THE "RED SHIELD" --SOVIET STRATEGIC DEFENSE

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James Hackett

I want to welcome you all to The Heritage Foundation and to our roundtable discussion on the Soviet strategic defense program.

There seems to be a good deal of confusion about what the Soviets are doing with respect to strategic defenses. The most common question I hear is, "Who is ahead?" But I think that really is not the right question. For one thing, it is difficult to answer because strategic defenses take so many different forms.

The short answer has to be that the Soviets are ahead in deployed strategic defenses. They have an existing strategic defense network around Moscow, which they are modernizing and improving. They have a major civil defense program. They provide deep underground bunkers and command centers for thousands of their key people. They are building a large early warning radar at Krasnoyarsk that is an indisputable violation of the ABM Treaty. They are deploying large numbers of dual-purpose interceptors with ABM capabilities, and they are developing mobile radars and mobile interceptors.

Most of these things they are doing and we are not doing. So with regard to the development and deployment of strategic defenses using existing technology, we must say "Yes, the Soviets are ahead." They are ahead in these areas not because of superior knowledge or technology, but because they have the political will to defend their society. And our political leaders apparently do not.

Concerning the more exotic technologies, we know that they are developing and testing some of the very things they want us to restrict to the laboratory. Most of this work on new technologies is done inside, in great secrecy, so it is difficult for us to get accurate information on what they are doing.

We have invited here today four experts in different areas of the Soviet strategic defense effort, in the hope they can cast some light on the Soviet program. Our first speaker, Mr. Frank Gaffney, is Deputy Assistant Secretary of Defense for Nuclear Forces and Arms Control Policy. Mr. Gaffney is going to speak about the Soviet strategic defense program.

Frank Gaffney

Thank you, Jim. I believe that this conference is more timely in light of developments that have taken place since it was scheduled. Thinking in particular of events at Reykjavick and even more recently at Vienna, it is clear the Soviets do not share our opinion that strategic defenses can contribute enormously to stability and reinforce the security postures of our countries. The Soviet position suggests, indeed, that strategic defense is somehow anathema to that. They are opposed to the very idea of preventing nuclear weapons from effectively attacking targets either in this country or in the Soviet Union.

I think we will be able to demonstrate this morning just how preposterous that claim is. Indeed, the Soviet Union today, as it has been throughout the post-war period, is fundamentally committed to the idea of defending the Soviet motherland against nuclear attack as well as against attack by any other means. This commitment is manifested in an enormous investment in strategic defenses of all types.

But a word of background. There is considerable misunderstanding, I believe, about the developments of the early 1970s and what they imply for strategic defense and the commitments of the two sides to strategic defense. In particular, I am thinking of the Anti-Ballistic Missile Treaty, which was consummated in 1972. Most people believe that the ABM Treaty canonized the principle that neither side would undertake to defend itself against nuclear attack. Both sides were implicitly, if not explicitly, subscribing to the principle of mutual vulnerability as a new and rather dramatically different strategic concept than that which had prevailed prior to 1972.

We, for our part, fully lived up to that concept. We not only closed down the early deployment part of our Safeguard anti-ballistic missile system, which we were not required to do by the ABM Treaty, but we also did far more. We effectively got out of the air defense business. Civil defense, which had long been a token effort anyway, was virtually dispensed with altogether. Leadership defense amounted to nothing more than retaining a few old structures left over from an earlier era. And passive defenses of our own strategic forces, through hardening of missile silos, for example, were given up with the exception of retaining what had been previously constructed. In short, we implemented as fully as we could this notion of vulnerability as a conscious matter of policy.

For their part, the Soviets neither implemented it with respect to ballistic missile defense nor with respect to these other important forms of strategic defense. And their program of strategic defenses, which we estimate has absorbed 50 percent of Soviet strategic investment over the past several decades, is bearing fruit. There can be no question that the Soviet Union today is less vulnerable to strategic attack than is the United States. And with respect to the ABM Treaty itself, we have seen mounting evidence, some of which Jim Hackett has just alluded to, that the Soviets are prepared even to violate its explicit terms and limitations.

