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REPORT ON THE NUCLEAR POSTURE OF NATO 84-F01-0904 91-F01-0766



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REPORT ON THE NUCLEAR POSTURE OF NATO

PREFACE

The "Department of Defense Authorization Act, 1984" directed the Secretary of Defense to conduct a study on the non-strategic nuclear posture of the North Atlantic Treaty Organization (NATO) and submit a report on the results of such study to the Committees on Armed Services of the Senate and the House of Representatives not later than 1 May 1984. This study was directed to include:

- (1) a detailed assessment of the current non-strategic nuclear force (NSNF) balance in Europe and that projected for 1990;
- (2) an assessment of the current, respective operational doctrines of the Warsaw Pact and NATO for the use of NSNF nuclear weapons in Europe;
- (3) an explanation of how the threat of the use of such weapons relates to deterrence and to conventional defense;
- (4) an identification of the number and types of nuclear warheads, if any, considered to be non-essential to the defense structure of Western Europe, the quantity and type of such weapons that could be eliminated from Europe under appropriate circumstances without jeopardizing the security of NATO nations and an assessment of what such circumstances might be;
- (5) an explanation of the steps that can be taken to develop a rational and coordinated nuclear posture by NATO in a manner that is consistent with proper emphasis on conventional defense forces; and
- (6) an identification of any notable relevant developments that have occurred since the submission to the Congress in April 1975 of the report entitled "The Theater Nuclear Force Posture in Europe", prepared by the Secretary of Defense pursuant to Section 302 of the Department of Defense Appropriation Authorization Act, 1975 (Public Law 93-365), which might cause the findings and conclusions of that report to require revision and such revisions in such report as the Secretary considers appropriate.

In October 1983, NATO's Nuclear Planning Group (NPG) concluded an extensive examination of the NATO NSNF requirements with the goal of maintaining in the stockpile only the minimum number of warheads needed for credible deterrence and defense. NPG Defense Ministers, acting on a report from the High Level Group, established a minimum level for the land-based NSNF stockpile over the period of the next decade and invited SACEUR to determine the specific types and numbers (i.e., the mix) and locations of those warheads to be removed. SACEUR and his staff are in the process of making those determinations based on the forthcoming findings from SHAPE's ongoing Nuclear Weapons Requirements Study and are confident that a basis for Ministerial discussion can be provided by Spring 1985. Consequently, this report does not fully address the task delineated in paragraph (4) above.



EXECUTIVE SUMMARY (U)

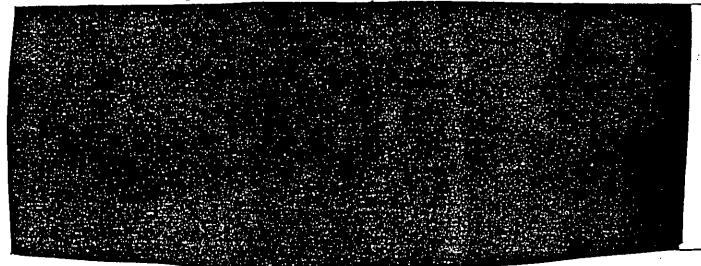
(U) PURPOSE

(U) This report sets forth the results of a review of NATO's nuclear posture undertaken in response to the 1984 Department of Defense Authorization Act (Senate Conference Report No. 98-213). The primary purpose of this report is to explain the steps that are being undertaken to develop a more rational and coordinated Non-Strategic Nuclear Force (NSNF) posture in a manner consistent with proper emphasis on conventional defense forces. The focus of this report is on the land-based NSNF posture — those land-based nuclear forces in NATO with ranges less than strategic (i.e., 5,500 kilometers) and under the responsibility of the Supreme Allied Commander Europe (SACEUR). Requirements to improve NATO's conventional and chemical forces have been taken into consideration in this report.

(U) 1975 FINDINGS AND CONCLUSIONS

(U) To provide continuity and background for this report, a review of the major findings and conclusions of the 1975 Report to Congress, The Theater Nuclear Posture, is helpful. The future goals established in 1975 for force posture improvements were in the following context: (i) enhance the deterrent capability of NATO's conventional, non-strategic and strategic forces, (ii) preserve the role of direct Allied participation in the nuclear posture, and (iii) ensure that any changes in the posture are made with due consideration for overall Alliance objectives. These goals remain valid today.

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TABLE OF CONTENTS

Prefa	sce	······i
		Summary1-10
I.]	introd	uctionI-1
II. N	ATO O Fo	bjectives, Strategy, Operational Doctrine, and rce RelationshipsII-1
A	. NA	TO ObjectivesII-1
	1. 2. 3.	PurposeII-1 DeterrenceII-1 DefenseII-1
В	. Sti	-ategyII_1
	1. 2. 3.	Flexible Response
,		a. Direct Defense
c.	. Bas	cic Force Relationships and Principles of NATO DoctrineII-2
	1.	NSNF RelationshipsII-3
		 a. Relationship of NSNF to Deterrence and DefenseII-3 b. Relationship of NSNF to Chemical and Biological ForcesII-3 c. Relationship of NSNF to Conventional DefenseII-4
	2. 3. 4. 5. 6.	Objectives of NATO Selective Nuclear Use
III.	Warsa	Pact Nuclear Strategy, Doctrine, and Force Trends

A	. Objectives, Strategy, and DoctrineIII-	-1
	 Warsaw Pact Objectives	-1 -1
	a. IntroductionIII- b. Employment Concepts for Nuclear WeaponsIII-	-1 -2
	(1) Combined Arms(2) Force Superiority(3) Surprise(4) Offensive Initiatives	
	c. Nuclear TargetingIII- d. Political ControlIII-	.3 4
В.	Trends in Warsaw Pact Nuclear Posture	4
	 Introduction	_
Ċ.	Warsaw Pact Response to NATO Force ImprovementsIII-	<u>ر</u> د
	ATO's Non-Strategic Nuclear Force (NSNF) PostureIV-1	
	Overview: The Adequacy of NATO's NSNF Posture Delivery Systems and Warheads	
	1. Composition of the Posture	
В.	Delivery Systems and Associated WarheadsIV-1	
	1. Delivery System Categories	
	a. Contribution to Deterrence	
	(1) 155mm HOWITZER (2) 203mm HOWITZER (3) HONEST JOHN (4) LANCE	

	3.	intermediate-range Nuclear Forces (INF)	IV′
	à	Contribution to Deterrence Contribution to Defense INF Assessment	IV-4
		(1) PERSHING Missiles (2) GLCM (3) DCA	•;
1	4. D	efensive Nuclear Forces (DNF)	. V –5
	a b c	Contribution to Deterrence	V-6
5	. 1	F/SNF/DNF StockpileI	
C. N	ATO's	Command, Control, Communications and Intelligence	V - 7
1 2	. Ov	erviewIV	
	a.	_	
		(1) Current US Communications Systems	
		(a) Dedicated Communications Systems(b) Defense Communications Systems Support	
	•	(2) Current NATO and Allied Communications Systems	.;
		(a) Major Types of Trunk Systems (b) Multiple Nets and Paths	
	b.	Communications Systems Assessment	-10
3.	c3 I	Functions and AssessmentsIV-	
	a. b. c. d. e. f.	Tactical Warning and Attack Assessment IV- Intelligence Gathering IV- Intelligence Fusion IV- Decision Center: Command & Control IV- Employment Planning and Targeting IV- Execution IV-	-10 -11 -11

	D.	Safety, Security, and Survivability (S3) of Nuclear WeaponsIV-1
		1. Introduction
		a. Physical SecurityIV-1
		(1) Long-Range Security Program(2) Improved Weapon Design
		b. SafetyIV-1
		(1) Reduced Likelihood of Inadvertant Detonation(2) Minimized Potential for Plutonium Dispersal
		c. SurvivabilityIV-14
	E.	Observations on the Adequacy of NATO's Nuclear Force Posture
•	 +-	1. Overview
٧.	Ste	os to a More Rational and Cooordinated Land-based NS'NF
		rostureV-1
	Α.	Notable Developments Since 1975V-1
		 NATO and the Changing Balance of Forces
	B.	Basis for Recommendations to Improve the NSNF PostureV-2
		 Proper Emphasis on Conventional Defense Forces
	c.	Recommendations & Steps to Improve NATO's NSNF PostureV-4
		1. NSNF Delivery Systems & Associated Warheads
		a. Nuclear Artillery

۷٠	(C3I) Systems
	a. Areas of Improvements
	(1) Regency Net (2) Flaming Arrow Net (3) MILSTAR (4) SCARS (5) TARE and CAMPS
	c. Target Acquisition
	(1) JSTARS (2) JTF (3) INCA
3.	Observations on Stockpile Level, Composition and Warhead Storage
. . .	a. Stockpile Level and Compositionv-8
	(1) Stockpile Adjustments (2) SACEUR's Work (3) Modernization Required (4) Long-Term Program
	b. Warhead StorageV-9
	(1) Long-Range Security Program(2) Weapons Storage and Security System(3) Improved Dispersal
D. Conc	lusionV-10
Annex A: Th	e NATO/Warsaw Pact Nuclear Balance
Annex B: NA	TO Decisions on the Future NSNF PostureB-1

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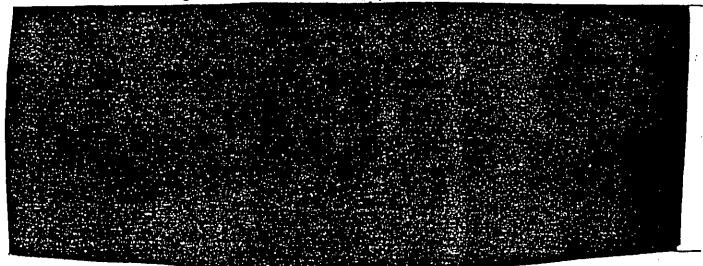
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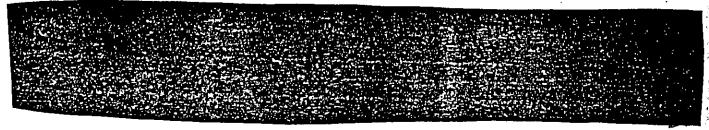
(U) NOTABLE DEVELOPMENTS SINCE 1975

Since the 1975 DoD report to the Congress, NATO has made major decisions concerning its NSNF posture. MATO's most fundamental policy decision was to maintain the minimum number of warheads in its nuclear stockpile consistent with credible deterrence and defense. In December 1979 in response to the rapid buildup of Soviet MIRVed SS-20 missiles, the Alliance decided on a dual-track approach of arms control negotiations and if necessary beginning at the end of 1983 to deploy 572 Longer-Range Intermediate-Range Nuclear Force (LRINF) missiles: Ground-Launched Cruise Missiles (GLCM) and PERSHING II (PII). Integral to that decision was the withdrawal of 1000 warheads from the stockpile of approximately warheads. In addition, consistent with its policy of maintaining the minimum number of warheads in the stockpile, for each of the 464 GLCM warheads deployed, a shorter-range warhead would be withdrawn on a one-for-one basis and 108 PERSHING 1 missiles and warheads were to be converted to the longer-range PII system. Another notable development was "The Montebello Decision" in October 1983 by NATO Defense Ministers attending the Fall Nuclear Planning Group (NPG) meeting. approved the High Level Group (HLG) conclusion that the Alliance must undertake the Ministers necessary modernization and improvements to maintain a credible deterrent while agreeing to withdraw an additional 1400 warheads from the European stockpile, re-

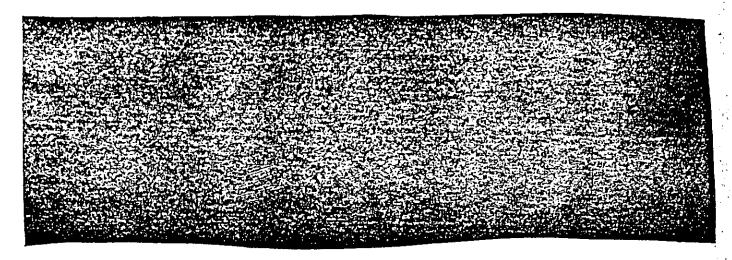
(U) At the same time, notable developments have occurred in the Warsaw (set (WP) threat. Soviet force improvements have quantitatively far outdistanced those undertaken by the NATO Alliance and, when coupled with significant qualitative improvements, have yielded a WP posture that is larger, more flexible, more survivable and more capable of striking a greater range of targets than in 1975.

(U) ASSESSMENT OF THE NATO/WP NSNF BALANCE

(U) The most striking observations derived from a review of the NATO/WP NSNF balance are the vigorous modernization of the WP's nuclear capabilities and the age of NATO's stockpile. Although NATO has been improving both its conventional and non-strategic nuclear forces since 1975, the gap between NATO's total military capabilities and those of the WP has inexorably grown.



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(U) NATO Doctrine. NATO nuclear doctrine is best explained in the context of NATO's objectives and its strategy of Flexible Response and Forward Defense. NATO's overriding purpose is to deter aggression and preserve the peace and freedom of the members of the Alliance. Through the NATO triad of conventional, non-strategic nuclear, and strategic forces, the Alliance seeks to influence the WP's calculation of risks and benefits attending the initiation of aggression, or the continuation of aggression, should deterrence fail. In peacetime, NATO's forces deter by: (i) making evident that an attack against the Alliance would be met by an immediate and effective defense; and (ii) maintaining an effective military posture, and the demonstrable resolve to use it, to convince the WP that neither intimidation nor aggression would succeed. Should deterrence fail and aggression occur, NATO would seek to cause an early political decision by the WP to cease aggression and withdraw. NATO's principal aims under these conditions would be: (i) the preservation of the territorial integrity of the Alliance; (ii) the termination of conflict at the lowest possible level of violence consistent with NATO's interest; and (iii) the restoration of deterrence.

(U) NATO's politico-military objectives are incorporated in its strategy of Forward Defense and Flexible Response. Forward Defense reflects NATO's collective commitment that any aggression will be met by an immediate and effective NATO military response to prevent an aggressor from seizing and holding NATO territory. The Flexible Response strategy reflects NATO's determination to prevent a potential aggressor from predicting with any confidence NATO's specific response to aggression. Flexibility in the range of response options available to NATO Authorities, supported by a credible military capability across the full spectrum of the NATO triad, creates uncertainty for a potential aggressor, forcing him to conclude that incalculable risks would be involved. Flexible Response provides for three types of response to aggression in which NSNF have a central role: Direct Defense, Deliberate Escalation, and General Nuclear Response (GNR). The capability for engaging in selective use of NSNF in Direct Defense and Deliberate Escalation, together with the ultimate response of GNR (in conjunction with other US strategic forces) presents the Soviets with uncertainty as to what NATO's response to aggression might be any aggression could initiate a sequence of events which could not be determined in

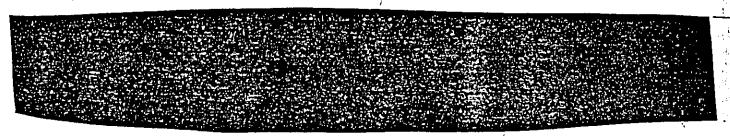
advance and which would involve risks out of all proportion to any advantages the aggressor might hope to gain.

(U) Thus, NATO's selective use of nuclear weapons has both political and military elements. The fundamental objective of any nuclear use will always be political. NATO as a defensive Alliance, would never be the first to use force. However, once aggression has occurred, NATO reserves the right to apply whatever force is necessary to convince the WP to make the decision to cease aggression and withdraw. At the same time the Alliance has recognized that for nuclear use to convey an effective signal of NATO resolve, such use must have a significant military impact.

(U) RELATIONSHIP OF NSNF TO DETERRENCE AND DEFENSE



(U) Advanced conventional munitions (ACMs) could contribute to the enforcement of WP dispersal; thus, efforts to enhance conventional capabilities must take into account promising advanced technologies, where it is appropriate to do so. Conventional force improvements are needed and supported; however, care must be exercised that investments in advanced conventional capabilities and needed NSNF improvements are kept in balance. A balanced approach to improving conventional and nuclear capabilities is recommended because both are necessary and complementary in providing credible deterrence and defense. ACMs compliment NSNF in providing deterrence across the conflict spectrum, and, therefore, we must pursue ways to enhance conventional capabilities. Nevertheless, even with conventional improvements, NSNF will continue to remain necessary to deter WP nuclear or large scale chemical use for several reasons. ACMs cannot carry the same psychological message to the enemy — nuclear use is a qualitative change in the conflict — and conventional weapons cannot deter enemy use of nuclear or chemical weapons, or political coercion from the threat of their use.

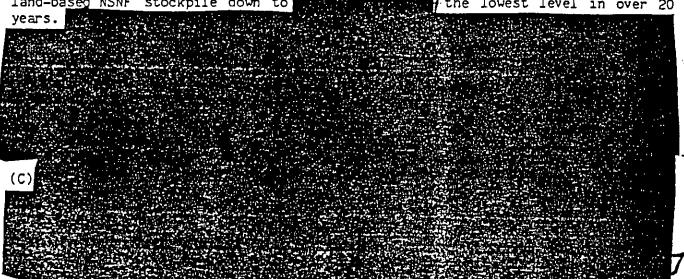


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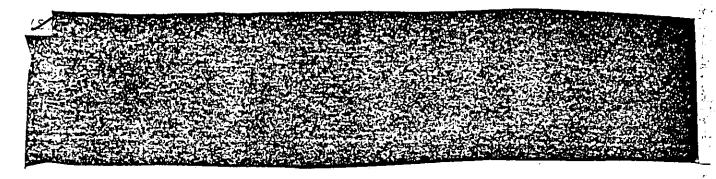
(U) The relationship of NSNF to deterrence is multifaceted. The role of NSNF is not to substitute nuclear capability for conventional force shortfalls. Rather, NSNF have intrinsic value: (i) in peacetime, NSNF demonstrate the resolve and solidarity of the Alliance through the willingness to share the costs and potential risks accruing from NSNF deployments; (ii) NSNF contribute to deterrence by providing credible, militarily effective nuclear options; (iii) NSNF cause the WP to maintain a dispersed posture, and (iv) NSNF provide linkage to strategic nuclear forces. Thus, the role of NSNF, in conjunction with the strategy of Flexible Response, is to deter aggression through the threat of selective use and by providing a credible linkage between conventional and strategic forces. Since NATO's defensive concept does not envisage continued fighting at the nuclear level to achieve a classic military victory, the Alliance need not match the WP warhead-for-warhead or system-for-system. It is this logic which permits setting a minimum number of warheads in the NSNF stockpile commensurate with the scale and quality of the threat and consistent with maintenance of a credible deterrence and defense.

