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SDI: SHIELD OR SWORD?

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COMMANDER CHARLES S. BUTLER AND LIEUTENANT COLONEL GEORGE R. SPICZAK

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# SDI: SHIELD OR SWORD?

A GROUP STUDY PROJECT

by

Commander Charles S. Butler and Lieutenant Colonel George R. Spiczak

> Colonel Robert F. Hervey Project Advisor

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U.S. Army War College Carlisle Barracks, Pennsylvania 17013 15 May 1989



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#### ABSTRACT

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The paper attempts to answer the fundamental question, "Is SDI an adjunct to a first strike strategy?" As its criteria, it discusses Soviet and U.S. opposing views on SDI, an historical application of Mutual Assured Destruction strategy, and a discussion of Soviet and U.S. thinking on first strike capability. President Reagan's March 1983 address on SDI is used as the backdrop to set the stage for the discussion. It is the objective of the authors to evaluate and analyze the potential impact of SDI on first strike.

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# "STAR WARS" DEFENSE

"WHO IS THREATENED IF WESTERN RESEARCH – AND SOVIET RESEARCH THAT IS ITSELF WELL ADVANCED – SHOULD DEVELOP A NONNUCLEAR SYSTEM WHICH WOULD THREATEN NOT HUMAN BEINGS, BUT ONLY BALLISTIC MISSILES. SURELY THE WORLD WILL SLEEP MORE SECURE WHEN THESE MISSILES HAVE BEEN RENDERED USELESS." PREMIER ALEXEL KOSYGIN, 1967

# SDI: SHIELD OR SWORD?

## CHAPTER I

## INTRODUCTION

On March 23, 1983, President Reagan revealed to the world his vision of a defense against strategic ballistic missiles which would "render nuclear weapons impotent and obsolete."<sup>1</sup> To support his initiative he reasoned,

Would it not be better to save lives than to avenge them? Are we not capable of demonstrating our peaceful intentions by applying our abilities and our ingenuity to achieving a truly lasting peace?...What if free people could live secure in the knowledge that their security did not rest on the threat of instant U.S. retaliation to deter a Soviet attack; That we could intercept and destroy strategic ballistic missiles before they reached our own soil or that of our allies?<sup>2</sup>

To him, the problem and the solution were very clear. Although deterrence of nuclear war by threat of retaliation, mutual assured destruction, had been effective and would most likely continue to be so, the U.S. and its allies should not have to ensure their security with the threat of the destruction of another society. Since the introduction of the Strategic Defense Initiative (SDI), there has been much debate on the subject. The possibility to change our strategy from nuclear deterrence based on mutual assured destruction to a strategy based on defense and denial has raised many difficult questions. Ignored has been the synergistic relationship that exists among arms control, SDI and strategic stability between the superpowers. The purpose of this paper is to address one of the fundamental questions: Is SDI an adjunct to a first strike strategy? What is the true intent of the Strategic Defense Initiative, shield or sword?

The technologies associated with SDI, as initially proposed, are admittedly exotic and, in some cases, still in the conceptual stage. Criticism runs high as to the relative virtues of widely ranging theoretical applications and courses of action. Recognizing the potential implications of SDI and its impact on state security, the Soviet Union has devoted considerable energies to its campaign to discredit the initiative.<sup>3</sup> Central among several key themes is the allegation that SDI is not intended, as publicized, merely to ensure U.S. survival, but rather to establish an American war-winning posture aimed at depriving the Soviet Union of any retaliatory capability. Only four days after the President's announcement of his initiative, then General Secretary Andropov stated,

first glance, this may even seem attractive to At uninformed people - after all, the President is talking about what seemed to be defensive measures. But it seems so only at first glance, and only to those who are unfamiliar with these matters. In fact, the development and improvement of the US's strategic offensive forces will continue at full speed, and in a very specific direction - that of acquiring the potential to deliver a nuclear first strike. In these conditions, the intention to obtain the possibility of destroying, with the help of an antimissile defense, the corresponding strategic systems of the other side i.e. of depriving it of the capability of inflicting a retaliatory strike - is designed to disarm the Soviet Union in the face of the American nuclear threat. This must be seen clearly if one is to correctly appraise the true meaning of the "new concept."

### OVERVIEW OF SDI CONCEPT

The functional intent of SDI research and development is the deployment of a Strategic Defense System that would make it possible to intercept incoming missiles as soon after launch as possible and to have as many intercept opportunities as possible throughout the missile's flight. Ballistic missile defense studies and experimentation have shown that the most effective defense against a high-level threat is a multiple layered defense in depth. Though each layer has less than perfect coverage, cumulative performance can meet acceptable standards.<sup>5</sup> The four phases of a typical ballistic missile trajectory are generally accepted as:

1. The boost phase, during which the main rocket engines are burning to thrust the warheads out of the atmosphere towards their target(s);

2. The post-boost phase, unique to MIRVed missiles only, where the post-boost vehicle (bus) containing both warheads and decoys is released from the booster engine;

3. The mid-course phase, during which the warheads travel above the atmosphere towards their target(s);

4. The terminal phase, during which the warheads reenter the atmosphere.

In each layer, systems must be defined which would detect a missile attack, define missile targets and identify individual threatening objects. Next, defensive weapons must be directed towards designated target vehicles. Finally, a battle management system must be incorporated to manage each phase of the battle and hand un-intercepted targets on to subsequent layers.<sup>6</sup>

## ENDNOTES

1. U.S. Executive Office of the President, <u>The President's</u> Strategic Defense Initiative, Washington, January 1985, pp. 1-10.