The implications over time of this sort of asymmetric approach to strategic defense speak for themselves. It poses a real and growing challenge to the security of the United States and indeed to the West as a whole to permit this asymmetric way of defending our people, our societies, and our values to continue as it has since 1972.

But adding insult to injury is the Soviet contention, which seems to be taken at face value in so many quarters at home and abroad, that they are not, in fact, pursuing a rigorous, relentless strategic defense program. I think after the presentations are made this morning, you will be obliged to conclude, as we have, that what the Soviets really are interested in doing at the negotiating table, and in the public fora in which they operate so effectively, is not to stop strategic defense, but to stop our strategic defense initiative.

Mr. Hackett: Thank you, Frank. Our next speaker is Mr. James McCrery, the Strategic Programs Officer at the Defense Intelligence Agency. We have asked him to discuss Soviet research and development in strategic defenses.

James McCrery

Thank you very much. I usually circulate in the classified world, so it is refreshing to be able to discuss these things in the open and gain some other perspectives on these issues.

As you have heard once, and you may hear it two or three more times today, the Soviets do not have public initiatives. They do not announce their programs, but they do have them. And their military programs are almost exclusively long-term, very goal-oriented kinds of programs. The Soviets freely chose to use their offensive military might as their claim to superpower status in the world. And, in fact, that is about all they have going for them.

Note that I said offensive military might. Even the strategic defense program that is the topic of our discussion today is oriented in an offensive mode. If you look at how they deploy defenses, you will discover that defenses are there, that they are quite extensive, and that they are primarily to defend military forces, command and control facilities, command authorities, and communications. In short, they defend the things that are required to control and to operate their offensive forces.

The programs that we see, both on the offensive side and on the defensive side, are driven by a doctrine and a strategy—a very well defined strategy. It was evolved during the late 1950s as a very conscious effort on the part of the higher levels in the Soviet Communist Party and military to decide how nuclear weapons fit into their concepts of war fighting. The result was a strategy promulgated by the Party and made official doctrine of the Soviet Union in 1960. It called for the Soviet Union to develop the ability to seize the initiative and hold it throughout a conflict, be it at the local level or the level of intercontinental nuclear war. That required a first-strike counterforce offensive capability, and strategic defenses to do what I have just said their defenses are designed to do.

Whenever you look at Soviet defenses, you must be very careful to look at them in terms of a Soviet frame of reference, not in terms of the old mutual assured destruction deterrence-minded framework into which we are used to placing such issues. So while the U.S. chose to prepare a retaliatory offensive force and to give up our strategic defenses, the Soviet Union chose to prepare a first-strike offensive force, emphasizing ballistic missiles and especially land-based intercontinental ballistic missiles (ICBMs). They then chose to make those and other important entities invulnerable to a U.S. retaliatory attack. We see that in their extensive air defenses. Their air defenses are not there to defend against a first-strike. They are there to defend against our bombers, which are retaliatory weapons. Their deployment of those air defenses is probably rivaled in magnitude of effort only by the Great Wall. They are very extensive--over 14,000 air defense interceptor missiles deployed throughout the Soviet Union.

In the area of passive defenses, which we have shied away from in the United States, the Soviets have a very extensive program. This is an area that people do not typically think of when you say strategic defense. A thousand, maybe more, shelters are scattered around the countryside for the protection of the leadership throughout the Party and military, and other important elements of society.

Another important activity is the hardening of their ICBM silos and some of their leadership protection facilities. This is a very serious passive defense underlay. It does not fall under the provisions of the ABM Treaty, but still provides a very effective base for a defense against ballistic missiles.

As soon as it was practical, the Soviets deployed an active ballistic missile defense system. That active system is deployed at their chief command, control, and communications center at Moscow. There, along with a key part of their extensive passive defense system, is what for the last 17 years has been a pretty effective defense against retaliatory attacks. They deployed it about 17 years ago and have maintained it ever since.