(U) ACHIEVING THE MINIMUM NSNF STOCKPILE

(8) In-October 1983 at the Fall NPG meeting, NATO Defense Ministers received the findings and recommendations of the HLG study which reviewed NATO's nuclear forces. Ministers agreed with the HLG report and also agreed to withdraw 1400 warheads from the European stockpile during the next five to six years. Taken with the withdrawal of 1000 warheads completed in 1980, this reduction when completed will bring the land-based NSNF stockpile down to



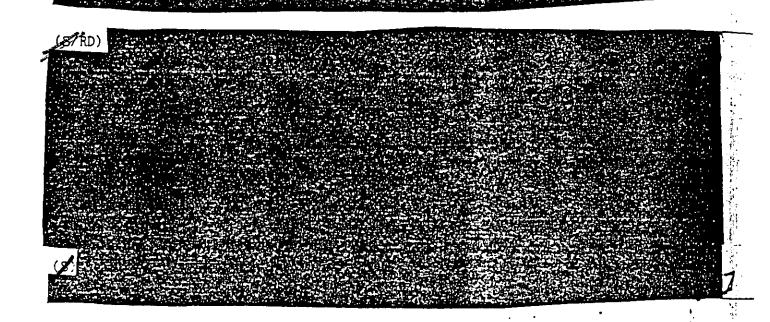
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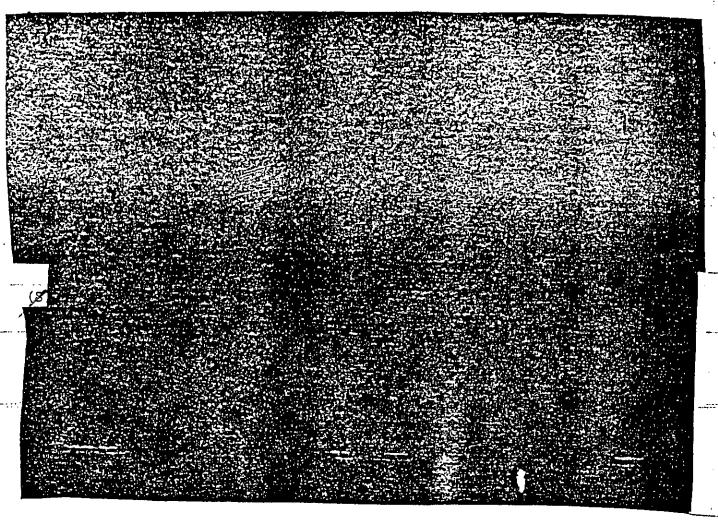


(U) STEPS TO A MORE RATIONAL AND COORDINATED NUCLEAR POSTURE

(U) An integral and essential step for the US in developing a more coordinated NATO nuclear posture has been the close and continuous consultation with the Allies. Defense Ministers together with the Major NATO Commanders meet twice-yearly as the NPG to discuss nuclear matters and the HLG, a supportive organization to the NPG, has provided a forum for more frequent consultation. Consequently, the decisions on NATO's future NSNF posture have been collective, well-coordinated Alliance decisions.

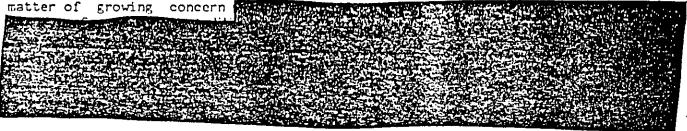
(8) Although much has been accomplished by way of strengthening both conventional and nuclear forces since the 1975 report, it is a DoD judgment that much remains to be done to ensure the continued credibility of NATO's nuclear posture. DoD supports continued improvements in conventional forces.





(U) NSNF Replacement and Modernization. Since 1975, it has been the collective judgment of all of the NATO Allies that, despite qualitative and quantitative changes in the WP threat, NATO's current strategy will remain sound for the foreseeable future. In reaffirming the wisdom of MC 14/3, however, NATO has also concluded that, in light of the growth in Warsaw Pact capabilities over the last decade, judicious replacement and modernization of NATO's NSNF, as well as improvements to NATO conventional forces, are essential to ensure the continuing viability of NATO's strategy.

With regard to alleviating particular force-wide deficiences, the NATO Allies have paid particular attention in their deliberations to several general areas in which improvements should be made. First, the age of NATO's nuclear forces is a matter of growing concern



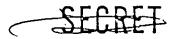


Allies that timely, judicious replacement and modernization of current NSNF and its supporting C3I are necessary in light of (i) the Alliance goal to achieve a minimum level nuclear stockpile to maintain effective deterrence and (ii) the trends in WP force capabilities. This requirement for modernization provides opportunity for greater coordination with our NATO Allies for the maintenance of adequate deterrence under changing circumstances.

REPORT ON THE NUCLEAR POSTURE OF NATO (U)

I. (U) INTRODUCTION.

- A. (U) This report sets forth the results of a review of NATO's nuclear posture undertaken in response to the 1984 Department of Defense Authorization Act (Senate Conference Report No. 98-213). The primary purpose of this report is to explain the steps being taken to develop a more coordinated Non-Strategic Nuclear Force (NSNF) posture in a manner consistent with proper emphasis on conventional defense forces. The focus of this report is on the land-based NSNF posture those land-based nuclear forces in NATO with ranges less than 5500 km and under the responsibility of the Supreme Allied Commander Europe (SACEUR).
- B. (U) The Department of Defense's conclusions and recommendations regarding steps to strengthen NATO's nuclear posture and NATO's deterrent are set forth below and draw upon previous work conducted by the Alliance's military authorities and the NATO Nuclear Planning Group (NPG). Measures to strengthen NATO's conventional and chemical forces have been taken into consideration in this report. Conventional force improvements are discussed in greater detail in the companion Department of Defense report, Improving NATO Conventional Capabilities, submitted under separate cover.
- C. (U) The Congressional request for an explanation of the steps being taken to develop a more rational and coordinated nuclear posture is particularly timely. Since the 1975 report to Congress on The Theater Nuclear Posture in Europe, NATO has made significant adjustmenta in its nuclear posture, ara-additional adjustments are planned. NATO's Defense Ministers have taken steps and provided recommendations essential to strengthening NATO's Nuclear Posture (See Annex A: The NATO/WP Nuclear Balance) and maintaining the integrity of NATO's nuclear deterrent. The introduction of Longer-Range Intermediate-range Nuclear Forces (LRINF) (PERSHING II and Ground Launched Cruise Missiles (GLCM)), absent any arms control agreement reducing the level of or obviating the need for these deployments, is essential to the maintenance of NATO's deterrent posture. NPG -Ministers also have identified and approved other improvements to the NSNF posture. At the October 1983 meeting of the NPG, Ministers agreed, in the context of the High Level Group (HLG) report presented for their consideration, to withdraw 1,400 warheads from the European stockpile during the next five to six years. Additionally, Ministers approved the HLG conclusion that the Alliance must undertake the necessary actions to improve its forces across the entire spectrum of capabilities in order to ensure a continuing and credible deterrent (See ANNEX B: NATO Decisions on the Future NSNF Posture).
- D. (U) An underlying theme in the Congressional requests for reports on both the conventional and nuclear postures is the need to review whether NATO's current policies remain appropriate. Accordingly, this report and the companion report on improving NATO's conventional forces, collectively reexamine NATO's deterrent posture in its entirety.
- E. (U) A fundamental conclusion of this review is that the existing NATO strategy remains valid. At the same time, due to trends in Warsaw Pact (WP) capabilities, improvements to NATO's NSNF, conventional, and chemical force postures are required. This requirement for modernization, coupled with new



technological opportunities for improving the deterrent effectiveness of NATO forces, provides an opportunity for even greater coordination of NATO's defense forces and, thereby, the maintenance of deterrence.

F. (U) These conclusions are developed in the following sections of the report. Section II of this report summarizes the NATO strategy and operational doctrine and the relationship of NSNF to deterrence and to conventional and chemical forces. This is followed by a synopsis of the threat in Section III. Section IV reviews the status of NATO's NSNF posture. Section V provides a description of the steps being taken in the development of a rational and coordinated nuclear posture.

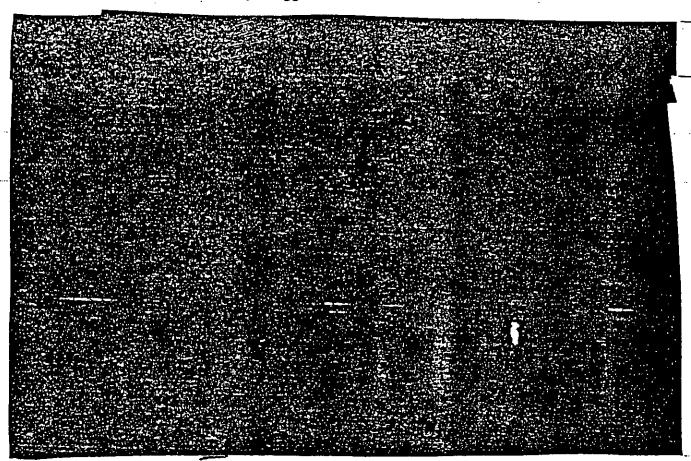
II. (U) NATO OBJECTIVES, STRATEGY, OPERATIONAL DOCTRINE & FORCE RELATIONSHIPS.

A. (U) NATO Objectives.

- 1. (U) <u>Purpose</u>. The overriding purpose of NATO is to deter aggression and preserve the peace and freedom of the members of the Alliance. Through its triad of forces conventional, non-strategic, and strategic nuclear forces the Alliance influences the WP's calculation of risks and benefits attending the initiation of aggression, or the continuation of aggression, should deterrence fail.
 - 2. (U) Deterrence. In peacetime, NATO seeks to convince the WP that any military action against NATO would not lead to victory and would pose unacceptable risks. NATO's forces deter by: (i) making evident that an attack against the Alliance would be met by an immediate and effective defense; and (ii) maintaining a credible military posture, and the demonstratable resolve to use it in war. Through capability and resolve, NATO seeks to convince the Soviets that intimidation would not succeed and that aggression would initiate a sequence of events which could not be determined in advance and which would involve risks out of all proportion to any advantages that might accrue from aggression.
 - 3. (U) <u>Defense</u>. Should deterrence fail, NATO would seek to cause an early political decision by the WP to cease the aggression and withdraw. The Alliance's objectives would involve three principal aims: the preservation of the territorial integrity of the Alliance, the termination of the conflict at the lowest possible level of violence, and the restoration of deterrence.
 - -B. (U) Strategy. Present NATO strategy embodies the appropriate balance between the conventional and nuclear extremes of earlier NATO strategies (pre-1967). By presenting a spectrum of possible conventional, chemical, and nuclear responses, NATO forces and strategy ensure a range of options well-suited to any contingency that might result from WP aggression. These forces and strategy also provide a framework in which both the political and military needs of NATO's Defense are met. And, they do so in a manner that reconciles the requirements for a peacetime posture with those of a flexible and effective posture should aggression occur. The distinctly politico-military character of NATO's objectives provides the backdrop for any discussion of NATO's strategy of Flexible Response and Forward Defense.
 - l. (U) Flexible Response. Flexible response is a defense principle which calls for a force structure that will make it impossible for a potential aggressor to predict with confidence NATO's specific response to aggression. This flexibility in NATO's choice of response options, supported by a credible military capability across the full spectrum of the triad, creates uncertainty for an aggressor, forcing him to conclude that incalculable risks would be involved regardless of the nature of an attack. Should deterrence fail, NATO must possess the capability to respond at whatever level of force is deemed necessary to stop aggression, to convey the Alliance's resolve, and to achieve the desired outcome while minimizing damage to NATO territory. Such a response could, for example, under certain circumstances, involve escalation by the use of nuclear weapons to halt a WP advance, to give pause to WP planners, and to make them reassess the objectives of their attack.

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2. (U) Forward Defense. Forward defense, as an element of strategy, seeks to make credible to the WP the conviction that any aggression will be met with an immediate and effective response by NATO. Forward defense requires sufficient forces in a high state of readiness, committed to NATO for prompt, integrated action in times of tension or against any limited or major aggression. Forces-in-being, with conventional and nuclear capabilities, must be committed to NATO in peacetime to present a credible deterrent to any level of aggression ranging from incursion to major aggression.

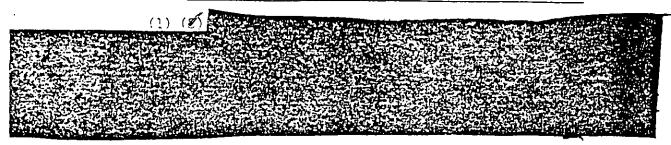


C. (U) <u>Basic Force Relationships and Principles of NATO Doctrine</u>.

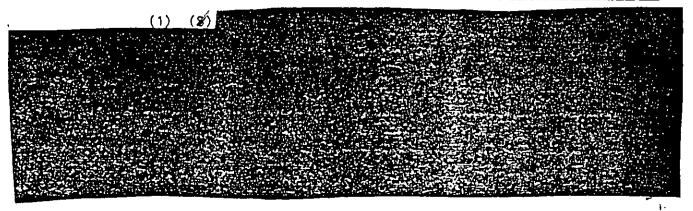
(U) As noted in the 1975 DoD Report to Congress, within the overall NATO strategy delineated in the NATO document MC 14/3, NATO's nuclear doctrine and force posture must continue to evolve to maintain and improve the effectiveness of the deterrent under changing circumstances. Nevertheless, several basic relationships and principles remain constant and serve to guide the evolution of both doctrine and force posture. These include: (i) the relationship of non-strategic nuclear forces (NSNF) to deterrence and other forces; (ii) the objectives of NATO selective nuclear use; (iii) the importance of political control of NATO's NSNF; (iv) planning of NATO nuclear options to enhance flexibility; (v) widespread sharing of risks and responsibilities in NATO; and (vi) peacetime coordination of participation in the NATO planning process. Each merits consideration.

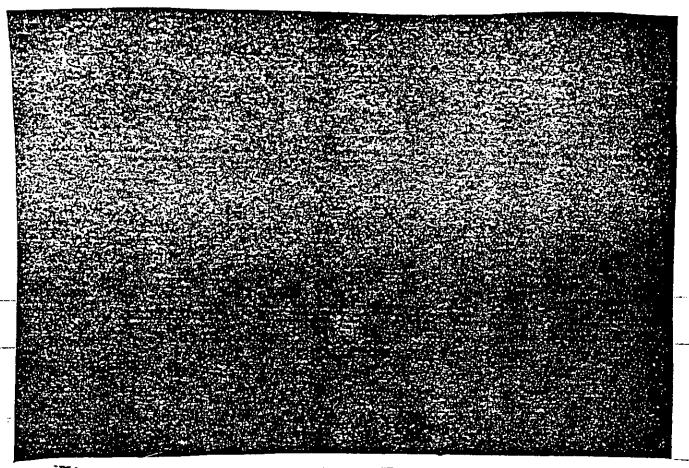


- 1. (U) MSNF Relationships.
 - (U) The Relationship of MSNF to Deterrence and Defense.

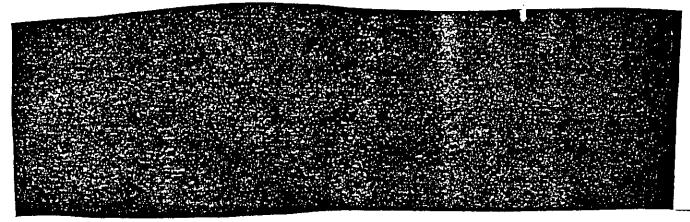


- (2) MSNF provide an essential element of deterrence and defensive capability and are not deployed as a substitute for conventional force shortfalls. Rather, NSNF have an intrinsic value: (i) in peacetime, NSNF demonstrate the resolve and solidarity of the Alliance through the willingness to share the costs and potential risks accruing from NSNF-deployments; (ii) NSNF contribute to deterrence by providing credible, militarily effective nuclear options; (iii) NSNF provide linkage to strategic nuclear forces; and (iv) should aggression occur, selective use of NSNF -will-raise the costs and risks of this aggression and serve to signal to WP planners that they have miscalculated Alliance resolve and solidarity. Flexibility in escalatory options enhances deterrence because it renders the risks of even limited WP aggression incalculable.
- The importance of maintaining NATO's NSNF posture ··(3) (U) in order to deter WP theater nuclear attacks, discussed in detail in the 1975 DoD report to Congress, is evident. Even if NATO were to deploy greatly improved conventional forces, the maintenence of some NSNF would be necessary. if for no other reasons than to preclude nuclear coercion of the Alliance or to deter WP nuclear use intended to defeat NATO conventional defenses. The WP deployment of substantial theater nuclear forces precludes any possibility that NATO could rely solely on conventional forces for deterrence.
- (4) (U) Less widely understood, however, is the role that NSNF play in deterring WP chemical and biological force employment and in permitting NATO to field a viable conventional defense.
 - (U) The Relationship of NSNF to Chemical and Biological Forces.





c. (U) The Relationship of NSNF to Conventional Defense.



(2) (U) Although such WP dispersal enhances the survivability of key combat elements, it also imposes operational limitations on WP offensive tactics. In turn, the prospects for a successful NATO conventional defense are improved substantially. Dispersal reduces the WP's offensive effectiveness and works against the Soviet doctrinal principle of achieving force superiority through massing. Not only does NATO's nuclear threat create doctrinal problems for the WP, but it also complicates command and control and logistics support.

By forcing WP forces to disperse (and to some extent increase the distance between echelons), it also constrains the rapidity with which these forces can be brought to bear.

(3) (U) Today, WP forces would be compelled to operate in dispersed formations to limit the risks attending possible NATO nuclear use. In the future, if the NSNF posture is maintained through judicious replacement and modernization, it will be possible for NATO to capitalize fully on promising conventional force technologies to exploit weaknesses in WP conventional tactics that are created by the deployment of NATO NSNF.

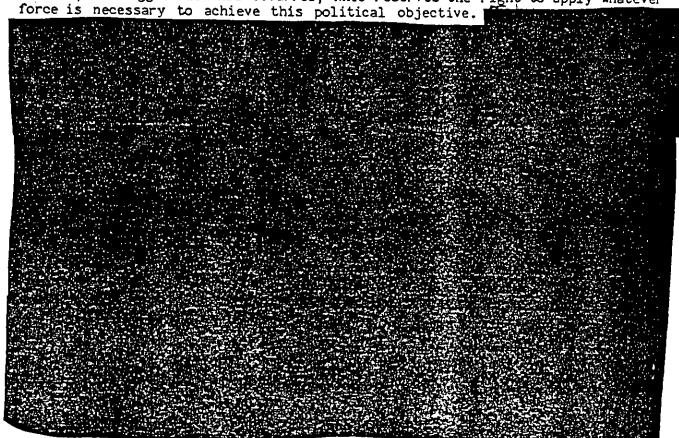
(4) (S) The above discussion demonstrates clearly the close and continuing relationship between NSNF deployments and an effective conventional defense

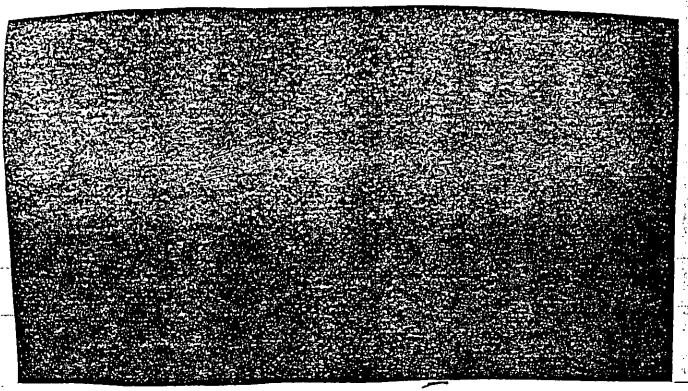


2. (U) Objectives of NATO Selective Nuclear Use.

elements.