2. <u>Ibid</u>.

3. See, for example, the excellent publication by the U.S. Arms Control Agency, <u>The Soviet Propaganda Campaign Against the</u> <u>Strategic Defense Initiative</u>, Office of Public Affairs and the Bureau of Strategic Programs, Washington, August 1986.

4. Yu. U. Andropov. "Andropov Hits Reagan on Missile Defense," <u>Pravda</u>, 27 March 1983, p. 1, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXV, No. 13, P. 5.

5. James A Abrahamson, "The Strategic Defense Initiative, a Technical Summary," <u>NATO's Sixteen Nations</u>, April 1986, p. 16.

6. <u>Ibid</u>.

# CHAPTER II

# SOVIET PERCEPTIONS

The Strategic Defense Initiative has precipitated a wide range of controversy in Western circles centered primarily on issues of technical feasibility, fiscal practicality, and the implications for alliance relations, arms control and the stability of the strategic nuclear balance. For the most part, the Soviet debate has followed a parallel course. Little attention, however, has been applied to an understanding of Soviet thought regarding SDI and the attendant implications of these perceptions in the context of their political and military philosophy, foreign policy development, and future challenges to U.S. strategic doctrine. For this reason, any comprehensive assessment of SDI must necessarily include some discovery process to identify Soviet perceptions of the SDI.

Soviet attitudes relative to SDI are consistent across a wide spectrum. They can, however, be generally categorized as considerations pertaining either to first strike/military superiority, the stabilization factor of mutual assured destruction.

# FIRST STRIKE/MILITARY SUPERIORITY

As indicated previously, the central allegation of Moscow's stand against SDI maintains that the program's intent is neither to defend the United States nor to "render nuclear weapons impotent or obsolete," but rather to back up an American

disarming first strike posture by depriving the Soviet Union of an assured retaliatory capability. Since its inception, Soviet writings on SDI have been continuous and overwhelmingly negative. In April, 1985, General Secretary Gorbachev complained that Americans "talk about defense but are preparing for an attack, they advertise a space shield but are preparing a space sword."<sup>1</sup> Other accusations portend the development of offensive weapons to compliment the alleged first strike capabilities of SDI technology. L. Semeiko suggested, "And when you have not only an 'irresistible sword' but also a 'reliable shield,'...why not take the risk and press the nuclear button?...Such calculations pose a fatal threat to peace."<sup>2</sup> Marshal of the Soviet Union. S.L. Sokolov, raised even more adamant reservations about SDI.

What are Washington's real intentions? To create an antiballistic missile shield over the US and at the same time to deploy first-strike strategic forces designed to hit targets on earth, in the sea, in the atmosphere and in space...According to the Pentagon's plans, the antiballistic missile shield is supposed to frustrate a retaliatory strike by the USSR - to "finish off" in flight, so to speak, any Soviet missiles that survive after an American nuclear first strike."

It is difficult to precisely define the extent of exaggeration and propaganda implicit within these statements. Irregardless, it is clear that at the base lies a genuine Soviet apprehension that an American space-based defensive system, if even moderately effective, would alter the strategic balance, placing the Soviet Union at a military, technological, economical and political disadvantage.

In a like manner, the Soviet military charges that SDI is a

program which will ensure military superiority for the United States. Defense Minister Marshal of the Soviet Union Sergi Sukolov commented in 1985.

The presence of this equilibrium (between the USSR and the US) deters the imperial ambitions of the US and prevents it from achieving world domination. This is why the Washington leaders are trying to upset parity, to obtain a military advantage over the USSR and its allies.

To understand the Soviet perceptions of SDI, it becomes necessary to arrive at an acceptable definition of military superiority. Prior to the existence of nuclear parity, superiority was used in the traditional sense to reflect an overwhelming nuclear capability. This definition was the accepted standard until General Secretary Brezhnev's January 1977 address at the commemoration of the city of Tula as a "Hero City" for its defense against the Germans in 1941.

At Tula, Brezhnev denied that the USSR was striving for military superiority with the aim of delivering a nuclear first strike.<sup>5</sup> "First Strike" was understood by the Soviets as a unilateral capability to destroy the enemy's retaliatory forces in all-out war while limiting damage to themselves, achieved through some combination of offensive means and active and passive defense (ABM, counterforce against land and sea, civil defense, etc.).<sup>6</sup> In his address, Brezhnev changed Soviet military policy in t includamental ways. First, he defined military superiority as the possession of a first strike capability. Second, he announced the Soviet admission that military

superiority was beyond the reach of either side, and that a clear cut, unilateral, damage-limiting (first strike) capability could no longer exist.

Since President Reagan's address, Soviet pronouncements on SDI have reflected a resurrection and continuation of the Tula expression regarding inherent political and military concepts. Soviet writings are replete with charges that the United States is pursuing the ambition to achieve strategic superiority through some combination of offensive and defensive means that will make it possible to fight and win an all-out nuclear war at an acceptable price. The USSR now sees the proposed U.S. ballistic missile defense as the principal vehicle for realizing this objective. In 1984, Defense Minister Marshal of the Soviet Union Dmitri Ustinov affirmed the Soviet belief that "this 'antimissile decision' by R. Reagan is aimed at securing for U.S. militarists the ability to deliver a first nuclear strike against the Soviet Union with impunity."<sup>7</sup> In a <u>Pravda</u> article discussing the ABM Treaty, Chief of the General Staff Marshal of the Soviet Union Sergi Akhromeyev stated the proposed SDI "is giving the U.S. the capability to deliver a first strike in hopes that a retaliatory strike on American territory will be prevented."<sup>6</sup> In a later <u>Pravda</u> article, Akhromeyev again voiced the opinion that the goal of "star wars" is "to acquire for the U.S. the capability to deliver a first nuclear strike on the Soviet Union with impunity..."9

