

# **CATO HANDBOOK FOR CONGRESS**

**POLICY RECOMMENDATIONS FOR THE 108TH CONGRESS**

**CATO**  
INSTITUTE

Washington, D.C.

## **50. Strategic Nuclear Forces and Missile Defense**

### ***Congress should***

- endorse a truly “national” limited land-based missile defense;
- eschew grandiose sea- and space-based missile defenses—which are unnecessary, expensive “international” systems designed to protect wealthy U.S. allies and friends and provide a robust shield for unneeded U.S. interventions overseas;
- pressure the administration not to rush development and deployment of land-based missile defense so that the system can be thoroughly tested under realistic conditions before a decision is made to deploy it;
- encourage the administration to destroy—rather than put in storage—warheads as part of the arms reduction agreement to reduce operationally deployed forces to 1,700–2,200 warheads within the next 10 years;
- encourage the administration to propose even deeper cuts in offensive strategic nuclear forces—down to a maximum of 1,500 warheads; and
- reduce the triad of U.S. nuclear forces—nuclear-capable bombers, intercontinental ballistic missiles (ICBMs), and sea-launched ballistic missiles (SLBMs)—to a dyad.

The administration withdrew from the ABM Treaty to eliminate constraints on its goal of pursuing a robust ballistic missile defense program. Although the administration envisions a global, layered missile defense system (incorporating land-, sea-, and space-based weapons), the reality is that a limited land-based system designed to protect the U.S. homeland against the potential threat of long-range missiles from “rogue” states is the most mature (though still not thoroughly tested and proven) and closest

to fruition. Rather than be rushed to deployment, a limited missile defense system should be developed at a measured pace because an excessively rapid development program could waste taxpayer dollars on an ineffective system. Missile defense should remain a research and development (R&D) program until it has been thoroughly tested under realistic operational conditions. Only then should a decision be made about its deployment.

Any defense expenditures—including those on missile defense—must be commensurate with the threat. More robust missile defenses are not justified by the present limited threat. Also, sinking large amounts of money into more comprehensive missile defenses—when even the limited land-based system might fail because of technical problems or lack of adequate testing—is questionable.

### ***A Limited Missile Defense Is Needed for a Limited Threat***

Although it is not certain that North Korea or any other rogue state will be capable of launching a missile attack against the United States by 2005, the R&D program for missile defense is being rushed to have a system deployed by that date. Even if the threat from North Korea did materialize by that date, the United States would probably be able to use its offensive nuclear force to deter a missile attack from North Korea, another rogue state, or any other state. Thus, missile defense would be a backup system against a missile attack from a pariah state. Rushing development to deploy a system without thorough and realistic operational testing increases the probability that the system will ultimately be delayed, will experience escalating costs, or will simply not work.

More important, rogue states have or will have options for striking the United States other than long-range ballistic missiles. Such countries already possess short- and medium-range ballistic missiles that could be launched from ships operating in international waters off the U.S. coasts. And a missile defense designed for use against long-range ICBMs will not have the capability to intercept these shorter-range missiles. Moreover, the kinds of missile defense systems designed to counter these threats (commonly referred to as theater missile defense) would be extremely expensive to deploy to protect the entire nation or even the coastlines (the limited areas such systems can protect would require greater numbers of systems) and are not part of the administration's plan for a missile defense system to protect the United States.

Rogue nations also may possess or could acquire cruise missiles that could be launched from ships or, possibly, aircraft. Again, a missile defense against long-range ICBMs will not be able to counter these threats, which would require deploying an extensive (and likely expensive) air defense system.

Finally, September 11, 2001, clearly demonstrated that the United States is vulnerable to terrorist attack.

Such threats to the American homeland may be more inexpensive, accurate, reliable, and thus more probable than that posed by ICBMs launched from rogue states. Even the most hostile pariah state is likely to hesitate to launch from its territory an ICBM against the United States. U.S. satellites can detect the origin of such long-range missile launches, and the world's most powerful nuclear force would almost certainly retaliate against the attacking nation. In contrast, the origin of terrorist attacks or missile launches from ships or aircraft may be harder to determine, which makes U.S. retaliation—and therefore deterrence—more difficult. The existence of the other threats does not, of course, refute the argument that long-range ballistic missiles also pose a threat and that the U.S. government should combat the threats that can be defeated. But we must understand that long-range ballistic missiles will be just one of several possible threats.