NATO, as a defensive Alliance, would never be the first to use; force. However, once aggression has occurred, NATO reserves the right to apply whatever





3. (U) Political Control of NSNF.

a. (%) Procedures to ensure political control over NATO_nuclear weapons during both peacetime and hostilities are well structured and Comprehen-

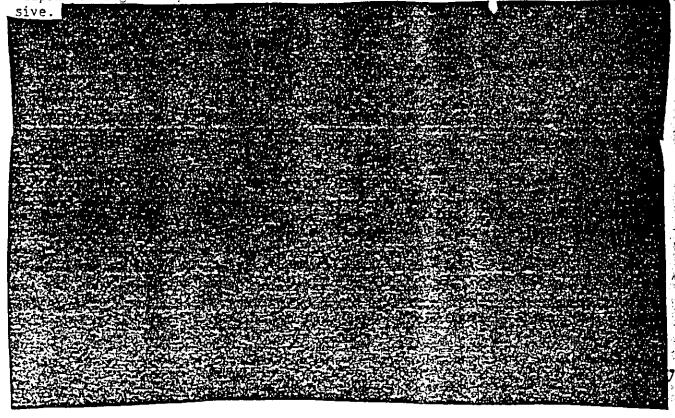
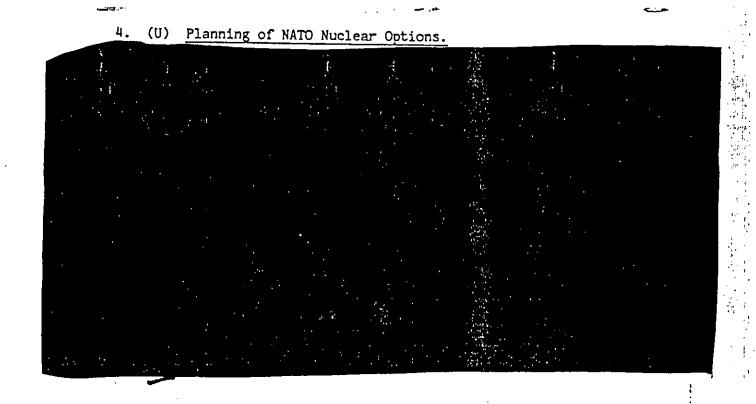




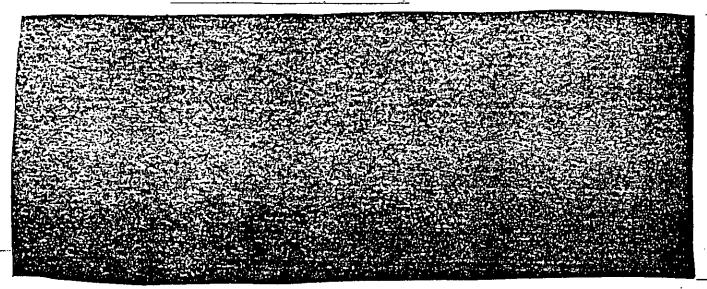
FIGURE II-1 (U) SACEUR NUCLEAR REQUEST AND RELEASE



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5. (U) Shared Risk and Responsibility.

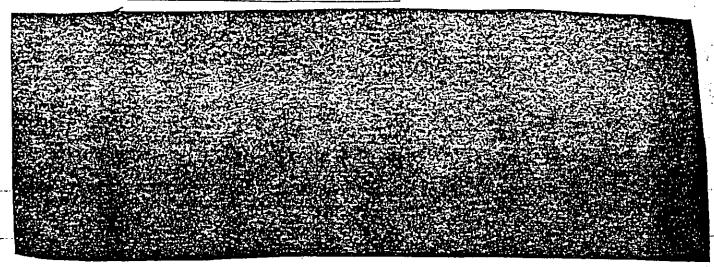


6. (U) Coordination and Participation in NATO Nuclear Planning.

- a. (U) Widespread coordination and participation in NATO nuclear planning during peacetime is a fundamental principle that complements collective sharing of responsibilities and risks, and guides the evolution of nuclear doctrine. Implementation of NATO strategy requires coordinated planning at both the political and the military level and widespread participation in terms of resources among the members of the Alliance.
 - b. (U) Coordinated planning at the political level is achieved through several mechanisms, notably the Defense Planning Committee (DPC) and the Nuclear Planning Group (NPG).
- (1) (U) General policy and broad politico-military planning is provided by the NATO DPC, which consists of the Defense Ministers under the chairmanship of the Secretary General.
- (2) (U) The NPG provides nuclear policy and conducts broad politico-military nuclear planning. It consists of Defense Ministers of the 14 countries directly involved in nuclear matters. A recent example of the NPG's planning responsibility is the decision taken on October 27, 1983, at Montebello, Canada, that NATO can, through NSNF improvements and judicious organization of resources and LRINF deployments, withdraw 1,400 nuclear warheads from the NATO stockpile over the next five to six years.
- c. (U) Coordinated military planning for the defense of the NATO Alliance is accomplished by the three Major NATO Commanders: (i) Supreme Allied Commander, Europe (SACEUR), responsible for the defense of Europe; (ii) Supreme Allied Commander, Atlantic (SACLANT), responsible for protecting the sea lanes of the Atlantic Ocean; and (iii) Allied Commander-in-Chief, Channel (CINCHAN), responsible for protecting the English Channel and the southern areas of the North Sea.

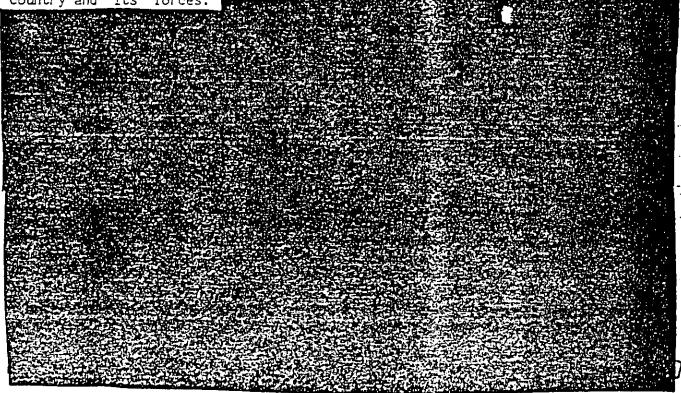


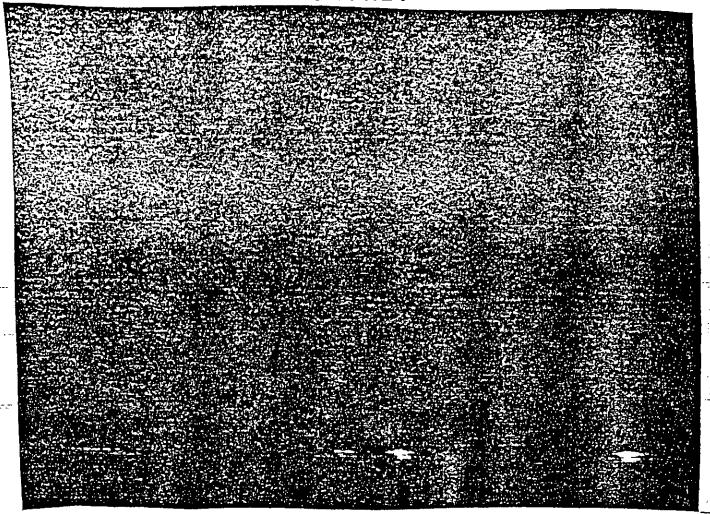
- III. (U) WARSAW PACT NUCLEAR STRATEGY, DOCTRINE, AND FORCE POSTURE TRENDS.
 - A. (U) CBJECTIVES, STRATEGY, AND DOCTRINE.



2. (U) Warsaw Pact Strategy and Doctrine.

Introduction. Soviet military doctrine is a body of views officially adopted by the political and military leaders on the nature of a future war, how to prepare for it and how it will be waged. Military doctrine determines the objectives and character of a potential future war and the preparation of the country and its forces.

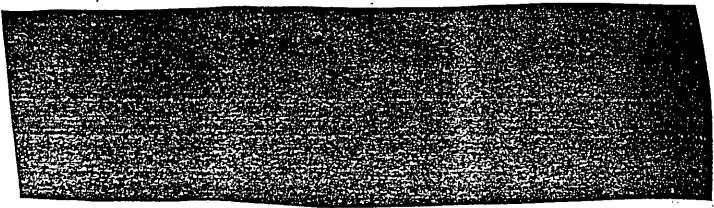


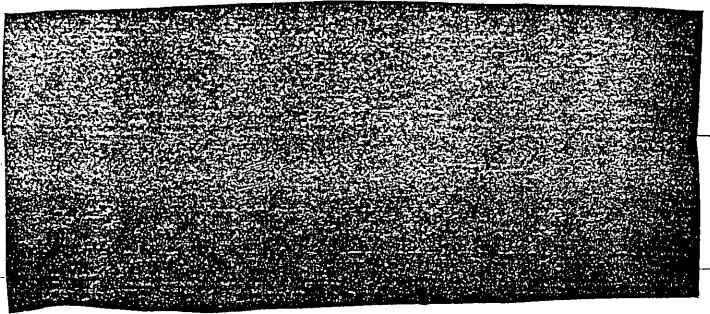


- b. (U) Employment Concepts for Nuclear Weapons. The specific employment concepts for nuclear war are contained within the theory of military art whose component parts are strategy, operational art, and tactics. Key principles of Soviet military art that would apply to the conduct of either a nuclear or conventional/chemical war with NATO are combined arms, force superiority, surprise, and offensive initiative.
- (1) (U) Combined Arms. WP military writers stress that a war will be won only by combined use of all the forces and means available. The importance of coordination by military units on the objectives, tasks, place, time, and means of fulfilling the objective of an operation permeates WP strategy. Operations in which resources are combined for the simultaneous solution of tasks are defined as "combined arms" operations and are conducted with the participation of elements from all or most of the military services or branch arms of the individual services. The combined arms approach would apply in a conflict in which nuclear weapons were employed as well as in a non-nuclear confrontation. Although WP planners foresee the employment of nuclear weapons in an initial massive strike to be decisive to the battle and/or the war, they also plan for rapid exploitation of the strike to be made by general purpose forces. Nuclear weapons would be employed predominantly in support of forces on a main axis, to

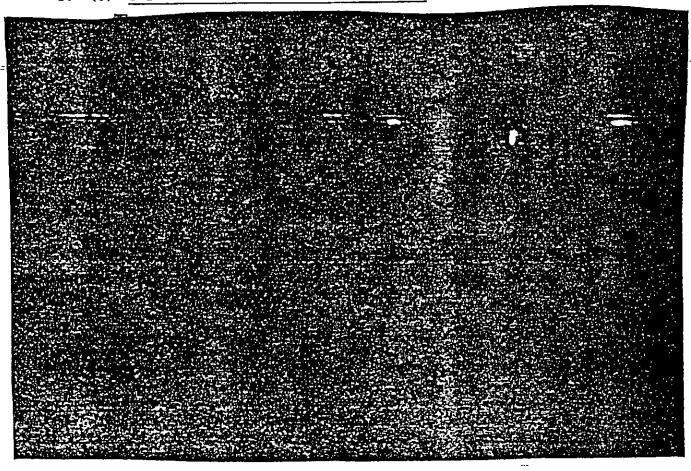
hasten the breakthrough. Forces on some axes might receive limited or no nuclear weapons support. Movement of forces in a nuclear environment would be planned to avoid the areas of highest contamination on the basis of reconnaissance data. In the context of theater nuclear warfare, the combined arms approach dictates the coordinated use of all varieties of weapons in the nuclear arsenal -- from strategic ballistic missiles to tactical artillery — as required to destroy designated targets in an initial massive nuclear strike. It also dictates the coordination of the operations of conventional forces with the massed nuclear strike (or strikes) to exploit the blow inflicted on the enemy.

- (2) (U) Force Superiority. In addition to employing all variety of resources available. Soviet writers also stress that military success will depend on the massed employment of forces to achieve and exploit superiority in decisive directions or axes. In conventional operations, troops will not be deployed equally along the entire front but concentrated at key points; in operations with nuclear weapons, massed strikes by missiles of various types and artillery are to be substituted for concentrations of troops. The WP anticipates that massed nuclear strikes will be so shattering as to accomplish most of the required destruction of enemy forces, with maneuver units merely exploiting gains made by the weapons.
- (3) (U) Surprise. Soviet writers consider that the advent of nuclear weapons considerably increases the decisive significance of surprise in modern warfare. They envision the possibility of a NATO surprise attack (which they consider likely) and prepare to launch a surprise preemptive attack themselves when they have acquired warning of NATO nuclear attack preparations. The principle of surprise translates into a major emphasis on high combat readiness, particularly for the means of nuclear attack and force-wide em loyment of deceptive measures.
- Offensive Initiative. The Soviets believe that the (4) (U) outcome of a future war will be predetermined by actions taken in its initial period. They stress the need to defeat the enemy as quickly and thoroughly as possible in order to prevent a coordinated response and reinforcement. Speed and decisiveness of action are necessary for the achievement of surprise. Once the war has gone nuclear, the mass nature of the initial strike and the simultaneous destruction of targets to the entire depth of the theater, including rear echelon elements, are seen as a means to thoroughly defeat NATO.

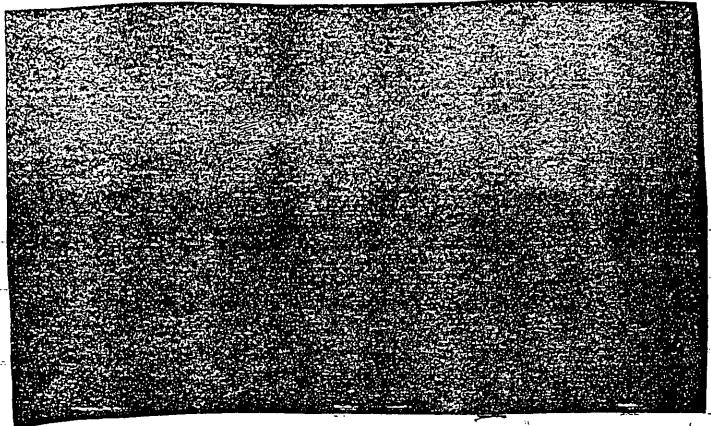




B. (U) TRENDS IN WARSAW PACT NUCLEAR POSTURE

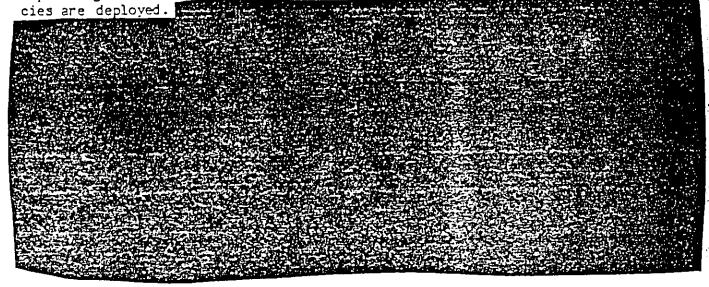


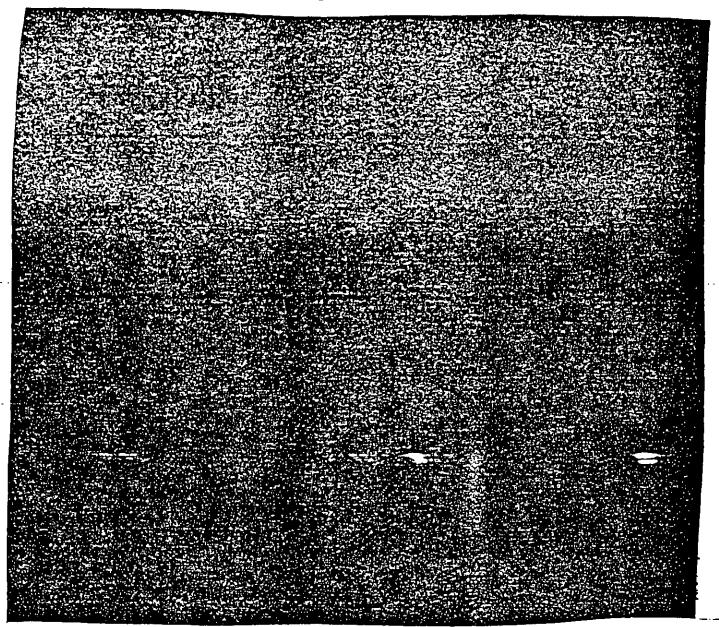
2. (U) Strategic Forces.



- 3. (U) Operational-Tactical and Tactical Forces.
 - a. (U) Short-Range Ballistic Missiles (SRBMs).

(1) (S) Over the rest of the century the WP SRBM force will improve both quantitatively and qualitatively as new systems with greater ranges, improved guidance and control. enhanced warhead capabilities and greater accura-

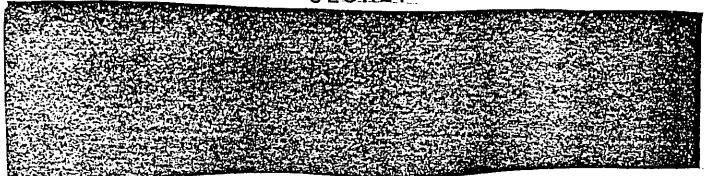




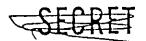
c. (8) <u>Tactical Aircraft</u>. In the tactical air forces, the potential for nuclear delivery is expected to grow as the aircraft modernization progress over the next decade.

C. (U) WARSAW PACT RESPONSE TO NATO FORCE IMPROVEMENTS.

1. The basic foundations of Soviet military doctrine and strategy have been consistent for several decades and Moscow has historically structured its military programs to achieve the political and military objectives of its doctrine and strategy.



