M.C. 48 (FINAL)
22 November 1954

NORTH ATLANTIC MILITARY COMMITTEE

DECISION ON M.C. 48

A Report by the Military Committee

on

THE MOST EFFECTIVE PATTERN OF NATO MILITARY STRENGTH FOR THE NEXT FEW YEARS

Note by the Secretary

1. At its Tenth Session on 22 November 1954, the North Atlantic Military Committee amended and approved M.C. 48 for transmission to the North Atlantic Council.

2. Holders of M.C. 48 are requested to replace pages 1, 9, 14, 16 and 18 with the attached pages 1, 9, 14, 16 and 18 and to destroy the removed pages.

3. This Decision now becomes a part of and shall be attached as the top sheet of M.C. 48.

M.C. 48
18 November 1954
Pages 1 - 20, incl.

REPORT BY THE MILITARY COMMITTEE

to the

NORTH ATLANTIC COUNCIL

on

THE MOST EFFECTIVE PATTERN OF NATO MILITARY STRENGTH FOR THE NEXT FEW YEARS

INTRODUCTION

1. In December 1953,* the North Atlantic Council invited the Military Committee to press on with their reassessment of the most effective pattern of military strength for the next few years within the resources which it is anticipated will be made available and to keep the Council informed of their progress. The NATO military authorities therefore initiated a series of studies which they intend making over the next few years, on which to base this reassessment. This report covers the first of this series of studies. The Military Committee, after having reviewed these first studies, has arrived at certain broad conclusions which relate primarily to forces which will be employed in Europe and has encountered certain problems, including among others those relating to sea communications and Air Defense, which should be investigated further. Although in initiating these studies the NATO Commanders were directed to gear the studies to a possible war in 1957, the year 1957 has no particular significance, and in this report, therefore, the Military Committee has dealt with the broad issues involved in NATO defense over the next few years.

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THE DEFENSIVE AIMS OF NATO

2. Defense preparations in the North Atlantic Treaty area aim at providing:

a. A major deterrent to aggression.

b. A successful forward defense in Europe against Soviet military aggression, and an assurance that if war is thrust upon NATO by the U.S.S.R. NATO will be able to exploit fully its land, sea and air power and thus assure defeat of the Soviets.

c. A high measure of confidence and security during the cold war.

3. To achieve these aims we must convince the Soviets that:

a. They cannot quickly overrun Europe.

b. In the event of aggression they will be subjected immediately to devastating counter-attack employing atomic weapons.*

PROBABLE NATURE AND DURATION OF FUTURE WAR INVOLVING NATO

4. The primary consideration affecting the Military Committee studies is that during the period under consideration an appreciable number of atomic weapons, along with the capability to deliver them, will become available both to NATO and to the Soviets. From its studies the Military Committee has concluded that the advent of atomic weapons systems will drastically change the conditions of modern war. The destructive power of these weapons, particularly the thermonuclear ones, and the difficulties of defense against them pose entirely new problems, not only of a military nature but political, economic and psychological as well.

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* The term “atomic weapons” whenever appearing is understood to mean atomic and thermonuclear weapons and, as appropriate, includes those delivered by aircraft, guided missiles, rockets and artillery.

5. The problem of the air defense of Europe will form the subject of a separate report. There does not exist in Europe today an air defense system which would be sufficiently effective against a determined air attack, and it is considered that existing types of active air defense systems will not alone be able to provide such a defense. It will, of course, be essential to employ all available air defense weapons, supplemented by adequate passive defense preparations, and to coordinate their use with counter-air operations. At this time the counter-air offensive is the most important factor in the overall air defense. The only presently feasible way of stopping an enemy from delivering atomic weapons against selected targets in Europe is to destroy his means of delivery at source. This will require early atomic counter-attack against the enemy's delivery system.