The Soviets concede that SDI, in and of itself, is not a

first strike weapon. This is primarily due to acknowledged limitations of current technology and the proposed structure of the defensive system. They do regard it, however, as a contributing system which becomes an essential part of a first strike capability when used in conjunction with enhanced nuclear offensive forces. Marshal Akhromeyev asserted that the projected SDI "is a most important element in the integrated offensive potential of the side that has created it...and provides an opportunity for the U.S. to deliver a first strike..."<sup>10</sup>

# MUTUAL DETERRENCE

An intricate relationship between strategic stability and anti-missile defense has been in existence between the United States and the Soviet Union for approximately the last twenty years. As Raymond Garthoff has explained,

... by late 1969, the political and military leaders of both the United States and the Soviet Union had concluded that the greatest possible danger to (and certain cost in maintaining) the strategic arms balance possibilities the conjugation of for the was development of both ABM and MIRV. Either of them could both would surely be...The leaders be destabilizing; both in Moscow and Washington had by that time decided that ABM limitation was the more feasible and the more necessary of the two, and MIRV control was both less feasible and surely less desirable.

In 1975, G. Trofimenko argued that the creation by the Soviet Union of a strategic arsenal comparable to that of the U.S., in both quality and quantity of systems, had radically changed the strategic picture. In his article, he wrote,

To sum it up, the balance of world forces had further shifted in socialism's favour by the early 1970's as

evidenced, for example, by the attainment of Soviet-American parity and the awareness by the USA of its limited possibilities to influence diverse events in the world by means of military forces. This made the US ruling class start a 'reappraisal of values' and acknowledge the need to reconcile the reality of competition between the two systems with the imperative of coexistence.<sup>12</sup>

In effect, the American force was neutralized by the Soviet Union's force and that shift towards mutual deterrence became dominant as a matter of consequence.

Garthoff has also noted that during the key formative period of Soviet arms control policy, "there were a number of very clear and explicit endorsements in <u>Military\_Thought</u> by influential Soviet military leaders of the concepts of mutual assured retaliation and mutual deterrence.<sup>13</sup> Mutual deterrence in Soviet writings, he clarified,

is usually expressed in terms of assured retaliatory capability which would devastate the aggressor...This formula avoids identification with the specific content of the American concept of 'mutual assured destruction' often expressed in terms of a percentage of the opponent's industry and population. This American interpretation is much more limited than the Soviet recognition of mutual deterrence resting on mutual capability for devastating retaliation unacceptable to a rational potential initiator of war, without calculations of arbitrary industrial and population losses which theoretically would be acceptable costs.<sup>14</sup>

The recognition of mutual vulnerability has remained central to the Soviet conception of the stability of the Soviet-American strategic relationship. Leonid Brezhnev told the 26th Party Congress in 1981, that "the military and strategic equilibrium prevailing between the USSR and the USA...is objectively a safeguard of world peace. We have not sought, and do not seek,

military superiority over the other side.<sup>15</sup> In September 1983, Former Chief of the General Staff Marshal of the Soviet Union Nikolai Ogarkov wrote,

With the modern development and dispersion of nuclear arms in the world, the defending side will always retain such a quantity of nuclear means as will be capable of inflicting 'unacceptable damage'...on the aggressor in a retaliatory strike...In present day conditions therefore only suicides can gamble on a nuclear first strike.

In his mind, the quantity and diversity of nuclear weapon capabilities meant that it was no longer possible to destroy the opponent's nuclear arsenal with one strike. The overwhelming retaliatory strike on an aggressor, with even the limited number of nuclear warheads left to a defender, would produce unacceptable damage.

In one of the more specific pronouncements on the implementation of SDI with respect to the danger of mutual nuclear destruction, Colonel Semeyko indicated that the "U.S. acknowledgement of the inevitability of mutual destruction as a result of nuclear war would be replaced by a stake on the destruction of only one side."<sup>17</sup>

Almost without exception, credible Soviet commentators have strongly condemned the contention that SDI can be more stabilizing than mutual assured deterrence. One of the primary Soviet objections to SDI is that it is inherently destabilizing precisely because it threatens to undermine the more equalizing reality of mutual assured deterrence in present day conditions.

#### ENDNOTES

1. M.S. Gorbachev, "M.S. Gorbachev's Interview With the Editor of Pravda," <u>Pravda</u>, 8 April 1985, p. 1, as translated in <u>The Current Digest of the Soviet Press</u>, Vol. XXXVII, No. 14, p. 6.

2. L. Semeiko, "Interview With the Editor," <u>Krasnaya</u> <u>Zvezda</u>, 15 April 1983, p. 3, as translated in <u>The Current Digest</u> of the Soviet Press, Vol. XXXV, NO. 16, p. 17.

3. S.L. Sokolov, "Marshal of the Soviet Union S.L. Sokolov, USSR Minister of Defense, Answers Questions from a Tass Correspondent," <u>Pravda</u>, 6 May 1985, p. 4, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXVII, NO. 18, p. 8.

4. <u>Ibid</u>., p. 7.