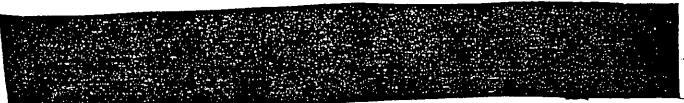
- 2. (U) In the doctrinal area, despite the attention given to the new US Army "air-land battle" doctrine in the Soviet press, this new employment concept will not likely change basic WP doctrinal concepts, such as the decisive nature of offensive operations or the critical importance of superiority in numbers and types of weapons systems which it continues to enjoy over NATO forces.
- 3. (U) The expansion and modernization of its USSR/WP military forces can be expected to continue. Despite economic difficulties, the USSR leadership can be expected to extract sacrifices from the Soviet people and WP allies to maintain or enhance its relative position as a world power.



IV. (U) NATO's Non-Strategic Nuclear Forces (NSNF) Posture.

A. (U) Overview: The Adequacy of NATO's NSNF Posture.

- 1. (U) <u>Composition of the Posture</u>. NATO's nuclear posture comprises NSNF delivery systems and their associated warheads; the safety, security, and survivability of nuclear warheads; and their supporting command, control, communication and intelligence (C3I) systems.
- 2. (U) Five Central Tasks. The adequacy of this posture is assessed in terms of its contribution to the Alliance objectives of deterrence and defense as discussed in Section II. The specific contribution of NSNF to these objectives flow from five central tasks:



- c..(U) Provide opportunities for Allied participation in NATO's NSNF deterrent posture.
- d. (U) Provide a capability for Direct Defense and options for Deliberate Escalation.
- e. (U) Preserve the linkage of NATO's deterrence and defense forces with strategic nuclear forces.
- 3. (U) Operational Criteria. To fulfill the central tasks, NSNF must be able to meet four fundamental operational criteria: adequate coverage at all ranges, effective deployments, force stability and survivability, and responsiveness. The ability of NATO NSNF to meet these operational criteria can be assessed from a review of the land-based delivery systems and their associated warheads; command, control, communications, and intelligence (C3I); and safety, security, and survivability of nuclear warheads.

B. (U) DELIVERY SYSTEMS AND ASSOCIATED WARHEADS.

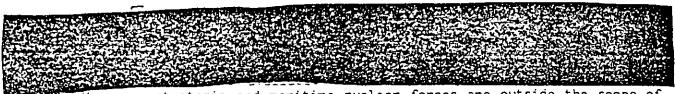
- l. (U) <u>Delivery System Categories</u>. NATO's NSNF are divided into three main categories. Additionally, NATO has at its disposal a limited number of strategic and maritime nuclear forces.
- a. (U) Short-range Nuclear Forces (SNF): 155mm and 203mm nuclear artillery; HONEST JOHN and LANCE missiles.

b. (U) Intermediate-range Nuclear Forces (INF):

(1) (U) Missiles -- PERSHING 1a (Shorter-Range INF or SRINF) and PERSHING II (PII) and the Ground Launched Cruise Missile (GLCM) (Longer-Range INF or LRINF).

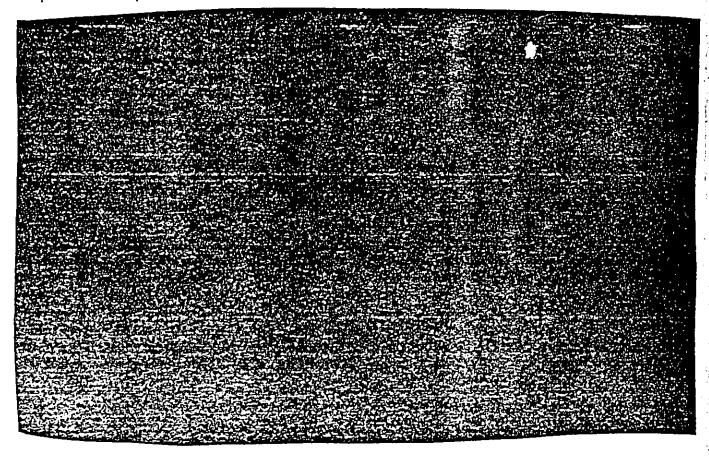


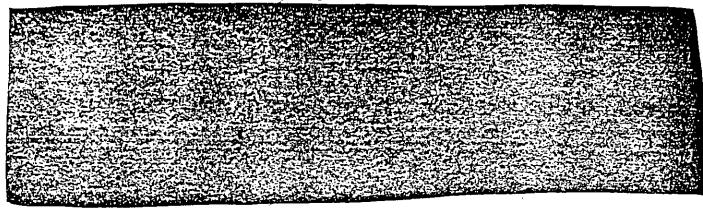
- (2) (U) Dual-Capable Aircraft (DCA) -- F-4, F-16, F-111, F-104, JAGUAR, TORNADO, BUCCANEER.
- c. (U) Defensive Nuclear Forces (DNF): NIKE HERCULES surface-to-air missiles and Atomic Demolition Munitions (ADMs).



However, strategic and maritime nuclear forces are outside the scope of this report.

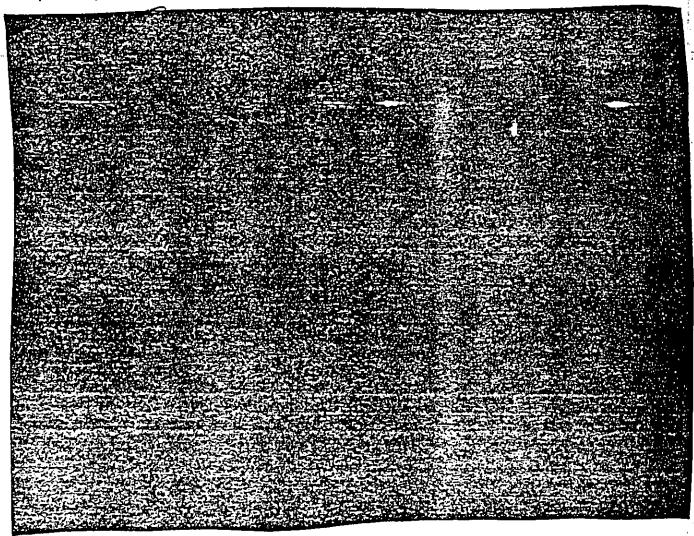
- 2. (U) Short-range Nuclear Forces (SNF).
- a. (U) Contribution to Deterrence. NATO's SNF contribute to deterrence by reducing the WP's conventional effectiveness and confidence that they could break through NATO's defense. Forward and widespread deployment of sufficient numbers of SNF, along with the enemy's uncertainty as to when, where, and to what degree NATO will resort to the use of nuclear weapons, would limit WP massing and cause closing follow-on forces to disperse out of fear of nuclear attack. That NATO can and, if necessary, will use nuclear weapons decreases the Soviet planners' certainty of achieving the desired force ratios through extensive massing, thus greatly reducing his confidence of success. Additionally, a militarily effective SNF deters. Soviet first use of nuclear weapons by providing NATO the option to respond in kind or to escalate the intensity or scope of the conflict.

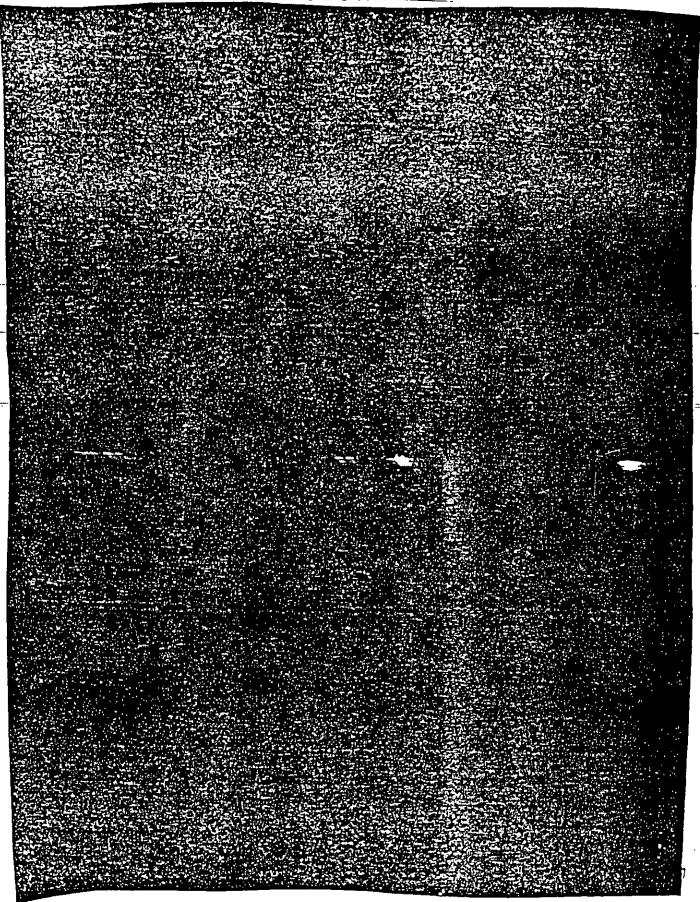




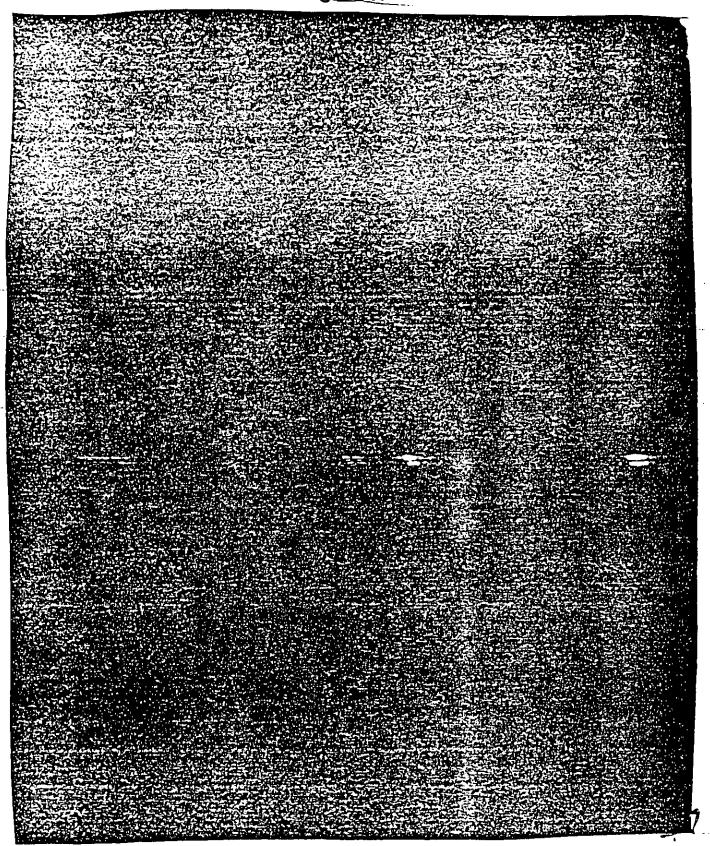
3. (U) Intermediate-range Nuclear Forces (INF).

a. (U) Contribution to Deterrence. NATO INF are assigned a critical role under NATO's policy of deterrence. They provide selective use options which hold at risk a wide range of military targets in both the NSWP and the Soviet Union, thus denying the Soviets a sanctuary from which to coerce or attack NATO. NATO's INF therefore contribute to deterrence by generating doubt among WP planners of their ability to control and sustain combat operations and on their capability to employ their own nuclear options.

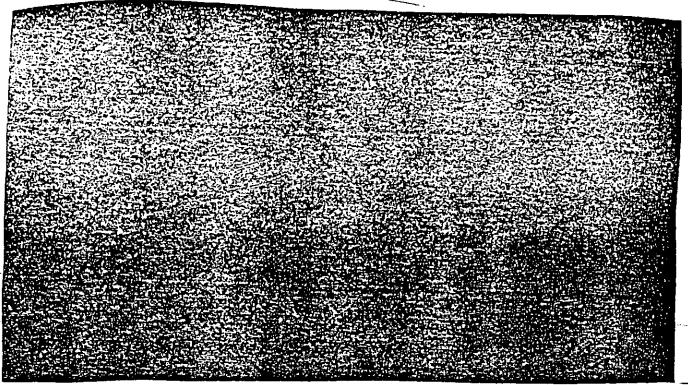




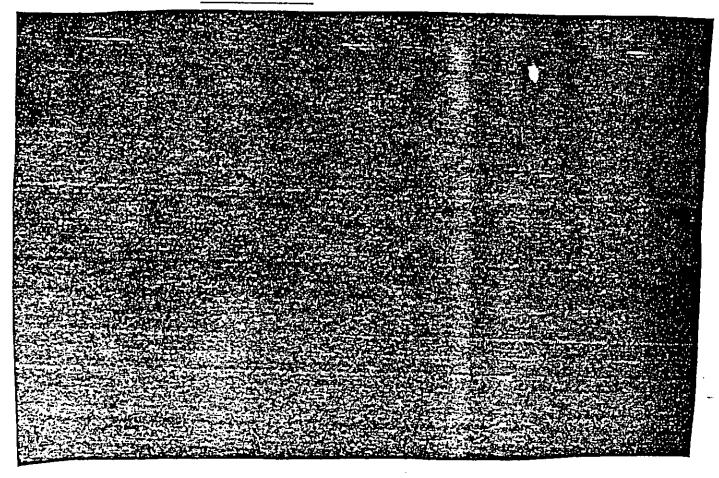
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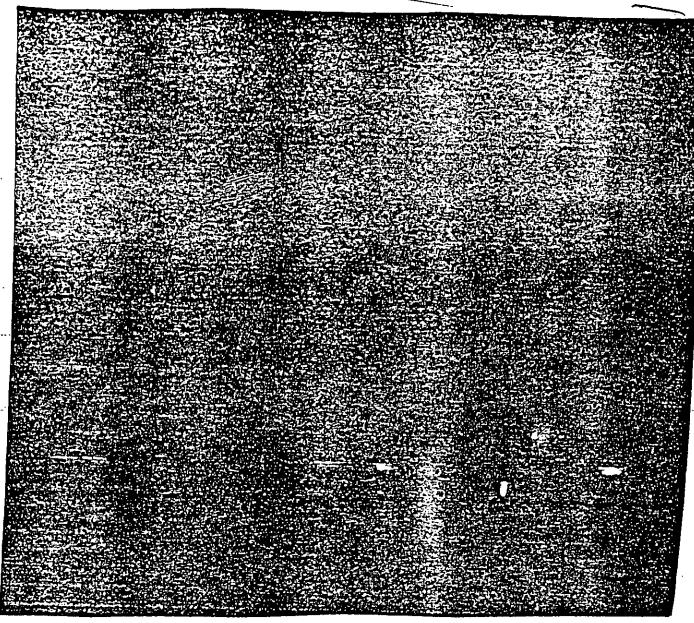


4. (U) Defensive Nuclear Forces. Nuclear air defense systems (NIKE HERCULES) and Atomic Demolition Munitions (ADMs) comprise NATO's DNF.

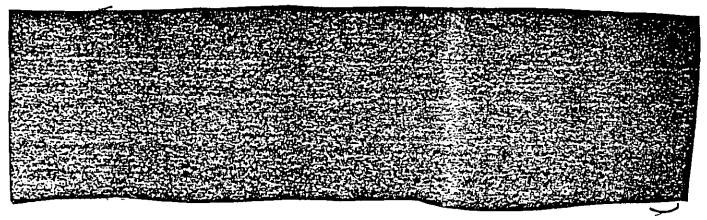


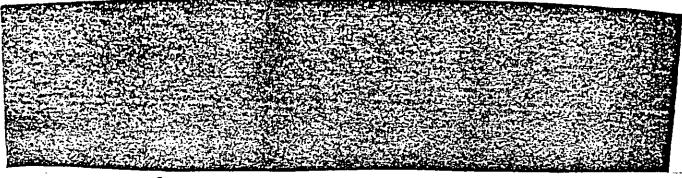
c. (U) DNF Assessment.



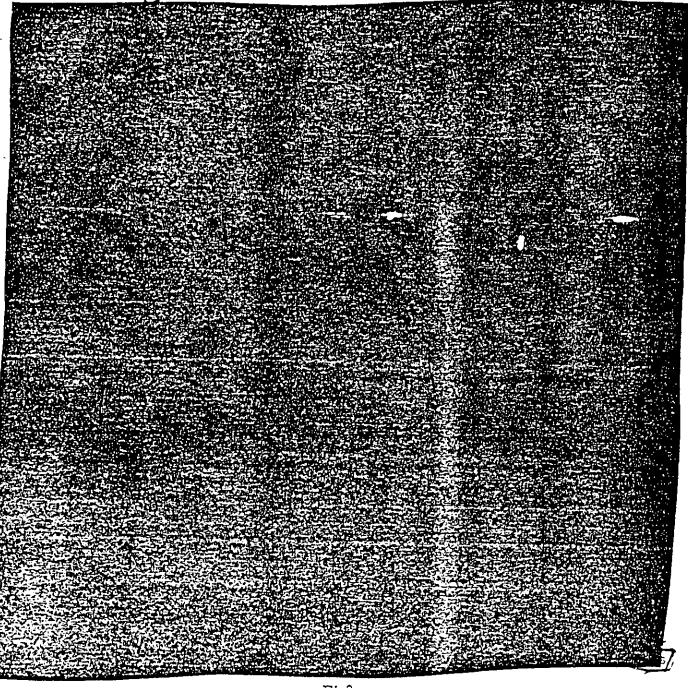


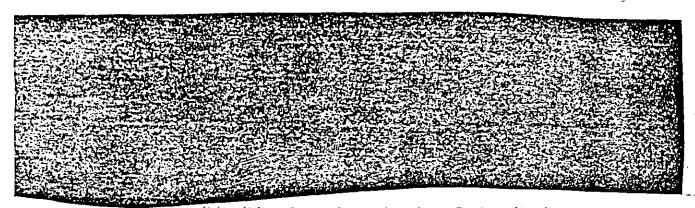
C. (U) NATO's Command, Control, Communications and Intelligence (C3I) Structure.





2. (U) C3 Systems.





(U) Defense Communications System (DCS) and Component Service System Support. The European DCS comprises a network of transmission systems using microwave, tropospheric scatter, satellite, HT radio, and cable communications. Switched networks include AUTOVON, AUTOSEVOCOM, and AUTODIN. AUTOVON is a long-haul, non-secure voice communications telephone network designed to provide service for operational and support requirements. AUTOSEVOCOM is an automatic secure voice system designed to provide secure voice communications to specified users. AUTODIN is a common user long-haul digital network designed to provide secure data transmission. To communicate with the individual US delivery units, US Army and Air Force Service systems are used depending on whether the unit is mobile or located at a fixed site. The USAREUR Tactical Alert Net (TAN) provides unsecure voice communication with major combat and combat support commands via leased circuits. When units are deployed to the field, communications for land forces are provided by a combination of radio teletype, HF voice, and VHF/FM voice systems. The USAFE Primary Alert System (PAS), a non-secure voice system; provides communications to tactical unit command posts via military and leased circuits. PAS will be upgraded to secure teletype in mid-1984. A USAFE HF/SSB system (INFORM) provides nonsecure radio voice communications to subordinate units. Tactical communications are provided by a combination of HF, VHF/ FM, and UHF radio systems providing nonsecure voice.

