MEMORANDUM FOR THE SECRETARY OF DEFENSE

SUBJECT: Letters of Transmittal for the DoD Report on Direct Communications Links and Other Measures to Enhance Stability

Attached for your signature at Tab A are the letters of transmittal necessary to forward the subject report to the appropriate committees of the House of Representatives and the Senate.

In accordance with Judge Clark's April 5, 1983 memorandum, (Attachment 1), it is our intent to be in a position to forward the report to the Congress by Monday, the April 11, 1983. A copy of the classified report is at Background, Attachment 2; the unclassified version is at Attachment 3. We will require your signature on the letters so that this can be done.

In support of the release of this report, we will have prepared and positioned appropriate materials for the press.

Fred C. Ikle

By Richard Perle

COORD: Lani
OSD/LA

DECLASSIFIED IN FULL
Authority: EO 13526
Chief, Records & Declass Div, WHS
Date: MAR 13 2013
REPORT TO THE CONGRESS

by

SECRETARY OF DEFENSE

CASPAR W. WEINBERGER

on

DIRECT COMMUNICATIONS LINKS AND OTHER MEASURES TO ENHANCE STABILITY

11 APRIL 1983

COPY 1 OF 32
THE SECRETARY OF DEFENSE
WASHINGTON, THE DISTRICT OF COLUMBIA

TO THE CONGRESS OF THE UNITED STATES

I am pleased to submit, in accordance with Public Law 97-252, the Department of Defense evaluation of possible initiatives for improving the containment and control of nuclear weapons, particularly during crises.

I share with the Congress the conviction that we must make every effort to ensure against nuclear war ever occurring between the United States and the Soviet Union. I am equally persuaded that we can and should improve existing mechanisms to control crises which might lead to the use of nuclear weapons as a result of accident, miscalculation, or misinterpretation. Of course we should be aware that measures toward these ends, no matter how attractive at first glance, in certain cases, could entail unacceptable risks to our security and that of our allies. The Department of Defense has therefore carefully assessed the potential advantages and disadvantages of each possible new initiative intended to lower the danger of an accident or miscalculation which could lead to the use of nuclear weapons.

That evaluation has led me to propose to the President several important measures:

- The addition of a high-speed facsimile capability to the Hotline.

- The creation of a Joint Military Communications Link between the U.S. and USSR.

- The establishment by the U.S. and Soviet governments of high rate data links with their embassies in the capital of the other.

- Agreement among the world's nations to consult in the event of a nuclear incident involving a terrorist group.

Each of those measures would increase our ability to resolve crisis situations and to prevent the escalation of military incidents. Taken together, they would mark significant progress toward eliminating the danger that accident or misinterpretation could lead to nuclear war.
We also have proposed for further study several possible new technical and procedural measures which might enhance our ability to verify treaty compliance and thereby further our goal of effective, significant arms control. These measures, which are outlined in the study, will be further analyzed by the Administration in the context of the development of verification measures for specific arms control treaties.

CASPAR W. WEINBERGER
I. INTRODUCTION

A. Purpose

(U) Section 1123(a) of Public Law 97-252, dated 8 September 1982 (Department of Defense Authorization Act 1983), directs the Secretary of Defense to conduct a full and complete study and evaluation of possible initiatives for improving the containment and control of the use of nuclear weapons, particularly during crises. It also specifies that the report should address:

- Establishment of a multi-national military crisis control center for monitoring and containing the use or potential use of nuclear weapons by third parties or terrorist groups.

- Development of a forum through which the United States and the Soviet Union could exchange information pertaining to nuclear weapons that could potentially be used by third parties or terrorist groups.

- Development of other measures for building confidence between the United States and the Soviet Union in order to further crisis stability and arms control, including:
  -- An improved United States–Soviet Union communications hotline for crisis control;
  -- Improved procedures for verification of any arms control agreements;
  -- Measures to lengthen the warning time each nation would have of potential nuclear attack.

(U) This report responds to that tasking. In addition, it describes ongoing U.S. initiatives already suggested by President Reagan to reduce the risk of accidental or unintended nuclear war.

B. Agreements in Force Designed to Reduce the Risk of War

(U) There is a long history of U.S. and Soviet efforts to reduce the threat of nuclear war between them. In fact, from the very beginning of the nuclear era, experts and government leaders expressed concern that nuclear war between the two nations could erupt unintentionally, by accident or miscalculation.
As a result, various arrangements for U.S.-Soviet cooperation and consultation have been proposed and negotiated, designed to reduce the risk of misinterpretation and accidental conflict. The United States and the Soviet Union have reached agreement on several such measures.

The Memorandum of Understanding between the United States of America and the Union of Soviet Socialist Republics Regarding the Establishment of a Direct Communications Link (Hotline Agreement), signed in 1963, established a direct communications link, or Hotline, between Washington and Moscow.

The Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics (Accident Measures Agreement), signed in 1971, requires each party: to maintain safeguards and controls against the accidental or unauthorized use of nuclear weapons; to notify the other side in advance of planned missile launches beyond the territory of the launching party and in the direction of the other party; to notify the other immediately in the event of an accidental, unauthorized, or unexplained incident involving a possible detonation of a nuclear weapon which could create a risk of outbreak of nuclear war; and in the event of any unexplained nuclear incident to act in such a way as to reduce the possibility of its actions being misinterpreted by the other party.

The Agreement Between the United States of America and the Union of Soviet Socialist Republics on Measures to Improve the US-USSR Direct Communications Link, signed in 1971, provided for the upgrading of the Hotline by the installation of two satellite communications circuits.

The Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Prevention of Incidents on and over the High Seas (Incidents at Sea Agreement), signed in 1972, requires the two sides: to observe strictly the letter and the spirit of the International Regulations for Preventing Collisions at Sea; to refrain from provocative acts at sea that could increase the risk of war; and to provide advance notice to mariners of actions on the high seas which represent a danger to navigation or to aircraft in flight.

The Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Prevention of Nuclear War, signed in 1973, requires that the two sides refrain from acts that could exacerbate relations between them, lead to military confrontations and/or lead to nuclear war between them or between one of them and another country.
It also recognizes that each party must refrain from the threat or use of force against the other party, its allies, or other countries and requires them to consult urgently with the other in the event of an apparent heightened risk of nuclear war.

C. Current Initiatives

(U) On 18 November 1981, President Reagan delivered the first in a series of major speeches outlining his program for preserving peace. He stated that one of the main elements of his program is to engage the Soviet Union "...in a dialogue about mutual restraint and arms limitations, hoping to reduce the risk of war and the burden of armaments and to lower the barriers that divide East from West." He also took that occasion to present the general framework of his major arms control initiatives and to express his commitment to reducing the risk of surprise attack and the chance of war arising out of uncertainty or miscalculation.

(U) President Reagan returned to this theme in his Berlin speech of 11 June 1982, and at the United Nations on 17 June 1982. He announced that we would approach the Soviet Union with proposals for reciprocal measures in such areas as advance notification of major strategic exercises, advance notification of missile launches within as well as beyond national boundaries, and an expanded exchange of strategic forces data.

(U) On 22 November 1982, President Reagan announced to the American people that he had proposed several confidence-building measures (CBMs) in a letter to the Soviet leadership. He also instructed our START and INF negotiators in Geneva to discuss those proposals with their Soviet counterparts. The President's proposals reflect his belief that we must take every step possible to ensure that nuclear war cannot break out as a result of an accident, miscalculation or misunderstanding.

(U) The measures not only include, but go beyond, the suggestions he made in Berlin and at the U.N. Thus the President proposed advance notification not only of ICBM launches but also of all launches of U.S. and Soviet submarine launched ballistic missiles and intermediate-range, land-based ballistic missiles of the type being negotiated in the INF talks. Additionally, he proposed an expanded exchange of data on intermediate-range nuclear forces as well as strategic forces and extended his proposal for advance notice of major strategic exercises to cover all major military exercises which might cause concern. Further, to illustrate the value of this measure, the U.S. voluntarily notified the Soviet Union in advance of its plans to begin the major military exercise named "Global Shield".
D. The "Third Party" Danger

(U) Most of the U.S. efforts to reduce the risk of war have concentrated on the interaction of Soviet and U.S. forces and systems, and possible risks of nuclear war through accident, miscalculation, or misunderstanding from this interaction. However, we have also paid attention to the risks that might arise from the use of nuclear weapons by a third country or subnational group.

(U) Six nations are known to have detonated nuclear explosive devices, and a number of additional countries currently have, or could achieve, the technological and industrial capacity to develop and produce nuclear weapons. A decision to "go nuclear" could occur quickly, once a nation with the necessary technology came to regard nuclear weapons as a desirable means to respond to perceived threats, to acquire international prestige, to salvage national honor, or to compensate for loss of confidence in outside security assurances or nuclear guarantees. Compounding the problem is the possibility that a terrorist group might acquire a nuclear weapon by fabricating a crude device or by stealing one from an existing stockpile.

E. Approach of this Study

(U) The United States and the USSR have a common interest in averting unintended or accidental nuclear war between them, and in preventing use of nuclear weapons by third nations or by terrorists that could trigger such a war. However, we must recognize that many fundamental differences between the United States and the Soviet Union complicate any effort to further that common interest through jointly agreed measures. The United States seeks to establish a stable balance of military forces and a world order based, not on the use of force, but on respect for the territorial integrity of nations. It perceives arms control measures, including CBMs, as means to help achieve these ends.