5. L.I. Brezhnev, "Outstanding Exploit of the Defenders of Tula," <u>Pravda</u>, 19 January 1977, pp. 1-2, as translated in <u>The</u> Current <u>Digest of the Soviet Press</u>, Vol. XXIX, No. 3, p. 3.

6. James M. McConnell, "Shifts in Soviet Views on the Proper Focus of Military Development," <u>World Politics</u>, April 1985, p. 319.

7. D.F. Ustinov, "Struggle for Peace, Strengthen Combat Capabilities," <u>Pravda</u>, 19 November 1983, p. 4, as translated in The <u>Current Digest of the Soviet Press</u>, Vol. XXXV, No. 46, p. 6.

8. S. Akhromeyev, "The ABM Treaty - - An Obstacle in the Path of the Strategic Arms Race," <u>Pravda</u>, 4 June 1985, p. 4, as translated in <u>The Current Digest of the Soviet Press</u>, Vol. XXXVII, No. 22, p. 1.

9. S. Akhromeyev, "Washington's Assertions and the Actual Facts," <u>Pravda</u>, 19 October 1985, p. 4, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXVII, No. 42, p. 7.

10. S. Akhromeyev, "The ABM Treaty - - An Obstacle in the Path of the Strategic Arms Race," <u>Pravda</u> 4 June 1985, p. 4, as translated in <u>The Current Digest of the Soviet Press</u>, Vol. XXXVII, NO. 22, p. 1.

11. Raymond L. Garthoff, "SALT I: An Evaluation," <u>World</u> <u>Politics</u>, October 1978, p. 4.

12. G. Trofimenko, "From Confrontation to Coexistence," International Affairs, October 1975, p. 38. 13. Raymond L. Garthoff, "Mutual Deterrence and Strategic Arms Limitation in Soviet Policy," <u>Strategic Review</u>, Fall 1982, p. 43.

14. <u>Ibid</u>., p. 42.

15. L.I. Brezhnev, "Comrade L.I. Brezhnev, General Secretary of the CPSU Central Committee to the 26th Congress of the Communist Party of the Soviet Union and the Party's Immediate Tasks in the Fields of Domestic and Foreign Policy," <u>Pravda</u>, 24 April 1981, pp. 2-9, as translated in <u>The Current Digest of the</u> <u>Soviet Press</u>, Vol. XXXIII, No. 8, p. 12.

16. N. Ogarkov, "Provide a Reliable Defense for Peace," <u>Isvestiya</u>, 23 September 1983, pp. 4-5, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXV, No. 38, p. 8.

17. L. Semeyko, "SDI - What Is It?" <u>Izvestiya</u>, 29 January 1986, p. 5, as translated in <u>FBIS Daily</u> <u>Report of the Soviet</u> <u>Union</u>, Vol. III, No. 019, pp. AA12-AA14.

## CHAPTER III

## UNITED STATES PERCEPTIONS

To understand the Strategic Defense Initiative program, one should be familiar with U.S. National Space Policy. In all U.S. strategies, control of the battlefield is paramount. This is only to say that as control of the sea and control of the land are essential, he who controls space will have a decided advantage. As expressed by former President Reagan in his January 1988 statement of National Security Strategy, U.S. space policy is comprised of five basic elements critical to maintaining a lead in the space race. These elements as stated are, 1) "Effective deterrence relies on the availability of space based assets to provide timely and accurate information to our combatant commander, 2) Free access to space must be provided to all nations much the same as the policy affecting the oceans of the world, 3) Our exploitation of space must be cost effective and stimulate exchange of technologies between government and commercial ventures where appropriate, 4) Either by deterrence or by defense we must protect our space assets form attack and provide for the improvement of our defensive capabilities, and 5) Enhance the effectiveness and performance of those space systems providing direct support to military forces."<sup>1</sup> With these stated goals, the President's priority for utilization of space is abundantly clear.

With the signing of a new Department of Defense Space Policy Directive, the Secretary of Defense heeded the guidance of the

Commander-in-Chief. Former Secretary of Defense, Mr. Carlucci, has expressed concern regarding the challenge of total integration of space operations with military doctrine and national security strategy. Space as a medium is as indispensable to the success of military operations as is land, air and sea. Stated policy will seek to: 1) improve deterrence, 2) prevent denial of our use of space, and 3) improve operations with use of space systems.<sup>2</sup> To achieve our stated policy, we should control the medium of space, we must: 1) provide continuous monitoring of significant military operations with space-based systems, 2) develop a successful anti-satellite capability, 3) provide for defense of our satellite fleet, and 4) develop mission reliability based on an appropriate mix of systems, space access and C3.<sup>3</sup>

#### WHY SDI

To understand the popularity of SDI, a reexamination of our nuclear strategy is warranted. Shortly after the Korean War, President Eisenhower established the policy of massive retaliation which threatened a nuclear response to any aggression against U.S. forces. However, the failings of this type of policy became clear when the Soviets used the same threats against France and Britain during the 1956 Suez Canal Crisis.

As the Kennedy Administration took office, we became familiar with Defense Secretary McNamara and the strategy of Mutual Assured Destruction which focuses on the premise that

sufficient nuclear weapons will survive an enemy attack and pose a retaliatory capability at a level unacceptable to the enemy. Thus both sides would refrain from the use of strategic nuclear weapons. Today, the situation is fundamentally different. There is great deal of concern about the balance of power between the United States and the Soviet Union. As we have seen the nuclear balance of power shift in favor of the Soviets, our concerns for a viable strategic nuclear strategy have heightened. On March 23, 1983, President Reagan expressed these concerns:

Now, thus far tonight I've shared with you my thoughts on problems of national security we must face together. My predecessors in the Oval Office have appeared before you on other occasions to describe the threat posed by Soviet power and have proposed steps to address that threat. But since the advent of nuclear weapons, those steps have been increasingly directed toward deterrence of aggression through the promise of retaliation.