6. As the initiation of a war by NATO would be contrary to the fundamental principles of the Alliance, it has been ruled out as a possibility. War, therefore, can come only as a result of Communist aggression either intentional or as a result of miscalculation. In the face of NATO's great and growing power in the field of atomic weapons, the Soviets' only hope of winning such a war would rest upon their sudden destruction of NATO's ability to counter-attack immediately and decisively with atomic weapons. There is a remote possibility that the Soviets might attempt to take advantage of their preponderance in land and tactical air forces to overrun Europe without employing atomic weapons in the hope that by so doing the Allies would also refrain from using these weapons. In this contingency our studies indicate that NATO would be unable to prevent the rapid overrunning of Europe unless NATO immediately employed these weapons both strategically and tactically.

7. The Soviets must realize this. There is little doubt, therefore, that should they provoke a war involving NATO, it would be initiated by an atomic onslaught against which NATO would have to react in kind. This would result in an intensive initial phase of operations - approximately thirty days or less -in which each side would strive to deliver a large portion of its accumulated stockpiles of atomic weapons as rapidly and effectively as possible in an effort to neutralize the opponent's atomic delivery capability. Instead, therefore, of the gradually increasing rate of destruction prevalent in recent wars of prolonged mobilization and attrition, maximum destruction would occur within the first few days or weeks as both sides strove to exploit their accumulated atomic stockpiles to gain atomic superiority. In addition to this atomic exchange both sides would initiate operations of their land, sea and air forces to achieve strategic advantage and to be prepared to conduct continued operations.

8. It is considered that the scale of devastation resulting from this initial atomic exchange, when supplemented by continued attacks, may well be so great that the side gaining superiority in this field would probably be able to prevent the enemy regaining the initiative. Thus, the loser in the initial exchange might possibly capitulate. However, despite the destruction wrought during the initial phase, it is probable that hostilities would not cease. In this case there would be a subsequent period of readjustment and follow-up, the exact nature of which would largely depend on the outcome of the initial phase. Hence, we visualize that a future war involving NATO will probably consist of two phases. The initial phase would include an intensive exchange of atomic weapons between the two groups of adversaries as each strove to gain atomic superiority. By the end of this phase, the atomic stockpiles of the weaker side will have been virtually

expended. In a war between NATO and the Soviets within the next few years, our superiority in atomic weapons and in our ability to deliver them should provide a major advantage in this phase, and should be adequate to provide us with a residual for use in the subsequent phase of operations. This subsequent phase would consist of a period of readjustment and follow-up leading to a conclusion of the war. The duration and the outcome of this phase will depend on the relative advantage achieved in the initial phase and our ability to continue to supply our forces in the U.K. and Europe.

9. As it cannot safely be assumed that hostilities will terminate at the end of the initial phase, our forces must be prepared to conduct subsequent operations of a much longer duration. Our ability, however, to defeat the enemy will depend on our ability to survive and gain superiority in the initial phase. Thus our peacetime force pattern must be designed primarily to achieve success during this initial phase and emphasis must be placed upon development of the forces which can participate most effectively in these operations.

FACTORS AFFECTING THE OUTCOME OF THE INITIAL PHASE

10. Should the Soviets decide to start a war involving NATO they will possess certain important advantages. These advantages may be summed up as follows:

a. The Initiative. The ability to choose the time, place, and type of attack has always been important. In a future war employing atomic weapons the possession of the initiative will be even more important than it has been in the past.

b. Surprise. Surprise is directly related to the possession of the initiative. In the atomic age, when the warning of a surprise air attack would be measured in minutes

and when our ability to withstand the first blow would depend on our being in an effective alert status, the degree of surprise attained by the enemy could greatly influence the outcome of the war. The Military Committee considers that a surprise onslaught with atomic weapons constitutes the most dangerous threat the West has to face, and that the Soviets would not jeopardize the attainment of surprise by any major pre-deployment of their forces.

c. Monolithic Political System. The Soviet political system, with its power of immediate decision and its advantage of strict security, as compared with the free and democratic system of the NATO type which must obtain decisions through group action, provides an initial advantage of great importance in achieving surprise.

d. Superiority in Land and Tactical Air Forces. The preponderance of the Soviets in land and tactical air forces is a major advantage to them, particularly in relation to their aim of rapidly overrunning the European Continent.

