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THE INF TREATY MONITORING AND VERTIFICATION CAPABILITIES

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Mr. BOREN, from the Select Committee on Intelligence, submitted the following

REPORT

U.S. SENATE,
SELECT COMMITTEE ON INTELLIGENCE,
Washington, DC, March 21, 1988.

Hon. CLAIBORNE PELL,
Chairman,
Hon. JESSE HELMS,
Ranking Minority Member,
Committee on Foreign Relations,
U.S. Senate, Washington, DC

DEAR SENATOR PELL AND SENATOR HELMS: The Senate Select Committee on Intelligence (SSCI) has been charged with the responsibility of providing to the United States Senate a report on the ability of the United States to monitor and verify compliance by the Soviet Union with the Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (the INF Treaty). In meeting this responsibility, the SSCI has explored in depth not only the immediate intelligence issues raised by the Treaty, but also the longer-term implications of the Treaty, including its relationship to future requirements that may be levied against our intelligence considered the requirements that attend any prospective START agreement. Of course, the Committee wishes to make clear that this report is not an assessment or prejudgment of START or its monitoring requirements, but rather an indication of the impact that START may have on the INF Treaty.

The Committee's efforts in preparing this study have been long and comprehensive. We have followed both negotiations and arms control monitoring on a continuing basis. In our annual budget authorization process, we have focused on U.S. technical intelligence capabilities, both for now and the future. Indeed, for several years,

this Committee has worked with the Executive branch to obtain needed funding for improvements in our technical collection capabilities, while encouraging the Intelligence Community to use those funds as efficiently as possible.

Over the last six months, when the INF talks gained momentum and finally concentrated on verification issues, the Committee's study of U.S. monitoring capabilities has been intensive. From last September until today, the Committee has had 15 closed hearings and 17 on-the-record staff briefings on INF monitoring, in addition to many informal staff briefings. Our witnesses have included ranking officials and substantive experts from the CIA, DIA, NSA, intelligence arms of the military services, the Intelligence Community Staff, the State Department, the Arms Control and Disarmament Agency, the Defense Department, the Joint Chiefs of Staff, former defense officials who are leading authorities on arms control, and (on counter-intelligence implications of on-site inspection) the FBI.

In addition to these proceedings, and the thousands of pages of documents that the Committee has studied, both we and our staff have traveled to many of the most important installations where monitoring systems are produced or operated, as well as to the site at Magna, Utah, where Soviet portal monitors will be able to observe items entering and leaving a U.S. missile production facility. In short, we have endeavored to ensure that every issue was fully addressed during the course of our work.

The purpose of this unclassified report is to address generally the issues involved in the monitoring and verification process and to describe the role which monitoring and verification plays in the overall assessment of the INF Treaty. Each of these issues is addressed in detail in the classified report available to each member of the U.S. Senate, and to whom the work of the SSCI is ultimately directed.

Thank you for the opportunity to present these important matters to the Foreign Relations Committee.

Sincerely,

DAVID L. BOREN,
Chairman.
WILLIAM S. COHEN,
Vice Chairman.

THE INF TREATY: MONITORING AND VERIFICATION CAPABILITIES

(Adopted by Unanimous Vote March 21, 1988)

For Members of the Senate Select Committee on Intelligence [SSCI], and consistent with the Committee's responsibility to the Senate as a whole, the appropriate starting point for analysis of the Treaty on the Elimination of Intermediate-Range and Shorter-Range Missiles (the INF Treaty) is to assess its verifiability. Several preliminary points should be made regarding this assessment.

First, the Committee notes that the answer to the question of verifiability is not a simple one. It is a matter of degree and sufficiency. Since no verification and monitoring regime can be absolutely perfect, a central focus for the Committee has been to deter-

mine whether any possible infractions would be of sufficient military significance to constitute a threat to our national security interests. This calculus is one which the Senate should bear in mind in its consideration of the Treaty.

Second, the Committee would note that U.S. intelligence requirements should not be dictated solely by arms control Treaty monitoring needs. The Committee believes that monitoring Soviet activities is necessary not only to verify arms control agreements, but also to provide timely warning of possible threats that are not prohibited by the Treaty. Accordingly, the Committee paid close attention to whether our current and proposed capabilities—human, technical and otherwise—are sufficient to meet current demands, as well as emerging future requirements. When certain systems are limited or eliminated by agreement, other military developments which are perfectly legal under treaties take on a new significance and could affect the strategic balance between the United States and potential adversaries. We must have the capability of monitoring such developments not addressed under the INF Treaty.