This approach to stability through offensive threat has worked. We and our allies have succeeded in preventing nuclear war for more than three decades. In recent months, however, my advisers, including the Joint Chiefs of Staff, have underscored the necessity offensive retaliation for our security. Over the course of these discussions, I've become more and more deeply convinced that the human spirit must be capable of rising above dealing with other nations and human beings by threatening their existence. Feeling this way, I believe we must thoroughly examine every opportunity for reducing tensions and for introducing greater stability into the strategic calculus on both sides...

# MUTUAL ASSURED DESTRUCTION FLAWED

To date, the assessment on MAD is that it has been effective in maintaining peace between the United States and the Soviet Union. However, the long term prognosis is not as optimistic, even predating President Reagan's criticism. MAD as a strategy places one's security hostage to the good judgement and behavior of one's expressed enemy. A further concern is the threat to retaliate would not prevent human error or a technical malfunction triggering an accidental attack that might provoke a response which, in the long run, would be as devastating as the intentional use of nuclear weapons. And what of the question of the society itself? Would we threaten to destroy the society of another nation? We will not. Our current stated policy is that under no circumstances will nuclear weapons be deliberately used for the purpose of destroying populations. This presents the Soviets with a rather easy solution, that of locating their warfighting capability within those urban sanctuaries. Although we do not threaten the existence of the Soviet people, we do hold at risk their war-fighting capability, their armed forces, and their industrial capacity to sustain conflict. This targeting, in fact, may result in the destruction of a society. There is the ever present concern that MAD may not deter an attempted Soviet first strike on the United States, which in turn would result in U.S. retaliation upon the Soviet Union, the combined consequences of which would be disastrous.

# TARGETING/COUNTERFORCE STRATEGY

The targeting requirements of strategic postures such as assured destruction are relatively easy to delineate. As defined by former U.S. Secretary of Defense Robert McNamara in February 1965, assured destruction requires the capability to destroy onequarter to one-third of the Soviet population and about twothirds of Soviet industrial capacity.<sup>6</sup> These damage levels could be achieved with the successful delivery of some 300 to 400 one megaton equivalent warheads, and would involve either the total destruction of some 200 cities or, more likely, somewhat less than complete devastation of about 300 cities.<sup>7</sup>

The targeting considerations that relate to counterforce strategies are obviously very different to this. To start with, they are much less finite, since the requirement to destroy the military forces of the adversary is, in practice, both more difficult to define with any precision, as well as much more difficult to effect, than that to destroy the urban industrial areas. As compared to cities, military targets are much more varied in character, they are generally smaller and are frequently hardened or mobile.

The targeting aspects of strategic concepts such as flexible response, limited nuclear war and escalation control are even more complex. These notions require that the national command authorities have available a wide range of nuclear weapon employment options which fall short of all-out attack, but also that the calculated exercise of restraint should be unmistakably

obvious to the adversary.<sup>8</sup>

Both the U.S. and the Soviets have many thousands of military, political and economic installations which are potential targets in any nuclear exchange. Many of these are located near population centers, making it difficult for the adversary to perceive the real objectives and the particular nature of the restraints involved. Effective attacks against some categories of targets would involve collateral damage to population centers, command and control facilities and other highly important installations that a response against cities could well be regarded as appropriate; on the other hand, if targets within or near cities are exempted from attack, it may be difficult to conduct meaningful military operations.<sup>9</sup>

This issue affects U.S. counterforce capability. The threat to retaliate against Soviet cities might not deter a Soviet counterforce attack, since the United States would be reluctant to attack Soviet cities as long as U.S. cities remained intact and the Soviet Union maintained forces capable of destroying them. If U.S. forces survived a Soviet first strike and were capable of destroying most of the Soviet ICBMs held in reserve, then no possible gain would result from a Soviet attack.

There are several objectives to U.S. counterforce strategy. First, even with the complete loss of the ICBM force, the United States would still have enough weapons for counter attacks on Soviet conventional military targets or isolated economic assets, in addition to those needed for attacks on Soviet cities. Most

importantly, a U.S. second strike counterforce capability might be indistinguishable to the Soviet Union from a first strike force. Because of their relatively greater dependence on ICBMs, the Soviets might be particularly sensitive to a U.S. counterforce threat. The perception of U.S. first strike capability enhanced by SDI poses a significant threat to the Soviets. As a result, a Soviet leadership facing a serious international crisis might feel strong incentives to launch a preemptive strike against U.S. strategic forces.

# PUBLIC OPINION

The public is losing faith in our government and the infallibility of its polices as witnessed by such experiences as Viet Nam, Beirut, and Iran-Contra. As we approach the end of this decade, there are growing differences between the public and defense officials on issues such as nuclear deterrence and defense spending. There is an increasing perception that nuclear war is not survivable, which drives the effort behind nuclear reductions and the search for new strategic direction.

From a religious perspective, the Pope has urged both sides to negotiate immediate reductions of nuclear arms, hopefully leading to the simultaneous and complete elimination of stockpiles by all.<sup>10</sup> This was followed by a much stronger statement by American Bishops challenging the morality of relying on nuclear weapons to deter, much less fight a nuclear war. In addition to the church, there remains support for a total nuclear

freeze, especially knowing that both the U.S. and the Soviet Union possess a sufficient amount of weapons to destroy each other.<sup>11</sup> Regardless of advantages and disadvantages in our abilities v. the Soviets, the general public holds views sympathetic to those of the nuclear disarmament movement:

1) It rejects the notion of a limited nuclear war with only about one in four saying a confrontation with the Soviets could be limited to the use of tactical nuclear weapons.