(U) The political and military interests of the United States and the Soviet Union conflict with respect to many specific nations and situations. Throughout the world, the USSR tries to exploit popular discontent for its own purposes. The USSR also has a deep interest in weakening the bonds between the United States and its many friends and allies throughout the world.

(U) In addition, the United States and the Soviet Union differ in fundamental geographic and societal characteristics. The United States is preeminently an open society, whose government
must freely share vital information about national security with the public—and thereby automatically with foreign governments. The leaders of the closed Soviet society, in contrast, maintain a heavy veil of security over their political and military activities. In addition, the Soviet Union is a large land power, contiguous to many of its allies and client states, and a short distance from most of our allies. The United States, on the other hand, is geographically distant from most of its friends and must, therefore, devote special effort to ensuring access to them.

(U) All of those differences mean that the United States must approach prudently any effort to devise joint U.S.-Soviet measures to reduce the risk of war or to contain and control the threat of use of nuclear weapons by third countries or terrorists. In this regard, it is important not to lose sight of the fact that most of the CBMs which the USSR has proposed in the past have sought to create or to solidify Soviet geopolitical or strategic advantages. Some Soviet CBM proposals have tried to restrict our ability to come to the aid of our allies or to defend other U.S. interests. Others have aimed at ensuring Soviet conventional and/or nuclear superiority. Such proposals are, of course, unacceptable, whether they are presented on their own or as the price for Soviet agreement to measures we advocate.

(U) We must also carefully examine any suggestions for U.S. CBM proposals to ensure that they would not inadvertently offer the Soviet Union some important unilateral benefit at our expense. We also must be alert to the possibility that any agreement could unduly restrict our ability to come to the aid of our allies, or directly harm their interests in another way. Indeed, our efforts must not only protect the interests of our allies, but must also take into account our relations with all those nations which conduct themselves in accordance with the UN Charter and other international agreements.
(U) Despite these potential drawbacks, the United States must still pursue every possible avenue to reduce the risk that war could break out between it and the Soviet Union because of accident, miscalculation, or misinterpretation. We must also try to cooperate with the USSR to limit the threat that a third party might use nuclear weapons. In so doing, however, we must be realistic about possible outcomes, approach initiatives with care, and insist that, for any new efforts undertaken, the potential benefits outweigh the risks.

DECLASSIFIED IN PART
Authority: EO 13526
Chief, Records & Declassify Div, WHS
Date: MAR 13 2013
II. CURRENT PROPOSALS TO REDUCE THE RISK OF WAR

(U) The confidence building measures which the President proposed to the Soviets last November would significantly add to the range and importance of existing means to improve communication and thus, to lessen the likelihood of misinterpretation, between the United States and the Soviet Union. As the President stated in Berlin in June 1982, "Taken together, these steps would represent a qualitative improvement in the nuclear environment."

A. Notification of Ballistic Missile Launches

(U) The President proposed to the Soviet leadership that the United States and the Soviet Union should announce in advance all launches of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs) and intermediate-range, land-based ballistic missiles of the type the U.S. and USSR are currently negotiating in Geneva. Because ballistic missiles combine high-yield warheads, accuracy, and short flight times, both sides consider them to be the most destabilizing and dangerous elements in the nuclear arsenal. Consequently, these steps to reduce the uncertainty associated with the launching of these missiles would significantly lower the risk of accidental nuclear war.

1. Intercontinental Ballistic Missile Launches

(U) A number of previous U.S.-USSR agreements have provided for advance notification of some ICBM launches:

(U) The 1971 "Accident Measures" Agreement requires each side to notify the other in advance of any planned missile launches which will extend beyond its national territory in the direction of the other party. Both sides have understood the Agreement to apply to land- rather than submarine-based ballistic missiles. A protocol to the Agreement requires immediate notification of an "unsuccessful" or malfunctioning launch of an unarmed missile when the trajectory of the missile extends beyond national territory in a direction that could be misinterpreted by the other side.

To date, there have been no specific notifications by either side under this agreement. While all U.S. ICBM test launches extend beyond U.S. national territory, they avoid azimuths in the direction of the Soviet Union. Relatively few Soviet ICBM tests extend beyond Soviet territory. Some of those that do—as well as the large number targetted on the Kamchatka Peninsula—follow azimuths that could be construed to be in the direction of U.S.
(U) The 1973 Incidents at Sea agreement requires both sides to issue Notices to Airmen and Mariners (NOTAMs) for missile launches which will impact in international waters. The NOTAMs mention only the projected impact areas of the launch vehicle and associated debris. They do not specify launch point or area, the type of vehicle, or the purpose of the launch. Moreover, relatively few Soviet launches are covered by the agreement. Only 5-10 percent of Soviet ICBM tests and slightly over 55 percent of Soviet SLBM tests--compared to virtually all U.S. ICBM and SLBM launches--are directed to the open ocean.

(U) The SALT II Treaty would have obligated each party to notify the other well in advance of any multiple ICBM launches or of single ICBM launches which would extend beyond its national territory. Unlike the NOTAMs required under the Incidents at Sea Agreement, the SALT notifications we sought would have included detailed information (e.g., launch locations, test range) and would have been provided directly to the other side.

(U) The U.S. began providing notifications in July 1979, consistent with its desire that the two countries act in accord with appropriate provisions of the SALT II Treaty even though it was not ratified. Because all US ICBM launches extend beyond our national territory, we have, therefore, notified the Soviets of all our ICBM launches since that time. The Soviets have notified us of four ICBM launches for which SALT II would have required notification, but they followed Incidents-at-Sea guidelines and, therefore, did not offer the level of detail we sought in SALT II. In 1980, however, the Soviet Union gave notification of a multiple launch involving an ICBM and an SLBM that would not have been required under the Treaty.

(U) None of the previous agreements provides total coverage of all ICBM launches. In particular, they do not cover single launches which impact within the territory of the launching nation. Because any launch can create some uncertainty and ambiguity, the U.S. has proposed in the START negotiations that the sides provide notice of all ICBM launches, whether they occur singly or in multiples, whether their flights remain within national boundaries or extend beyond them. This proposal would carry the additional benefits of equalizing the current obligations on each side for advance notification and of discouraging the use of missile launches for geopolitical purposes such as a "show-of-force."
2. Submarine-Launched Ballistic Missile Launches

(S) The vast majority of SLBM launches on both sides occur from operational submarine launch tubes, so that test launches cannot be distinguished from actual launches of armed SLBMs, except through inference based on the launch area and other factors. Despite the potential for a misunderstanding resulting from an SLBM test, the United States and the USSR do not now notify each other directly or specifically of those launches. They only issue standard NOTAMs which announce air space and ocean "closure areas" if they expect an SLBM to impact in international waters. They do not, however, specify the reason for the closures. The President has, therefore, proposed that the two sides provide specific advance notification of all SLBM launches, including any which impact within national territory. This, combined with the ICBM notification proposal, would mean that for the first time, advance notice would be required for all launches of strategic ballistic missiles in the arsenals of either side.

(U) We recognize that protecting SSBN launching location is critical for ensuring the continued invulnerability of submarines. The proposal which the U.S. has tabled in Geneva provides that the required notice would include enough detail to identify the fact of an SLBM launch but not so much that it would compromise the position of the launching SSBN. Hence, our proposal meets the security needs of both sides.

3. LRINF Ballistic Missile Launches

(U) Finally, the United States has proposed that both sides provide advance notification of all launches of land-based longer-range intermediate-range nuclear force (LRINF) ballistic missiles. These include the Soviet Union's SS-20, SS-4, and SS-5 missiles, and the US PERSHING II. We continue to seek the elimination of all land-based American and Soviet LRINF missiles. While we are negotiating that ban, however, we believe that notification of LRINF ballistic missile launches would have some net benefits. Soviet LRINF missiles are already deployed in large numbers. Our PERSHING II system is in an advanced stage of development. Unless prior notification is given, launches of any of those missiles could lead to misperceptions concerning military or political intent.

B. Advance Notification of Major Military Exercises

(U) Each year the United States and the USSR conduct military exercises intended to provide training, to assess operational readiness, or to develop, perfect or refine plans, procedures, or operations related to nuclear forces. Such exercises, involving a nation's nuclear forces, could be misinterpreted and evoke an unintended response from the other side. The
President has proposed that each side provide advance notice of major military exercises involving nuclear forces which are of such a scope as to raise the concerns of the other side.

The United States currently provides advance notice of many field exercises via embassy notifications and news releases. For example, last year we provided prior notice of GLOBAL SHIELD, our largest and most significant exercise for strategic nuclear forces. Conducted annually for U.S. joint forces, it is a combined command post and field training exercise, following a scenario portraying a Soviet strategic nuclear threat against the United States. The USSR provides no advance notification, except in conformance with the voluntary procedures of the 1975 Helsinki Final Act, which call for advance notice of exercises involving 25,000 or more troops.

Our Geneva proposal would commit the parties to providing notification at least three days in advance of planned major exercises involving nuclear forces which could raise concern on the other side. The notice would include: the type of exercise; its dates, area, and broad purpose; and the general types and approximate numbers of U.S. or Soviet forces involved. Where possible, it would also include additional relevant information.

C. Expanded Data Exchanges

(U) The third main element of the President’s proposal calls for a broad-ranging exchange of basic data about each side’s nuclear forces. The U.S. START and INF delegations are now pursuing such an exchange in Geneva.

