aggressive ballistic missile programs in Iran and North Korea and heavy investments by Russia and China in their nuclear and missile programs. To get back ahead of the threat, the fundamental choices made by the administration must be revisited and some wholly reversed.

The time to push for maximum missile defenses is now.