

November 2, 1989

## WHAT IF MOSCOW HAS ITS OWN SDI?

### INTRODUCTION

**T**he Soviet Union suddenly has begun admitting all kinds of things it vigorously and long denied: that the Krasnoyarsk radar violates a United States-Soviet treaty; that the invasion of Afghanistan was illegal and wrong. Now it is time for Moscow to admit something else that is absolutely true: that the Soviet Union had been working on its own strategic defense long before America's Strategic Defense Initiative was unveiled in 1983.

In fact, the Soviet Union has been at work on its strategic defenses since Stalin's time and barely slowed its effort even after the 1972 U.S.-Soviet Anti-Ballistic Missile (ABM) Treaty limiting deployment of missile defenses. Though Moscow has complied with at least some of the Treaty's provisions by not deploying a nationwide missile defense system, it is conceivable that the Soviets could break out of the ABM Treaty for a major build-up of ballistic missile defenses. After all, Moscow's opposition to the U.S. Strategic Defense Initiative (SDI) program has been driven not by hostility to strategic defenses in principle but by the fear that the U.S. may beat the USSR in a race toward deployment of space-based defenses. Should the Soviets be the first to build a large-scale, nationwide defense system composed mainly of land-based interceptors, U.S. security would be gravely jeopardized.

**Setting Records.** The deployment of Soviet strategic defenses unmatched by an American SDI system is a mounting possibility as the SDI program becomes increasingly troubled. Congress has cut the SDI budget by \$5.6 billion over the past five years, and this fiscal year, is allowing no real growth in spending. At the same time Soviet investment in strategic programs is setting records. Warns Secretary of Defense Richard Cheney in this year's

edition of *Soviet Military Power*. "The most striking feature of Soviet military power today is the extraordinary momentum of its offensive strategic nuclear force modernization."<sup>1</sup> New additions to the Soviet intercontinental ballistic missile (ICBM) force include 58 SS-24s and 170 SS-25s, most of which are mobile. Meanwhile, according to the Pentagon, Moscow spent some \$4 billion last year on procuring active strategic defenses, including air defenses, aircraft, and missile defenses.<sup>2</sup> A reduction in SDI funding could kill the U.S. program while the Soviet SDI continues to grow.

A deployment of effective strategic defense systems by Moscow would shift the global balance of power in the Soviet favor, unless America has its own strategic defenses. A Soviet strategic defense monopoly would undermine the credibility of U.S. deterrence by limiting the effect of American retaliatory forces. In Europe, the ability of U.S. forces to deter a Soviet conventional attack would be jeopardized gravely because the U.S. strategic nuclear deterrent, which backs up NATO conventional forces, would be of questionable value. Depending on the effectiveness of Soviet defenses, even the U.S. ability to deter Soviet strikes against the U.S. homeland would be undermined. The Soviets could launch a first strike against the U.S., while their defensive system would limit the damage to Soviet territory caused by a U.S. retaliatory strike.

To ensure that it does not one day find itself unprepared in the face of a Soviet ballistic missile defense, the U.S. should:

◆ ◆ **Continue to modernize its offensive missile force, with particular emphasis on giving U.S. ballistic missiles the ability to penetrate Soviet strategic defenses.** This requires the U.S. to deploy maneuverable warheads (reentry vehicles) or MARVs that move on their own power to evade enemy missile interceptors. It also requires deployment of so-called penetration aids such as decoys that are also placed on missiles and are used to confuse and thwart enemy missile interceptors.

◆ ◆ **Increase the number of its bombers and cruise missiles.** A ballistic missile defense is not designed to intercept and destroy these weapons. Having an ample inventory of bombers and cruise missiles would enable the U.S. to retaliate successfully against a Soviet attack even if the USSR is defended with ballistic missile defenses.

◆ ◆ **Conduct a robust strategic defense research and development program, balanced between near - and far-term technologies.** This will ensure that the U.S. is ready for any contingency. A balanced SDI program focusing on "exotic" space-based defense systems as well as less advanced ground-based systems, suitable for near-term and mid-term deployment, could prepare the U.S. for a rapid deployment by Soviet missile defenses.