2) A majority of Americans are opposed to using tactical nuclear weapons to prevent the fall of Western Europe to conventional Soviet forces, but a 49 per cent plurality think the Reagan Administration would favor the use of nuclear weapons in such a case.

3) Few Americans (7%) believe we are ahead of the Soviets in nuclear weaponry...Nonetheless, 50 per cent think the United States has enough weapons to destroy its enemies, and only 31 per cent think we need more.

With the Soviets possessing superior conventional forces in Europe and the disillusionment with arms control which has resulted in a growth in nuclear weapons favorable to the Soviets, the U.S. general public is questioning the wisdom of our nuclear deterrence strategy. These issues have led to SDI and its fundamental appeal to the American public. SDI blends well with our national style of defensive peace and morality. However, public opinion will play a critical role in shaping its future.

# ENDNOTES

1. The White House, <u>National Security Strategy of the</u> <u>United States</u>, January 1988, p. 22.

2. Frank C. Carlucci, "An Overview of DOD's Space Policy," <u>Defense 88</u>, November/December 1988, pp. 3-6.

3. <u>Ibid</u>.

4. President Reagan, "Address to the Nation on Defense and National Security," March 23, 1983, <u>Public Papers of the</u> <u>President of the United States</u>, Ronald Reagan 1983, Book 1.

5. Kenneth Adelman, "The Impact of Space on Arms Control," Defense Science 2005, April/May 1985, pp. 41-48.

6. <u>Statement of Secretary of Defense Robert S. McNamara</u> <u>before the House Armed Services Committee on the Fiscal Year</u> <u>1966-70 Defense Program</u>, 18 February 1965, p. 39.

7. Harold Brown, <u>Department of Defense Annual Report Fiscal</u> Year 1981, 1980, p. 79.

8. Desmond Ball, "Targeting for Strategic Deterrence," <u>Adelphi Papers</u>, Summer 1983, p. 2.

9. <u>Ibid</u>.

10. Kenneth Woodward, "Churchman v. the Bomb," <u>Newsweek</u>, January 11, 1982, pp. 70-71.

11. George Gallup Jr., "The Gallup Poll - Public Opinion 1982," Wilmington Delaware, 1986.

12. <u>Ibid</u>.

# CHAPTER IV

## CONCLUSION

Subsequent to President Reagans's 1983 address, many Soviet leaders have expressed the concern that the United States may be attempting to pull away from the Soviet-American parity. which had been gained at great expense, and that the U.S. was again striving to achieve some degree of military superiority. The impact of the Strategic Defense Initiative, with its alleged first strike intent, on this sense of impending Soviet inferiority can best be understood in the context of strategic, technological and geographical asymmetries between the two countries.

Each side's nuclear arsenals were developed to focus on the dissimilarities of defense needs. The United States supports a geographically scattered alliance of pluralistic democracies, and the Soviet Union supports a totalitarian system defending a large continental land mass. The United States deploys the majority of its nuclear warheads on relatively invulnerable submarinelaunched ballistic missiles (SLBMs) and long range bombers. Less than 20 per cent of U.S. nuclear warheads are on easily targetable land based intercontinental ballistic missiles. The Soviet Union, in striking contrast, as a traditional land power, deploy's more than 70 per cent of its strategic warheads on ICBMs, with the balance deployed by the less vulnerable submarine force.1

In the area of technology, Soviet inferiority is indeed

evident. Soviet submarines, though making great improvement, are still noisier and thus easier to detect and more vulnerable than their American counterparts. Soviet anti-submarine warfare capabilities, also making gains, still lag behind that of the United States. Soviet SLBMs still rely largely on liquid fuel rather than solid fuel. The maintenance of liquid fuel missile systems requires the carrying vessel to spend significantly more time in port, increasing vulnerablity, and less time on patrol.<sup>2</sup>

Another very significant strategic threat to the Soviet Union is the geographical and political asymmetries which have given the United States numerous military bases and nuclear installations around the perimeter of the Soviet Union while allowing them few near the United States. Related to this relative disadvantage, the Soviet Union faces not one, but four nuclear adversaries: the United States, Great Britain, France and China. Since Great Britain and France are allied with the United States, and Great Britain coordinates the targeting of her forces with those of American strategic arsenals, the Soviets quite naturally see a threat where the whole is greater than the sum of its parts.<sup>3</sup>

The Soviet Union suffers a significant imbalance in both flexibility of nuclear options and technological capability as compared to the strategic capabilities of the United States and her allies. In this light, the Strategic Defense Initiative poses a new and potentially lethal threat to the Soviet reliance on their primary capability of deterrence, its land based

missiles. The prospective development of new and sophisticated means of attack missiles from space, whatever the effectiveness and reliability may be, undermines, at least in principle, their nuclear deterrent and suggest the development of an American preemptive posture.