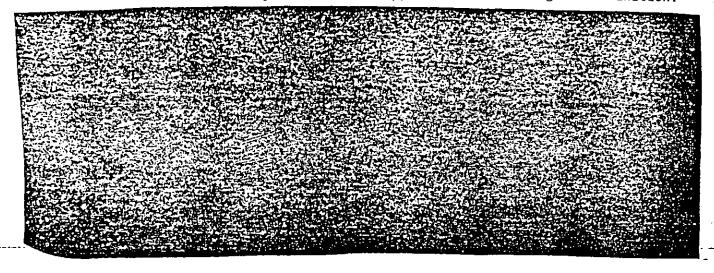
(2) (U) Current NATO and Allied Communications Systems.

(a) (U) Major Types of Trunk Systems. NATO's command and control system relies on a combination of communications systems made up of US and other Allied systems as well as NATO elements. Four major types of trunk systems exist. First, there are NATO-financed systems such as the ACE HIGH tropopospheric scatter system covering all of NATO Europe (Norway to Turkey) and the NATO Satellite Communications (SATCOM) system. Second, there is the US worldwide DCS which provides trans-Atlantic and much intra-European service. The third is the military service which each NATO nation provides separately between its NATO-deployed forces and its organic national defense establishment. Fourth, there are leased circuits belonging to the national postal-telephone-telegraphic (PTT) organizations with which both the individual nations and NATO supplement their national systems.

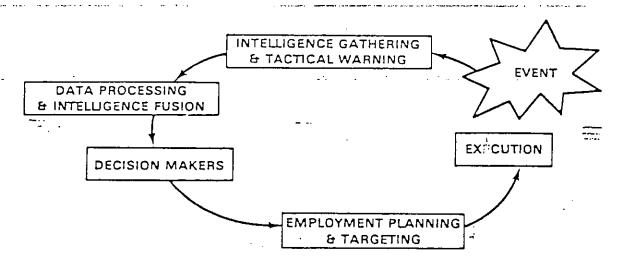
(b) (U) <u>Multiple Nets and Paths</u>. The evolutionary development of NATO communications networks and systems has resulted in multiple paths from and to SACEUR and other key NATO commanders. SHAPE operates nets such as the Status Control Alerting and Reporting System (SCARS) which uses links provided by ACE HIGH, Communications Improvement Program-67 (CIP-67), PIT, and various national military systems to handle messages supporting the NATO NSNF. Two HF nets (ERIGHT DAWN and the HF Broadcast Net) are also used for passing



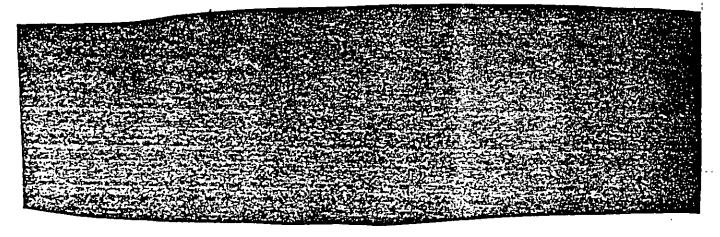
nuclear control orders. Additionally, a NATO Secure Voice Network and a Selective Release Improvement Program (SELRIP) support nuclear message dissemination.

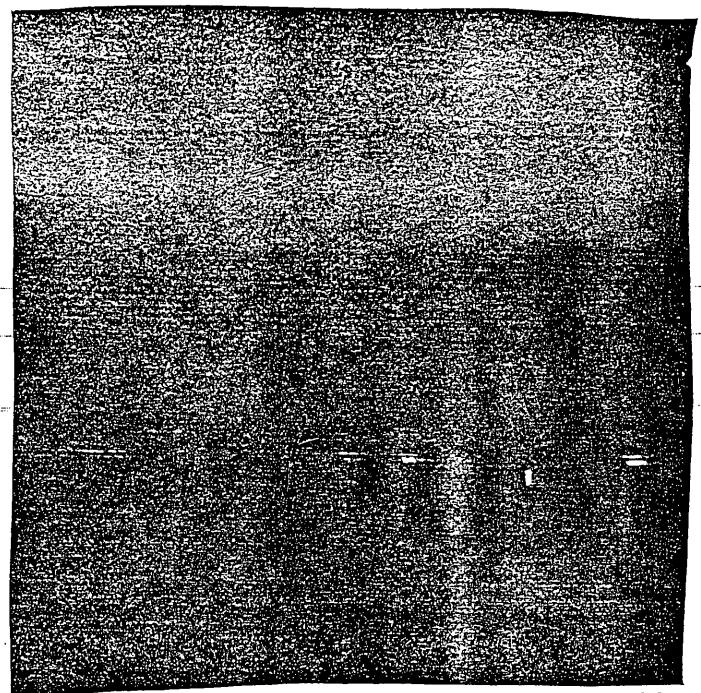


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(U) Tactical Warning and Attack Assessment.

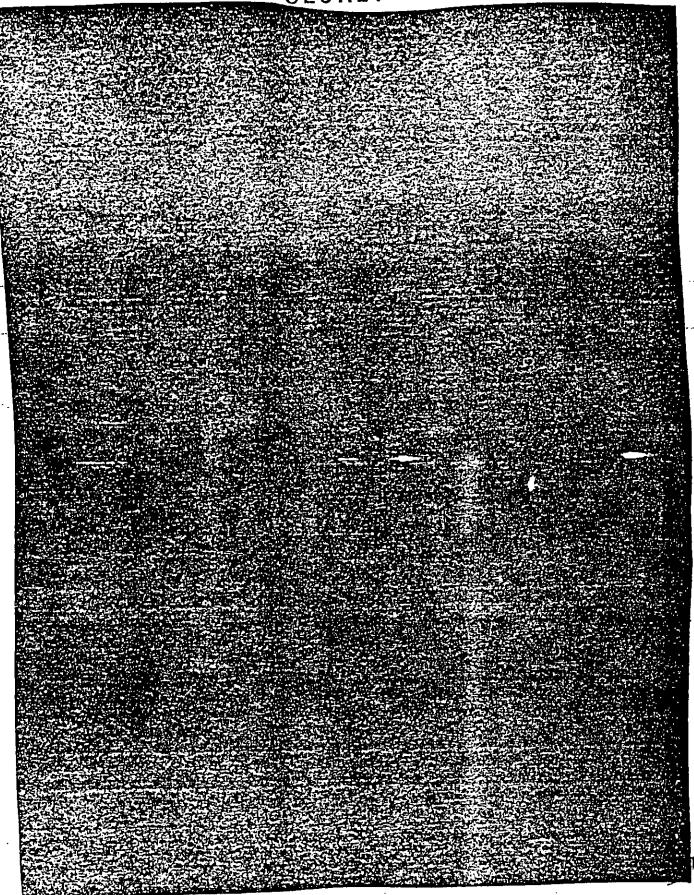


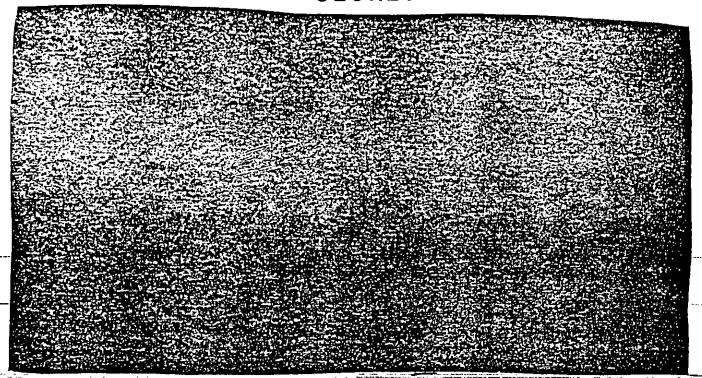


d. (U) <u>Decision Center: Command and Control</u>. Command and control for NSNF encompasses both a spectrum of requirements to include planning, directing, controlling, and executing forces as well as the positive control, protection, and custody of nuclear weapons.

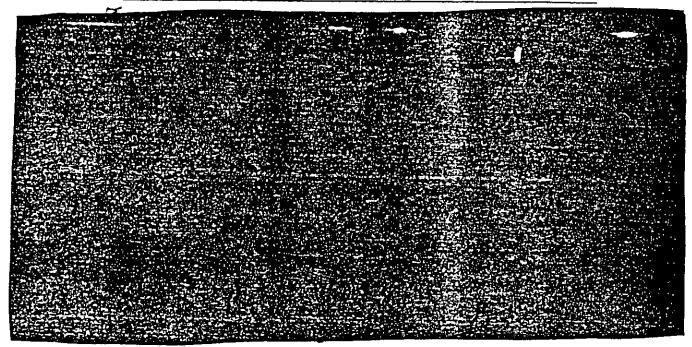


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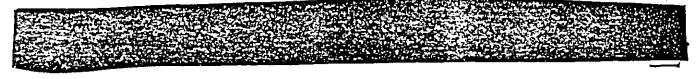


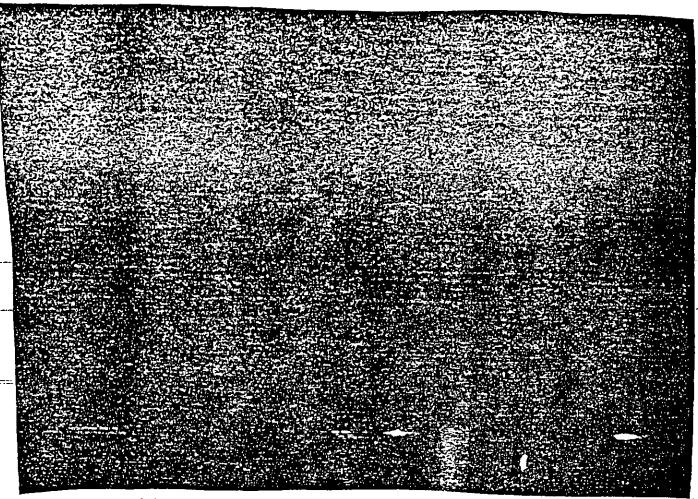
D. (U) SAFETY, SECURITY, AND SURVIVABILITY (S3) OF NUCLEAR WEAPONS.



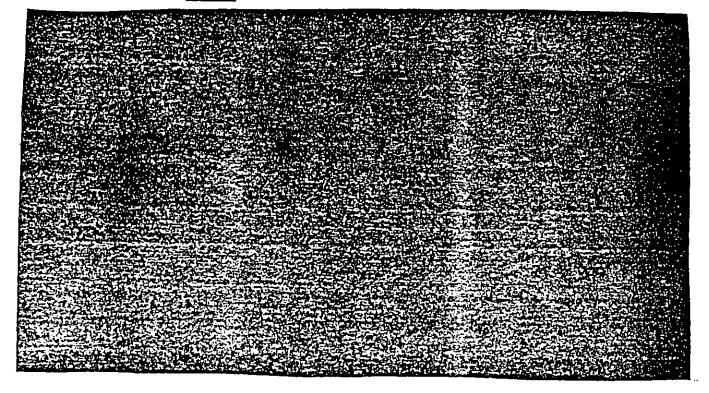
3. (U) S3 Improvements.

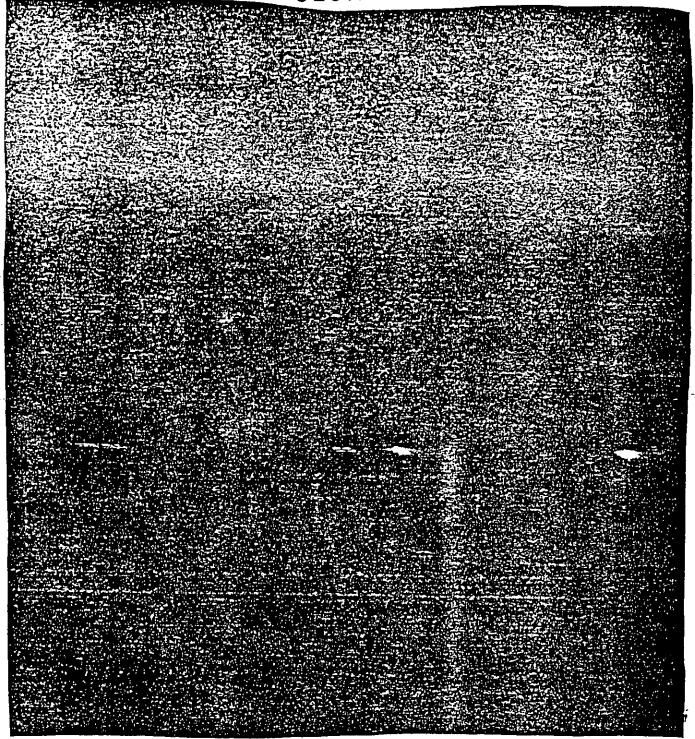
a. (U) Physical Security. There are many on-going initiatives to improve the security aspects of our nuclear forces.



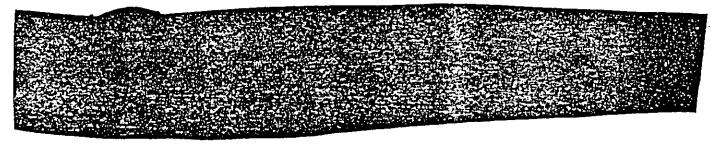


b. (U) Safety.

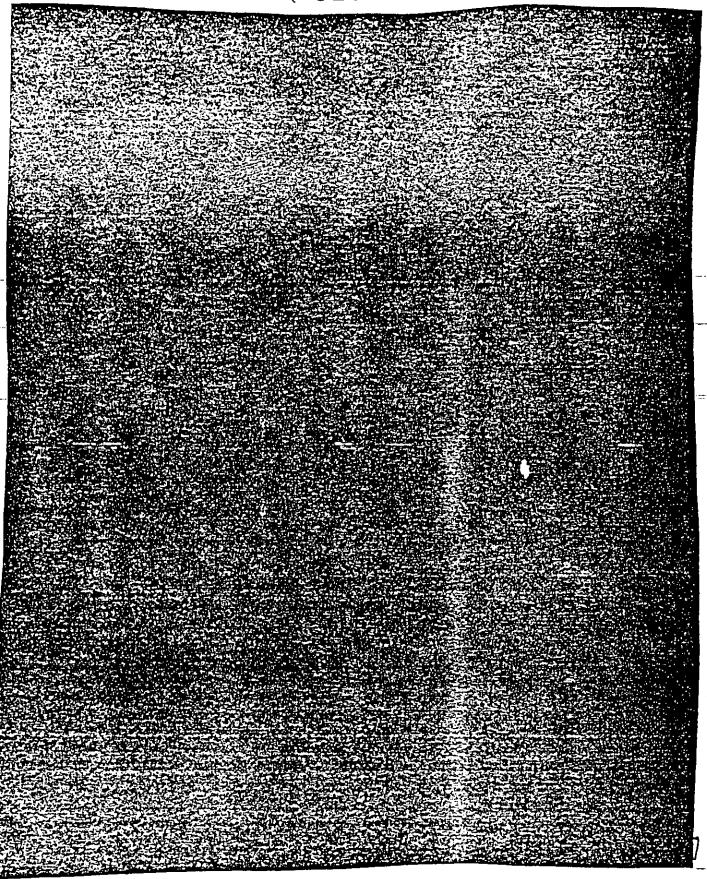


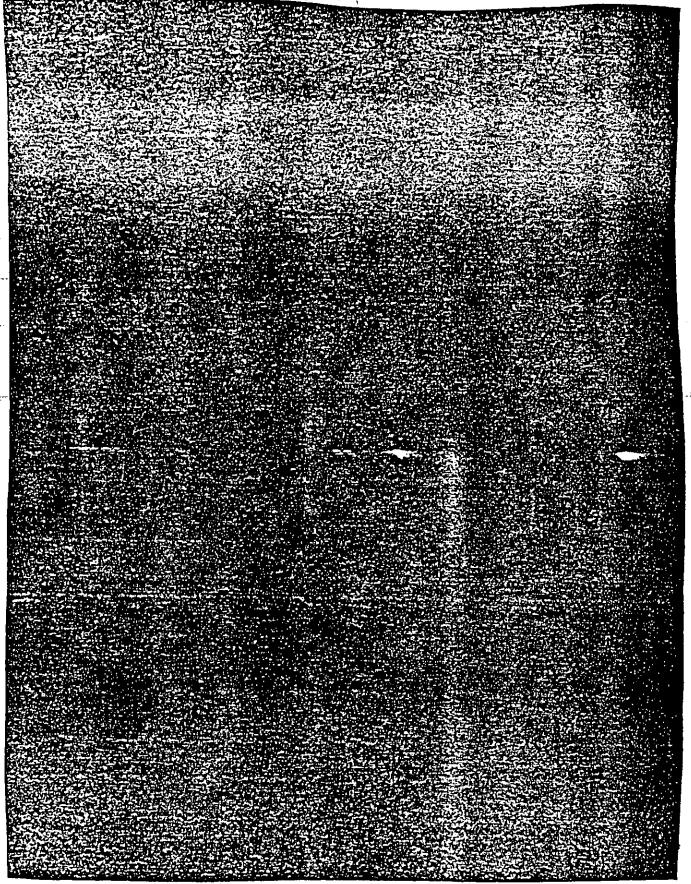


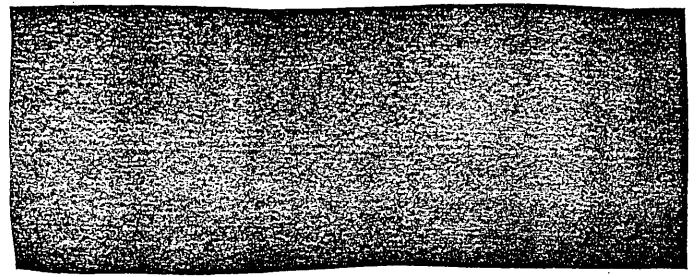
E. (U) CESERVATIONS ON THE ADEQUACY OF NATO'S NUCLEAR FORCE POSTURE.