The data exchange we envisage would go far beyond that contained in the SALT accords. SALT II provided for reciprocal information only on the numbers of strategic nuclear delivery vehicles—ICBMs, SLBMs, and heavy bombers. The President has proposed a much wider and more detailed exchange of data on both strategic and intermediate-range ballistic missiles, which would provide essential information on the make-up of each side’s forces. The types of information which we would like to include in a data exchange agreement cover: numbers of
each type and model of delivery vehicle, both in operation and in storage; the names of bases and of the delivery vehicles based or home ported there (including storage vehicles); and information on the characteristics and production of strategic delivery vehicles, including production rates and major manufacturing locations.

The exchange of such detailed information about each side's forces might help verification and could facilitate future arms control negotiations. It would also enhance the understanding which each side has of the capabilities and limitations of the other. Such exchanges would be essential for the implementation of any START or INF Agreement. Data exchanges are, in fact, integral parts of the cooperative verification measures being prepared for the START and INF talks.
III. POSSIBLE NEW MEASURES TO ENHANCE COMMUNICATION

(U) One of the most effective ways to further the effort already begun by President Reagan to ensure against unintended nuclear conflict between the United States and the Soviet Union would be to improve the ability of the two to communicate about crises and military incidents. In examining possible new initiatives for reducing the threat of nuclear weapons use, the Department of Defense has therefore focused on ways of increasing the speed, reliability, accuracy, and completeness of direct communication between the United States and the Soviet Union. In addition, we have studied whether improved communications with other countries could lower the risk of war.

A. Hotline Improvements

(U) A priority measure to enhance communications is to improve the Direct Communications Link (DCL, or "Hotline") between the U.S. and Soviet heads of government. The Hotline is, and should remain, for use only in severe emergencies. It would degrade the system, and reduce its impact in major crises, if it were used in cases that could be handled effectively through routine or lower-level bilateral channels.

In keeping with the Hotline mission, the precise number of times that the two heads of state have used it has not been disclosed. It is known that it has been used sparingly during its twenty-year existence, but it has proved invaluable in major crises. The U.S. President used it during the 1967 Arab-Israeli War to prevent possible Soviet misunderstanding of U.S. fleet movements in the Mediterranean. The U.S. had recourse to it again during the 1973 Arab-Israeli War, and President Brezhnev used it at the beginning of the Afghanistan crisis in 1979.

(U) The United States and the Soviet Union have significantly upgraded the DCL once since its creation. The system originally consisted of two terminal points with teletype equipment, one full-time duplex wire telegraph circuit (routed Washington-London-Copenhagen-Stockholm-Helsinki-Moscow), and for back-up, one full-time duplex radio-telegraph circuit (routed Washington-Tangier-Moscow). In 1971, the two governments agreed to establish two satellite communication circuits for the DCL, with a system of multiple terminals in each country. When those became operational in 1978, the DCL achieved almost 100 percent technical reliability. The original radio circuit was terminated, while the wire telegraph circuit remains as a back-up.*

OSD 3.3(b)(6)(8)  JS 3.3(b)(5)
1. Facsimile Transmission Capability

(U) The Department of Defense has now proposed for consideration by the President the addition of a high-speed facsimile capability to the system. This improvement would increase the DCL's ability for conveying information by enabling the two sides to transmit more, and more complex, data more quickly and reliably. Whereas the DCL now operates at the rate of only about 10 pages per hour, a facsimile capability could allow up to two pages per minute to be sent. The time saved—even though limited by the slowness of the translation process—could be used to send more messages or for increased deliberation and consultation on each side. In addition, facsimile transmission capability would minimize or entirely eliminate the need for keyboarding, and therefore the possibility of operator error.

(U) Most important, this new capability would endow the Hotline with a capability which it does not now possess: the ability to exchange graphic information. The precise, detailed, and often easily interpreted information offered by maps, charts, and drawings could be essential in resolving an on-going military crisis. Because graphic information requires little or no translation, the total time saved through this improvement could actually be much greater than that implied simply by the increase in the transmission rate. Translation is the slowest step in the direct communication process. A highly proficient Russian language specialist can produce a full translation at the rate of only 1,000 words per hour, and do a cursory review at the rate of 6,000 words per hour.

(U) Technology transfer considerations would prevent the use of the most advanced equipment available, but not the use of equipment that would be adequate for the purpose. Cryptography requirements present more of a problem. A unique cryptographic system would be necessary in order to preserve the security of our national communications systems while also giving the DCL facsimile capability long-term immunity to third party interruption. Although the task is technically feasible, it could take two or more years to complete. The consequent delay between a U.S.-Soviet agreement to add a facsimile capability and its implementation, however, would not be as long as the seven-year hiatus between the 1971 decision to introduce satellite circuitry and its final implementation.
2. **Voice and Video Capability**

(U) The Department of Defense has also considered the possibility of adding a secure voice or video capability to the DCL. We have concluded, however, that this step would carry many more disadvantages than advantages. The United States and the Soviet Union explicitly decided not to include voice capability when they negotiated the original Hotline agreement and its subsequent improvement. On both occasions, they concluded that printed communication would be more private, more precise, and more reliable. The studies leading to this report reinforce this conclusion.

Voice communication appears a threatening idea at first glance, primarily because it would seem to permit the holding of a "mini-Summit" in which each leader could directly exercise his persuasive powers, and thereby increase his ability to defuse a crisis situation should he so desire. In addition, voice communication might provide us with important insights into the psychological and emotional state of the Soviet leader.

3. **Improving DCL Survivability**

(U) Another potential avenue for improving the DCL—enhancing its survivability—requires further study and analysis. Redundancy and encryption now provide important guarantees against
interruption or destruction of the system by third parties. Nuclear weapons launched accidentally—or deliberately by a third party—however, could destroy the American or Soviet terminals and thereby preclude Hotline use.

Because the United States and Soviet Union might each have an interest in keeping communications open no matter how severe the conflict between them, it is not likely that either one would choose to destroy the system deliberately. Nevertheless, the development of some insurance against this possibility would also significantly increase the system's importance. Although the main purpose of the DCL was—and remains—the prevention of war, it could still prove valuable if hostilities ever did occur. Its use could help to control escalation, or to bring about termination of the conflict.

We have identified, but need to assess more fully, two methods for increasing Hotline survivability. These are to

An interagency group will examine both of those options in the coming months.

B. Possible New Communications Mechanisms

1. Bilateral Joint Military Communications Link

(U) One measure which we also have proposed for consideration by the President would create a Joint Military Communications Link (JMCL), paralleling the DCL, between the United States and the Soviet Union. A JMCL would provide a direct facsimile transmission capability between the two national crisis control centers (in the United States, the National Military Command Center in the Pentagon).

(U) Placing a JMCL in the national military command centers would enable us to build on and strengthen the existing rapid communications system, and reduce requirements for additional personnel, training, etc. Additionally, colocation of a JMCL with the military command centers would obviate the need for additional equipment beyond that purchased as back-up for Hotline facsimile capability. Further, it would permit quick transition, if necessary, to head-of-government messages and allow for rapid communication of instructions to military commanders should that eventually be required. Finally, it would allow rapid exchange of highly technical information that could be essential to understanding and therefore resolving a nuclear or other military crisis. No existing communication channel between the United States and the USSR has a similar capability.
Joint U.S.-Soviet exercises of the system could be planned and conducted to ensure its effective functioning. In addition, delegations from the two centers could meet once a year to discuss the operation of the system and consider the need for possible improvements. Any changes in the system, like its creation, however, would require a formal agreement between the two governments.

A JMCL could be used to implement agreements on the sharing of military information that is time urgent. It could, for example, be the mechanism for consultations on the military aspects of terrorist nuclear activity. It could also be the designated vehicle for the ballistic missile launch and military exercise notifications proposed by the President. Those proposals provide for numerous notifications. Furthermore, use of a rapid military channel for these notices would ensure that any questions and ambiguities relating to these military events could be quickly addressed.

A JMCL could also have a crisis control function. It could be used in the event of any military incident that required urgent communication between the United States and the USSR, but did not warrant direct contact between the two heads of government.

Occasionally, the two governments could use a JMCL in tandem with the DCL. During an on-going military conflict involving third parties, the United States and/or the Soviet Union, for example, it could be imperative to exploit both systems to communicate different levels of information. For both severe and lower level crises, therefore, a JMCL could supplement existing elements of the crisis communication network between the two countries.

A JMCL could also be used for cooperation—rather than avoidance of confrontation—between the two countries in certain urgent situations. For example, if a military craft of the one side were lost or disabled, a JMCL could facilitate assistance by the other. Similarly, it could ensure proper handling of any space objects with nuclear components which threatened to impact on land.

The formalization of crisis consultation and cooperation that would be involved in creation of a JMCL would represent a major innovation in U.S.-Soviet relations. As such, it would carry important potential benefits, but also some real risks. Continued use of traditional diplomatic channels would
be preferable for crisis consultation and information sharing functions that are broader than those envisioned for a JMCL. Also, the expertise and personal contacts of the two sides' Ambassadors, Deputy Chiefs of Mission, Defense Attaches, etc. could be more effective than an impersonal JMCL in managing some incipient military crises. If the Soviets nonetheless used the JMCL in such a situation, we might incur delays in shifting to the diplomatic channel. Moreover, use of a JMCL rather than traditional diplomatic channels could create a sense of emergency where there was none before and thus serve to escalate, rather than to dampen, a crisis.