That system consisted of a couple of very large and capable radars that we call "Doghouse" radars. They have been maintained for over 15 years. There were four ABM interceptor sites deployed there, and they also have been maintained. For early warning purposes, the Soviets had eleven large radars located around the periphery of the country that gave almost complete coverage against ballistic missile attack from both the United States and from submarines at sea. They have, again, maintained that system and continue to maintain it as an early warning against ballistic missile attack.

In addition to that older system, there is a new system being built. Sometimes you hear someone say it is an upgrade of the old system. It is not an upgrade of the old system; it is a new deployment of a new system at Moscow. It has been underway for several years and probably will take two or three more years to complete. It consists of a new, sophisticated large ABM radar located near Moscow. There are silo-based interceptor missile launchers being deployed at some of the older sites and at five new sites near Moscow. When it is complete, the Soviets will have a dual-layer missile intercept system, with both short-range and long-range capabilities.

The Soviet goal is to provide strategic defense for the entities within the Soviet Union that they determine are the most important. As we see things being deployed, we see them checking off a prioritized feasibility list. As they find that they can do something militarily significant, they do it. They do not wait until they have a solution to all of their problems, just until they have something that will add in a significant way to the overall equation of success in a military conflict. And they have done that with their ABM program as they have with all other military programs. What has existed in Moscow for a long time is a sort of small area defense, one that could be used in a preferential way to gain a lot of leverage along with all of that passive defense. The new system that is being deployed around Moscow is a much finer version that comes in two layers: one exoatmospheric and one endoatmospheric.

In addition, the Soviets have a rapidly deployable ABM system that has been under development for a long time. There are dual-capable SAM systems (surface-to-air missiles) under development that probably will be deployed fairly soon and very extensively. They could contribute considerably to the ABM capability of the Soviet Union.

There now is a new network of Krasnoyarsk-type radars under construction. The Krasnoyarsk radar, because of its location, is a clear violation of the ABM Treaty. That is

very serious and it demonstrates the Soviet attitude with regard to treaties when a military requirement is present. But the radar network is of real strategic significance.

The kinds of technology that have to be developed in order to do very long-range midcourse intercepts or boost-phase intercepts are still under development both here and in the Soviet Union. But there is no question in my mind that when those technologies are available, the Soviets will deploy them. To deviate from that would be to deviate from what they have demonstrated as policy for as far back as any of us can remember. That is, when the technology is available to them they will deploy it.

In addition to these traditional ABM systems, for a long time the Soviets have been conducting very serious research and development in the areas we think of when someone mentions the term Star Wars: laser weapons, particle beam weapons, lasers for air defense and for ballistic missile defense. We expect to see some of these new weapons deployed in the not too distant future for air defense. There have been significant developments in ballistic missile defense, and we give some estimates in our recent publications. Soviet Military Power, for example, indicates that the Soviets might have a laser capability for anti-satellite purposes in the not too distant future.

The Soviets have been working at least as long and much harder than the United States in these areas of advanced, exotic types of weapons. It is very difficult to estimate the dollar equivalent of Soviet expenditures on these activities because of different accounting procedures in the Soviet Union and the United States, but there has been several times the level of effort and devotion of resources to these efforts in the Soviet Union.

The Soviets are working on a space-based program or programs for space-based weapons and they are going to require a large launch vehicle capability for that purpose. Their launch vehicle will be used to launch their shuttle, but also to launch other kinds of payloads. They have built flexibility into their launch vehicle that we do not have in ours. They will be able to launch a whole shuttle payload into lower orbit, while we can put up only about a third of the shuttle payload.

The important thing, though, is not to look at these developments one program at a time, but to stand back and look at the whole forest. What you see is a strategic defense program, including ballistic missile defenses, that respond to the Soviet doctrine and strategy of seizing and holding the initiative, just as their offensive weapons respond to that doctrine and strategy. We do not believe that the Soviets intend to back off from their strategic defense program, which for so long and in so many ways they have demonstrated their devotion to.

Mr. Hackett: Thank you, Jim. It is good to have you in from the cold here at The Heritage Foundation. Our next speaker is Dr. Joseph Douglass of Falcon Associates, who has written on Soviet cover, concealment, and deception, which I think says quite clearly what they are up to.