11. In any examination of how these advantages can best be offset and overcome, it is essential to keep in mind that in the event of war the primary tasks of the NATO forces would be not only to survive the enemy's initial attacks, but also to retaliate immediately with atomic weapons. to be able to carry out these tasks successfully, it is necessary for NATO to take measures to:

a. Develop an effective intelligence system to provide NATO with the best possible analysis of Soviet capabilities, intentions and operations.

b. Ensure to the maximum extent possible the security of their vitally important strategic air forces and atomic striking forces in Europe. The most important measures to be

taken are the establishment of a satisfactory alert system, the improvement of intelligence and communications, the initiation of adequate active and passive air defense measures, and the dispersion of vital atomic delivery forces.

c. Ensure that, in the event of aggression, NATO forces would be able to initiate immediate defensive and retaliatory operations including the use of atomic weapons.

d. Develop 'forces in being' in Europe which would be capable of effectively contributing to success in the initial phase and of preventing the rapid overrunning of Europe. To do this these forces must be highly trained, mobile, have an integrated atomic capability* and be properly positioned in depth. In this respect the importance of obtaining a German contribution to these forces cannot be too strongly emphasized.

FACTORS AFFECTING THE OUTCOME OF SUBSEQUENT OPERATIONS

12. The Military Committee has not yet been able to give detailed study to the nature of operations subsequent to the initial phase of a war. However, it appears that at this point the advantage would be on our side. The Soviets would probably still be considerably superior numerically in field armies. On the other hand, the NATO countries should still be superior to the Soviets in the fields of atomic delivery capability and production capacity and should be in possession of superiority in strategic air and at sea. Should NATO attain these advantages the Soviets would be seriously handicapped in their ability to maintain the offensive because of the vulnerability of their tactical formations, transportation systems and lines of communication to continued atomic attacks.

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* The ability to integrate the delivery of atomic weapons with the delivery of present type weapons. This involves the integration of intelligence and communications systems, and a common tactical doctrine.

13. The objective of our air operations subsequent to the initial phase should, therefore, be to continue attacks on the Soviets' industry, communications, and centers of control, in order that they could not remobilize sufficiently to overcome our atomic superiority. If these attacks are successful the Soviet totalitarian political system, dependent on highly centralized control and communications, might be incapable of continuing to give cohesive direction to the Soviet armed forces, or of performing the essential functions of civil government. Finally, it is possible that at this time serious defections of dissident groups within the Soviet Union and among the enslaved satellite peoples might occur. The latter will be more likely to develop if our atomic success is promptly exploited by land operations designed to link up with such groups. The greater Allied residual capacity in atomic stockpiles, and production and manpower would enable NATO to keep exerting ever increasing pressure with these ends in view.

14. Should NATO attain the above advantages the Soviets would generally be on the defensive both strategically and tactically -a condition that must lead to their final defeat.

EXAMINATION OF SOVIET CAPABILITIES AND PROBABLE STRATEGY

15. It is now necessary to examine the capabilities of the Soviet forces in the atomic concept of warfare outlined above, and to consider the probable strategy that would be employed. Then, in the light of the conclusions reached, it should be possible to: formulate a NATO strategy to counter the Soviet threat; devise a pattern of NATO forces to implement this strategy and still be within the NATO resources likely to be available; and finally make recommendations on the measures which must be taken to attain this force pattern.