None of the proposed missile defense systems to protect the United States will have a defensive capability against either short-range ballistic missiles or cruise missiles—delivery systems that rogue states and others already possess. The best reason to have a limited missile defense may be the possibility of accidental—rather than intentional—launches from such states and limited accidental launches from established nuclear powers. Pariah states with newly acquired long-range missiles and nuclear warheads may have poor early warning systems, only rudimentary command and control over such forces, nonexistent nuclear doctrine, and insufficient safeguards against an accidental launch. In addition, in the past, Russia's decrepit early warning systems have almost led to accidental launches.

Nevertheless, the primary threat from accidental or intentional launches from rogue states is likely to be relatively modest (a few ICBMs) and unsophisticated (their missiles are unlikely to have multiple warheads or sophisticated decoys), requiring an equally modest response. A limited ground-based missile defense system of 100 or so interceptors could provide sufficient defensive capability against such threats.

## ***The Limited Threat Does Not Warrant “International” Defenses***

Although it is portrayed to the American public as a “national” missile defense, the global, layered system consisting of land-, sea-, and space-based weapons favored by the administration is really an “international” missile defense system that would also defend U.S. allies and “friends,” even though they are wealthy enough to build their own missile defenses.

The main objective of observers who support more comprehensive, robust, and layered missile defense systems does not seem to be defense of the U.S. homeland. Instead, their aim seems to be to create a stronger shield behind which the United States can intervene against potential regional adversaries possessing weapons of mass destruction and the long-range missiles to deliver them. According to that reasoning, if such adversaries cannot threaten the United States or its allies with catastrophic retaliation, U.S. policymakers will feel more confident about intervening militarily. But because no missile defense system can guarantee that all incoming warheads will be destroyed, such an increase in U.S. military activism could actually undermine U.S. security in a catastrophic way. Thus, deployment of a missile defense should be confined to a more limited land-based “national” system, which is the most technologically mature system.

Some proponents of missile defense argue that a sea-based system can be deployed more quickly and will be less expensive than the limited land-based system. They contend that the Navy Theater Wide system (a system that is currently being designed to provide midcourse intercept capability against slower, shorter-range theater ballistic missiles) can be upgraded to destroy long-range ICBMs in their boost phase (when under powered flight at the beginning of their trajectories). To intercept faster, longer-range missiles in the boost phase, a new, faster interceptor would need to be developed. That interceptor would probably not be compatible with the vertical launchers of Navy ships. Forward-deployed sea-based missile defense against ICBMs might also experience operational difficulties, including greater vulnerability to attack, and detract from the Navy’s other missions, or require expensive new dedicated ships for missile defense.

Some proponents have also advocated a sea-based midcourse system as an alternative to a land-based system. But this would require dedicated Aegis ships deployed near Alaska (where the proposed limited land-based system would be deployed), necessitating an investment in additional ships

and crews. And such ships would still be dependent on land-based radars—the Aegis SPY-1B radar system is designed to track shorter-range and slower ballistic and cruise missiles, and an X-band radar for ICBMs is too large to be fitted aboard an Aegis ship. So it is puzzling how such a system would be an improvement over a land-based deployment.

Even if a sea-based missile defense could be developed faster and more inexpensively than the more mature land-based system (a dubious proposition since the sea-based system would depend on sensor, communication, and kill vehicle technology being developed for the land-based system), critical gaps in coverage would necessitate supplementing the sea-based system with expensive space-based weapons. Unlike land-based missile defense against ICBMs, a sea-based system is not a stand-alone system.

Also, many advocates of sea- and space-based weapons want to protect U.S. friends and allies. But the United States should refuse to cover those wealthy nations—which spend too little on their own defense and already benefit from significant U.S. security guarantees—with a missile defense. A layered international missile defense that adds sea- and space-based weapons will escalate the costs of the system dramatically. In addition, an international defense is not warranted by the limited threat and should not be used to defend rich allies who can afford to build their own missile defenses.

A limited land-based system (for example, a hundred or more ground-based interceptors designed to defend against tens of warheads from rogue states) would not enable the United States to undermine nuclear stability by threatening Russia's surviving offensive nuclear forces (even at reduced levels, numbering in the hundreds or thousands of warheads), but more robust defenses might do so. In addition, deploying robust defenses might cause an “action-reaction” cycle with China. As China modernizes and builds up its small nuclear forces (which will probably happen whether or not U.S. defenses are deployed), robust defenses are much more likely to cause a larger Chinese buildup than is a limited system. Congress needs to encourage the administration to pursue a limited missile defense to signal to both powers that the United States is not trying to achieve strategic advantage.