Joseph Douglass

Thank you, Jim. The key issue today is the question of verification and how it will affect the possibility of a new arms control treaty. Within verification, we immediately focus on questions of cover, concealment, and deception. In looking at this subject, we are concerned with two very different vectors, both of which the Soviets are talented in.

The first concerns their ability to keep secret or hidden various weapons developments and the second concerns their ability to deceive or mislead us with regard to their intentions and sometimes their capabilities. Both of these enter very strongly into the question of to what extent we can verify with confidence a particular arms control agreement.

The position of the Administration, as I understand it, has been from the beginning that national technical means by themselves are inadequate to handle the job of verification and that some type of cooperative measures are required. Here one really has to underline the word cooperative. A question that has been discussed quite a bit is that of on-site inspection. The thing that strikes me is that on-site inspection carries with it many of the same problems as national technical means. For it to be successful, on-site inspection is going to require a great deal of cooperation. It is no panacea.

A while ago, there was a special on William Buckley's Firing Line program which really brought home the problems of on-site inspection. This was a film called The Harvest of Despair, a documentary on forced starvation in the Ukraine in the early thirties. This was a case in which the Soviets made considerable efforts to stop the flow of food into the area and even to extract what was grown there. Estimates of the number of people who starved were from five to ten million. But there was associated with this a program to maintain that it was not taking place. And when word started leaking out, the Soviets invited the French ambassador to tour the area. He did, and ended up saying that he could see no problem, that everywhere there was plenty of food and no sign of starvation.

I think this illustrates the nature of the problem we are dealing with, and it certainly shows the ability of the Soviet Union to control what people see, even with on-site inspection. Another good example was described to me by a former Czech official, who said that when the air defenses went into Czechoslovakia in the mid-1960s, the first unit that was deployed was fake. When all the deployments were complete, he said, 50 percent were fakes. And those 50 percent were constructed to look identical to the 50 percent that were real. The only differences were that the fake missiles were made of wood and the sites were manned by intelligence personnel rather than air defense officers. The dummies had radars and made radar emissions to complete the deception.

Over the past year, I had the opportunity of discussing Soviet arms control motivations and objectives with several former officials from behind the Iron Curtain. I would like to mention some of the things they said that bear on the problems of arms control, verification and deception.

First, they emphasized that to the Soviets arms control is really a strategic operation. It is designed to enable them to gain superiority, to confirm intelligence on U.S. plans and intentions, to mislead the United States about Soviet intentions and capabilities, and to exacerbate U.S.-European relations.

Further, statements made to these former East bloc officials by top-level Soviet officials made it quite clear that arms control agreements would not be allowed to upset Soviet plans, nor would the Soviets allow the West, through the arms control process, to gain an

accurate picture of Soviet capabilities. This was the Soviet perspective as explained to these people by top Soviet officials, in this particular case Marshal Grechko himself. The former East bloc officials also said that basic cheating and deception was planned as part of the arms control process and that as a general principle such planning took place prior to the completion of an agreement.

In the examples they provided of violations or decisions to violate agreements, it seems that there were two primary vectors. One was secrecy—a cover if you will—and the second was propaganda or disinformation. The propaganda and disinformation were designed both to deflect attention away from what the Soviets were actually doing and to shift the blame to the United States or the West in the event their cheating was discovered. Cheating by the Soviet Union is not a frivolous pursuit. It is a very serious and planned activity, entered into at the highest levels of government.

Two examples are particularly interesting because of the first-hand knowledge of a former Soviet official. One concerns the Test Ban Treaty of 1963. This former official was informed by top Soviet officials in 1962 during a review of the treaty negotiations that the Soviet purpose in pursuing the treaty was political. It was to show the world that the Soviets were leading in trying to control the arms race, and it would demonstrate that it was possible for the Soviet government to force the U.S. government into an arms control agreement.

The Soviet officials also indicated that the treaty would not stop any progress in Soviet weapons developments. They said they expected to resume nuclear testing within six months after the agreement was signed, with small tests they did not believe the U.S. could detect. However, if the U.S. did detect them, it would provide good intelligence on U.S. monitoring capabilities.