Agreement between the two governments on the purpose and methods of a JMCL could partially--but not completely--alleviate those problems. An agreement would spell out the basic internal procedures governing the decision to use a JMCL. Any agreement setting up a JMCL would also specify that the system supplemented, but did not supplant, the DCL or existing diplomatic channels, and was intended for cases demanding rapid, direct communication of military information, and not for broader political consultations or for bilateral crises requiring Heads of State communication.

OSD 3.3(b)(6)
Finally, we believe that joint exercises of a JMCL and its regular use for implementing information-sharing agreements could reduce many of the risks which might be involved in using this new, innovative mechanism for U.S.-Soviet crisis communication. The information-sharing function of a JMCL would provide both sides with a series of opportunities—in time-sensitive, but not emergency, situations—to increase their familiarity with the system and to identify any procedural changes which would heighten its usefulness in a military crises.

Joint U.S.-Soviet exercises of a JCML also could offer an important vehicle for refining and building each side’s confidence in the system. We would hope that the two parties could hold several such exercises during the first year of JMCL operation. Each exercise could revolve around a different scenario to represent the range of major crisis types which might trigger use of a JMCL. If JMCL exercises proved useful, they could continue after the first year, albeit not so frequently, in order to maintain the system at maximum efficiency, to allow continual tests and refinements of its procedures, and to permit even more detailed scenarios which would closely imitate potential crisis situations.

JMCL exercises might have an additional important benefit beyond improving chances that the mechanism would work well in an actual military crisis or incident. Exercises might suggest further measures which would broaden the system of crisis communication between the United States and the Soviet Union. They could also provide a concrete indication of whether—and how—more regularized and routine contacts between the U.S. and Soviet militaries could contribute to our long-term goal of reducing the risk of accidental or unintended war. Such contacts could allow the two sides, outside of a pressure-ridden crisis situation, to take measure of each other, and to exchange general views on strategic and conventional forces and balances. The insights the two would gain from those exchanges could heighten their ability to avert future military crisis.

2. Multilateral Military Communications Link

While the bilateral JMCL concept could enhance communication and reduce the risk of war arising from miscalculation or misinterpretation, we believe that a multilateral MCL would not be desirable. It would be extremely difficult to determine
which states to include in a multilateral network. The addition of too many states would threaten to make a MCL so unwieldy that it would never function effectively.

Confining a multinational military communications network to the five permanent members of the United Nations Security Council would alleviate several of those problems. The system would automatically be more manageable than a larger one. The chances of a participant using it to spread disinformation or foment instability would decline. All of the members, with the possible exception of the People's Republic of China, would possess the requisite technical capability. Although a five-member system would be more difficult to operate than a bilateral one, it would have the corresponding advantage of including—and being limited to—the world's avowed nuclear powers.

A five-member system would present some problems, however, that would not attend the establishment of a broader system. For one thing, it would be needlessly redundant. There are various national means of communication which allow for bilateral consultations at a state's discretion. A multilateral crisis network might be bypassed in military emergency situations in favor of these national means. Moreover, the five already belong to one forum—the Security Council—for the multinational discussion of military crisis situations. Although the Security Council is not a rapid vehicle, the very nature of multinational discussions generally precludes speedy communication and decisions. In addition, the five powers are members of the Military Staff Committee, created by Article 47 of the United Nations Charter. The Charter provided that various governments would make military forces available to the Security Council. The Military Staff Committee was to direct those forces and assist the Council in planning their use in combined international enforcement actions. Because of Soviet intransigence in the Security Council, however, the Military Staff Committee has never functioned as originally envisaged.
While limitation of a JMCL to the United States and the USSR would carry some costs, they clearly would be lower than those of broadening the system. A bilateral JMCL could lose something by not including the other nuclear powers, but it would still cover the two whose communication is most essential for global stability. A bilateral system could also heighten other countries' fears of "superpower condominium." Those fears would not be too acute, however, because the system would be small and in many ways simply represent an extension and refinement of the Hotline system. In any case, other states' worries about U.S. and Soviet dominance probably would be overshadowed by widespread applause at this evidence that the United States and Soviet Union wanted to—and could—better communicate to reduce the risk of war.

3. Embassy-Capital High Data Rate Communication Link

Another promising method of improving crisis communications between the United States and the Soviet Union which we are investigating would be for each to establish high data rate links between its head of government and its embassy in the other's capital. Each government would install and control its own system, using its own technology and encryption systems. The embassy-capital links, unlike the DCL or a JMCL, could therefore take advantage of the most sophisticated current technology.

Although the equipment involved would be national in origin, installation, and control, its introduction would require consent pursuant to the 1961 Vienna Convention on Diplomatic Privileges and Immunities. A bilateral agreement would also be essential to ensure that each government agreed to allow the other to bring in the necessary equipment freely and without interference.

We believe that high speed embassy-capital links could provide an important supplement to the DCL and to a JMCL. In addition, the system could have significant subsidiary advantages. It probably could increase the access of U.S. diplomatic
personnel to their Soviet counterparts. Most importantly, it could constitute a more reliable and secure vehicle than we have now for intra-governmental communications between Washington and our embassy in Moscow.

4. Crisis Control Center

We have also carefully considered the suggestions for a US-Soviet or multinational crisis control center, but have concluded that it would not be desirable to establish such an institution at this time. The risks associated with the concept are too great. Over time, however, our experience with operating a Joint Military Communications Link—with a charter limited to communication on military aspects of time urgent situations and exchange of notification of launches and exercises—might allow us to pursue a broader mechanism to control crises, by indicating ways in which we could reduce the risks involved in a crisis control center to an acceptable level. The potential disadvantages of a joint center located in a neutral country are so great, however, that we question whether that idea would ever be feasible. Use of a JMCL would be more likely to point the way to a mechanism which linked separate crisis control bodies located in the national capitals. We also expect that experience with a JMCL would confirm our current belief that any formal crisis control mechanism would be most beneficial, and least risky, if it were limited to the United States and the Soviet Union, rather than encompassing other countries as well.

A institutionalized, joint crisis control center located in a neutral country would be far removed from the national capitals where crisis decisions would have to be made. This separation would present several serious drawbacks. It is most likely that a center would be completely bypassed in national crisis decisionmaking. If not, serious difficulties could result. A joint center located in a neutral capital could create a cumbersome extra layer in the national and international decision processes, retarding action just when speed was most imperative. Even worse, it could risk transmitting messages which did not reflect national governmental decisions.

Moreover, flexibility in deciding when to communicate, which would be an important feature of a JMCL, would be difficult to achieve in an institutionalized U.S.-Soviet crisis control center located in a neutral country. The institution could provide a clear and legitimate channel for automatic consideration of any crisis—including those in which Soviet participation would serve to heighten, rather than reduce, tensions. We might have to insist that each participant have veto power over consideration of any situation in order to maintain our power to determine when to activate a center. Even if center discussions and actions were confidential, however, the Soviets could still try to
gain considerable propaganda advantage from U.S. demands for a veto. A veto provision could also confront us with a Soviet prohibition against center consideration of a crisis when we believed that such consideration was essential. At least with a JMCL, we could communicate a message even if the Soviets did not want to respond. Introducing a veto—though necessary—would carry a serious risk of leading a center to the same fate that befell the United Nations Military Staff Committee.

A joint crisis control center also could complicate our relations with other countries by increasing their concerns about "superpower dominance." That reaction could be quite severe, because a formal center located in a third country would be a publicly visible institution. If center deliberations were confidential, as they would have to be, third party fears of its effect on their interests could be all the greater.
That problem could also plague a five-member center which grouped the permanent members of the UN Security Council. The outside world could still view such an institution as an effort at great power dominance, the sole difference being the number of powers involved. Only a crisis control center with a much broader membership would definitely be immune from that reaction, but it would compound the other risks associated with the crisis control center concept.

The more members in a center, the less likely that they would all share a common interest in preventing the outbreak or escalation of conflict. Even if that were not the case, the decisionmaking process in a multinational center would easily become bogged down, and inhibit timely, concerted actions to avert a serious crisis. In order for any decisions to be made, some political mechanism such as a weighted voting system would be necessary, which the members would be loath to accept. A veto provision would be essential as well, to prevent center involvement from exacerbating a crisis. The Soviet Union and other states, however, could derive even more propaganda advantage from U.S. insistence on, or invocation of, a veto in a multinational center than they would from veto use in a bilateral institution. Indeed, there would be a general risk that the facility would evolve from a confidential tool for crisis management into a forum for waging propaganda warfare over sensitive crises.
That problem could be surmounted if the institution were made a multilateral rather than bilateral one. However, then all the intelligence-related disadvantages of creating a multinational crisis control center would apply. Moreover, membership expansion would deprive the institution of a key rationale. It would be virtually impossible for the United States and Soviet Union to exchange information about a third country if that country belonged to the center. Even the dissemination of information about terrorist nuclear activity would be problematic.

Although an information-sharing institution therefore does not seem feasible, we are actively pursuing less formal ways of increasing information exchange in order to reduce the chances that a third party nuclear event could precipitate a U.S.-Soviet crisis. Previous U.S.-Soviet cooperation led to the 1968 Non-Proliferation Treaty and the attendant International Atomic Agency safeguards which are designed to ensure compliance with the treaty. Less public bilateral cooperation later made possible the creation of the so-called London Suppliers Group, consisting of those nations which export nuclear technology, equipment, and material to non-nuclear states. That group, however, has been dormant for several years.