16. On the assumption that for the next three to five years the Soviet military build-up conforms to present trends, the Soviet armed forces should be capable towards the end of that period of effectively carrying out the following offensive operations during the opening stages of war:

a. Intensive atomic strategic air attacks against the vital centers and atomic bases of NATO. It is expected that surprise would be utilized to the full.

b. Widespread attacks by the Soviet army and tactical air forces against NATO countries in Europe. In carrying out these attacks the enemy will have a superiority of at least 2 to 1 on the ground, and an appreciable numerical superiority in aircraft, and will have the great advantage of possessing the initiative. Moreover, the Soviet tactical air forces will be capable of delivering atomic weapons.

c. Attacks against Allied naval forces, naval bases, ports and merchant shipping.

17. Since it is considered that a surprise attack would give the Soviets the best chance of gaining dominance in the vital atomic field and would be the worst condition that NATO might have to face, it has been assumed that Soviet strategy would be based on surprise. It would probably be on the following lines:

a. A strategic air offensive with the aim of:

(1) Destruction of vital allied centers and the war-making capacity of the United States, the United Kingdom and Canada and their overseas bases, giving highest priority to the destruction of the Allied atomic capability.

(2) Isolation of the European battlefield by attacks against NATO lines of communication in the Atlantic and Mediterranean, and against Allied ports and harbors in Europe, North Africa and North America.

b. Defense of the U.S.S.R.

c. Destruction of the forces of Allied Command Europe, and acquisition of vital strategic areas in Europe and the Middle East.

d. Offensive naval operations, particularly with submarines, against Allied naval forces, ports and merchant shipping.

e. Strategic defensive in other areas.

THE TASK OF NATO FORCES IN EUROPE

18. In planning the future development and organization of NATO forces it is essential not to lose sight of the primary aim of the Alliance which is to prevent war. Within this aim the primary role of the NATO forces in Europe must be that of an effective deterrent. These forces must, therefore, be so organized, disposed, trained and equipped that the Soviets, in taking account of them in their plans, must come to the conclusion that, even with superior numbers and the advantage of surprise, their chances of obtaining a quick decision in the European theater are small and that such an attempt would involve grave risks to the Soviet Union.

19. We must not assume, however, that even in these circumstances the Soviets might not precipitate a war, in which case the forces which had been built up and deployed to act as a deterrent must be capable of immediately and successfully carrying out their wartime role of preventing the rapid overrunning of Europe.

20. This clearly establishes that essential NATO forces must first of all be forces-in-being. Moreover, it is clear from an analysis of the Capabilities Study of the Supreme Allied Commander Europe that, to offset the great numerical superiority of the Soviets in land and tactical air forces, NATO forces-in-being must be equipped with an integrated atomic capability.

21. To be effective tactically in their wartime role, these forces-in-being must be capable of:

a. Surviving the initial attack. This will entail implementing in peacetime passive defense measures such as dispersion and protection, obtaining maximum warning of attack, and establishing an effective alerts system.

b. Participating effectively in the battle for air superiority. They must be able, in conjunction with the operations of strategic air forces, to establish air superiority, primarily by attacking the enemy's air complex at source with atomic weapons.

c. Preventing the rapid overrunning of Europe. An analysis of the Study of the Supreme Allied Commander Europe has led the Military Committee to conclude that this could be accomplished, within the NATO resources that could be made available, by the use of highly trained and mobile forces with an integrated atomic capability, properly deployed in depth and immediately ready to fight with maximum intensity on D-Day and in the early phases. There is reason to believe that, when employed by such forces, particularly when NATO land forces are operating on ground of their own choosing and on pre-selected and prepared defensive zones, atomic weapons will favor NATO's planned system of defense on the battlefield since, as a general principle, if an enemy wishes to advance against a strongly defended position he must concentrate. In an atomic war, concentration would expose his forces to heavy losses from atomic attack. On the other hand, the dispersion required to provide adequate protection against atomic attack would force the enemy to adopt tactics for advancing which would be less effective than concentrated penetrations.