A second treaty issue which was particularly interesting dealt with the exclusion of weapons of mass destruction from space. The United Nations General Assembly passed a resolution on this subject in October 1963. It was followed by a treaty in 1967. One of the people I discussed this with related that he had read the Soviet report on the Soviet Defense Council decision that was taken on this in 1963. It stated that the Soviet Union would not follow the U.N. Resolution. Attached to the document was a special order from the Soviet Defense Council to the Minister of Defense, the Minister of the Interior, and the President of the Academy of Sciences, where most of the research is conducted, instructing them to hide Soviet activities that might be banned and ordering the imposition of secrecy measures so that Soviet violations did not leak out to the West.

In 1966, the Czechoslovak Defense Council discussed this Soviet Defense Council decision in the context of a Czech decision, at Soviet direction, to begin applying their scientific capabilities to the military use of space, and how those programs were to be hidden. The subjects that the Czech scientists were to work on were: 1) weapons that could be used to destroy satellites in space; 2) the use of weapons in space to destroy ground targets; 3) the use of biological weapons stored in space; 4) laser weapons; and 5) communications for command and control.

In order to maintain secrecy, the Defense Council ordered that there would be no mention of military applications in space below the top secret level, and that the Academy

of Sciences program in this area would be deleted from all Academy plans and from all reports, including those that went to the Politburo. All Czech scientists who worked on these programs would have to pass additional security investigations in which the KGB would coordinate with Czech military counterintelligence. The work was to be under the direct supervision of the Czech Ministry of Defense, which meant that it actually would be supervised by the Soviet Ministry of Defense. There was also attached a political plan, designed as a type of a cover. It was a propaganda plan, based on Soviet guidance, to be employed against the West, accusing the West of exploiting space for military purposes.

The Soviets are very adept at keeping these programs very close to the chest and making sure that documentation on them does not leak out. In this case, a few sentences that required an understanding of the program to interpret their meaning were contained in Czech secret-level publications. This led the Soviets to severely chastise the Czechs the following year for allowing such information to get out in documents classified below top secret. Most of the instructions issued in this and similar circumstances are oral. There is no written record and they are held as closely as possible.

Mr. Hackett: Thank you, Joe. Our next speaker is Mr. Ralph Bennett, a senior staff correspondent for the <u>Reader's Digest</u>. Mr. Bennett authored an article that appeared in the <u>Reader's Digest</u> issue of July 1986 entitled "Russia's Red Shield." If you have not seen it, the super editors at the <u>Digest</u> have succeeded in condensing a lot of material into a very coherent short article. Mr. Bennett is going to talk about the Soviet disinformation program.

Ralph Bennett

Listening to my august but restrained friends here, I have an old story that is very appropriate to what we are talking about today. It is the story of the milk wagon that is parked on the street; the street is deserted; it is quite early in the morning and this man is passing the milk wagon. The milkman is inside the apartment building delivering the milk. As the man passes the wagon, the horse says, "Good morning." The man stops, quite surprised, looks at the horse and says, "Did you say good morning?" The horse says, "Yes, good morning. How are you?" The man says, "This is amazing, I can't believe it, a talking horse."

The horse says, "Oh, yes. I not only talk, but do you know that I once won the Kentucky Derby?" The horse is starting to tell the story just as the milkman comes out. The man looks at the milkman and says, "You really have an amazing horse here." And the milkman looks at him and says, "Don't believe that stuff about the Kentucky Derby."

Sometimes, we miss the point of what is really surprising about the information we have available to us. I am concerned about public perceptions of the Soviet SDI program, because there is not much public perception of the Soviet SDI program.

Recently there was an open letter to the President signed by 30 Soviet emigre scientists, which I quote: "One, the Soviet scientific community and government leaders believe that effective strategic defenses are technically possible and doable. Two, the Soviet Union has been intensely working on its own version of the Strategic Defense Initiative since the late 1960s and puts much more of its efforts and resources into its Star Wars and strategic

defense programs than does the U.S." And another point, again quoting these scientists, "The Soviet communist leaders can be expected to continue working on their Star Wars system either overtly or covertly and with high priority no matter what they say or what they sign or what the U.S. does."