The Soviet view of deterrence involves neither the concept of mutual assured destruction nor that of limited nuclear options. They contend that deterrence of nuclear attack is best achieved by the ability to wage a nuclear war successfully. The better the Soviet forces are equipped and trained to fight a nuclear war, the more effective they will be as a deterrent to a nuclear attack on the Soviet Union. If deterrence fails, these forces will then be used purposefully and massively for military victory.<sup>4</sup>

Soviet writings on nuclear war indicate the importance of the initial strikes and seizing the initiative in those strikes. One military text teaches,

Mass nuclear missile strikes at the armed forces of the opponent and at his key economic and political objectives can determine the victory of one side and the defeat of the other at the very beginning of the war. Therefore, a correct estimate of the elements of the supremacy over the opponent and the ability to use them before the opponent does are the key to victory in such a war.

Marshal of the Soviet Union Kirill Moskalenko, former Commanderin-Chief of Strategic Rocket Forces, wrote, "In view of the immense destructive force of nuclear weapons and the extremely limited time available to take effective countermeasures after an

enemy launches his missiles, the launching of the first massed nuclear attack acquires decisive importance."<sup>6</sup>

This line of reasoning lays the basis for the Soviet assessment of the impact of any strategy or technology which neutralizes their retaliatory force. Since 1972, there have been several significant changes in U.S. strategic nuclear targeting policy, as manifested in NSDM 242, "Planning the Employment of Nuclear Weapons"; PD 59, "Nuclear Weapons Employment Policy"; and most recently NSSD 13. The net effect of these directives has been the shift in emphasis form destruction of Soviet economic recovery capability to the targeting of Soviet military and political assets.<sup>7</sup>

The consequence of this shift is to place the Soviet SS-18 and SS-19 missiles at risk from attack by the MX and Trident D-5. The U.S. Air Force projects that the yield and CEP combination of the MX missile is sufficient to achieve acceptable damage against the current generation of SS-18 and SS-19 ICBM complexes. It is reasonable to assume that the Soviet assess the Trident D-5 warhead to have equivalent hard target kill capability with a significantly shorter delivery time.<sup>8</sup>

In the Soviet view, the U.S. counterforce targeting philosophy in conjunction with the superior capabilities of the MX and Trident D-5 missile systems pose a serious threat to one of the basic tenets of Soviet military doctrine, the possibility to fight and win a nuclear war, and in some circumstances may prove to be a first strike capability in and of themselves. To

these already potent forces, the addition of a defensive system with the capabilities envisioned by the Strategic Defense Initiative places the Soviet Union in a position of vulnerability controlled solely by the good will of a foreign power.

The Soviet Union has long recognized the notion that strategic defense is a desirable objective. It also recognizes its vulnerability to nuclear attack - although possibly less so than the United States in some very important respects. For many years, the Soviet Union has pursued programs to limit the damage it would receive in the event of a nuclear war, especially to its leadership and command and control structure. These programs have included civil defense, hardened shelters, an operational ballistic missile defense system and a great extant anti-bomber system. Keep in mind that these developments have preceded SDI. In short, the Both nations appear to be on similar courses. United States does not have to convince the Soviet Union of the value of defense against nuclear weapons. The Soviet Union has long appreciated the value of strategic defense.

Without promoting continued Soviet insecurity, the United States could proceed with the deployment of a limited SDI capability designed to protect strategic systems and command and communications centers against a sudden Soviet attack. At the same time, the United States could continue to improve its second strike capability based on the strategic triad of bombers, SLBMs and ICBMs. These second strike forces should not threaten the Soviet Union with the prospect of an American disarming first

strike. Additionally, the United States should make very clear the limits placed on deployment of those U.S. systems with potential first strike capability so that the scale of such deployments does not pose to the Soviets an unacceptable degree of risk. With this type of approach, a strategic balance could be maintained.

#### ENDNOTES

1. Jane M.O. Sharp, "Soviet Approaches to Arms Control," in <u>The Arms Race in the Era of Star Wars</u>, eds. David Carlton and Carlo Schaerf, p. 122.

2. <u>Ibid</u>., p. 123.

3. <u>Ibid</u>., p. 126.

4. Benjamin S. Lambeth, "The Sources of Soviet Military Doctrine," <u>Comparative Defense</u> Policy, eds. R.B. Horton, A.C. Rogerson and E.L. Warner, p. 212.

5. <u>Marxism-Leninism on War and Army</u>, translated and published under the auspices of the U.S. Air Force, p. 30.

6. Joseph D. Douglass and Amoretta M. Hofeber, <u>Soviet</u> <u>Strategy for a Nuclear War</u>, p. 36.

7. Roman Kolkowicz and Ellen Propper Mickiewicz, eds., <u>The</u> <u>Soviet Calculus of Nuclear War</u>, p. 78.

8. <u>Ibid</u>.

#### BIBLIOGRAPHY

1. Abrahamson, James A. "The Strategic Defense Initiative, a Technical Summary." <u>NATO's Sixteen Nations</u>, April 1986, pp. 14-19.

2. Adelman, Kenneth. "The Impact of Space and Arms Control." <u>Defense Science 2005</u>. April/May 1985, pp. 41-48.

3. Akhromeyev, S. "The ABM Treaty - - An Obstacle in the Path of the Strategic Arms Race." <u>Pravda</u>, 4 June 1985, p. 4, as translated in <u>The Current Digest of the Soviet Press</u>, Vol. XXXVII, No. 22, pp. 1-3.

4. Akhromeyev, S. "Washington's Assertions and the Actual Facts." <u>Pravda</u>, 19 October 1985, p. 4, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXVII, No. 42, pp. 7-8.

5. Andropov, Yu. U. "Andropov Hits Reagan on Missile Defense." <u>Pravda</u>, 27 March 1983, p. 1, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXV, No. 13, pp. 4-5.