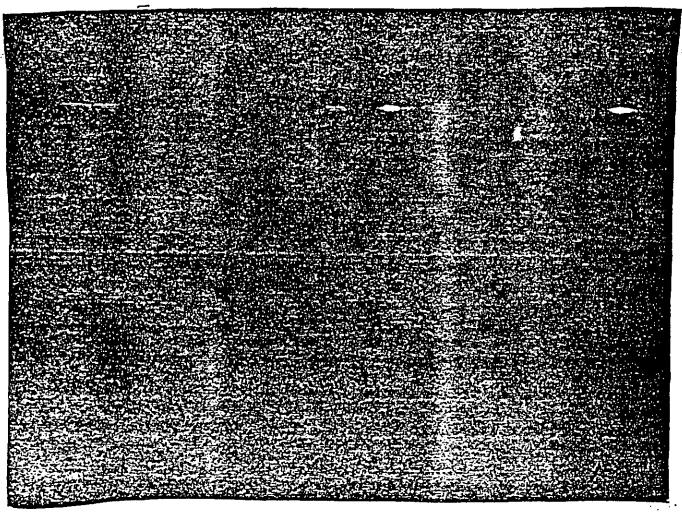
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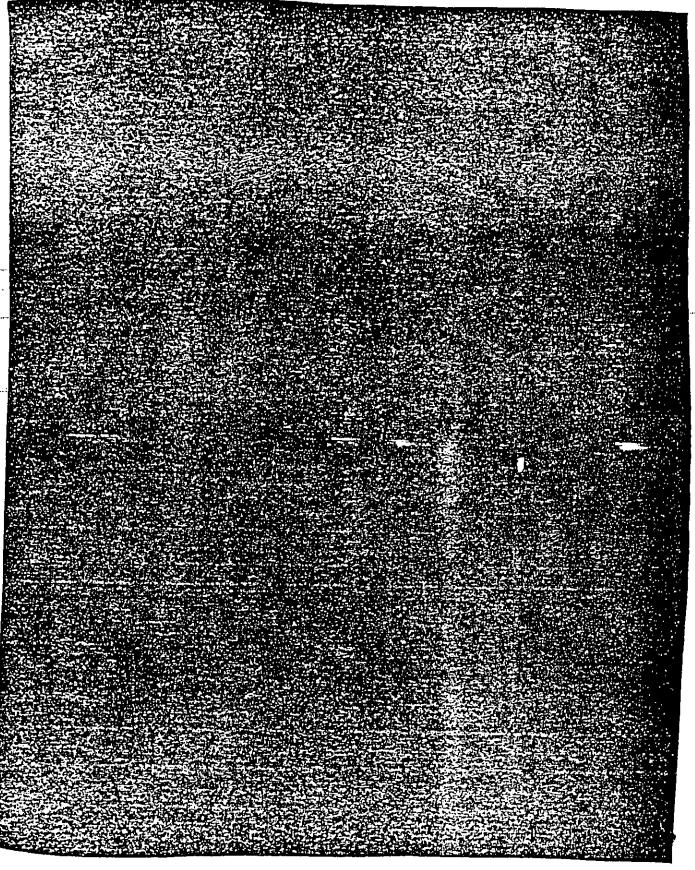




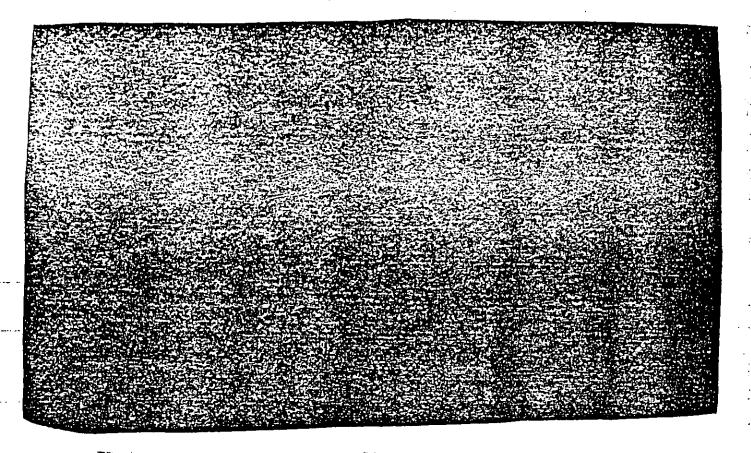


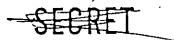
4. (U) Force Stability. The ability to maintain operational readiness under a wide variety of scenarios is an important requirement for NATO nuclear forces. The stability of NATO's nuclear posture is dependent upon sufficient survivability and endurance which will provide NATO the sustained capability to respond appropriately after any level of aggression.





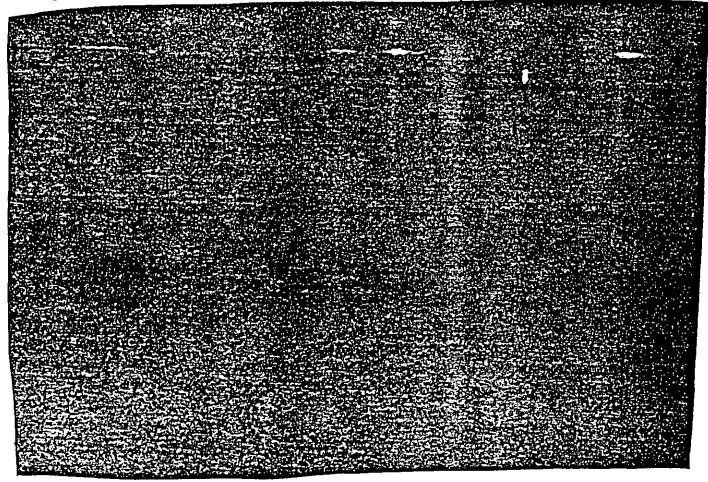
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V. (U) STEPS TO A MORE RATIONAL AND COORDINATED LAND-BASED NSNF POSTURE.

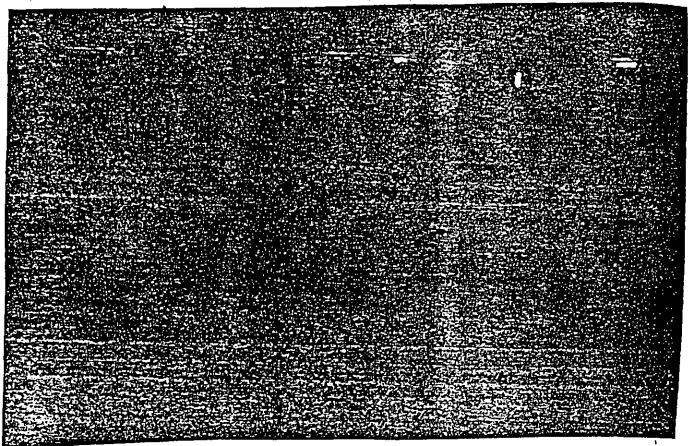
- Notable Developments Since 1975. Significant developments in the force posture and operating environment of NATO's NSNF have been addressed as appropriate throughout the course of this report. In brief, it is DoD's conclusion that there exist no grounds for revising the fundamental conclusions and recommendations reached in 1975. NATO strategy remains sound: the NATO nations continue to support deterrence and defense with a force posture that is both coordinated and rational. At the same time, developments in Soviet forces, as well as opportunities for improving the deterrent effectiveness of NATO forces, indicate that the 1975 findings should be supplemented in some areas. Moreover, a review of earlier recommendations reveals areas where additional efforts will be needed to carry on-going programs to successful conclusion.
- 1. (U) NATO and the Changing Balance of Forces. The introduction of PII, GLCM, F-16 and TORNADO notwithstanding, the pace of nuclear force modernization in Europe over the last eight years has strongly favored the Soviet Union. While NATO has made some force improvements, Soviet force improvements have quantitatively far out distanced those undertaken by the NATO Alliance and, when coupled with significant qualitative improvements, have yielded a WP posture that is larger, more flexible, more survivable and more capable of striking a greater range of targets than in 1975.



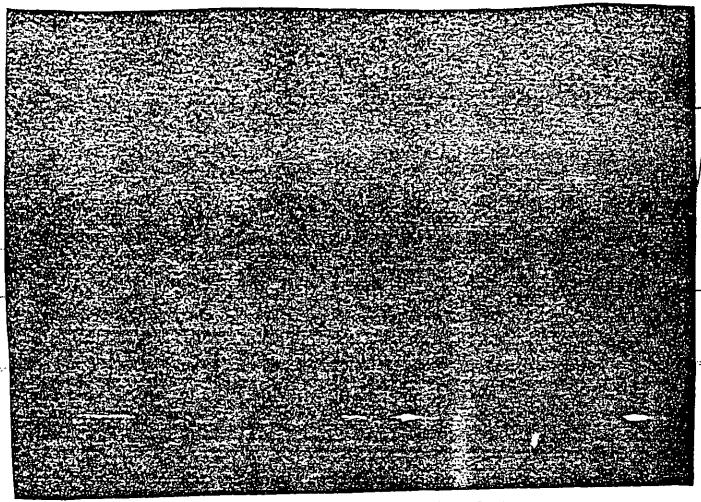
B. (U) Basis for Recommendations to Improve the NSNF Posture. Three major considerations shape the steps being taken to redress the existing deficiencies in NATO's NSNF posture: (i) an assessment of the proper emphasis to be placed on NATO's conventional defenses, taking into account new technological opportunities; (ii) DoD goals established by the Defense Guidance (DG) for NSNF; and (iii) NATO decisions on its future posture. Taken together, these three considerations provide the basis for the steps being taken to strengthen NATO's NSNF posture.

1. (U) Proper Emphasis on Conventional Defense Forces.

a. (U) The companion to this report, Improving NATO Conventional Capabilities, documents the critical and pressing need to strengthen NATO's conventional capability. Although NATO has been improving its conventional forces, the gap between NATO's total military capabilities and those of the WP has inexorably grown, as the WP has continued to modernize its forces. Qualitative and quantitative improvements to WP conventional forces have increased the reliance on NATO's nuclear forces due to the lack of comparable improvements to NATO's conventional defenses. Although difficult, the achievement of a credible conventional capability is feasible, both economically and politically. Significant progress towards achieving an adequate conventional capability by the end of this decade can be made if the NATO members fulfill their biannually-agreed Force Goals on the established schedule.

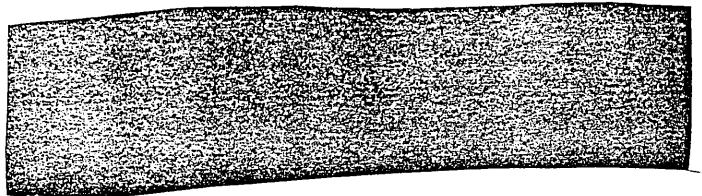


2. (U) DoD Guidance on Future NSNF Posture.

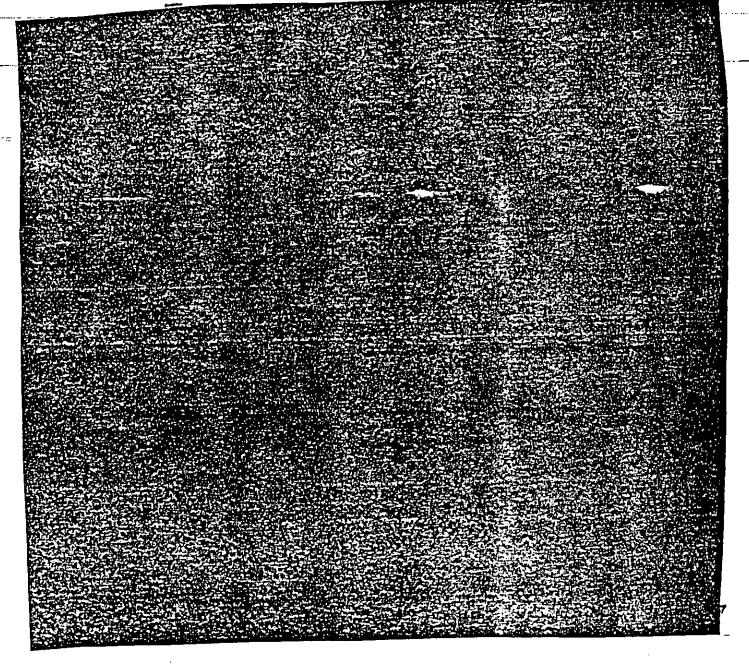


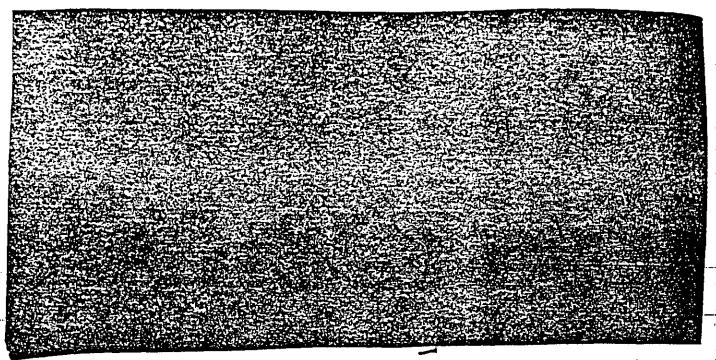
3. (U) NATO Decisions on the Future Nuclear Posture

- a. (U) An integral and essential step for the U.S. in developing a more coordinated NATO nuclear posture is consultation with the Allies. Consultation is continuous and Defense Ministers meet twice-yearly as the Nuclear Planning Group (NPG) to discuss nuclear matters. The High Level Group (HLG), a supporting organization, is another forum for consultation and provides recommendations on the whole spectrum of NSNF modernization to NATO Defense Ministers. Since 1977, the HLG has conducted a detailed examination of the land-based component of the Alliance NSNF posture.
- b. (U) The NPG/HLG efforts between 1977 and 1979 included evaluations of Alliance LRINF modernization requirements; the consideration in 1980 of the role of Defensive Nuclear Forces (DNF) in Alliance strategy; and most recently, in 1983, concluded with an assessment of NATO INF/SNF/DNF. In 1983, NATO Defense Ministers reaffirmed the dual-track approach to LRINF modernization, called for modernization of the nuclear posture, and established a rationale for the minimum necessary level of warheads needed to sustain a credible deterrent the Montebello Decision. A recapitulation of these Alliance decisions is provided in ANNEX B: NATO Decisions on the Future NSNF Posture.



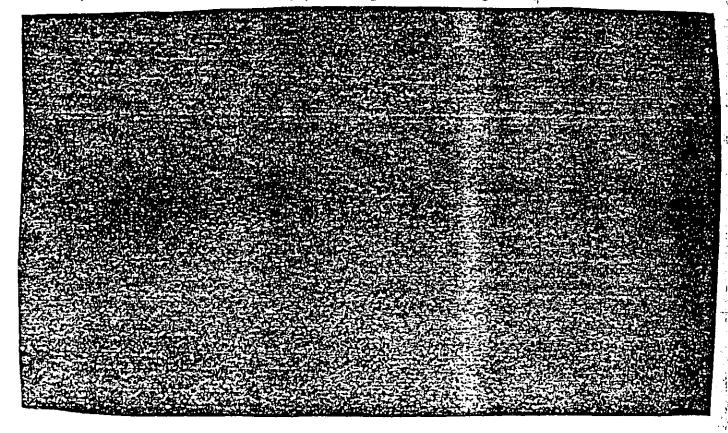
1. (U) NSNF Delivery Systems and Associated Warheads

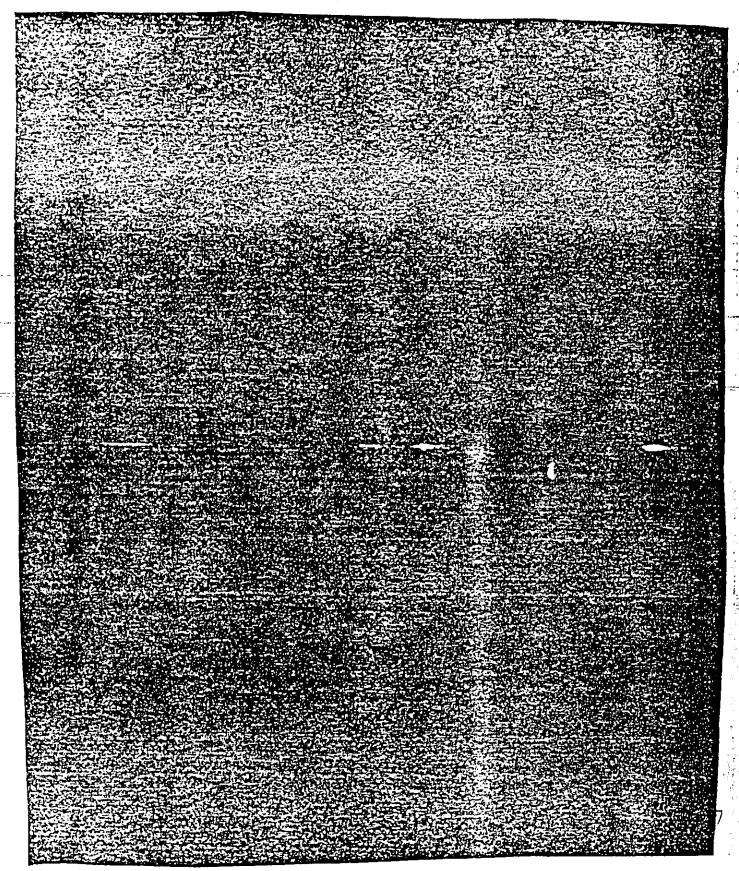


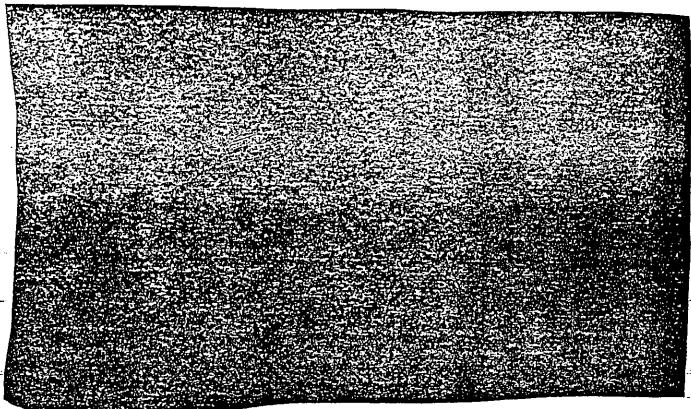


2. (U) Command, Control, Communications and Intelligence (C3I) Systems.

a. (U) Areas of Improvements. Generally, needed improvements to C3I supporting NATO NSNF can be categorized into two major areas — improvements designed to enhance the deterrent posture by strengthening positive political and military control over these weapons during hostilities, and those designed to improve NSNF effectiveness by providing enhanced target accuisition.