Now please be advised that we should always take with a grain of salt anything that scientists say, whether they are Soviet or American. And we should always, and I am afraid that many of my colleagues in the journalistic community do not do so, differentiate between science and politics masquerading as science. But at least it is interesting that these thirty scientists made this observation about a Soviet program that no one has ever heard of.

We have right now, I believe, one weapons-grade laser operating in the United States. The Soviets have at least ten we have identified and there may be more. At Los Alamos right now our scientists are working on developing a very compact particle accelerator. This is vital work toward the development of something you have all heard about, a particle beam weapon of some kind. At the heart of that system is a Soviet invention dating back to the 1960s called a radio frequency quadrapole. Years ago, the Soviets mysteriously decided that there would be no more literature, open or semi-open, on this or any similar development. Such information suddenly disappeared from these vaunted scientific exchanges that we hear are so important. Of course, the Soviets exchange very little information that is vital to them in these so-called exchanges, anyway.

The only operating ABM system in the world is around Moscow. I recently saw it described in the press as "the aging system," which is yet another myth that is constantly perpetuated in the press. This system has been upgraded over the years as the Soviets have acquired greater knowledge of such things as guidance radar, fuel technology, and whatever else is needed to improve this operational system. And while laboratories are fine, there is nothing like operational experience. We have the F-16 fighter and we know well that the blood of the Sabre jet and a lot of other fine fighters flows in its veins. A lot of things that were learned in developing the weapons we have today were the result not of thumb sucking in a laboratory, but of operational experience.

I just came back from Europe and did not have a lot of time, but I conducted a survey. It was by no means a scientific survey, but certainly on a par with some of the surveys we read about in the media today. I looked at 196 magazine, newspaper, wire service, and scientific journal articles on SDI dating back to January 1986. I concentrated on the cream of the media, the top newspapers, the top magazines, the wire services, and television news reports. Of the 196, only 11 dealt with the Soviet SDI program. That is 6 percent reporting on the Soviet "Star Peace" program, whatever that turns out to be.

There were lots of stories about alleged misuse of U.S. SDI funds and there were lots of pieces on that favorite theme--that SDI will never work, that it is beyond our capabilities. We are failing to understand that SDI is not a science problem; it is an engineering problem. We are not talking about breakthroughs on the same level as the Manhattan Project. We are talking about engineering problems, and when you get out into the engineering community and talk to people who are involved in the work, you find they are not daunted by the prospects of designing and building strategic defenses that work.

So it is interesting that the only SDI program in the world embracing actual operational components is virtually ignored in the press, while the initiative we are taking in contemplating the building of a program consumes all of our attention. Now we can say that is a function of the secrecy that we have talked about. It is difficult to penetrate the veil of Soviet secrecy. But I doubt that there is any fellow journalist here who says it is really that hard. If you dig hard enough, there is plenty of information to be found. I am not talking about mindless gathering of propaganda, but hard information that can be evaluated; and once obtained it can be taken to people who know what they are talking about and who can determine whether it is hard information or not.

Secrecy helps make formidable this system we are trying to deal with-a system which has built more weapons than any in history, but which cannot feed itself; a system in which you have to bribe a nurse for a bed pan in their free medical system-but it is also a function of our press ignoring this story, somehow thinking that the Soviet side of it is irrelevant. Why that should be I do not know. I have thought about it many times and I cannot understand why that should be the case. But the U.S. program, which is a response to the Soviet program, is the subject of some of the most ignorant prattling I have ever seen in the media.

Unfortunately, a lot of journalists treat government information on the Soviet programs as propaganda. Anyone who tries to cover defense in a coherent way will find a tremendous amount of information in government publications and you do not have to read very closely between the lines to see a lot more. They are very valuable and they are very substantial.