22. An examination, in the light of the above, of the forces likely to be at the disposal of Allied Command Europe leads to the conclusion that with the quantities of atomic weapons estimated to

be available to these forces in the next few years, it lies within NATO's power to provide an effective deterrent in Europe and, should war come despite the deterrent, to prevent a rapid overrunning of Europe provided that:

a. The ability to make immediate use of atomic weapons is ensured. Our studies have indicated that without their immediate use we could not successfully defend Europe within the resources available. Any delay in their use - even measured in hours - could be fatal. Therefore, in the event of a war involving NATO it is militarily essential that NATO forces should be able to use atomic and thermonuclear weapons in their defense from the outset.

b. A German contribution will be provided. It has been evident from all past NATO military studies that, insofar as the Central European theater is concerned, a German contribution would be necessary, even for the strategy of holding Rhine-Ijssel line. Up till now NATO has been obliged to accept this strategy, even though it neither includes the vital industrial areas of the Ruhr, nor provides adequate defense in depth for Western Europe. The advent of tactical atomic weapons alone would not enable NATO to hold even the Rhine-Ijssel line without a German contribution. The advent of new weapons, plus a German contribution, however, will for the first time enable NATO to adopt a real forward strategy with a main line of defense well to the East of the Rhine-Ijssel. This is vital to a successful defense in Central and Northern Europe and to the basic NATO strategy.

c. Certain essential measures necessary to enable our present forces to fight effectively in an atomic war are taken. The most important of these measures (except certain additional measures relating to air defense which will be covered in a later report) are set out in the Enclosure to this Report.

The Supreme Allied Commander Europe has prepared a more detailed list of these measures, which the Military Committee has noted as the basis which he will use for further action.

23. If and only if these actions are taken will NATO forces in Europe provide an effective deterrent and have a reasonable expectation of preventing the rapid overrunning of Europe should war come despite the deterrent.

24. It has not yet been possible for an assessment to be made of the costs involved in carrying out the measures necessary to enable our forces in Europe to fight effectively in an atomic war. Many of the most important of these measures are not ones involving heavy expenditures in either money or resources; others will be costly.

CONTROL OF SEA COMMUNICATIONS

25. In considering the pattern of the NATO naval forces required over the next few years for the accomplishment of essential naval tasks, the Military Committee encountered certain very important problems. These require further study to insure that naval force patterns and capabilities are kept abreast of latest advances and the naval requirements of atomic warfare.

26. The basic tasks of the NATO Naval Commanders are to control and exploit the seas for NATO purposes and to deny their use to the enemy. To achieve this, they must protect and maintain the flow of Allied shipping in the Atlantic, Channel, and Mediterranean, ensure the support and reinforcement of NATO forces in Europe, control and exploit vital sea areas, and deny tot he enemy the use of sea areas essential to his operations. In order to participate most effectively in a future war involving NATO, naval forces-in-being must be capable during the initial phase of carrying out powerful offensive operations against such targets as enemy naval bases and confined areas and of establishing Allied supremacy at sea.

27. In the Capabilities Studies prepared by Supreme Allied Commander Atlantic and Commanders-in-Chief Channel, they imply that, with the forces anticipated to be available to them within the next few years, they will not be able to provide adequate protection for the amount of shipping which present plans require them to safeguard in the initial phase of a war. On the other hand, the Supreme Allied Commander Atlantic will possess a considerable offensive capability which he plans to use to the maximum extent to reduce the threat to shipping and thus to compensate in part for his deficiency in defensive forces and to lighten the escort burden. These offensive forces are also of importance as a component of the forces-in-being required to act as a deterrent.

28. In a war developing into a period of sustained operations, the timely arrival in Europe of reinforcements and supplies from overseas would be essential. This would require coordinated operations to protect essential Allied shipping and naval forces against losses critical to the maintenance of the civilian population and to the successful continuation of the war. In the initial phase, however, the essential military and civilian requirements must be met to the greatest extent possible from stockpiles and local sources in order to reduce the necessity of bringing a great volume of shipping into the United Kingdom and the ports of Allied Command Europe. A reliable estimate of the minimum resulting shipping requirements both for the initial phase and subsequent operations is urgently needed before a useful assessment can be made of the forces required to protect shipping during a future war.