We have long held regular bilateral discussions with the Soviet Union during the IAEA Board of Governors’ meetings. In December 1982, we held a special three-day bilateral on non-proliferation issues in Washington, and hope for further meetings. The December session grew out of a Soviet and U.S. proposals for periodic meetings to monitor non-proliferation events and trends. The United States agreed to an exploratory bilateral session, which would canvass the possibilities for constructive action in the area.

The December meeting was businesslike, constructive, and helpful in achieving a better mutual understanding of each side’s views. The two delegations discussed the problems raised by those countries which appear likely to pursue acquisition of nuclear weapons, and reviewed the various on-going negotiations related to non-proliferation. They devoted particular attention to the current problems in the IAEA, agreeing on the importance of that institution and of its statutory purposes—widely sharing nuclear energy technology and monitoring its use so as to inhibit the spread of nuclear weapons.

In addition to pursuing the possibility of further bilateral discussions on proliferation matters, we are considering a multilateral agreement providing for consultations during particular nuclear crises. Nations party to the agreement would, when they deemed appropriate, consult with each other on nuclear explosions or acquisition of nuclear weapons by terrorist groups. By limiting the consultation to an aspect
of the nuclear proliferation problem that is of particular concern to virtually all states, the agreement would minimize the risk that a nation would use it for disinformation purposes. Crosschecking facilities available in Washington would provide a further guarantee against successful efforts of this kind. Finally, there would be little risk of intelligence compromise, since the United States would share only that information that it chose to provide.

DECLASSIFIED IN FULL
Authority: EO 13526
Chief, Records & Declass Div, WHS
Date: MAR 13 2013
IV. ADDITIONAL MEASURES TO REDUCE AMBIGUITY AND MISINTERPRETATION

(U) In addition to the enhanced communication mechanisms discussed in the previous section, the Department of Defense has considered a number of other measures which might reduce ambiguity surrounding military incidents, and thus lessen the possibility of misinterpretation. These fall into three general categories: improved arms control verification procedures; improved warning of nuclear attack; and reduced vulnerability of command, control, and communication systems.

A. Enhanced Verification Procedures for Nuclear Arms Control Agreements

(U) Effective verification is essential to effective arms control. The first requirement for effective verification is possession of satisfactory monitoring capability. Towards this end, the United States maintains an extensive network of intelligence hardware useful for monitoring treaty-limited activities and invests heavily in new technologies which may improve our ability to monitor activity. In a related effort, we must estimate the capabilities of future intelligence collection systems, the ability of the other side to evade detection, and our own ability to counter cheating.

(U) Effective verification depends on satisfying a series of non-technical conditions as well. Our verification efforts cannot rely solely on intelligence community monitoring of the other side to evade detection, and our own ability to counter cheating. We must assess the incentive of the other side to cheat. We must also assess the political and military significance of potential violations, recognizing that charges of treaty violation are not easily made nor easily accepted, especially when evidence based upon the most sensitive intelligence sources and methods is involved. Enforcement of compliance under these circumstances is even more difficult.

(U) The verification provisions of US-USSR arms control treaties vary widely. Some agreements, such as the Biological Weapons Convention, do not include express verifications measures, but instead simply provide for consultations about compliance. Other agreements, like the SALT I Interim Agreement and the ABM Treaty, explicitly refer to national technical means of verification (NTM), and provide supplements to NTM through counting rules and collateral measures such as dismantlement and destruction procedures. The SALT II verification provisions appeared to go further by including telemetry encryption under measures defined as deliberate concealment measures. In fact, however, some SALT II provisions were ambiguous and provided an inadequate basis for judging compliance.
The U.S. has attempted in some arms control negotiations to include other measures which would supplement or go beyond NTM. Thus, it has proposed on-site-inspections (OSI), mandatory observers at certain activities, and remote sensors on the parties' national territories.

(U) The Soviet Union's callous disregard of the 1972 Biological Weapons Convention by producing deadly toxins and of the 1925 Geneva Protocol by using and encouraging the use of chemical and toxin weapons against combatants and innocent civilians in Southeast Asia provides the most compelling explanation of why, in the future, the U.S. must insist that arms control agreements with the USSR contain effective verification provisions.

(U) We have examined several technical and procedural measures which could enhance verification capabilities and thereby contribute to mutual confidence between the United States and the Soviet Union. All, however, require further analysis in the context of specific treaty requirements before we can decide whether to propose them to the President for inclusion in current or future arms control negotiations.

Each of these measures could make limited, task-specific, but valuable contributions to verifying specific arms control treaties. Taken as a group, they could be mutually reinforcing. Even so, given the nature of the USSR and its ideology, outlooks, and ambitions, there would always be a great risk of Soviet circumvention, breakout and manipulation for deception. Those risks could be reduced only through careful negotiation of precise and comprehensive treaty provisions.
1. **U.S.-USSR Standing or Combined Consultative Commissions.**

(U) One possible step would be to expand and improve the use of U.S.-Soviet consultative arrangements in connection with arms control agreements. The body in being of this type, the U.S.-USSR Standing Consultative Commission (SCC), is a joint body to "promote the implementation of the objectives and provisions" of the SALT I ABM Treaty, Interim Agreement and Agreement on Measures to Reduce the Risk or Outbreak of Nuclear War. The SCC meets at least twice a year. Discussions to date have focused on questions related to compliance; understandings concerning implementation of a number of specific provisions of those agreements; the development of agreed procedures to govern implementation of other provisions, such as replacement and dismantling or destruction of weapons systems; and carrying out the required five-year reviews of the ABM Treaty.

Our experience with the SCC points out the probable advantages and disadvantages of broadening its scope—and/or creating similar bodies—to cover other arms control agreements. It has proven a useful means for expressing compliance concerns and strengthening treaty verification provisions, including working out detailed procedures to implement agreements. It has also been useful for exploring uncertainties about compliance without premature public disclosure. At the same time, however, the SCC has been extremely slow-moving and the Soviets have not been as forthcoming with specific, detailed data to alleviate U.S. concerns as we would wish.

2. **International Verification Bodies.**

(OSD 3.3(b)(i),(6))

Multilateral bodies like the IAEA might oversee future multinational agreements. Such institutions would have a mix of advantages and disadvantages. By involving a wide number of states, they could avert charges of "superpower dominance," allow our friends and allies to defend their interests directly, and possibly broaden international support for compliance with the treaties involved.

International verification does not appear appropriate or effective for bilateral US-Soviet arms control agreements. Multinational agreements, on the other hand, need to be examined on a case-by-case basis to see what verification mechanisms might constitute the best approach to achieving international acceptance and effective verification.
3. **On-Site Access.**

On-site access, whether by human inspectors or remote sensors, could contribute to effective monitoring and confidence building, both for many existing treaties (such as the Geneva Protocol, the Biological Weapons Convention, the Threshold Test Ban Treaty, and the Non-Proliferation Treaty) and for the effectiveness of future, more complex agreements. Indeed, some form of on-site access may be necessary for effective monitoring and verification of the INF and START Agreements. An acceptable and useful access provision could take a number of varied forms, depending on the treaty involved, the availability of alternate means to achieve confidence in compliance, and the need for third-country approval if inspections would take place on their territory. International or third-party access, however, is not likely to satisfy U.S. verification requirements for monitoring compliance with bilateral treaties.
B. MEASURES TO LENGTHEN WARNING TIME OF POTENTIAL ATTACK

(U) Many of the initiatives discussed earlier in this report—the President's proposals for ballistic missile launch notifications, the Joint Military Communications Link, the high data rate link between each side's capital and its embassy in the other country, the agreement to consult during crises involving terrorist nuclear activity—would heighten U.S. and Soviet awareness of and thereby ability to divert—any near-term danger of a nuclear accident or attack. We have also examined more technical measures which might enhance U.S. and Soviet warning capabilities, whether the threat comes from the other party, from a third country, or from a terrorist or subnational group.
1. ICBM Launch Detection Sensors

JS 3.3(b)(5),(6)

OSD 3.3(b)(5)(B)
2. SSBN Standoff Zones

(U) Proposals for SSBN standoff zones seek to reduce the potential danger presented by the short flight time of SLBMs operating off the coasts of the United States and the Soviet Union. Such proposals would prohibit the submarines of one side from entering the waters within some agreed distance of the other's national borders (or of specified geographical points, such as the national capital). SSBN standoff zones could, in theory, increase available warning time and lower the SLBM threat to U.S. bomber bases and command and control systems. In fact, however, this proposal would have only marginal utility and could actually entail substantial military costs.

3. ASW-Free Zones

(S) Proposals for ASW-free zones would prohibit antisubmarine forces of one side from designated ocean areas close to the other. The aim of such a proposal would be to allow each side to deploy SSBNs safely and thus enhance their survivability. We do not believe that the idea is worth pursuing, however, because it would carry major disadvantages for the United States which would not be counterbalanced by important advantages.
REPORT TO THE CONGRESS

by

SECRETARY OF DEFENSE

CASPAR W. WEINBERGER

on

DIRECT COMMUNICATIONS LINKS AND OTHER MEASURES TO ENHANCE STABILITY

11 APRIL 1983
TO THE CONGRESS OF THE UNITED STATES

I am pleased to submit, in accordance with Public Law 97-252, the Department of Defense evaluation of possible initiatives for improving the containment and control of nuclear weapons, particularly during crises.

I share with the Congress the conviction that we must make every effort to ensure against nuclear war ever occurring between the United States and the Soviet Union. I am equally persuaded that we can and should improve existing mechanisms to control crises which might lead to the use of nuclear weapons as a result of accident, miscalculation, or misinterpretation. Of course we should be aware that measures toward these ends, no matter how attractive at first glance, in certain cases, could entail unacceptable risks to our security and that of our allies. The Department of Defense has therefore carefully assessed the potential advantages and disadvantages of each possible new initiative intended to lower the danger of an accident or miscalculation which could lead to the use of nuclear weapons.

That evaluation has led me to propose to the President several important measures:

- The addition of a high-speed facsimile capability to the Hotline.
- The creation of a Joint Military Communications Link between the U.S. and USSR.
- The establishment by the U.S. and Soviet governments of high rate data links with their embassies in the capital of the other.
- Agreement among the world's nations to consult in the event of a nuclear incident involving a terrorist group.

Each of those measures would increase our ability to resolve crisis situations and to prevent the escalation of military incidents. Taken together, they would mark significant progress toward eliminating the danger that accident or misinterpretation could lead to nuclear war.
We also have proposed for further study several possible new technical and procedural measures which might enhance our ability to verify treaty compliance and thereby further our goal of effective, significant arms control. These measures, which are outlined in the study, will be further analyzed by the Administration in the context of the development of verification measures for specific arms control treaties.

CASPAR W. WEINBERGER
I. INTRODUCTION

A. Purpose

Section 1123(a) of Public Law 97-252, dated 8 September 1982 (Department of Defense Authorization Act 1983), directs the Secretary of Defense to conduct a full and complete study and evaluation of possible initiatives for improving the containment and control of the use of nuclear weapons, particularly during crises. It also specifies that the report should address:

- Establishment of a multi-national military crisis control center for monitoring and containing the use or potential use of nuclear weapons by third parties or terrorist groups.

- Development of a forum through which the United States and the Soviet Union could exchange information pertaining to nuclear weapons that could potentially be used by third parties or terrorist groups.

- Development of other measures for building confidence between the United States and the Soviet Union in order to further crisis stability and arms control, including:
  
  -- An improved United States-Soviet Union communications hotline for crisis control;
  
  -- Improved procedures for verification of any arms control agreements;

-- Measures to lengthen the warning time each nation would have of potential nuclear attack.

This report responds to that tasking. In addition, it describes ongoing U.S. initiatives already undertaken by President Reagan to reduce the risk of accidental or unintended nuclear war.

B. Agreements in Force Designed to Reduce the Risk of War

There is a long history of U.S. and Soviet efforts to reduce the threat of nuclear war between them. In fact, from the very beginning of the nuclear era, experts and government leaders expressed concern that nuclear war between the two nations could erupt unintentionally, by accident or miscalculation.
As a result, various arrangements for U.S.-Soviet cooperation and consultation have been proposed and negotiated, designed to reduce the risk of misinterpretation and accidental conflict. The United States and the Soviet Union have reached agreement on several such measures.

The Memorandum of Understanding between the United States of America and the Union of Soviet Socialist Republics Regarding the Establishment of a Direct Communications Link (Hotline Agreement), signed in 1963, established a direct communications link, or Hotline, between Washington and Moscow.

The Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics (Accident Measures Agreement), signed in 1971, requires each side: to maintain and improve organizational and technical arrangements to guard against the accidental or unauthorized use of nuclear weapons; to notify the other side in advance of planned missile launches beyond the territory of the launching party and in the direction of the other party; and to notify the other immediately in the event of an accidental, unauthorized, or unexplained incident involving a possible detonation of a nuclear weapon which could create a risk of outbreak of nuclear war; and in the event of any unexplained nuclear incident to act in such a way as to reduce the possibility of its actions being misinterpreted by the other party.

The Agreement Between the United States of America and the Union of Soviet Socialist Republics on Measures to Improve the US-USSR Direct Communications Link, signed in 1971, provided for the upgrading of the Hotline by the installation of two satellite communications circuits.

The Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Prevention of Incidents on and over the High Seas (Incidents at Sea Agreement), signed in 1972, enjoins the two sides: to observe strictly the letter and the spirit of the International Regulations for Preventing Collisions at Sea; to refrain from provocative acts at sea that could increase the risk of war; and to provide advance notice to mariners of actions on the high seas which represent a danger to navigation or to aircraft in flight.

The Agreement Between the United States of America and the Union of Soviet Socialist Republics on the Prevention of Nuclear War, signed in 1973, requires that the two sides refrain from acts that could exacerbate relations between them, lead to military confrontations and/or lead to nuclear war between them or between one of them and another country.
It also recognizes that each party must refrain from the threat or use of force against the other party, its allies, or other countries and to consult with the other in the event of heightened risk of nuclear war.

C. Current Initiatives

On 18 November 1981, President Reagan delivered the first in a series of major speeches outlining his program for preserving peace. He stated that one of the main elements of his program is to engage the Soviet Union "...in a dialogue about mutual restraint and arms limitations, hoping to reduce the risk of war and the burden of armaments and to lower the barriers that divide East from West." He also took that occasion to present the general framework of his major arms control initiatives and to express his commitment to reducing the risk of surprise attack and the chance of war arising out of uncertainty or miscalculation.

President Reagan returned to this theme in his Berlin speech of 11 June 1982, and at the United Nations on 17 June 1982. He announced that we would approach the Soviet Union with proposals for reciprocal measures in such areas as advance notification of major strategic exercises, advance notification of missile launches within as well as beyond national boundaries, and an expanded exchange of strategic forces data.

On 22 November 1982, President Reagan announced to the American people that he had proposed several Confidence Building Measures (CBMs) in a letter to the Soviet leadership. He also instructed our START and INF negotiators in Geneva to discuss those proposals with their Soviet counterparts. The President's proposals reflect his belief that we must take every step possible to ensure that nuclear war cannot break out as a result of an accident, miscalculation or misunderstanding.

The measures not only include, but go beyond, the suggestions he made in Berlin and at the U.N. Thus the President proposed advance notification not only of ICBM launches but also of all launches of U.S. and Soviet submarine-launched ballistic missiles and of intermediate-range, land-based ballistic missiles of the type being negotiated in the INF talks. Additionally, he proposed an expanded exchange of data on intermediate-range nuclear forces as well as strategic forces and extended his proposal for advance notice of major strategic exercises to cover all major military exercises which might cause concern. Further, to illustrate the value of this measure, the U.S. voluntarily notified the Soviet Union in advance of its plans to begin the major military exercise named "Global Shield".
D. The "Third Party" Danger

Most of the U.S. efforts in this area have concentrated on the interaction of Soviet and U.S. forces and systems, and possible risks of nuclear war through accident, miscalculation or misunderstanding from this interaction. However, we have also paid attention to the risks that might arise from the use of nuclear weapons by a third country or subnational group.

Six nations are known to have detonated nuclear explosive devices, and a number of additional countries currently have, or could achieve, the technological and industrial capacity to develop and produce nuclear weapons. A decision to "go nuclear" could occur quickly, once a nation with the necessary technology came to regard nuclear weapons as a desirable means to respond to perceived threats, to acquire international prestige, to salvage national honor, or to compensate for loss of confidence in outside security assurances or nuclear guarantees. Compounding the problem is the possibility that a terrorist group might acquire a nuclear weapon by fabricating a crude device or by stealing one from an existing stockpile.

E. Approach of this Study

The United States and the USSR have a common interest in averting unintended or accidental nuclear war between them, and in preventing use of nuclear weapons by third nations or by terrorists that could trigger such a war. However, we must recognize that many fundamental differences between the United States and the Soviet Union complicate any effort to further that common interest through jointly agreed measures. The United States seeks to establish a stable balance of military forces and a world order based, not on the use of force, but on respect for the territorial integrity of nations. It perceives arms control measures, including CBMs, as means to help achieve these ends.

The political and military interests of the United States and the Soviet Union conflict with respect to many specific nations and situations. The USSR also has a deep interest in weakening the bonds between the United States and its many friends and allies throughout the world.

Moreover, the United States and the Soviet Union differ in fundamental geographic and societal characteristics. The United States is preeminently an open society, whose government must freely share vital information about national security
with the public—and thereby automatically with foreign governments. The leaders of the closed Soviet society, in contrast, maintain a heavy veil of security over their political and military activities. In addition, the Soviet Union is a large land power, contiguous to many of its allies and client states, and a short distance from many of our allies. The United States, on the other hand, is geographically distant from most of its friends and must, therefore, devote special effort to ensuring access to them.

All of those differences mean that the United States must approach prudently any effort to devise joint U.S.-Soviet measures to reduce the risk of war or to contain and control the threat of use of nuclear weapons by third countries or terrorists. In this regard, it is important not to lose sight of the fact that most of the CBMs which the USSR has proposed in the past have sought to create or to solidify Soviet geopolitical or strategic advantages. Some Soviet CBM proposals have tried to restrict our ability to come to the aid of our allies or to defend other U.S. interests. Others have aimed at ensuring Soviet conventional and/or nuclear superiority. Such proposals are, of course, unacceptable, whether they are presented on their own or as the price for Soviet agreement to measures we advocate.

We must also carefully examine any suggestions for U.S. CBM proposals to ensure that they would not inadvertently offer the Soviet Union some important unilateral benefit at our expense. We also must be alert to the possibility that any agreement could unduly restrict our ability to come to the aid of our allies, or directly harm their interests in another way. Indeed, our efforts must not only protect the interests of our allies, but must also take into account our relations with all those nations which conduct themselves in accordance with the UN Charter and other international agreements.
Despite these potential drawbacks, the United States must still pursue every possible avenue to reduce the risk that war could break out between it and the Soviet Union because of accident, miscalculation, or misinterpretation. We must also try to cooperate with the USSR to limit the threat that a third party might use nuclear weapons. In so doing, however, we must be realistic about possible outcomes, approach initiatives with care, and insist that, for any new efforts undertaken, the potential benefits outweigh the risks.
II. CURRENT PROPOSALS TO REDUCE THE RISK OF WAR

The confidence building measures which the President proposed to the Soviets last November would significantly add to the range and importance of existing means to improve communication, and thus to lessen the likelihood of misinterpretation, between the United States and the Soviet Union. As the President stated in Berlin in June 1982, "Taken together, these steps would represent a qualitative improvement in the nuclear environment."

A. Notification of Ballistic Missile Launches

The President proposed to the Soviet leadership that the United States and the Soviet Union should announce in advance all launches of intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs) and intermediate-range, land-based ballistic missiles of the type the U.S. and USSR are currently negotiating in Geneva. Because ballistic missiles combine high-yield warheads, accuracy, and short flight times, both sides consider them to be the most destabilizing and dangerous elements in the nuclear arsenal. Consequently, these steps to reduce the uncertainty associated with the launching of these missiles would significantly lower the risk of accidental nuclear war.

1. Intercontinental Ballistic Missile Launches

A number of previous U.S.–USSR agreements have provided for advance notification of some ICBM launches:

The 1971 "Accident Measures" Agreement requires each side to notify the other in advance of any planned missile launches which will extend beyond its national territory in the direction of the other party. Both sides have understood the Agreement to apply to land- rather than submarine-based ballistic missiles. A protocol to the Agreement requires immediate notification of an "unsuccessful" or malfunctioning launch of an unarmed missile when the trajectory of the missile extends beyond national territory in a direction that could be misinterpreted by the other side.

The 1973 Incidents at Sea agreement requires both sides to issue Notices to Airmen and Mariners (NOTAMs) for missile launches which will impact in international waters. The NOTAMs mention only the projected impact areas of the launch vehicle and associated debris. They do not specify launch point or area, the type of vehicle, or the purpose of the launch. Moreover, relatively few Soviet launches are covered by the agreement, whereas virtually all U.S. ICBM and SLBM launches are directed to the open ocean.
The SALT II Treaty would have obligated each party to notify the other well in advance of any multiple ICBM launches or of single ICBM launches which would extend beyond its national territory. Unlike the NOTAMs required under the Incidents at Sea Agreement, the SALT notifications we sought would have included detailed information (e.g., launch locations, test range) and would have been provided directly to the other side. The U.S. began providing notifications in July 1979, consistent with its desire that the two countries act in accord with appropriate provisions of the SALT II Treaty even though it was not ratified. The Soviets also have provided notifications, albeit not as detailed as the U.S. notifications.

None of the previous agreements provides total coverage of all ICBM launches. In particular, they do not cover single launches which impact within the territory of the launching nation. Because any launch can create some uncertainty and ambiguity, the U.S. has proposed in the START negotiations that the sides provide notice of all ICBM launches, whether they occur singly or in multiples, whether their flights remain within national boundaries or extend beyond them. This proposal would carry the additional benefits of equalizing the current obligations on each side for advance notification and of discouraging the use of missile launches for geopolitical purposes such as a "show-of-force."

2. Submarine-Launched Ballistic Missile Launches

The United States and the USSR do not now notify each other directly or specifically of SLBM launches. They only issue standard NOTAMs which announce air space and ocean "closure areas" if they expect an SLBM to impact in international waters. They do not, however, specify the reason for the closures. The President has, therefore, proposed that the two sides provide specific advance notification of all SLBM launches, including any which impact within national territory. This, combined with the ICBM notification proposal, would mean that for the first time, advance notice would be required for all launches of strategic ballistic missiles in the arsenals of either side.

3. LRINF Ballistic Missile Launches

Finally, the United States has proposed that both sides provide advance notification of all launches of land-based longer-range intermediate-range nuclear force (LRINF) ballistic missiles. These include the Soviet Union's SS-20, SS-4, and SS-5 missiles, and the US PERSHING II. We continue to seek the elimination of all land-based American and Soviet LRINF missiles. While we are negotiating that ban, however, we believe that notification of all LRINF ballistic missile launches would have some net benefits.
Soviet LRINF missiles are already deployed in large numbers. Our PERSHING II system is in an advanced stage of development. Unless prior notification is given, launches of any of those missiles could lead to misperceptions concerning military or political intent.

B. Advance Notification of Major Military Exercises

Each year the United States and the USSR conduct military exercises intended to provide training, to assess operational readiness, or to develop, perfect or refine plans, procedures, or operations related to nuclear forces. Such exercises, involving a nation's major nuclear forces, could be misinterpreted and evoke an unintended response from the other side. The President has proposed that each side provide advance notice of major military exercises involving nuclear forces which are of such a scope as to raise the concerns of the other side.

The United States currently provides advance notice of many field exercises via embassy notifications and news releases. For example, last year we gave advance notice of GLOBAL SHIELD, our largest and most significant exercise for strategic nuclear forces. The USSR provides no advance notification, except in conformance with the voluntary procedures of the 1975 Helsinki Final Act, which call for advance notice of exercises involving 25,000 or more troops.

C. Expanded Data Exchanges

The third main element of the President's proposal calls for a broad-ranging exchange of basic data about each side's nuclear forces. The U.S. START and INF delegations are now pursuing such an agreement in Geneva.

The data exchange we envisage would go far beyond that contained in the SALT accords. SALT II provided for reciprocal information only on the numbers of strategic nuclear delivery vehicles—ICBMs, SLBMs, and heavy bombers. The President has proposed a much wider and more detailed exchange of data on both strategic and intermediate-range ballistic missiles, which would provide essential information on the make-up of each side's forces.

The exchange of detailed information about each side's forces might help verification and could facilitate future arms control negotiations. It would also enhance the understanding which each side has of the capabilities and limitations of the other. Such exchanges would be essential for the implementation of any START or INF Agreement.
III. POSSIBLE NEW MEASURES TO ENHANCE COMMUNICATION

One of the most effective ways to further the effort already begun by President Reagan to ensure against unintended nuclear conflict between the United States and the Soviet Union would be to improve the ability of the two to communicate about crises and military incidents. In examining possible new initiatives for reducing the threat of nuclear weapons use, the Department of Defense has therefore focused on ways of increasing the speed, reliability, accuracy, and completeness of direct communication between the United States and the Soviet Union. In addition, we have studied whether improved communications with other countries could lower the risk of war.

A. Hotline Improvements

A priority measure to enhance communications is to improve the Direct Communications Link (DCL, or "Hotline") between the U.S. and Soviet heads of government. The Hotline is, and should remain, for use only in severe emergencies. It would degrade the system, and reduce its impact in major crises, if it were used in cases that could be handled effectively through routine or lower-level bilateral channels.

In keeping with the Hotline mission, the precise number of times that the two heads of state have used it has not been disclosed. It is known that it has been used sparingly during its twenty-year existence, but it has proved invaluable in major crises. U.S. Presidents have cited its use during the 1967 Arab-Israeli War to prevent possible Soviet misunderstanding of U.S. fleet movements in the Mediterranean and during the 1973 Arab-Israeli War.

The United States and the Soviet Union have significantly upgraded the DCL once since its creation. The system originally consisted of two terminal points with teletype equipment, one full-time duplex wire telegraph circuit (routed Washington-London-Copenhagen-Stockholm-Helsinki-Moscow), and for back-up, one full-time duplex radio-telegraph circuit (routed Washington-Tangier-Moscow). In 1971, the two governments agreed to establish two satellite communication circuits for the DCL, with a system of multiple terminals in each country. When those became operational in 1978, the DCL achieved almost 100 percent technical reliability. The original radio circuit was terminated, while the wire telegraph circuit remains as a back-up.
1. Facsimile Transmission Capability

The Department of Defense has now proposed for consideration by the President the addition of a high-speed facsimile capability to the system. This improvement would increase the DCL's ability for conveying information by enabling the two sides to transmit more, and more complex, data more quickly and reliably. The time saved—even though limited by the slowness of the translation process—could be used to send more messages or for increased deliberation and consultation on each side. In addition, a facsimile transmission capability would minimize or entirely eliminate the need for keyboarding, and therefore the possibility of operator error.

Most important, facsimile equipment would endow the Hotline with a capability which it does not now possess: the ability to exchange graphic information. The precise, detailed, and often easily interpreted information offered by maps, charts, and drawings could be essential in resolving an on-going military crisis. Because graphic information requires little or no translation, the total time saved through this improvement could actually be much greater than that implied simply by the increase in the transmission rate. Translation is the slowest step in the direct communication process. A highly proficient Russian language specialist can produce a full translation at the rate of only 1,000 words per hour, and do a cursory review at the rate of 6,000 words per hour.

2. Voice and Video Capability

The Department of Defense has also considered the possibility of adding a secure voice or video capability to the DCL. We have concluded, however, that this step would carry many more disadvantages than advantages. The United States and the Soviet Union explicitly decided not to include voice capability when they negotiated the original Hotline agreement and its subsequent improvement. On both occasions, they concluded that printed communication would be more private, more precise, and more reliable. The studies leading to this report reinforce that conclusion.

Because voice communication is more difficult than written material to translate, it is far more subject to misunderstanding. In addition, a direct conversation could encourage instant response, thereby denying the head of state the necessary opportunity to consult with advisors and prepare a thoughtful and measured response. For both reasons,
emergency voice communications between the two leaders could reduce, rather than heighten, their ability to resolve a crisis. The same considerations apply, in heightened fashion, to the installation of video conferencing capability.

B. Possible New Communications Mechanisms

1. Bilateral Joint Military Communications Link

One measure which we are now considering would create a Joint Military Communications Link (JMCL), paralleling the DCL, between the United States and the Soviet Union. A JMCL would provide a direct facsimile transmission capability between the two national crisis control centers (in the United States, the National Military Command Center in the Pentagon). It would supplement, but not supplant, existing diplomatic channels.

Placing a JMCL in the national military command centers would enable us to build on and strengthen the existing rapid communications system, and reduce requirements for additional personnel, training, etc. Also, it would allow rapid exchange of highly technical information that could be essential to understanding and therefore resolving a nuclear or other military crisis. No existing communication channel between the United States and the USSR has a similar capability.

A JMCL could be used to implement agreements on the sharing of military information that is time urgent. It could, for example, be the mechanism for the consultations on terrorist nuclear activity that we discuss later in this report. It could also be the designated vehicle for the ballistic missile launch and military exercise notifications proposed by the President.

A JMCL could also have a crisis control function. It could be used in the event of any military incident that required urgent communication between the United States and the USSR, but did not warrant direct contact between the two heads of government.

A JMCL could also be used for cooperation—rather than avoidance of confrontation—between the two countries in certain urgent situations. For example, if a military craft of the one side were lost or disabled, a JMCL would facilitate assistance by the other. Similarly, it could ensure proper handling of any space objects with nuclear components which threatened to impact on land.

We believe that exercises of a JMCL and its regular use for implementing information-sharing agreements would go far toward ensuring that the system would work well in any crisis.
The information-sharing function of a JMCL would provide both sides with a series of opportunities—in time-sensitive, but not emergency, situations—to increase their familiarity with the system and to identify any procedural changes which would heighten its usefulness in a military crisis.

Joint U.S.–Soviet exercises of a JCML could also offer an important vehicle for refining and building each side's confidence in the system.

2. **Multilateral Military Communications Link**

While the bilateral JMCL concept could enhance communication and reduce the risk of war arising from miscalculation or misinterpretation, we believe that a multilateral MCL would not be desirable. It would be extremely difficult to determine which states to include in a multilateral network. The addition of too many states would threaten to make a MCL so unwieldy that it would never function effectively.

3. **Embassy–Capital High Rate Data Communication Link**

Another promising method of improving crisis communications between the United States and the Soviet Union could be for each to establish high rate data links between its head of government and its embassy in the other's capital. We believe that such a system could provide an important supplement to the DCL and to a JMCL.

Each government would install and control its own system, using its own technology. Nevertheless, introduction of the system would require consent pursuant to the 1961 Vienna Convention on Diplomatic Privileges and Immunities. A bilateral agreement would also be essential to ensure that each government agreed to allow the other to bring in the necessary equipment freely and without interference.

4. **Crisis Control Center**

We have also carefully considered the suggestions for a U.S.–Soviet or multinational crisis control center, but have concluded that it would not be desirable to establish such an institution at this time. Over time, our experience with operating a JMCL might allow us to pursue the idea of a crisis control center, by indicating ways in which we could reduce the risks involved in it to an acceptable level. We doubt, however, that a multilateral crisis control center located in a neutral country will ever be feasible. We expect that the use of a JMCL would be more likely to point the way to a bilateral mechanism linking separate crisis control bodies located in Washington and Moscow.
A crisis control center located in a neutral country would be far removed from the national capitals where crisis decisions would have to be made. This separation would present several serious drawbacks. It is most likely that a center would be completely bypassed in national crisis decisionmaking. If not, a center would create a cumbersome extra layer in the national and international decision processes, retarding action just when speed was most imperative. Moreover, flexibility in deciding when to communicate, which would be an important feature of a JMCL, would be difficult to achieve in an institutionalized U.S.-Soviet crisis control center. The institution would provide a clear and legitimate channel for automatic consideration of any crisis—including those in which Soviet participation would serve to heighten, rather than reduce, tensions.

A multilateral crisis control center would suffer from even more problems. The more members in a center, the less likely that they would all share a common interest in preventing the outbreak or escalation of conflict. Even if that were not the case, the decisionmaking process in a multinational center would easily become bogged down, and inhibit timely, concerted actions to avert a serious crisis. Indeed, there would be a general risk that the facility would evolve from a confidential tool for crisis management into a forum for waging propaganda warfare over sensitive crises.

Finally, the expansion of the number of recipients of shared information would increase the danger that a member government might use the facility to spread disinformation or misuse gathered information. With unrestricted membership, it would be impossible by definition to exchange intelligence data. Any shared information would immediately be in the public domain.

5. Information Sharing Facility

A U.S.-Soviet institution for sharing information on nuclear activities by third countries or terrorists would present many of the problems associated with a crisis control center and add new ones. Those risks would be compounded if an effort was made to endow the institution with a general data bank or if it was made a multilateral rather than bilateral forum.

Although an information-sharing institution therefore does not seem feasible, we are considering a multilateral agreement providing for consultations during particular nuclear crises.
Nations party to the agreement would, when they deemed appropriate, consult with each other on nuclear explosions or acquisition of nuclear weapons by terrorist groups. By limiting the consultation to an aspect of the nuclear proliferation problem that is of particular concern to virtually all states, the agreement would minimize the risk that a nation would use it for disinformation purposes.
IV. ADDITIONAL MEASURES TO REDUCE AMBIGUITY AND MISINTERPRETATION

In addition to the enhanced communication mechanisms discussed in the previous section, the Department of Defense has considered a number of other measures which might reduce ambiguity surrounding military incidents, and thus lessen the possibility of misinterpretation. These fall into three general categories: improved arms control verification procedures; improved warning of nuclear attack; and reduced vulnerability of command, control, and communication systems.

A. Enhanced Verification Procedures for Nuclear Arms Control Agreements

Effective verification is essential to effective arms control. The first requirement for effective verification is possession of satisfactory monitoring capability. Towards this end, the United States maintains an extensive intelligence capability for monitoring treaty-limited activities and invests heavily in new technologies which may improve our ability to monitor activity related to treaty compliance.

Effective verification depends on satisfying a series of non-technical conditions as well. Our verification efforts cannot rely solely on intelligence community monitoring of the other side to evade detection, and our own ability to counter cheating. We must assess the incentive of the other side to cheat. We must also assess the political and military significance of potential violations, recognizing that charges of treaty violation are not easily made nor easily accepted, especially when evidence based upon the most sensitive intelligence sources and methods is involved. Enforcement of compliance under these circumstances is even more difficult.

The verification provisions of US-USSR arms control treaties vary widely. Some agreements, such as the Biological Weapons Convention, do not include express verifications measures, but instead simply provide for consultations about compliance. Other agreements, like the SALT I Interim Agreement and the ABM Treaty, explicitly refer to national technical means of verification (NTM), and provide supplements to NTM through counting rules and collateral measures such as dismantlement and destruction procedures. The SALT II verification provisions appeared to go further by including telemetry encryption under measures that could be defined as deliberate concealment measures. In fact, however, some SALT II provisions were ambiguous and provided an inadequate basis for judging compliance.
The information needed by the West for effective verification of arms control agreements generally requires disclosure of what the Soviet Union considers to be state secrets—even though it may involve information normally made public in the West. Consequently, except for such collateral measures as dismantlement and destruction procedures, the Soviet Union typically prefers caveated or ambiguous wording which makes it difficult to challenge its compliance with verification rules.

The Soviet Union's callous disregard of the 1972 Biological Weapons Convention by producing deadly toxins and of the 1925 Geneva Protocol by using and encouraging the use of deadly toxins against combatants and innocent civilians in Southeast Asia provides the most compelling explanation of why, in the future, the U.S. must insist that arms control agreements with the USSR contain effective verification provisions.

We have examined several technical and procedural measures which could enhance verification capabilities and thereby contribute to mutual confidence between the United States and the Soviet Union. These include the use of combined consultative commissions, international verification bodies, data exchanges and other measures beyond National Technical Means of verification. All, however, require further analysis in the context of specific treaty requirements.

B. Measures to Lengthen Warning Time of Potential Attack

Many of the initiatives discussed earlier in this report—the President's proposals for ballistic missile launch notifications, the Joint Military Communications Link, the high rate data link between each side's capital and its embassy in the other country, the agreement to consult during crises involving terrorist nuclear activity—would heighten U.S. and Soviet awareness of—and thereby ability to divert—any near-term danger of a nuclear accident or attack. We have also examined more technical measures which might enhance U.S. and Soviet warning capabilities, whether the threat comes from the other party, from a third country, or from a terrorist or subnational group. After careful study, however, we have concluded that none of the possible bilateral U.S.-Soviet measures available for increasing warning time would have enough utility to warrant its continued consideration.