We as journalists are "red meat" for disinformation, especially when it is in the guise of something new and sensational. Our record of being critical when information is first released is not very good. I cannot think of a better example than the great nuclear winter scare, which is now being torn to ribbons. When I think of the amount of time and newsprint that was used on this, I am happy to say that we did not fall for it. I just mention two comments on it, one by George Rathjens, a professor at MIT, a Nobel laureate and certainly not one who would be considered a hawk, who said, "Nuclear winter is the worst example of the misrepresentation of science to the public in my memory." And another person who could certainly not be thought of as being in the camp of the hawks, Freeman Dyson, "It is an absolutely atrocious piece of science, but I quite despair of setting the record straight."

There are a lot of people who were taken in by this smoke job by scientists who, in fact, had a political reason for what they were doing--not a scientific reason. We must be aware of political opposition masquerading as science. There is nothing wrong with political opposition, but what bothers me are groups that try to wrap it in the cloak of science. There is nothing wrong with moral opposition. But some of it is ill-informed and not very clearly thought out. The press is easily victimized by a lot of these masquerades and this is very troublesome. We should all be on our guard about it.

Mr. Hackett: Thank you, Ralph. I think probably everyone in the audience is familiar with Soviet Military Power, issued annually by the Department of Defense, which is one of the publications that Mr. Bennett was referring to. The other is "Soviet Strategic Defense Programs." Both are available free from the Department of Defense. There also are a

couple of publications put out this year (1986) by the U.S. Arms Control and Disarmament Agency that may be of interest. One contains a comprehensive list of Soviet arms control violations, while the other has a list of Soviet disinformation practices. I would now like to ask Dr. Kim Holmes of The Heritage Foundation staff if he would like to add anything.

Kim Holmes

I would like to say a few words about the Soviet military laser program. There have been a flurry of reports in the media over the last couple of months about Soviet activities in the development of lasers, perhaps for an anti-satellite system. You often hear people say that the Soviet Union does not have the advanced technology base to compete with the United States in advanced strategic defense technologies. While this may be true in certain areas, like data processing and microelectronics technologies, it is not the case in areas of laser technology development.

We have known for some time that the Soviet Union built the world's first excimer laser in 1970, for example. We know that the Soviet Union worked on x-ray laser technologies before the United States and may have built some facilities to test this technology. The intelligence reports suggest that the Soviets may have begun deployment of the world's first operational ground-based laser anti-satellite system, which could perhaps be upgraded for use against ballistic missiles by the mid- or late 1990s. And the Soviets have conducted weapons tests in space from a ground-based laser station in Sary Shagan, tests that would have been prohibited under the ten-year ban on SDI testing proposed by General Secretary Gorbachev at the Iceland summit.

But there is one piece of information I would like to point out for those of you who do not know about it. It is information that has come to us through Soviet documents that were released to French intelligence in 1981 and 1982 by a senior KGB official code named "Farewell." He was an official in KGB Directorate "T" for technology. The documents were annual reports of the Ministry of the Military Industrial Commission, which is in charge of coordinating Soviet activities in the West to obtain technology for military applications in the Soviet Union.

The documents revealed that the Soviets were intending to produce "an effective anti-missile defense for our country using high-powered lasers, chemical lasers, and lasers not only based in space and on the ground, but on aircraft as well." There were references in these documents to a number of Soviet organizations associated with the Military Industrial Commission and the Ministry of Defense trying to gain valuable technology in the West on metal optical surface technologies, which can be used in the development of advanced mirrors to be deployed in space to reflect ground-based lasers against ballistic missiles.

You can find references to these documents in <u>The Financial Times</u>, in an article dated October 10, 1986. There has been some discussion about whether the United States government could get copies of these documents from the French government for public release. It would be interesting to see in greater detail what the Soviets have been doing to gain technology from the West. But they clearly have an ongoing space-based laser program, which has existed much longer than the U.S. SDI program.

Mr. Hackett: Thank you, Kim. I will leave with Mr. Gaffney and Mr. McCrery the idea of getting the Soviet documents from the French and then getting them declassified and released to the public. Mr. Bennett said that he went through 196 articles to find eleven on the Soviet strategic defense program. I hope that what was said today will result in a few more articles on this Soviet activity. Thank you all for coming.