One of the most challenging tasks the Intelligence Community could face in the near future is the monitoring of a prospective START agreement. An agreed cut in Soviet and U.S. strategic nuclear forces would change the requirements for U.S. intelligence for several reasons:

Under current proposals, envisioning a system of limits and sublimits on strategic arms, as opposed to the bans employed by the INF Treaty, significant violations would be more difficult to detect;

Soviet violations of START could have a greater impact on U.S. national security than any plausible violation of the INF Treaty;

Unanticipated improvements in Soviet strategic offensive and defensive capabilities could make the lower levels of U.S. strategic forces set by START more vulnerable;

Even in the absence of START, the balance of strategic forces could be undermined or upset by possible Soviet technological breakthroughs, offensive forces improvements, or possible breakouts from ABM Treaty limits.

The Committee believes that without continuous attention to improving our intelligence capabilities, the Intelligence Community may not be able to monitor a START Treaty well enough to ensure U.S. security. Indeed, the burdens of monitoring Soviet military activities that are not constrained, as well as those that are constrained by the INF and any prospective START Treaty, could put strains on the future capabilities of the Intelligence Community, especially in an environment of limited funding for intelligence activities.

The Committee feels that this potential gap between intelligence capabilities and intelligence requirements must be appreciated by Members of the Senate. Thus, this report and its classified annex raises the issue in connection with consideration of the INF Treaty.

Third, the Committee would observe that in negotiating an arms control agreement, verification is only one of many objectives that must be served. Indeed, there are inevitable tensions between the

need for effective verification and the desire for strategic stability. The current U.S. position in Geneva is to seek a ban on mobile missiles, largely because of the verification problems they may pose. On the other hand, mobility enhances strategic stability by reducing the opportunity for preemptive strikes. In any arms control proposal we advance, we must always keep open the possibility of allowing ourselves the flexibility to adopt systems needed for our own national security even if it makes verification less certain. In other words, verification cannot be viewed in a vacuum. It is but one factor that must be balanced with other competing interests for our own security.

In the INF agreement, the United States has sacrificed the right to deploy a conventional long-range ground-launched cruise missile [GLCM] against the Warsaw Pact, principally because monitoring the distinction between nuclear and conventional cruise missiles is difficult. Some Members of the Committee believe that other national security interests may have been subordinated to verification considerations on the GLCM issue. This has raised serious concerns among Members of the Committee that similar considerations of verifiability in START could lead to unduly restrictive limitations on future U.S. options for conventionally armed air-launched and sea-launched cruise missiles.

Another example of the tension between monitoring requirements and overall strategic needs is the fact that there are no on-site inspection rights provided for undeclared or suspect sites. These problems are most pronounced with respect to the possibility of covertly stored missiles at undeclared facilities in the Soviet Union. In this case, legitimate U.S. security interests argued against allowing the Soviets greater presence and access in the United States than granted by the Treaty. Our own counterintelligence concerns about potential Soviet exploitation of on-site inspection rights may again outweigh the need for more intrusive and direct verification in future negotiations.

Finally, the Committee would emphasize that the conclusions with respect to monitoring and verification do not necessarily control the final decision each Senator must make with respect to whether the INF Treaty should be ratified. Rather, the verifiability of the Treaty is only a part of the analysis that each Senator must make, and the weight given to verifiability in making his or her final decision regarding ratification properly resides with each individual Member.

VERIFICATION REQUIREMENTS AND MONITORING CAPABILITIES

Effective verification—knowing whether or not the Soviets are cheating—is essential to enforcing strict compliance. And good intelligence—monitoring all aspects of Soviet strategic behavior—is the key to effective verification. Between the extremes of blindly trusting the Soviets and trying to follow their every move, what level of monitoring is needed to verify and enforce the INF treaty? Are U.S. monitoring capabilities good enough to make the INF treaty effectively verifiable? To answer these questions, it is helpful to distinguish among the functions and officials involved in dealing with suspected violations.

Monitoring

Monitoring is the responsibility of the Intelligence Community, which reports on what the Soviets do, using all the information available from U.S. on-site inspectors, our National Technical Means, and other sources of information on Soviet missiles and related activities.

Verification

Verification is the responsibility of the Executive branch, which decides whether the Soviet behavior reported by the Intelligence Community is permitted by the treaty, based on the text of the treaty, relevant records, diplomatic exchanges, and applicable law.

Enforcement

Enforcement is the responsibility of the President, acting in concert with the Congress, in proposing and pursuing a course of action if a violation is found. Options for enforcement include seeking Soviet compliance by diplomatic means, denouncing the violation publicly, threatening to withdraw from the treaty, or ultimately countering the violation with new military programs of our own.

Each option depends on the United States having the will to act in the face of a confirmed violation. To be effective, monitors, verifiers, and enforcers will need good information on Soviet intentions, as well as capabilities, in order to make critical decisions. To do nothing is advisable only if confronting the Soviets with the violation would jeopardize the sensitive intelligence sources and methods on which we rely for detecting more serious threats.