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1 Department of Defense, *Soviet Military Power, 1989* (Washington, D.C.: U.S. Government Printing Office, 1989), p. 5.

2 Department of Defense, *Annual Report to Congress, Fiscal Year 1990* (Washington, D.C.: U.S. Government Printing Office, 1989), p. 16.

Equally important is to prepare for the rapid procurement of strategic defense systems, should the Soviets break out or be detected as preparing to break out of the ABM Treaty. This would require that the U.S. provide needed funds to test such SDI components as space-based and ground-based missile interceptors, sensors, and battle management systems so that prototypes could be rapidly developed and reliable systems actually built if the need arose.

◆ ◆ **Respond to Moscow's development and deployment of missile defenses.** Moscow is developing and deploying missile defenses in ways that in several instances violate restrictions of the ABM Treaty. Under international law, the U.S. has the right to respond proportionately to such Soviet violations. Responses could include testing SDI weapons in space, which otherwise might be restricted by the ABM Treaty.

● ◆ **Point to Moscow's own SDI research to bolster the U.S. position in arms control negotiations.** The Soviets have often claimed that SDI is destabilizing and blocks progress on arms control. The Bush Administration should stress to the Soviets, publicly and privately, that their own development of missile defenses belies their public criticisms of SDI. The Soviets, it appears, are not against all strategic defenses — they are only against the American SDI program. The Administration also should state that the deployment of strategic defenses is compatible with agreements to limit offensive weapons, and that it will improve the prospects for agreements to reduce offensive forces because such defenses will provide an insurance policy against violations of such agreements.

## **SOVIET STRATEGIC DEFENSES**

Over the years Moscow has invested heavily in strategic defense forces. Soviet ABM research began during Stalin's time simultaneously with the launching of research on offensive ballistic missiles. In fact, the Soviet interest in missile defenses can be traced as far back as the late 1940s, when Moscow pressed thousands of German scientists and prisoners of war into work on the first comprehensive air defense force, dubbed *PVO-Strany*, which was to defend the Soviet homeland against the full range of threats from the air. By 1961, a vigorous ballistic missile defense research and development program was underway, focusing on radars, interceptors, and data processing for command and control. About the same time the Soviets also began to endow existing and projected air defense systems with a capability to intercept ballistic missiles. By the mid-1960s, primitive missile defense systems had sprung up around Moscow and Leningrad, and the Soviets established an independent ballistic missile defense organization, called the *PRO* (anti-rocket defense force), within its air defense command.

The Soviets signed the 1972 ABM Treaty almost surely because they wanted to stall the technologically superior missile defense program of the U.S. Although they decided to forego fielding a large nationwide ballistic missile defense system, the Soviets continued their strategic defense program, and since 1972, have spent roughly as much on strategic defense

programs as on offensive nuclear forces. In the past decade alone, Moscow's strategic defense program costs have been over \$150 billion. This compares to \$20 billion for the U.S. in the same period. To be sure, a major portion of these funds were spent on anti-aircraft defense.<sup>3</sup> Nevertheless, the Soviet strategic defense investment increased in the late 1970s and 1980s, while substantial U.S. increases began with the SDI program in 1985.

**Undermining the Soviet Strategy.** There are several apparent reasons for the increased Soviet investment in strategic defenses. For one thing, Soviet strategists seem to have concluded that, given the large number of nuclear weapons already in their arsenal, further buildup of offensive forces would not appreciably improve their capability against the U.S.<sup>4</sup> For another, the Soviets saw that the U.S. was deploying new nuclear weapons such as the *Trident* and *MX* missiles, which threatened Soviet follow-on strike forces. These new deployments undermined the Soviet strategy of relying on a preemptive nuclear strike against U.S. forces. The U.S. deployments increased the likelihood that a preemptive strike by Soviet forces would be unable to weaken significantly the U.S. retaliatory strike.

The American SDI program, launched by Ronald Reagan on March 23, 1983, probably contributed further to Moscow's decision to intensify its own strategic defense programs. The Soviets chose to compete with the U.S. in the development of missile defense technologies. It is also likely that the Soviet leadership wanted to gain leverage in arms control discussions about strategic defenses by having a program that attempted to match the SDI program.

The Soviet Union generally has found itself lagging behind the U.S. in its weapons technology base and tends to use the arms control process to delay U.S. deployments in order to catch up. The Soviets also tend to move more quickly than the U.S. in applying military technologies. This gives the Soviets an advantage over the U.S. in several areas of deployed systems, particularly strategic defenses. U.S. application of its technology to strategic defenses would erode Soviet advantages.

**Additional Incentives.** The fruits of SDI-type research are also applicable to conventional weapons. They can improve conventional missile accuracy, upgrade computers, and improve command and control systems among other things. Thus, Moscow has an incentive to continue research on missile defense technologies for reasons that go beyond the desire for missile defenses themselves.

The Soviet strategic defense program consists in part of the defense system around Moscow. The Soviets have upgraded it with a new battle management radar at Pushkino and new missile interceptors to destroy incoming missiles

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3 The Soviets have the most capable and the largest air defense system in the world, consisting of almost 10,000 surface-to-air missiles, 1,200 interceptor aircraft, and 6,300 radars.

4 This view was expressed by such senior Soviet military theoreticians as Ogarkov and Gareev. See N. Ogarkov, *Krasnaya Zvezda*, May 9, 1984, and M.A. Gareev, *M.V. Frunze-Voennii Teoretik* (Moscow: Voennidat, 1985).

inside and outside the atmosphere. The upgraded system, to be partly operational this year, consists of new advanced *Galosh* interceptors and new high-speed missile interceptors called *Gazelle*. This brings the Moscow ABM system to 100 interceptors, the maximum allowed by the ABM Treaty; the original system had 64 interceptors.

**Disrupting U.S. Warheads.** The new heat-seeking *Galosh* interceptor missile represents a particularly notable improvement over the earlier model. According to an article by defense reporter Peter Samuel, Moscow's system can cover an area reaching 300 miles from the capital and can provide some protection to 30 percent of the Soviet intercontinental ballistic missile (ICBM) force. The *Galosh* and *Gazelle* interceptors are thought to be equipped with low-yield nuclear warheads designed to disrupt or destroy U.S. reentry vehicles without the need to precisely maneuver in their path. Target and tracking radars and associated systems also have been modernized with new hardware and computer controls.<sup>5</sup>

Moscow has poured vast resources into bolstering its countrywide early-warning and tracking radar network. In addition to the *Hen House* early warning radars, in existence prior to 1972, the Soviets have constructed at least twelve large phased-array radars of the *Pechora* class, designed to track incoming ballistic missiles and their subsequent stages, including post-boost vehicles and reentry vehicles. The twelfth *Pechora* class radar was discovered by U.S. intelligence in March 1988 at the Soviet test facility at Sary Shagan near Lake Balkhash in Kazakhstan.<sup>6</sup> Ten of the twelve *Pechora* class radars already are operating, and the old *Hen House* radars have been given the capability to track incoming reentry vehicles with sufficient precision to provide targeting data to interceptor missiles.<sup>7</sup>

**Integrating Radars.** The Soviets have tested successfully their large phased-array radar network. Data exchanges, which allow the radars to work as a network involving at least six of the *Pechora* class radars, have been observed.<sup>8</sup> Also, Moscow has been tying together its large phased-array radars with the smaller radars associated with its numerous surface-to-air (SAM) missiles. Also tested was the integrated operation of *Gazelle* interceptors and *Flat Twin* engagement radars, which improves the accuracy and reliability of the interceptors in destroying incoming missile warheads. An extensive and successful testing program that proved the workability of the integrated system of radars and interceptors took place in 1984.<sup>9</sup>

One of the large phased-array radars is involved in the most blatant Soviet violation of the ABM Treaty. The treaty prohibits the construction of any large phased-array radar except for those either associated with the Moscow

5 Peter Samuel, "U.S. Intelligence Estimate Unmasks Red Breakout," *Washington Inquirer*, April 1, 1988.

6 "New Evidence Points to a Soviet ABM Breakout," *The Washington Times*, March 10, 1988.

7 See *Washington Inquirer*, *op.cit.*

8 Peter Samuel, "ABM Break Out - USAF Says Soviet Radars Internetted and Interceptors Produced," *Defense 2000*, March 1988, p. 121.

9 *The Washington Times*, *op.cit.*

system, situated at permitted test sites designated by the Treaty, or located at the Soviet border and designed to track missiles outside the air space of the Soviet Union. The large phased-array radar in Krasnoyarsk in Central Siberia does not fit these categories. This violates the ABM Treaty because the radar could give the Soviets the capability to track precisely incoming reentry vehicles within range of interceptor missiles.

**Elaborate Preparations.** Moscow also has been stockpiling such components as the *Galosh* and *Gazelle* interceptor missiles. Two Soviet ballistic missile defense factories at Tyumen (east of the Ural Mountains) and at Gomel (in the Western Ukraine) have been expanded to increase production rates. There are indications that close to 3,000 of these interceptors ultimately will be manufactured at these factories. These numbers vastly exceed the needs of the single Moscow ABM system. Moreover, Moscow is constructing hundreds of underground strategic defense facilities near military bases and command and control centers. These sites are expected to house radars and interceptors to track and destroy incoming missiles in the event of an attack.<sup>10</sup> Facilities for the *Gazelle* interceptor missiles are also being prepared for rapid deployment above ground. Since these interceptor missiles do not require silos, the missiles can be deployed from hidden areas quickly.

These elaborate preparations mean that the Soviets are nearly capable of deploying the nationwide missile defense specifically prohibited by the ABM Treaty. This approach of stockpiling existing ABM components has also allowed the Soviets to proceed with their build-up of missile defenses in a way that makes it difficult for the U.S. to verify full compliance with the ABM Treaty, unlike the testing or deployment of space-based systems that would be readily detectable.

**ABM Violations.** The Soviets have continued to upgrade their vast air defense network. This violates the ABM Treaty because it gives Soviet surface-to-air missiles the ability to intercept and destroy missile reentry vehicles. The ABM Treaty allows the deployment of missiles capable of intercepting and destroying ICBM reentry vehicles only at designated sites. Soviet surface-to-air missiles are deployed throughout Soviet territory. Tests of the SA-5, SA-10, and SA-12 surface-to-air missiles against ballistic missile reentry vehicles in the 1970s and 1980s demonstrated the capability of these weapons to fill limited ballistic missile defense missions. According to defense reporter Peter Samuel, in some 100 cases "these classes of surface-to-air missiles have been observed in tests against ballistic missile warheads."<sup>11</sup>

Moscow continues to violate ABM Treaty provisions that prohibit the deployment of ABM radars in the interior of the country. Specifically, the Soviets have not dismantled their illegal *Pechora* class radar at Krasnoyarsk,

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<sup>10</sup> *The Washington Times*, op.cit.

<sup>11</sup> *Defense 2000*, March 1988, p. 121.

although they pledged to do so at the Baker-Shevardnadze meeting in Jackson Hole, Wyoming, on September 23, providing they were "reassured" that U.S. radars in Greenland and Britain do not violate the ABM Treaty. So far, however, the Krasnoyarsk radar has not been dismantled.

The Soviets have been conducting advanced research on strategic defenses, focusing on terrestrial and space-based systems. This program mobilizes tens of thousands of scientists, engineers, and technicians to develop high-energy battle lasers, particle beams, and other directed energy systems that could disrupt or destroy ballistic missiles or their components. Radio frequency weapons, which can disable ballistic missiles by interfering with their electronic components, and kinetic energy devices, which destroy missiles and reentry vehicles by the force of collision, are also being explored.

**Tremendous Resources.** Considerable funding has been allotted to these efforts. According to former Deputy Director of Central Intelligence Robert Gates, the Soviet laser program is estimated to cost about \$1 billion per year.<sup>12</sup> The Soviets also have invested tremendous resources in developing an extensive space launch capability, centered on very large booster rockets and reusable spacecraft, which could lift strategic defense systems into space. Some 70 percent of Soviet space launches are military in nature. If Moscow were to decide to ignore the ABM Treaty's prohibition of a nationwide defense against ballistic missiles, it could lift its defense system into space much faster than could the U.S.

It is estimated that, although in the early 1970s it would have taken the Soviets close to a decade to deploy strategic defenses throughout the USSR, today it would take only about two years. Thus, Moscow could have a considerable lead over the U.S. if strategic defenses were deployed. According to published reports of a U.S. intelligence estimate, the scope and tempo of the ongoing Soviet ABM efforts mean that Moscow may be preparing to break out of the ABM Treaty by laying the groundwork for a nationwide strategic defense system.<sup>13</sup>

## **A SCENARIO FOR A SOVIET BREAKOUT FROM THE ABM TREATY**

To say that Moscow appears poised to break out of the ABM Treaty does not, of course, explain either when the breakout would occur or how it would proceed. In fact, it is likely that even Moscow itself does not have a precise answer to this question. Much depends on how the technology develops in the years ahead, how the American SDI program proceeds, and more generally, the state of U.S.-Soviet relations. One thing, however, is certain: If the U.S. SDI program falters because of cutbacks in funding, and if the Soviet strategic defense program continues apace, Moscow will face far fewer risks if

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<sup>12</sup> This statement was made by Mr. Gates before the World Affairs Council of Northern California, November 25, 1986.

<sup>13</sup> *The Washington Times*, *op. cit.*; *Washington Inquirer*, *op. cit.*; *Defense 2000*, *op. cit.*

it breaks out of the ABM Treaty than if the U.S. SDI were ready to be deployed.

A breakout likely would be gradual. The infrastructure of a nationwide strategic defense system is already in place, and it is being further improved and modernized. If an overt breakout begins, Moscow would likely rapidly install thousands of the mobile radars and land-based missile interceptors that are currently being produced and stockpiled. Defense systems would likely be deployed mainly to protect key industrial, administrative, and military resources, including military bases, compounds for Party leaders, and major factories.

**Countermeasures to U.S. Defenses.** To this system, space- and land-based components could be added to produce a progressively more effective strategic defense system. This approach assumes that the pace and scope of the breakout are matters solely of Moscow's choosing. However, should the American SDI program proceed briskly, the Soviets might be forced to allocate resources for the development and deployment of countermeasures to possible U.S. defensive deployments. Such countermeasures could include missiles deployed with decoys and penetration aids and anti-satellite systems to maintain the effectiveness of the Soviet's own offensive nuclear arsenal. Allowing Moscow to proceed with its own strategic defense plans undisturbed is the worst option because the Soviets would then be able to achieve absolute strategic superiority over the U.S. and its allies.

This is not to say, as argued by SDI opponents, that Moscow would be either willing or able to thwart SDI completely with countermeasures.

## **THE THREAT OF UNILATERAL SOVIET STRATEGIC DEFENSE DEPLOYMENTS**

Unilateral deployment of nationwide missile defenses would enable the Soviets to defend their territory after their offensive forces had destroyed much of the U.S. nuclear arsenal in a first strike. Combined with extensive Soviet civil defenses and efforts to fortify their industrial facilities or disperse them in the event of a nuclear attack, it would likely reduce Soviet damage from any nuclear exchange.

The Soviets would not need a perfect defense; even a moderately effective defense comprised of ground-based interceptors would be good enough. At one time, Moscow sought to limit damage to the homeland by planning offensive nuclear strikes against U.S. nuclear forces. Now, assuming deep cuts in offensive nuclear arsenals are possible through a Strategic Arms Reduction Talks (START) agreement, Moscow's strategy to limit damage to the homeland would be much less demanding because the U.S. nuclear arsenal would be smaller.

Unilateral deployment of Soviet defenses would prevent the U.S. from destroying a large percentage of Soviet missile silos, submarine bases, and command and control centers in a nuclear retaliatory attack. To be sure,



low-flying cruise missiles and strategic bombers (sometimes called "air breathers" because they do not leave the atmosphere) would remain in the U.S. arsenal, and they would not be as vulnerable to strategic defenses designed to intercept only ballistic missiles that leave and reenter the atmosphere. Such a U.S. retaliation, however, would hit only the Soviet population, not Soviet ballistic missiles, strategic command and control centers, and other military installations used to coordinate a nuclear attack on the U.S. Thus, a U.S. retaliatory attack would be suicidal because it would invite a Soviet retaliatory strike in kind that would likewise cause immense destruction to American civilians. It is thus questionable whether any U.S. President would order a strike against Soviet civilians under such circumstances. The unilateral deployment of strategic defenses by the Soviet Union could force a U.S. President into a no-win situation in which the choice is either surrender or the death of millions of Americans.

## **A U.S. RESPONSE TO SOVIET STRATEGIC DEFENSES**

Moscow's own ambitious strategic defense research and development program seriously challenges American security. The deployment of robust, nationwide missile defenses by Moscow, when coupled with its overwhelming offensive nuclear force, would tilt the strategic balance in Moscow's favor if left unanswered. To prevent this, the U.S. should:

◆ ◆ **Continue to modernize its offensive missile force.** As the Soviets proceed with the development and deployment of ever more effective missile defenses, the U.S. will be pressed to maintain the effectiveness of its missile force. It can do this by incorporating new technologies, including maneuverable reentry vehicles (MARVs), which are warheads capable of taking evasive action upon reentering the atmosphere against Soviet interceptor missiles, and such penetration aids as decoys and chaff, which simulate real reentry vehicles in order to confuse missile interceptors.

The deployment of missiles with MARVs and penetration aids will limit the effectiveness of Soviet missile defenses against the U.S. missile force by either evading or deceiving the Soviet missile defense system. This is not to say, however, that the effectiveness of the U.S. missile force can be made impervious to missile defenses, particularly if Moscow deploys a sophisticated space-based missile defense system. This is because ballistic missiles are to some degree inherently vulnerable to missile defenses in the course of their flights, particularly during the boost stage.

◆ ◆ **Increase the number of nonballistic delivery vehicles (bombers and cruise missiles) in the U.S. inventory.** While strategic bombers, and to some extent cruise missiles, must contend with Soviet air defenses, they are not as vulnerable to ballistic missile defenses. The U.S. is in the process of developing the B-2 "stealth" bomber and more accurate versions of the cruise missile, which are projected to be capable of penetrating Soviet airspace well into the 21st century. Deployment of these systems will help bolster the effectiveness of the U.S. offensive nuclear force in the face of a possible deployment of Soviet missile defenses.

◆ ◆ **Continue a robust and balanced SDI research effort.** The most effective U.S. hedge against a Soviet breakout of the ABM Treaty is the SDI program. Even SDI critics concede that some level of SDI research and development should continue so that the U.S. will have the capability to respond to a Soviet breakout. Slowing the SDI program will diminish the U.S. capacity to respond if the Soviets break out of the restrictions of the ABM Treaty and deploy a nationwide ballistic missile defense.

To address the threat posed by a Soviet breakout of the ABM Treaty, the U.S. must maintain a balanced SDI research effort. This requires research on systems ready to be deployed in the near term, such as land-based interceptor missiles, and on the more exotic weapons that will not be deployed until much later, such as laser weapons and other directed energy weapons that could be placed in space. In this way, the U.S. will be able to respond to the full array of contingencies that may accompany a Soviet breakout. If the Soviets break out of the ABM Treaty in the next several years, the U.S. will need to respond by deploying immediately available anti-missile systems. If the Soviets attempt to deploy sophisticated, space-based missile defenses toward the end of the 1990s, the U.S. must be ready to deploy similarly sophisticated, if not more sophisticated, space-based laser and other directed energy weapons.

The U.S. should be prepared to procure missile defenses very rapidly if the Soviets abandon the ABM Treaty. The SDI program depends on an American defense industrial base, including aerospace and electronic and computer manufacturers able to conduct research for the program. These manufacturers will build and maintain U.S. missile defense systems. A weakening of the SDI program through congressional budget cuts will disrupt the ongoing research efforts of the many U.S. defense industries involved in missile defense research. The disruption caused by these budget reductions ultimately will diminish the capacity of the U.S. to respond quickly to a Soviet breakout of the ABM Treaty.

◆ ◆ **Respond to Moscow's development and deployment of missile defenses.** Soviet efforts to develop and deploy missile defenses include activities prohibited by the ABM Treaty. The most obvious is the construction of the Krasnoyarsk radar. Under international law, the U.S. is entitled to take a proportionate action against an uncorrected treaty violation. As such, Washington should announce that it is testing SDI in ways that otherwise would violate the ABM Treaty and that this is a proportionate response to the Krasnoyarsk violation. The U.S. also should be prepared to take similar action in response to other Soviet violations of the ABM Treaty.

◆ ◆ **Point to Moscow's own SDI research effort to bolster the U.S. position in arms control negotiations.** The Soviets have argued that the U.S. SDI program is destabilizing and threatens arms control. They have made these arguments while conducting an SDI program of their own that in many ways is more robust than the U.S. effort. It is clear, therefore, that Moscow seeks to limit only American missile defenses. The Bush Administration should constantly remind the Soviets that their declarations about the U.S. SDI program are incompatible with their own SDI program.

**Insurance Policy.** The Bush Administration also should respond to the Soviet criticism that SDI is incompatible with arms control by pointing out that SDI discourages cheating on arms control agreements that limit nuclear missiles by providing a defense against illegal missile deployments. There will be little reason for either the Soviet Union or the U.S. to deploy covertly missiles whose presence would violate an arms control agreement, if these additional deployments have only a limited military value because of the presence of missile defenses. In fact, SDI can be an insurance policy for START or the Intermediate-range Nuclear Forces (INF) Treaty. Such a policy would allow both sides to protect their security interests through defensive deployments, including the threat posed by a breakout from either INF or START.

## CONCLUSION

The Soviet Union has had an interest in strategic defenses since the dawn of the nuclear age. Protecting the Motherland from nuclear attack has been among the highest of Soviet military priorities. This has created a varied and vigorous Soviet program to develop and deploy strategic defenses. Washington cannot afford to ignore Soviet progress in deploying land-based interceptors and ABM radars and in developing laser weapons, as that would result in Soviet strategic superiority.

The U.S. should be prepared to confront the Soviet SDI program both politically and militarily. By taking strong action to counter the Soviets' ambitious missile defense program, the U.S. can virtually guarantee that the Soviets will derive little military or political benefit from it. To do this, the U.S. should:

- 1) **Modernize its missile force with maneuverable reentry vehicles and penetration aids to enhance the ability of the missiles to evade or deceive Soviet defenses.**
- 2) **Retain several elements in its offensive nuclear arsenal that are nonballistic (air breathers) and not as vulnerable to missile defenses, including bombers and cruise missiles.**
- 3) **Continue a vigorous and balanced SDI research effort to hedge against a possible nationwide Soviet anti-missile deployment.**
- 4) **Be prepared to respond proportionally to Soviet violations of the ABM Treaty by conducting tests that would otherwise constitute violations of the Treaty.**
- 5) **Point to the Soviet SDI program in fending off Soviet efforts to restrict or kill the U.S. SDI program.**

The Soviet Union views defending its territory against nuclear attack as one of its highest military priorities. In recent years, the Soviets have spent as much on strategic defense as on offensive strategic weapons. Soviet defensive deployments, by themselves, do not threaten the U.S. and its allies, but when

combined with the Soviet Union's overwhelming offensive nuclear arsenal, they pose a significant threat. The U.S. must be prepared to respond to the Soviet strategic defense program both politically and militarily. This will require the U.S. to modernize its offensive forces and pursue its own strategic defense program. Absent such a positive U.S. response, the Soviet Union will have achieved through its strategic defense program a clear political and military advantage relative to the U.S. and its allies.

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