6. Ball, Desmond. "Targeting for Strategic Deterrence." <u>Adelphi Papers</u>, No. 185, Summer 1983.

7. Brezhnev, L.I. "Comrade L.I. Brezhnev, General Secretary of the CPSU Central Committee to the 26th Congress of the Communist Party of the Soviet Union and the Party's Immediate Tasks in the Fields of Domestic and Foreign Policy." <u>Pravda</u>, 24 April 1981, pp. 2-9, as translated in <u>The Current Digest of the</u> <u>Soviet Press</u>, Vol. XXXIII, No. 14, pp. 1-3.

8. Brezhnev, L.I. "Outstanding Exploit of the Defenders of Tula." <u>Pravda</u>, 19 January 1977, pp. 1-2, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXIX, No. 3, pp. 1-5.

9. Brown, Harold. <u>Department of Defense Annual Report</u> <u>Fiscal Year 1981</u>. Washington: Government Printing Office, 1980.

10. Carlucci, Frank C. "An Overview of DOD's Space Policy." Defense 88. November/December 1988, pp. 3-6.

11. Douglass, Joseph D. and Amoretta M. Hofeber. <u>Soviet</u> <u>Strategy for a Nuclear War</u>. Stanford: Hoover Institution Press, 1979.

12. Gallup, George Jr. "The Gallup Poll - Public Opinion 1982." Wilmington Delaware, 1986.

13. Garthoff, Raymond L. "Mutual Deterrence and Strategic Arms Limitation in Soviet Policy." <u>Strategic Review</u>, Fal! 1982, pp. 112-147.

14. Garthoff, Raymond L. "SALT I: An Evaluation." <u>World</u> <u>Politics</u>, October 1978, pp. 1-25.

15. Gorbachev, M.S. "M.S. Gorbachev's Interview With the Editor of <u>Pravda</u>." <u>Pravda</u>, 8 April 1985, p. 1, as translated in <u>The Current Digest of the Soviet Press</u>, Vol. XXXVII, No. 14, p. 6.

16. Kolkowicz, Roman and Ellen Propper Mickiewicz, eds. <u>The</u> <u>Soviet Calculus of Nuclear War</u>. Lexington, <u>Massachusetts</u>: Lexington Books, 1986.

17. Lambeth, Benjamin S. "The Sources of Soviet Military Doctrine." <u>Comparative Defense Policy</u>. Eds., R.B. Horton, A.C. Rogerson and E.L. Warner. Baltimore: Johns Hopkins University Press, 1974.

18. <u>Marxism-Leninism on War and Army</u>, translated and published under the auspices of the U.S. Air Force, Washington: Government Printing Office, 1972, pp. 200-216.

19. McConnell, James M. "Shifts in Soviet Views on the Proper Focus of Military Development." <u>World Politics</u>, April 1985, pp. 318-343.

20. Ogarkov, N. "Provide a Reliable Defense for Peace." <u>Isvestiya</u>, 23 September 1983, pp. 4-5, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXV, No. 38, p. 8.

21. Reagan, Ronald. "Address to the Nation on Defense and National Security." <u>Public Papers of the President of the United</u> <u>States</u>. Ronald Reagan, 1983, Book 1.

22. Semeyko, L. "Interview With the Editor." <u>Krasnaya</u> <u>Zvezda</u>, 15 April 1983, p. 3, as translated in <u>The Current Digest</u> <u>of the Soviet Press</u>, Vol. XXXV, No. 16, p. 17.

23. Semeyko, L. "SDI - What Is It?" <u>Isvestiya</u>, 29 January 1986, p. 5, as translated in <u>FBIS Daily Report of the Soviet</u> <u>Union</u>, Vol. III, No. 019, pp. AA12-AA14.

24. Sharp, Jane M.O. "Soviet Approaches to Arms Control." <u>The Arms Race in the Era of Star Wars</u>. Eds. David Carlton and Carlo Schaerf. New York: St. Martin's Press, 1987

25. Sokolov, S.L. "Marshal of the Soviet Union S.L. Sokolov, USSR Minister of Defense, Answers Questions from a Tass Correspondent." <u>Pravda</u>, 6 May 1986, p. 4, as translated in <u>The</u> <u>Current Digest of the Soviet Press</u>, Vol. XXXVII, No. 18, pp 7-9.

26. Statement of Secretary of Defense Robert S. McNamara

<u>before the House Armed Services Committee on the Fiscal Year</u> <u>1966-70 Defense Program</u>. Washington: Government Printing Office, 1965.

27. Trofimenko, G. "From Confrontation to Coexistence." International Affairs, October 1975, pp. 33-41.

28. U.S. Arms Control Agency. <u>The Soviet Propaganda</u> <u>Campaign Against the Strategic Defense Initiative</u>. Office of Public Affairs and the Bureau of Strategic Programs, Washington: Government Printing Office, 1986.

29. U.S. Executive Office of the President. <u>The President's</u> <u>Strategic Defense Initiative</u>. Washington: Government Printing Office, 1985.

30. Ustinov, D.F. "Struggle for Peace, Strengthen Combat Capabilities." <u>Pravda</u>, 19 November 1983, p. 4, as translated in <u>The Current Digest of the Soviet Press</u>, Vol. XXXV, No. 46, pp. 6-8.

31. The White House, <u>National Security Strategy of the</u> <u>United States</u>. Washington: Government Printing Office, 1988.

32. Woodward, Kenneth. "Churchman v. the Bomb." <u>Newsweek</u>. January 11, 1982, pp. 70-71.