Moreover, to deter the Soviets from cheating in the first place, the U.S. must reinforce Soviet expectations that Treaty violations would be discovered and countered if they did so.

In the case of the INF treaty, detecting any possible violations involves three sets of monitoring requirements:

Assessing the accuracy of the numbers and locations of INF systems declared by the Soviets in the Treaty's Memorandum of Understanding.

Observing the drawdown and elimination of INF systems in accordance with the procedures set forth in the Protocol on Elimination.

Detecting any production, testing, or deployment of INF systems.

ASSESSING SOVIET DECLARATIONS

With respect to assessing the accuracy of the numbers and locations of forces and systems declared by the Soviets in the Treaty's Memorandum of Understanding, the Intelligence Community has not resolved significant differences of view over the possibility that the Soviets may not have disclosed their entire inventory of nondeployed SS-20 missiles. These differences represent valid analytical judgments based on the limited and inconclusive information that has been available to the Intelligence Community.

Whether or not these differences can be resolved in the future, on the basis of new information or analysis, their potential military significance would be short-lived. This is because the oper-

ational reliability and military utility of any covertly maintained missiles would begin to deteriorate immediately; would seriously degrade during the first three years, when all declared missiles are being eliminated; and would vanish entirely within a decade, unless the Soviets can resume flight testing them. This would be both illegal and readily detectable.

OBSERVING DRAWDOWN AND ELIMINATION

With respect to declared INF systems, we can expect Soviet cooperation in permitting U.S. inspectors to observe their elimination, because they will have a strong interest in showing us that they are fulfilling their treaty commitments. If the Soviets fail to cooperate, we will know it well before we have eliminated our own INF systems and could retain them until they cooperated. So, by fully implementing the Inspection Protocols of the INF Treaty, the U.S. will not need to rely on National Technical Means to verify the complete elimination of the Soviets' declared INF systems.

DETECTING ILLEGAL SYSTEMS AND ACTIVITIES

At the same time, U.S. intelligence must also seek to ensure that there are no illegal INF systems that should have been declared or that have been covertly stored, diverted, tested, or produced in violation of the INF treaty. In contrast with Soviet interests in showing our inspectors their declared inventories of INF systems and their elimination, we must expect the Soviets will try to conceal any illegal systems or activities.

That is why the United States must be able to monitor Soviet missile-related activities, no matter how well concealed. In particular, verifying the INF treaty's ban on all Soviet ground-based missiles for weapons-delivery with ranges of 500 to 5,500 kilometers will require that we monitor Soviet missile testing, production, and deployments with the best National Technical Means available.

Yet, as noted previously, even with the best technical means in the world, the United States cannot expect to discover every prohibited activity that the Soviets have plausible incentives to conduct clandestinely. Concealing a few, small illegal activities or assets is just too easy in a closed society like the Soviet Union. However, there is little apparent advantage to Soviet military commanders, and there are certainly significant risks, in developing any covert forces that cannot be exercised realistically or tested fully because they must remain strictly concealed all the time to minimize any chance of detection.

Moreover, the INF treaty's ban on the testing of any ballistic missiles for weapons delivery with ranges between 500 and 5,500 kilometer can be monitored with high confidence. This makes it exceedingly difficult, costly, and risky for the Soviets to develop or maintain a militarily useful, covert force of ballistic missiles, especially longer-range missiles, which violates the INF treaty. At worst, a Soviet short-range ballistic missile might be tested to a range of slightly over 500 kilometers without U.S. monitoring capabilities being able to verify that it is a treaty violation, but the Soviets would have little to gain and much to lose from conducting such a test.

U.S. National Technical Means of verification are not as highly effective against ground-launched cruise missiles [GLCMs] with these ranges, testing within which are likewise banned by the INF treaty. In aprticualr, an illegal force of GLCMs could probably not be detected nearly s promptly nor with the same high degee of confidence. This is due to their much smaller size and to the fact that they are in almost all respects identical with and virtually indistinguishable from sea-launched versions of the same missile, which are not banned by the INF treaty.

Still, any militarily significant training or deployment of a covert force of ground-launched cruise missiles would be subject to detection by the United States. This is because it would necessarily involve a sizable number of troops and technicians, as well as special security arrangements associated with highly sensitive activities, especially the illegal training or deployment of a nuclear-capable missile force. Moreover, in contrast with the SS-20, the Soviets have never developed the infrastructure for such a force of GLCMs. So, the Soviets could not have much confidence that they could maintain or deploy a ready ground-launched cruise missile force banned by the INF treaty without being caught.

FINDINGS AND CONCLUSIONS

The key unclassified findings and conclusions of the Committee are as follows:

The Committee believes that by a combination of National Technical Means and on-site inspection, the intelligence community will be able to monitor the drawdown and elimination of declared Soviet missiles launchers and associated equipment with great certainty.