29. Another factor of determining influence on the composition and operations of naval forces will be the effect of atomic attacks on ports and unloading facilities. While all lines of communications will be exposed to similar hazards, ports, in particular, are likely to be high priority targets for the enemy. As it appears improbable that they can be adequately defended during the

period under consideration, the damage inflicted may well be so great that in the early stages of a war seaborne supplies will have to be largely handled through secondary harbors and over beaches. This would greatly reduce the total tonnage that could be properly handled and will also have an effect on the types of vessels required. Moreover, it would be dangerous to send in large convoys in excess of the rates which could be handled expeditiously under these conditions, since such convoys or groupings of ships awaiting unloading would themselves be excellent targets for enemy air and submarine attacks. The probable extent of damage to ports from atomic attack is now being studied. An evaluation of the resultant capacity of ports, anchorages, and beaches will then determine the amount of shipping which it will be possible to handle. A related problem is that the atomic threat is likely to lead, on the outbreak of war, to an immediate exodus of merchant shipping from major European ports. These problems need further investigation as they may well have an influence on the composition of NATO naval forces.

30. Further studies are necessary to determine how naval forces expected to be available in the next few years can be used to the greatest advantage in performing essential naval tasks. These studies must take into account new developments in naval techniques and weapons in order that NATO naval forces will be kept abreast of the latest technical advances in naval warfare under atomic conditions.

31. At this stage, therefore, it is necessary to defer final conclusions with respect to the present Capabilities Studies of the NATO Naval Commanders. The Military Committee is initiating further studies and will report on them to the Council in their next assessment of the NATO force pattern.

CONCLUSIONS

32. As a result of its recent study of the impact of new weapons on a war involving NATO, the Military Committee has reached the following conclusions:

a. Superiority in atomic weapons and the capability to deliver them will be the most important factor in a major war in the foreseeable future.

b. Surprise will be a major factor in any future war involving NATO, and the degree of surprise attained by the enemy could greatly influence the outcome of the war. The ability of NATO to withstand and react to the first blow will depend on the extent of the resistance of our populations to such action and the state of preparedness of our forces at the time of the enemy's surprise attack.

c. Should war occur, it will most likely consist of two phases:

- a relatively short initial phase of intensive atomic exchange;
- a subsequent phase involving operations of indeterminable length and of lesser intensity.

The ultimate victory however, would probably have been determined by the outcome of the initial phase.

d. Should war occur, the best defense against atomic attack lies in the ability of the Allied nations to reduce the threat at source by immediate and intensive atomic counter-attack.

33. In face of the threat of such a war, the primary aim of NATO, must more than ever before, be to prevent war. This aim can only be achieved if the Allied nations are so powerful int he vital elements of modern warfare that the enemy will conclude that he has little hope of winning a war involving NATO. This means that NATO must be able to withstand the initial Soviet onslaught, to deliver decisive atomic counter-attacks against the war-making capacity of the enemy, and to prevent the rapid overrunning of Europe.

34. In developing the pattern of NATO military strength in Europe which would be most effective in the type of war envisaged for the next few years and which would be within the available resources, priority must be given to the provision of forces in being capable of effectively contributing to success in the initial phase. Other forces are required to contribute to subsequent operations, but, in view of the importance of the initial phase and taking into account the limited resources which it is anticipated will be available, the build-up of these forces must be given a lower priority.

35. The forces in being must be characterized by:

a. Atomic delivery forces adequately protected from initial attack and constantly ready to launch an immediate counter-attack.

b. Systems in operation designed to ensure early warning of attack.

c. Forces which will have an integrated atomic capability, will have been properly equipped, trained, and deployed in depth, and will be maintained in a high state of readiness.