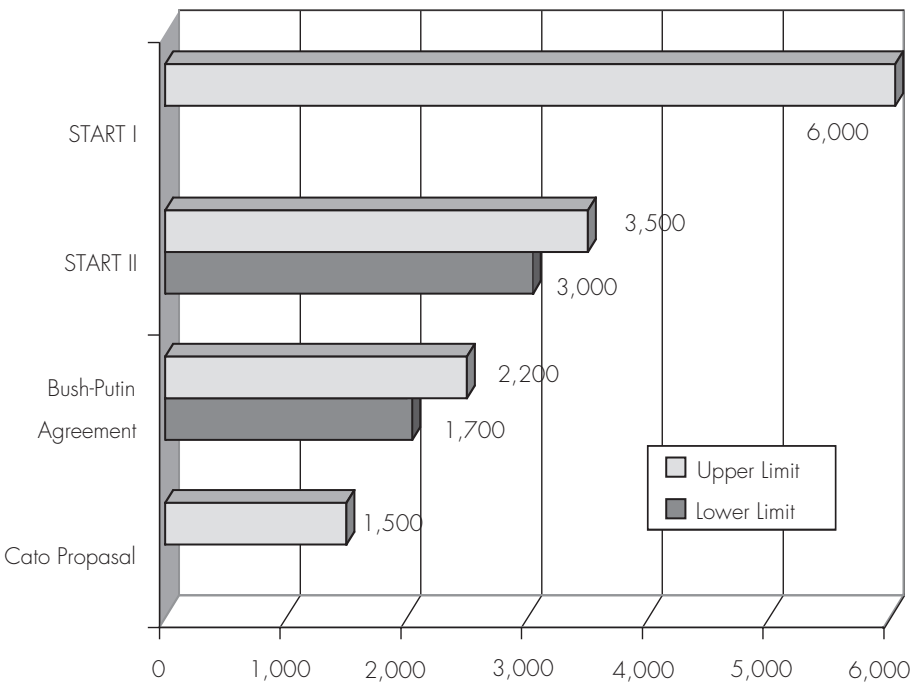
### ***Combine Limited Missile Defense with Deeper Cuts in Offensive Strategic Weapons***

The most prudent course of action is to pursue development of a limited missile defense system to defend the United States against rogue state

threats and accidental launches and negotiate even deeper cuts in strategic offensive forces.

In the much milder nuclear threat environment of a post–Cold War world, if the United States changed its nuclear doctrine from war fighting to deterrence, deep mutual reductions in offensive forces to levels below the 1,700 to 2,200 operationally deployed warheads of the Bush-Putin arms reduction agreement (perhaps a ceiling as low as 1,500 warheads) would still allow the United States to deter Russia and smaller or emerging nuclear powers (Figure 50.1). Also, with much lower numbers of warheads in that more benign environment, it would be more efficient and cost-effective to reduce the triad of nuclear forces—nuclear-capable bombers, ICBMs, and SLBMs—to a dyad (possibly ICBMs and bombers or SLBMs and bombers). The reduced threat of nuclear war would require less redundancy among U.S. forces to complicate the attack plans of the adversary.

**Figure 50.1**  
**Proposed Limits on Warheads in Each of the U.S. and Russian Arsenals**



Perhaps most important, the United States should destroy rather than put in reserve the warheads taken off operational deployment. The primary rationale for retaining more weapons in reserve is as a hedge against some unforeseen future threat. The perceived need for a reserve seems to reflect the thinking of many conservatives and military officials that Russia could one day again become a nuclear rival or that China could pose a future nuclear threat. If the United States and Russia have truly entered a new stage in their relationship, then actions should match the rhetoric. Furthermore, the “hedging” logic becomes a self-fulfilling prophecy. If the United States retains more weapons, so will Russia. And the Chinese will likely view the entire U.S. strategic arsenal—not just deployed weapons—as a threat and react accordingly. Counting rules that allow the United States to retain more weapons create an incentive for Russia, China, and others to do the same.

Lower numbers of warheads in the inventories of Russia and the United States would probably mean lower numbers of warheads on alert status, and lower numbers of warheads on alert status would substantially reduce the risk of an accidental nuclear launch. The lower inventory levels would also mean that fewer nuclear warheads would be available to be stolen or sold to rogue states or terrorist groups (that possibility is a particular concern for the aging and insecure Russian nuclear stockpile).

Concerns about the safety and security of nuclear warheads put into reserve status further highlight the need to destroy rather than store warheads. If the Russians decide to retain more weapons in storage, there are legitimate concerns about the safety and security of those weapons. By definition, they will be less secure than deployed weapons guarded regularly by military personnel. Their relative lack of security makes them attractive targets for terrorists seeking to acquire weapons of mass destruction. So taking the weapons off operational deployment without destroying them could possibly lessen U.S. security rather than enhance it.

### ***Recommended Readings***

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