The Committee notes that the on-site inspections established by the Treaty are applicable only to facilities declared by the Soviets in the Memorandum of Understanding. Therefore, the burden of detecting banned activities at undeclared sites, where they are most likely to occur, will fall on National Technical Means of verification.

The specific requirements imposed by the Treaty, including the bans on production, flight testing and storage, will limit the ability of the Soviets to maintain non-deployed missiles in a high state of readiness. These provisions increase both the probability of detecting cheating and the cost of cheating for the Soviets. At the same time, however, Soviet compliance with some of the Treaty's provisions will be difficult to monitor.

This problem is exemplified by the unresolved controversy between DIA and other intelligence agencies over the number of SS-20's in the Soviet inventory. In any event, the Treaty's ban on flight testing, will over time limit the military utility of any SS-20's that the Soviet Union might covertly maintain.

At the same time, the Committee notes that the flight test ban is uneven in its application against weapons systems eliminated by the Treaty. It is effective in limiting the military reliability of a covert SS-20 force, but far less relevant to ground-launched cruise missiles and shorter-range ballistic missiles.

Ground-launched cruise missiles pose a particularly difficult monitoring problem as they are interchangeable with long-range Soviet sea launched cruise missiles [SLCM's]. So long as SLCMs are not banned, their testing will allow a Soviet military planner to fulfill all of the technical requirements for testing a covert GLCM. The lack of a ground forces infrastructure for such weapons, however, would be extremely difficult for the Soviets to overcome covertly, and this greatly lessens the value and probability of such a cheating effort.

We are concerned that the Soviets could covertly extend the range capability of a cruise missile, or overtly develop a new ground-launched missile with a prohibited long-range capability, if the cruise missile were tested only to shorter ranges.

Yet the Committee believes that the risk of a Soviet attempt to cheat with such an extended range capability is offset by Soviet operational requirements. Soviet military planners would have serious problems with the reliability of systems not tested to their maximum range.

In the case of short range ballistic missiles [SRBM's] the Committee does not foresee the need for the Soviets to cheat since they can easily and legally develop a new or modernized SRBM with a demonstrated range less than 500 kilometers.

Moreover, the Soviets could not test any short-range ballistic missile much beyond the 500-kilometer limit without the United States detecting the violation.

The Committee believes that in the absence of a START agreement, the Soviets have little or no incentive to cheat. With 10,000 warheads in their strategic arsenal today, the the Soviets can cover INF and global targets and still have several thousand warheads in reserve.

In an INF/START environment, however, the monitoring, cheating and risk calculus changes substantially. The Soveit incentive to cheat could increase because of a greater difficulty in meeting targeting requirements. The military significance of any cheating will increase because of lower U.S. force levels.

But the Soviets would have greater difficulty maintaining a covert force of intermediate-range ballistic missiles in a START regime with new limits on road-mobile strategic ballistic missiles and new provisions for short-notice inspections of undeclared facilities.

The monitoring of numerical limits, rather than a ban, and of qualitiative restrictions will make the satisfaction of collection requirements and, therefore, the detection of cheating far more difficult.

The U.S. intelligence community must be prepared to meet two priorities under a Start environment—where the United States and the Soviet Union have agreed to reduce their strategic offensive forces while also complying with the INF, ABM and other arms control treaties. The first involves monitoring those weapons systems and activities limited or banned by arms control treaties. The second involves military activities which are not limited by treaties, but which take on an added importance as a result of their constraints.

By cutting strategic offensive forces on both sides by roughly 50 percent, a START agreement would raise the importance of intelligence on Soviet developments in other areas that would threaten the survivability and effectiveness on scaled back U.S. strategic forces.

Indeed, it is potential combinations of simultaneous developments in Soviet strategic offensive and defensive forces, particularly its capabilities against U.S. satellites, ballistic missile launchers and cruise missiles that raise the most urgent concerns about threatening shifts in the strategic balance between the Soviet Union and the United States. Moreover, it is in areas not limited by a treaty where such Soviet efforts are likely to be most active.

The Committee accordingly recommends that the Congress authorize and appropriate funds required to initiate a long-term program to modernize and improve upon current plans for intelligence collection. It specifically recommends investing more in programs that would be most helpful in verifying a START Treaty, in preventing technological surprise and in supporting U.S. policy and operation in crises.

Many of the details regarding the precise nature of our inspection rights are still being negotiated with the Soviets. A constructive process has been put in motion to secure U.S. objectives in these negotiations, although this has not yet been achieved.

The extensive on-site inspection and portal monitoring that may be required by a START agreement, including suspect site inspections, could have a far more significant impact on U.S. counterintelligence and security interests than those agreed to in the INF Treaty.

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