36. If measures are taken to provide NATO forces in Europe of the above pattern and if a German contribution is available, it is considered that, by the use of atomic weapons from the outset of hostilities, the forces of Allied Command Europe could provide a successful forward defense in Europe. Insofar as the Central and Northern European commands are concerned, this would enable NATO, for the first time, to establish a major defensive line well to the east of the Rhine-Ijssel, which is vital to defense of these commands and to the control of the Baltic exits.

37. It is militarily essential that NATO forces should be able to use atomic and thermo-nuclear weapons in their defense and that NATO military authorities should be authorized to plan and

make preparations on the assumption that atomic and thermo-nuclear weapons will be used in defense from the outset.

38. The Military Committee is initiating further studies dealing with NATO naval problems. Until these studies are completed and assessed it is necessary to defer conclusions with respect to the recent Capabilities Studies of the NATO Naval Commanders.

39. The most effective pattern of all NATO forces must, of course, be examined continuously in the light of the new problems posed by the advent of atomic weapons.

RECOMMENDATIONS

40. The Military Committee recommends that the North Atlantic Council:

a. Approve the above conclusions, noting the significance of the assumption in paragraph 37.

b. Approve in principle the measures in the Enclosure to the report as being those most necessary to adapt our military forces for a future major war; and note that the Supreme Allied Commander Europe has prepared a detailed list of Program Recommendations which he will use as a basis for further study and action.

c. Note the Military Committee's action in initiating further studies of NATO naval problems.

d. Note that the Military Committee is initiating such action as lies within its authority to adapt NATO forces for an atomic war.

e. Note that the Military Committee will submit a later Report on Air Defense.

f. Note that this report is only the first of a series that the Military Committee intends to make in the future.

ENCLOSURE

MINIMUM MEASURES NECESSARY TO INCREASE THE DETERRENT AND DEFENSIVE VALUE OF NATO FORCES

1. Atomic Capability. The forces of NATO should be provided with an integrated atomic capability for use as rapidly as possible in order to give them maximum deterrent power and the ability to participate effectively in an immediate atomic counter-offensive in the event of war.

2. The Alert System. A fully effective alert system must be provided, as surprise will be extremely important in an atomic war. NATO must be able to react immediately to a warning by initiating all possible passive defense measures and by preparing to launch counter-offensive operations against the enemy's air complex the moment after positive evaluation of attack has been made. The effectiveness of this alert system will be a major factor in the initial phase of a war.

3. Warning of Attack. In the event of war it will be essential for Allied forces to obtain the maximum possible warning of enemy attack. All measures contributing to the achievement of early warning must, therefore, be given high priority. In particular, the following measures are recommended:

a. Increased emphasis be placed on the improvement of Allied intelligence systems, and on improvement in methods of rapid communication of such intelligence within NATO.

b. Steps be taken to ensure that the main NATO radar net will be completed and adequately manned.

c. The currently planned radar cover be extended and completed as necessary.

4. Forces-in-Being. Priority must be given to forces-in-being. These forces must have an integrated atomic capability and must be so organized, equipped, trained, and deployed in depth that they fulfil to the maximum extent practicable their dual role of a deterrent force and a force capable of surviving and countering the enemy's initial onslaught. An effective German contribution to these forces-in-being is essential, and must be provided as soon as possible. The provision of all forces other than forces-in-being should be accorded a lower priority.

5. Measures to Enable NATO Forces to Survive Soviet Atomic Attack. In view of the increasing Soviet atomic capability and the probability of a future war opening with surprise atomic attacks, it is essential that the necessary dispersal and redeployment measures are taken to ensure the survival of NATO forces during the initial phase of hostilities. We must readjust our tactical disposition, improve and augment both passive and active defense measures, and increase unit dispersion and mobility. These measures apply to all forces, air, land and sea alike. We must particularly guard our air forces against such attack by basing them on as many different air fields as possible, by dispersing them to the maximum extent possible on these airfields, and by improving their ability to redeploy to and operate from alternate bases at immediate notice.