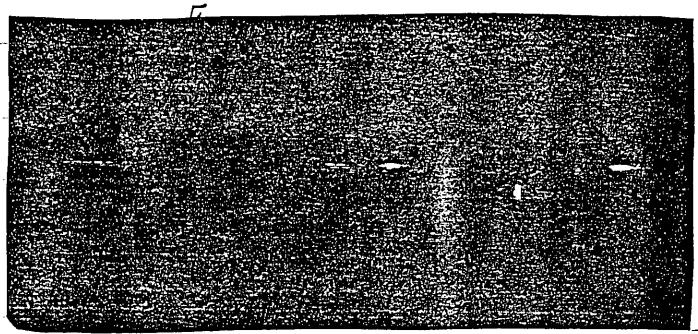




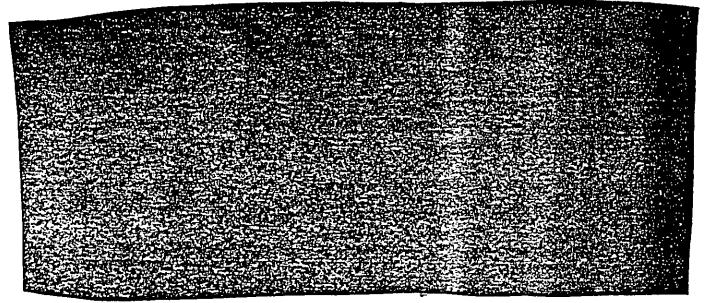
which will process, analyze, and distribute reports obtained from JSTARS, ASARS, PLSS, and other sources. This information will assist battlefield commanders in assessing the status and disposition of enemy forces and selected targets. An advanced fusion system, described in Section IV, to provide direct, real-time intelligence and targeting is in development.

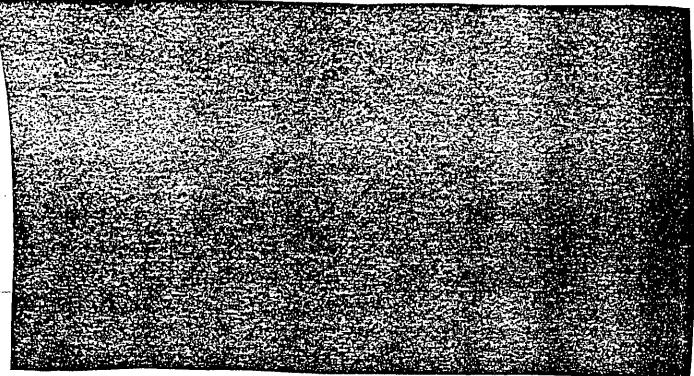
- (3) (U) INCA. In a much broader context, there is an on-going initiative to develop an intelligence architecture to support operational commanders. This initiative is the European Theater Intelligence Architecture Program. This program responds both to Alliance and theater imperatives to construct an intelligence structure that can satisfy essential wartime tactical requirements. SHAPE has a similar initiative and the results of both programs will also be fed into the Congressionally-mandated Intelligence Communications Architecture (INCA) Program.
 - 3. (U) Observations on Stockpile Level, Composition and Warhead Storage.
 - a. (U) Stockpile Level and Composition.
- (1) (U) Stockpile Adjustments. The Congress has requested an identification of the number and types of NSNF warheads that are not essential for deterrence and which could be withdrawn from Western Europe. Contingent on judicious reorganization of resources and improvements in the NSNF posture, the Alliance agreed that the existing European-based NSNF stockpile can be reduced by 1400 warheads.

(2) (U) SACEUR'S Work. At the October 1983 NPG meeting, NATO Defense Ministers "noted that SACEUR annually reviews stockpile requirements with a view to removing unnecessary weapons while maintaining and recommending improvements of those capabilities necessary to implement at a prudent level of risk, and are looking forward to his advice concerning implementation of their decisions." Further, Ministers "invited SACEUR to determine as soon as possible the specific types, numbers and locations of those warheads to be removed and to report his findings at a future meeting of the Nuclear Planning Group." SACEUR has indicated that a firm basis for Ministerial discussions of stockpile reductions will be available by Spring 1985 and will provide recommendations on the specific composition of the warhead reductions.

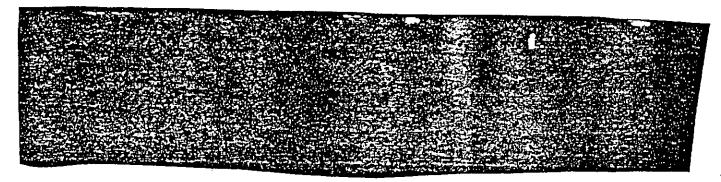


b. (U) Warhead Storage.





D. (U) Conclusion.



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ANNEX A

THE NATO/WARSAW PACT NUCLEAR BALANCE

RESTRICTED DATA
This material contains Restricted Data
as defined in the Atomic Energy Act
of 1954, Unauthorized disclosure subject
to administrative and criminal sanctions.

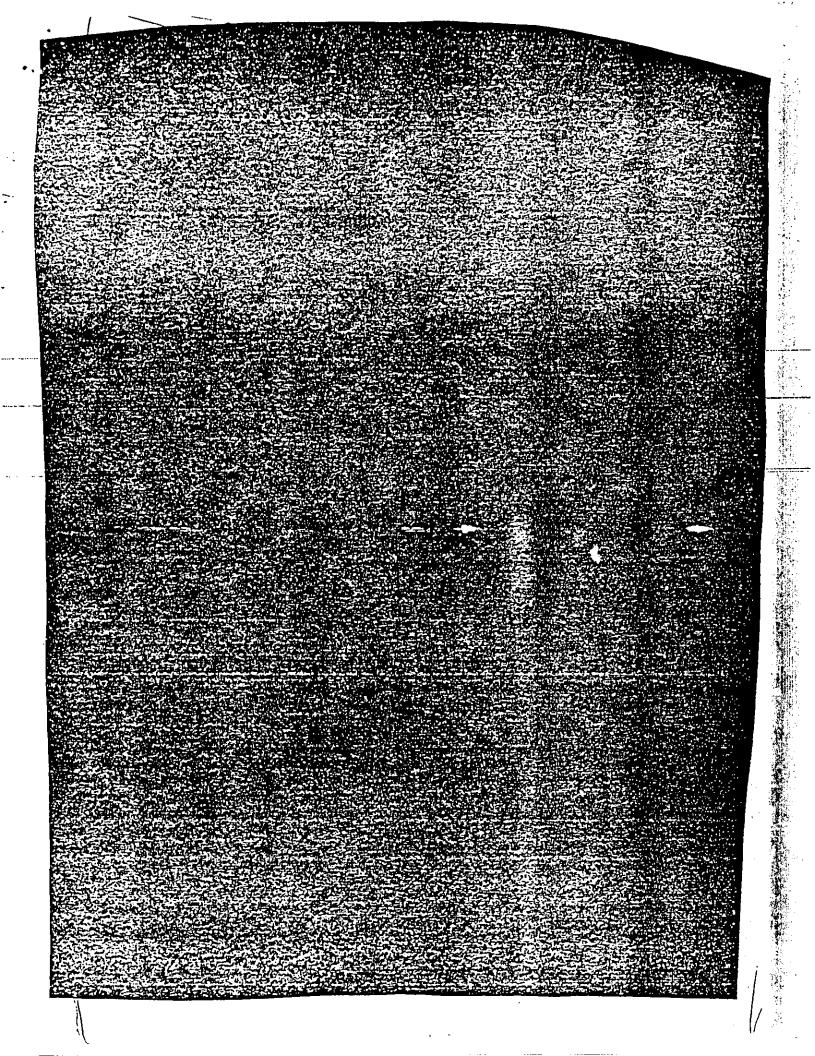
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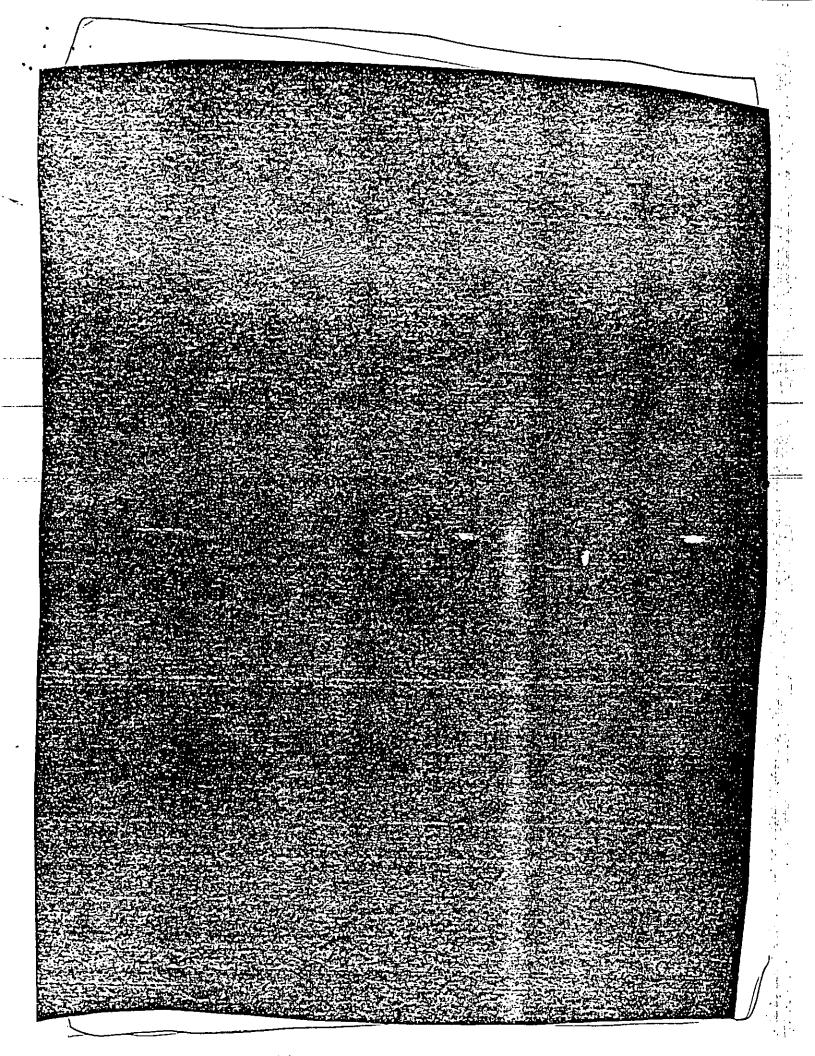


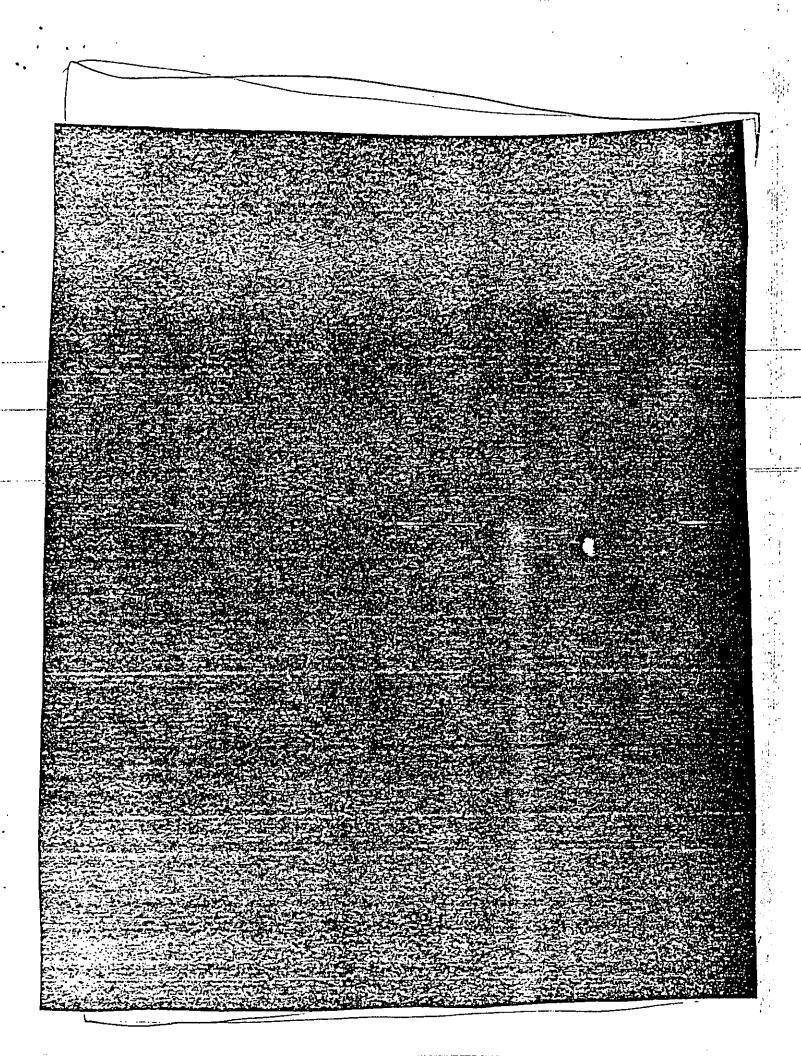
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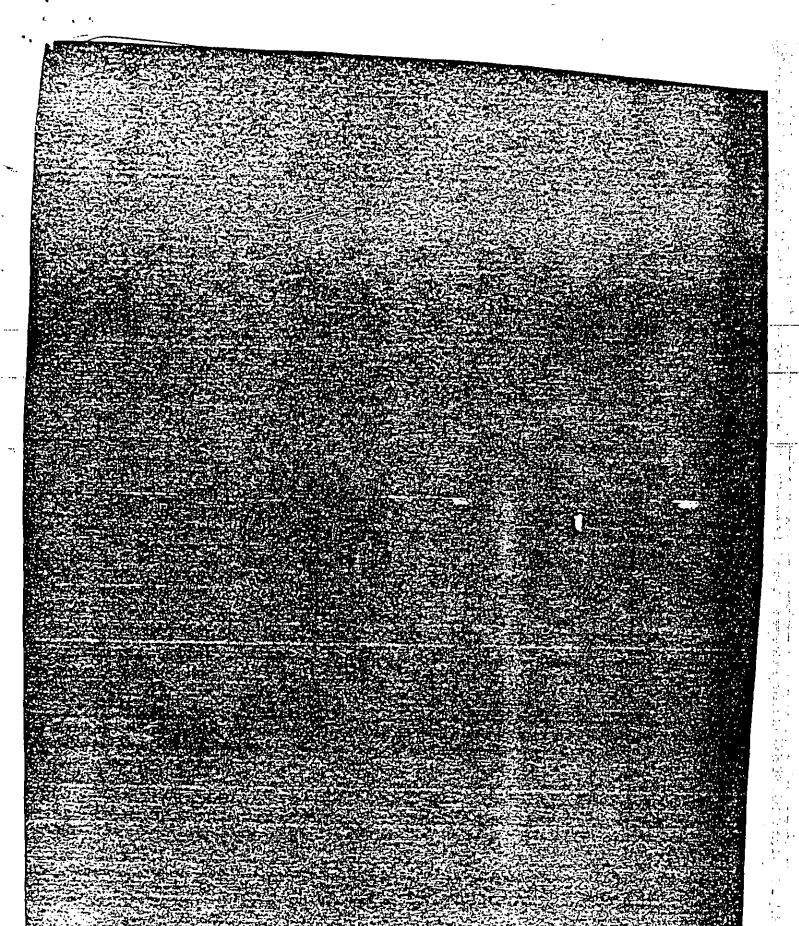
This Annex provides a detailed assessment of the current land-based NSNF balance in Europe.

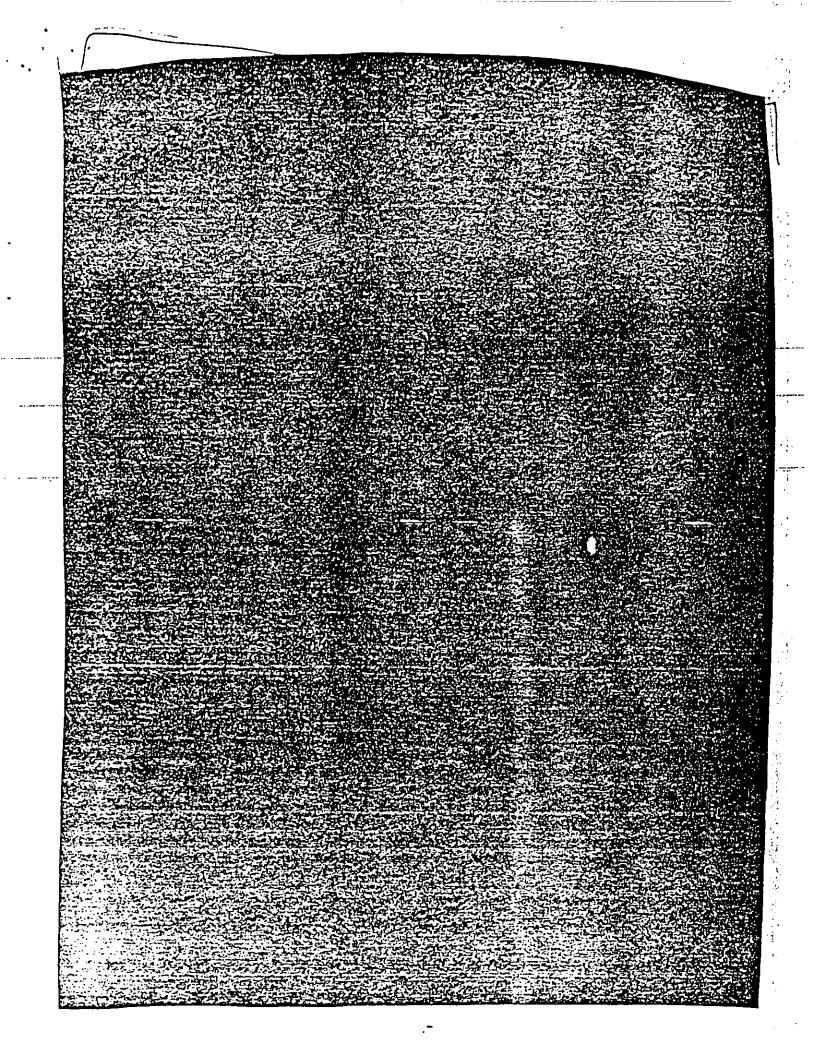
-	Comparison of NATO and Warsaw Pact SNF Systems in Europe: Artillery Tubes	A-2
	Comparison of NATO and Warsaw Pact SNF Systems	A-3
	Comparison of NATO and Warsaw Fact INF Systems	A-4
	Comparison of NATO and Warsaw Fact INF Systems in Europe: DCA	A-5
-	NATO Stockpile Age	A-6
: <u> </u>	Trends and Composition of NATO Land-Rased Stockpile	A-7.
-	Record of NSNF Modernization	A-8
-	NATO/Warsaw Pact Artillery Comperison	A-9
-	NATO/Warsaw Pact SRINF/SNF Missile Comparison	A-10
_	NATO/Warsaw Pact IRINF Comparison	A-11

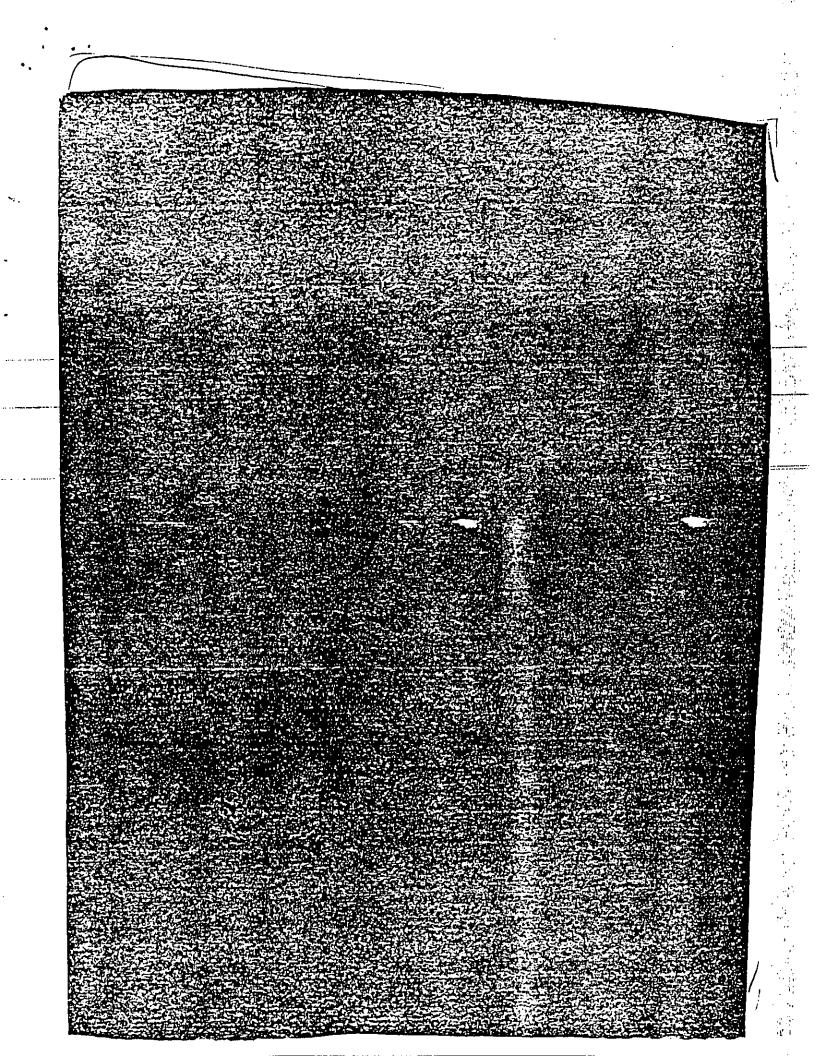


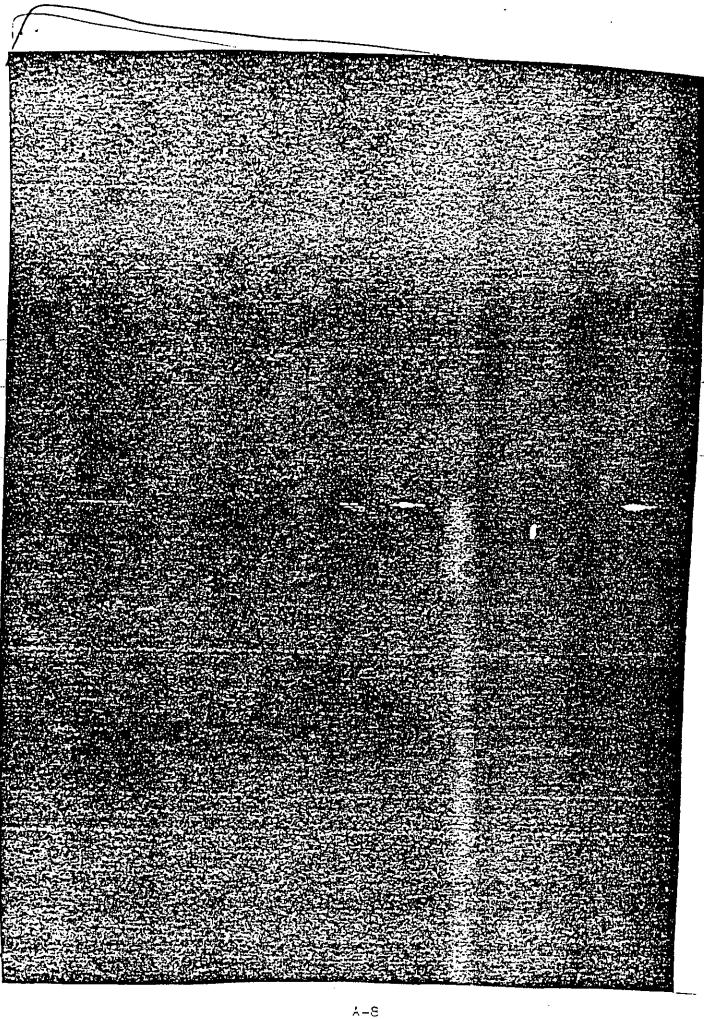


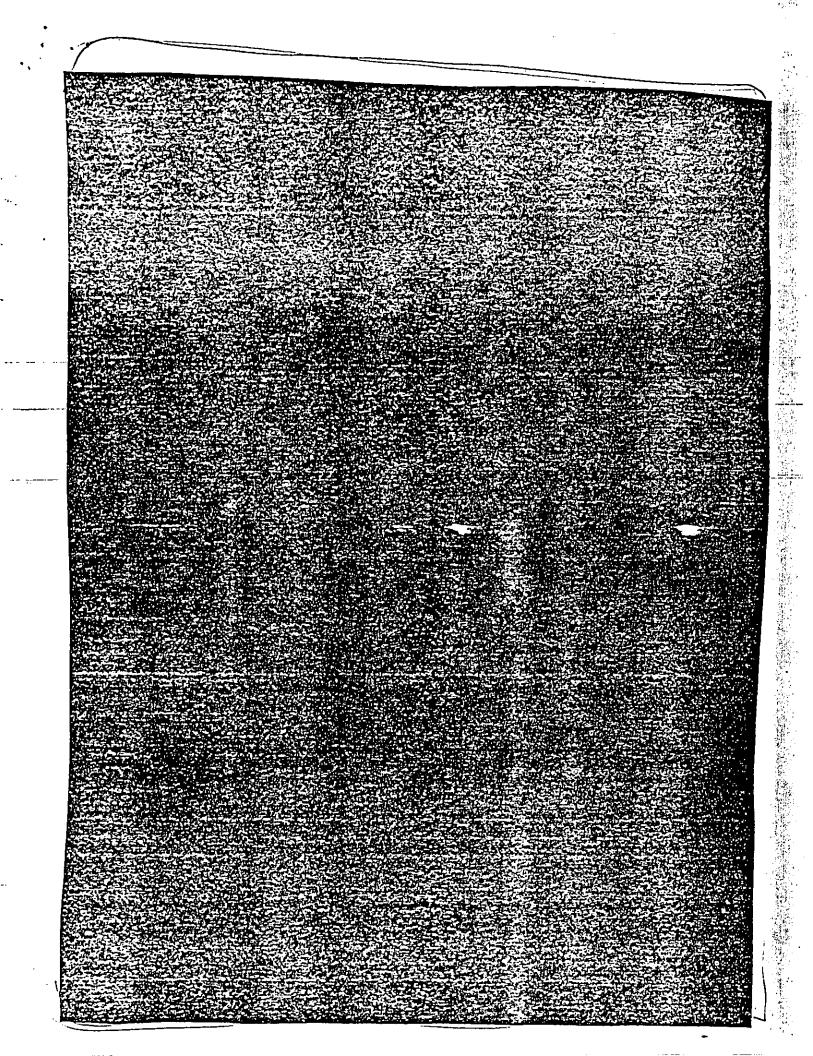


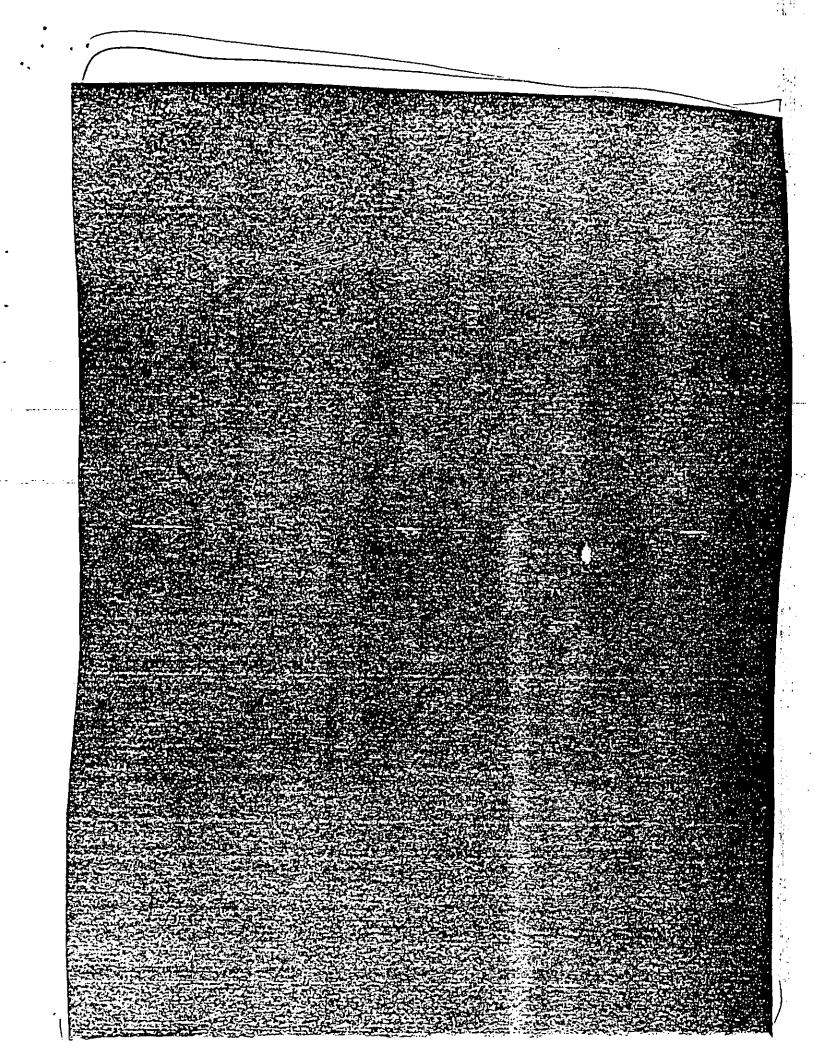


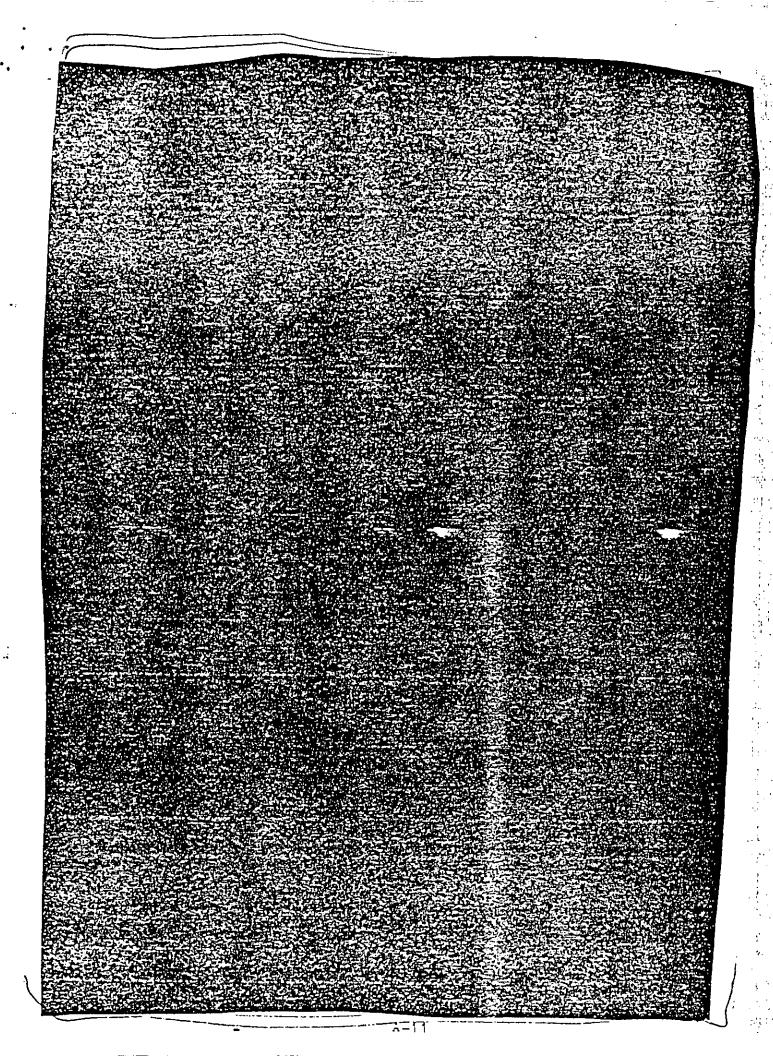






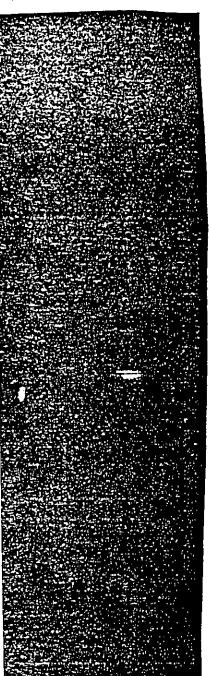






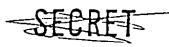
ANNEX B

ATO DECISIONS ON THE FUTURE NSNF POSTURE



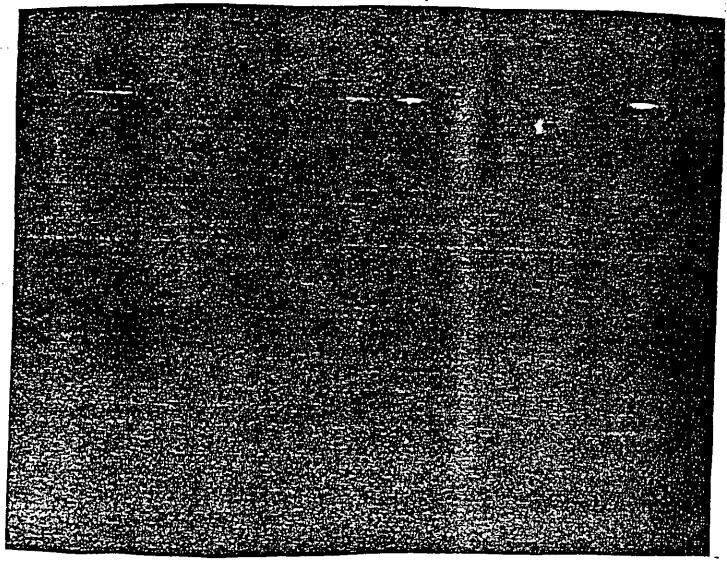
vide a backdrop against ${\mathfrak l}$ the HLG and NPG since

equires the capability dequate target coverage tability and resilience control, communications



and intelligence (C3I) capabilities. The 1979 LRINF decision was important for both political and military reasons. From a military perspective, GLCM deployments and PII conversions close a gap in the spectrum of targets which could not be held at risk by existing NATO forces. They also provide important escalatory options and strengthen linkage to strategic responses. Politically, LRINF deployments underscore Alliance cohesion and the commitment to nuclear escalation while denying the Soviet Union political and military advantage. The resulting 1979 NATO Integrated Decision Document (IDD) symbolizes NATO's resolve through the deployment of 464 GLCM and coversion of P1a to PERSHING II. The IDD provided that, as the 572 new warheads for LRINF are deployed, the same number of warheads will be withdrawn from the nuclear stockpile in Europe. Additionally, in 1979 the Alliance agreed on the withdrawal of 1,000 US nuclear warheads from Europe. This withdrawal of warheads was completed in 1980. At the same time, the IDD symbolizes NATO's resolve to seek, through negotiations with the Soviet Union, meaningful and equitable limitations on LRINF.

b. (U) The HLG study on Defensive Nuclear Forces (DNF), completed in 1980, examined the role of both NIKE HERCULES nuclear air defense and Atomic Demolition Munitions (ADMs) in NATO's deterrent posture.

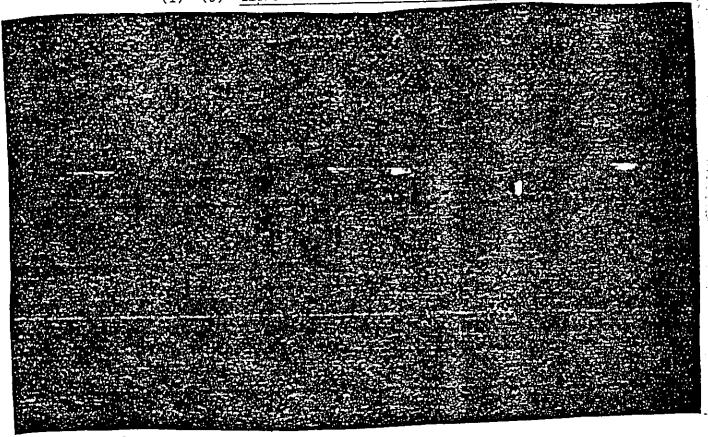


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d. (U) Context of the Montebello Decision. Ministers at the NPG, while agreeing to withdraw 1400 warheads from the European stockpile over the next five to six years, approved the HLG conclusion that the Alliance must undertake the necessary actions to improve its forces across the entire spectrum of capabilities in order to ensure a continuing credible deterrent. Specific HLG findings and recommendations

included:

(1) (U) Improvements to SRINF/SNF Systems and Warheads



— (U) Further, it is important that NATO continue efforts to improve its conventional force capabilities.

(2) (U) Improvements to Survivability



(3) (U) Improvements to Responsiveness:

- (U) It is important that current programmed changes to the NSNF posture be completed on schedule. The introduction of more modern aircraft such as the F-16 and TORNADO with their greater capability to penetrate enroute defenses and defended targets is improving responsiveness.
- (U) An improvement in the ability of NATO forces to acquire, identify, and process data concerning mobile targets beyond line of sight of the FLOT would strengthen both responsiveness and effectiveness of weapon systems.

(4) (U) Improvements to Effectiveness:



- (U) Additionally, concurrent measures to make communications—more survivable via the reduction of imique C³ signatures associated with nuclear forces and hardening sites against conventional attack and electromagnetic pulse, together with the provision of back-up communication channels would enhance effectiveness.

(5) (U) Adjustments to the Nuclear Stockpile:

