DATE: April 6, 1967
PLACE: Department of Sta
time: 9:50 AM - 5:25 PM

subject: Nuclear Defense Affairs Committee,
Nuclear Planning Group

participants: See Attached List

Copies to: Secretary McNamara - Defense
Assistant Secretary Mcnaughton - Defense
JCS - General Wheeler - Defense
U - Mr. Katzenbach
M - Mr. Rostow
EUR - Mr. Liddy
G - Mr. Kohler
EUR/RPM - Mr. McAluliffe
USRO - Ambassador Cleveland

Secretary General Brosio opened the meeting with brief re-
marks expressing his hope that the NPG would provide a new
constructive activity for NATO and truly fruitful results. On
behalf of the other Ministers and on behalf of NATO, he expressed
his thanks to Secretary McNamara and the US Government for their
hospitality. He expressed a special welcome to Netherlands Defense
Minister den Toom, who is no newcomer to NATO affairs. He then
asked Secretary McNamara to lead the discussion in reviewing the
NPGW conclusions and the Minute of February 18, 1966.

Secretary McNamara welcomed his fellow Defense Ministers to
Washington and asserted President Johnson's keen interest in NATO
nuclear affairs. Both the President and he view the NPG as a
major step in increasing the role of non-nuclear governments in
the nuclear affairs of the Alliance. Indeed, President Johnson
would welcome the opportunity to meet with Secretary General Brosio
and the Defense Ministers, and Secretary McNamara disclosed that
he had already made a tentative appointment at noon at the White
House on April 7, and hoped that this arrangement would meet with
the Ministers' approval. It was then agreed that Secretary General
Brosio and the seven Defense Ministers would meet with the
President at the appointed time.
Turning to item I (a) on the agenda, Secretary McNamara said that his presentation would be an informal one; he invited ques-
tions and comments from his colleagues, as he proceeded. First, at the February 1966 meeting, the NFWG concluded "that the general size of existing strategic nuclear forces is adequate to deter large scale attack by the Soviet Union, but that there appears to be no way to prevent unacceptable damage to the West from an all out nuclear exchange". In other words, the NFWG decided (1) that the current NATO deterrent is adequate, and, equally important, (2) that there is no way to prevent the destruction of the West in a full scale nuclear exchange. The question which this meeting must examine is: Should we change our conclusions today?

As a prelude to this discussion, Secretary McNamara explained the US philosophy for deterrence. We can be assured of our deterrent capability if the Alliance has sufficient nuclear power to survive a Soviet surprise nuclear attack and still be able to destroy the USSR. This, then, is a reasonable basis on which to shape our assured destruction forces.

Secretary McNamara went on to say that one must then ask the next question: Is additional force necessary to limit damage to the West in the event that deterrence fails as a result of irrationality, miscalculation or accident? This is the question we must have in mind when we design our damage limiting forces.

Last year in the NFWG studies, we projected the Soviet threat through 1970. Since that time there have been some changes in the threat, some of which are important.

Our knowledge of Soviet strategic and missile forces is base for the most part on excellent and detailed satellite photography. The means by which we derive this knowledge must be kept out of the press and out of the realm of public speculation. Regularly we conduct precise photography of every mile of the USSR; and another such reconnaissance has just been completed within the past several months. By this means we are particularly able to detect fixed emplacements. Construction of such installations requires a minimum of twenty-four months with the result that
our information is very precise and our margin of error very low. There are some changes -- upward revisions -- in our estimate of Soviet forces for two years from now since there has been a definite change in the rate of construction of new missile sites. During the period from 1960 through 1965 the Soviets experienced several failures in their missile systems. During the past year, however, there has occurred a very substantial acceleration of construction work, and NATO must now plan to face a larger Soviet strategic missile threat. Secretary McNamara then used the following chart:

Table 1

<table>
<thead>
<tr>
<th>TOTAL SOVIET INTERCONTINENTAL BALLISTIC MISSILES</th>
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<tbody>
<tr>
<td>Date of Estimate</td>
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<tr>
<td>------------------</td>
</tr>
<tr>
<td>1965</td>
</tr>
<tr>
<td>Mid-1966</td>
</tr>
<tr>
<td>Including ICBMs</td>
</tr>
<tr>
<td>1965</td>
</tr>
<tr>
<td>Mid-1966</td>
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Secretary McNamara noted that we can now expect an increase of 175 Soviet ICBMs by 1968 and that by mid-1971 we can expect the USSR to have 1300 missiles rather than the 1100 that had been predicted last year.

Secretary McNamara noted that each estimate is a range or spectrum of analyses derived from studies conducted by experts in the CIA, the DIA and the Department of State. When we compare our past estimates with our present knowledge we have reason to place a high degree of confidence in the figures for 1966 and 1968 and reasonable confidence in the estimates for mid-1971. The estimates, in our judgment, are more than adequate for NATO force planning, particularly since US estimators are inclined to
err on the high side in order to base our military posture on conservative assumptions and to make it as adequate as possible.

Secretary McNamara then drew the attention of his colleagues to a second chart dealing with US and Soviet intercontinental missile and bomber forces for mid-1976:

Table 2

<table>
<thead>
<tr>
<th>US AND SOVIET INTERCONTINENTAL MISSILE AND BOMBER FORCES</th>
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<tbody>
<tr>
<td>10/1/66</td>
</tr>
<tr>
<td>US</td>
</tr>
<tr>
<td>ICBM's</td>
</tr>
<tr>
<td>Submarine launched BM's</td>
</tr>
<tr>
<td>Total BM's</td>
</tr>
<tr>
<td>Intercontinental Bomber</td>
</tr>
<tr>
<td>Nuclear Warheads Planned</td>
</tr>
<tr>
<td>Alternatives</td>
</tr>
</tbody>
</table>

In this connection, he called particular attention to the present balance of [US nuclear warheads] versus 700 in the hands of the Soviets, -- compared with the situation in 1968 when the balance will be [US] versus 1,100 Soviet -- and compared with the planned situation in mid-1976 when the balance will be [US] versus 1,700 Soviet.

Secretary McNamara then introduced a new chart dealing with levels of Soviet population and industry destroyed, as a function of US warheads delivered:
Table 3

**SOVIET POPULATION AND INDUSTRY DESTROYED**
(Assumed 1972 Total Population of 247 Million;
Urban Population of 130 Million)

<table>
<thead>
<tr>
<th>One Megaton Delivered Warheads</th>
<th>Population Fatalities</th>
<th></th>
<th></th>
<th>Percent Ind. Cap. Destroyed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Urban Millions</td>
<td>Percent</td>
<td>Total Millions</td>
<td>Percent</td>
</tr>
<tr>
<td>100</td>
<td>34</td>
<td>26</td>
<td>37</td>
<td>15</td>
</tr>
<tr>
<td>200</td>
<td>48</td>
<td>37</td>
<td>51</td>
<td>21</td>
</tr>
<tr>
<td>400</td>
<td>66</td>
<td>51</td>
<td>73</td>
<td>30</td>
</tr>
<tr>
<td>800</td>
<td>83</td>
<td>64</td>
<td>93</td>
<td>38</td>
</tr>
<tr>
<td>1,200</td>
<td>95</td>
<td>73</td>
<td>107</td>
<td>44</td>
</tr>
<tr>
<td>1,600</td>
<td>100</td>
<td>77</td>
<td>115</td>
<td>47</td>
</tr>
</tbody>
</table>

He emphasized that in our studies we count only fatalities that could be expected from immediate blast and radiation. It is our conservative view that the destruction of one-fourth of the total Soviet population and one-half of its industry would eliminate the USSR as a modern 20th century state and amount to unacceptable damage in the mind of any rational Soviet planner. Secretary McNamara drew particular attention to the fact that [400] delivered warheads provide the optimal effect in terms of fatalities and industrial destruction. A doubling of the [400 figure to 800] warheads provides only a modest increase in Soviet deaths and the damage inflicted on Soviet industry. We assume that 100 per cent of our mechanically operative missiles surviving a Soviet first strike would penetrate (since the Soviet Union now possesses no ADMs) and 95 per cent of our bomber force would penetrate to their targets.

In response to a question from Minister Healey, Secretary McNamara explained that we expect a malfunction rate of no higher
than 30 to 35 per cent of our missiles. We further estimate that at the present time 50 to 60 per cent of our strategic delivery systems would survive a surprise nuclear attack. Thus, of the 1500 weapons now on hand, we need have only 400 penetrate to their targets to effect assured destruction of the USSR. In some respects, Secretary McNamara went on, it is almost necessary for us to boast of our superiority in the strategic field to make our deterrent credible to the public in the West.

As the figures in Table 2 show, said Secretary McNamara, the relationship between the West and the Soviets will be essentially the same in 1968 as in 1966. There will be some slight decline in the number of US bombers; but we now have four times as many bombers as they, with 600 US tankers to back them up. As the number of bombers declines in the years to come, the number of submarine-launched missiles and Minutemen rises. Although the ratio of US to Soviet strategic forces will decline from a 6 to 1 advantage to a 4 to 1 advantage, we shall have in our possession more fast response weapons in the shape of missiles.

Given long lead times, however, one must plan not for 1968 but for 1976. By that time we can expect the Soviets to have up to 1700 ICBMs, and their submarine force will have doubled. In response to a question from Minister Healey, Secretary McNamara said there are major qualitative differences between US and Soviet forces: all of our submarines are nuclear-powered; all are equipped for sub-surface firing; all have greater range and pay load. We can expect the Soviets to improve the quality of their forces during the next decade, but we can also expect that the West will do likewise.

When queried by Minister Healey about Soviet MRBMs and IRBMs, Secretary McNamara said he did not expect that the Soviets planned to increase the number of their weapons in this category. However, it is reasonable to expect them to seek greater mobility and hardening of their missile sites and to convert to solid propellants.

In response to a question from Minister Hellyer about the advantages of solid fuels, Secretary McNamara explained that one cannot make a liquid fuel missile as survivable as one with a
solid propellant. In response to another question from **Minister Healey**, Secretary McNamara said that the US is constantly striving to raise the [70] per cent reliability factor of our existing missile force since this is the cheapest way of increasing effectiveness. He went on to say that the greatest change one can see on the Soviet side is their effort to improve accuracy. Looking at the time frame 1968-1976, one sees an increase in nuclear weapons from 1100 to 1700. These estimates are based on our knowledge of Soviet current construction programs, on our knowledge of Soviet R&D efforts, on our analysis of the division of resources by the USSR, and, finally, on the stated objectives of Soviet military and political leaders. We thus face a 60 per cent increase in Soviet weapons in the 1968-1976 time frame and a 120 per cent increase if one compares the 1976 situation with the present. Moreover, a political decision by Soviet leaders could permit the number of Soviet weapons to rise as high as 5,000 by 1976. In that event and in the event that the Soviets have deployed by that time an ABM system, the West might need a 5 to 1 or a 6 to 1 ratio to achieve assured destruction. Our technology in the US is now ahead of the Soviets and we are planning to have weapons to penetrate their ABM system if they decide to deploy one. If they should decide to push to the 5,000 figure, then the West will need 20,500 weapons and the US has already provided the funds and the alternatives in our FY 1968 budget to take that contingency into full account.

At this point, **Minister Healey** intervened to inquire about the malfunction rate in the Soviet ABMs. Secretary McNamara said that we can measure their current experience to some extent through our intelligence system, in another dimension since their experience is very much like our own in terms of the development of weapons system. In general, one could say that their [40] per cent malfunction rate closely parallels our own which is in the order of [35] per cent. No one should estimate that the Soviets are primitive or backward in technology. If the Soviet leaders decide to concentrate their efforts on a certain program, they can achieve the goal they have established.

Secretary McNamara went on to say it is difficult to estimate what the Soviets will do in response to Western actions. In general,
however, they reason very much the same way we do and they appear to entertain a similar philosophy with respect to strategic deterrence. Their purpose is to inflict unacceptable damage on NATO in terms of their own political requirements. In general, however, one can say that there is a 3 to 5 year lag in Soviet thinking in their studies of nuclear war, -- and there is an almost identical technology lag of 3 to 5 years which one can detect in their ABMs and in their strategic doctrine.

Minister Hellyer asked what the Soviets consider unacceptable damage on the US and NATO. Secretary McNamara replied the Soviets apparently view the US in much the same way as the US views the USSR in Table 3. However, with respect to targets in Western Europe, they might increase the number of weapons by some 25 to 30 per cent to compensate for the population density in that area. Secretary McNamara then showed another chart depicting fatalities in an all out US-Soviet nuclear exchange in the year 1976:

### FATALITIES IN ALL-OUT STRATEGIC NUCLEAR EXCHANGE IN 1976

<table>
<thead>
<tr>
<th></th>
<th>Soviet First Strike</th>
<th>US First Strike</th>
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<tbody>
<tr>
<td>US</td>
<td>US</td>
<td>US</td>
</tr>
<tr>
<td>Program</td>
<td>Fatalities</td>
<td>Fatalities</td>
</tr>
<tr>
<td>Approved</td>
<td>120</td>
<td>120+</td>
</tr>
</tbody>
</table>

This table shows clearly that in 1976, even after a Soviet First Strike, the West would be able to inflict unacceptable damage on the USSR. Secretary McNamara also described results that would occur in the unlikely event the US would undertake a First Strike. In that situation, the most unlikely one, the US would paradoxically suffer 100 million fatalities while the Soviet Union would endure about 70 million, compared with 120+ million if they strike first. This paradox, Secretary McNamara explained, stems from the fact that a US First Strike would direct its full force at airports, silos, and military targets. This would mean that the West would have fewer weapons to put down on Soviet population centers. One might be able to improve this balance somewhat, but the fact of the matter is that in 1976 -- or even today -- one cannot contemplate a full scale nuclear exchange with the Soviet Union that would not result in the destruction of both Western
Europe and the US. Any form of nuclear exchange of this magnitude would bring unacceptable damage to the West. There are those in the Congress and in certain parliaments who ask whether increased technology applications and greater sums of money might not provide a military advantage or political opportunity. The answer to both questions, Secretary McNamara said, is "no".

Minister Healey then inquired whether the US had modified its adherence to the doctrine of flexible response. Secretary McNamara replied that the US continues to adhere to that strategy since we believe it is the only way of limiting the possible initiation of hostilities that could lead to a strategic nuclear exchange. There still remain the possibilities of an accident, especially when one can see the possibility of 20,000 nuclear weapons being in existence. The US has taken great pains and devoted a great deal of research to avoiding a nuclear accident; the Soviets have not done the same. Aside from an accidental detonation, one must also take into account possible irrationality on the part of a political or military leader who is operating under great stress. Indeed, during the Cuban missile crisis of 1962 when there were only 50 Soviet nuclear warheads in Cuba, we faced the very real possibility of an attack from that quarter. At that juncture it would have been very hard for the leaders in Washington to determine whether the attack was intentional on the part of Moscow. Therefore, the US has not given up maintaining alternatives to an all-out nuclear exchange.

Summing up, Secretary McNamara said he felt it important that the NPG review what the NFWG had decided in February 1966 since the principles enunciated on that occasion are fundamental to sound political and military planning.

Minister Healey stated that all governments do not think in these sophisticated terms. He wondered whether the Soviets, noting US assertions of its ability to control crises through missile superiority, might at some point try to put themselves in that same position. If the Soviets begin to think the same way, why should they accept a missile inferiority of 4 to 1. He then asked if the West is prepared to moderate or accept a more symmetrical relationship.
In reply, Secretary McNamara said the US does not assert its ability to control a crisis. However, if a crisis should come, we do not think only in terms of an all-out nuclear exchange -- but we do recognize that there might be an accidental detonation or the firing of only a few missiles. We seriously doubt that anyone can control a nuclear crisis since there is the great danger that leaders will act irrationally and without possession of all the facts. We actually assert our 4 to 1 nuclear superiority for several audiences. There are those in Western Europe who doubt US strength and who also doubt our will to use our weapons. There are many in the US who think that US nuclear forces are inadequate. Many in Congress are impatient and ready to appropriate more funds than the Administration requests. The latter ask, "Are you, Mr. Secretary of Defense, willing to accept the fact that the Soviets can inflict unacceptable damage on the US?" When we tell these critics of our 4 to 1 superiority, they find comfort in it.

Minister Healey responded that he could not help feeling that Secretary McNamara's statement at Ann Arbor and at the Economic Club had been misunderstood in many quarters in Europe. The thinking is quite sophisticated with the result that many Europeans now believe that they run risks which the US will be spared; there are even those who think that the US has led the Soviets to believe that they hold the cities of Europe as their hostages. Secretary McNamara replied that public statements of US strength are needed from time to time.

Minister Tremelloni noted that the entire discussion thus far had been in technological terms and that he was interested in the economic reasoning. He inquired what the economic effects of such a missile buildup will be in the US and the USSR. What will be the order of magnitude of the costs? What will be the effect upon the consumer economies of both countries? Secretary McNamara assured his colleagues that the US economy is easily capable of producing 9,000 or -- if necessary -- 20,000 weapons by 1976. He also expressed his belief that the Soviet economy could produce 1700 or even 5,000 nuclear weapons by 1976, -- but not without certain political strains. Even now, he said, the Soviet leaders feel some pressure to divert national resources from space and military purposes to consumer goods and
to the development of their economy. However, the US judges that Soviet leaders will continue to put the security of their country first and will do whatever is required to meet national security needs.

Minister den Toom said he was concerned about plans for the possible use of only a limited number of nuclear weapons. Were there plans for using only one or a limited number of such weapons to show the capability which NATO possesses? Secretary McNamara replied that our plans do include employing Polaris and aircraft for less than an all-out nuclear exchange. He went on to say that he found it difficult to predict the set of circumstances where it would be to the US advantage to employ only a limited number of weapons since it was hard to conceive how the Soviets would react to such a situation. If Kosygin were told that one or two or three Soviet cities had been destroyed by nuclear attack and several millions of people killed, would he launch 3 weapons, 700 weapons or none. In fact, isn't it more likely that the first fragmentary report reaching Kosygin would be that the USSR was under massive nuclear attack?

Minister Healey said that, if the Soviets are rational and aware of US nuclear power, then it seemed to him that the Soviets would not employ their weapons first against American cities but rather against those of Western Europe. Thus, they might respond to a demonstrative use of nuclear weapons by the West by striking the same number of targets in Western Europe. Secretary McNamara responded that he and General Wheeler had often discussed what one should do if the Soviets launched an attack. The only principle which he had established in these deliberations was not to act in haste since we know that the West possesses sufficient weapons under the sea and in holes in the ground where they are invulnerable to Soviet attack. Further, at this time the Soviets do not possess enough missiles to put one weapon on each of our silos. As Secretary of Defense, he considered it his duty to get the necessary information to political leaders and to have procedures available for the political leaders which will permit a variable response. It is important, Secretary McNamara said, that the West maintain a full spectrum of response.

Minister Helleuex asked who would engage in this thinking process which Secretary McNamara had just described in case the
first Soviet missile fell squarely on Washington. Secretary McNamara explained that since May 1961 the US had maintained an aerial command post 24 hours a day with a general officer who has in his possession war plans and communications which will permit him to initiate intelligent action in such an eventuality.

(At this point a coffee break ensued).

Secretary General Brosio briefly reviewed the highlights of Secretary McNamara's presentation on strategic forces. He noted that we are in a situation of mutual deterrence where neither side can expect to avoid very substantial damage in a nuclear exchange. He also noted the revised and higher estimates of Soviet ICBM strength given to the Group by Secretary McNamara. In introducing the subject of ABMs, he stressed its importance to NATO from both a political and military viewpoint. He referred to two documents that had been circulated previously:

1. Ambassador Cleveland's comments to the North Atlantic Council on ABM, and

2. The US paper circulated in advance of the meeting to the Nuclear Planning Group members.

Secretary McNamara opened by encouraging his colleagues to raise questions and comments as he proceeded. He referred to the US document on ABMs which had been provided in advance noting that this reflected very considerable thought on his part about the ABM problem. Material in this paper was, in effect, the foundation of the recommendations that he had made to the President in this area. In one sense, there was not much to add to what was in the paper. However, inasmuch as this was a highly complex subject, he thought it might be useful to summarize some of the main points.

Secretary McNamara noted the US had spent more than $4 billion on research and development on ABMs in the past ten years. AT&T, which was the prime contractor, was about the most efficient and effective that he had worked with since he had been in the Pentagon. Their two major subsidiaries, Bell Telephone Labs and Western Electric, were highly expert in this area and brought a high degree
of integrity to their work. He is convinced that, as a result
of this extensive R&D effort by these very able organizations,
we have the most advanced ABM technically in the world, and
that certainly includes the Soviet Union.

Using slides to illustrate his talk, Secretary McNamara
provided the following description of the NIKE-X system:

Slide 1 described the area defense and the SPARTAN exo-
atmospheric interceptor. Secretary McNamara noted that the same
system could be deployed in Western Europe. It is based on the
perimeter acquisition radar (PAR) and the SPARTAN missile, both
of which he described. He noted that this missile uses a large
warhead and depends on radiation effects. Intercepts are made
75–80 miles up and 300–400 miles out.

Slide 2 described the SPARTAN coverage contour. It was
noted that one battery covers an area approximately 600 by 900
miles. However, the battery is limited in numbers of defensive
weapons. There may be 20–100 SPARTANs per battery. The defense
can be saturated by numbers. In addition, the radar cannot dis-
criminate in space. Thus, it can be saturated by light objects
("feathers") such as wires, chaff and foil. This ability of the
offense to saturate the area defense is the most serious limi-
tation of the area defense.

Minister Healey asked in this highly complex system, what
is the rate of malfunction, and how many missiles do you need to
fire at each object? Secretary McNamara said that while he didn't
recall precisely, he thought it took about three missiles to
achieve a 90% probability of kill. He also noted that the com-
puter program was extremely complex. Minister Healey asked
how many degrees of coverage does the PAR have? Secretary McNamara
answered that it has essentially full coverage. Minister Healey
asked about the blackout problem. Secretary McNamara acknowledged
that this was a problem. However, we have taken it into account
in designing our radars which operate at very high frequencies.
We also have redundancy of coverage. He said that these last
points were highly technical and that if the group desired,
Dr. John Foster could answer them in detail.
The third slide showed area defense weapons effects. Secretary McNamara explained that there would be little effect on the ground from SPARTAN bursts due to the high altitude at which the SPARTAN would intercept. There would be some long-range fallout effects but these would not be serious. There would be significant and varied blackout effects from high altitude bursts. For example, radio stations might be out for as much as 24 hours. However, we are designing our essential military systems to take account of these effects.

The fourth slide depicted the terminal defense concept. Secretary McNamara explained that the terminal defense is a necessary component of the system against a large or sophisticated attack. The SPRINT missile would engage objects that come through the area defense that the PAR cannot discriminate. The atmosphere acts to sift out light objects, and the MSR radar will distinguish between warheads and light decoys. However, the MSR cannot easily discriminate decoys that are 10% - 20% or maybe even 5% of the weight of the warhead. The MSR must be able to track all objects which appear to be warheads. The MSR will launch and track the SPRINT missile which intercepts at an altitude 35,000 to 100,000 feet. The SPRINT warhead is much smaller than the SPARTAN - in the kiloton range - and thus, must be more accurate.

The fifth slide showed the footprint for the terminal defense. Secretary McNamara noted that the footprint of coverage was much smaller than the area defense, i.e., 10 - 20 miles. This is because of the shorter range of the MSR and the SPRINT missile. Minister Helvyer asked about the effects on the ground from the SPRINT missile and particularly the electro-magnetic pulse effects. Secretary McNamara said that the effects on the ground from the SPRINT were not significantly different from the SPARTAN because the SPRINT, even though it went off at a lower altitude, was a much smaller weapon. He acknowledged that the electro-magnetic pulse effects would be a problem, but we can protect our equipment against this. Secretary General Brosio asked if the SPRINT would be much more accurate than the SPARTAN. Secretary McNamara responded that it would be much more accurate.
The sixth slide showed a picture of a PAR-type radar. Secretary McNamara noted that this was a very big radar but not as big as some of the large radars the Soviets are deploying. These are about 25% larger than our PAR.

The seventh slide showed a sketch of the MSR. Secretary McNamara noted that the MSR was different from the analogous Soviet radar which depended on mechanical scanning. The MSR uses electronic scanning which is much faster. Secretary McNamara noted that a prototype MSR would be completed by Raytheon this summer and would be installed at the test facility on Kwajalein. He stated that the US will be installing a complete NIKE-X system at Kwajalein which is scheduled to be completed in 1969. We then plan to launch about 100 missiles from Vandenberg Air Force Base over a period of several years to fully test the system. The eighth slide showed drawings of the SPRINT and SPARTAN missiles and compared the major characteristics of the two missiles.

The ninth slide showed a schematic diagram of the area and terminal defenses, and Secretary McNamara described how the defense operated and the function performed by each component including SPRINT, SPARTAN, PAR, MSR, TACMAR and the computers. He noted that the system is extremely complex and costly.

The tenth slide showed footprints for an area defense of the continental US oriented toward an attack from Communist China. Secretary McNamara stressed that such a defense could not conceivably protect against a large-scale Soviet attack. He explained that we had considered essentially three types of defenses: (a) a thin area defense, (b) a light defense, and (c) a heavy defense. He noted that even with a thin defense, some SPRINT missiles were required to protect radars. He also pointed out that the particular deployment depicted had heavier overlapping coverage of the East Coast where the largest US urban industrial centers were located. He said such a thin defense would cost $4 - $6 billion. The other defenses would cost from $10 - $40 billion. He personally believed that the investment cost of a heavy defense would ultimately run to $40 billion.

Secretary McNamara read from official US estimates regarding the Soviet AEM program. He said that we believe the Soviets
decided about five years ago on deploying an ABM at Moscow, and we expect the initial deployment at Moscow to be operational in 1967 and this deployment to be complete in 1970. It is an area defense. It has good capabilities against a limited attack but can be saturated easily by present US capabilities. Furthermore, it only covers part of the POLARIS threat corridor.

The Soviets also are deploying a second system which we call the Tallinn system. It is not clear whether this system is primarily an anti-bomber system or ABM. Secretary McNamara then quoted from an estimate on the Tallinn system which described our uncertainties. He added that the majority view was that Tallinn is primarily a SAM system. He concluded that while there is much controversy over the Tallinn system, he believes it does not make much difference. We must assume it is an ABM or if it is not, they will extend their ABM in some way. It does not make sense for them just to defend Moscow.

Secretary McNamara then addressed the question: "What can an ABM accomplish?" He showed estimates of US and Soviet fatalities if the present programs are projected without a US ABM. (These figures and other figures on fatalities noted below were the same as those in the pre-circulated ABM paper). He then asked "Can we reduce these fatalities?" and replied "Yes we can." However, he stressed it would cost at least $40 billion, and would probably take longer than people now estimate. He then showed figures on fatalities if the US deployed an ABM, noting that in one case of a US first strike, fatalities could be as low as 20 million. He said similar results could be achieved in Western Europe.

Minister Healey asked if this did not assume there was no Soviet reaction to our ABM.

Secretary McNamara said "Yes, and that is the principal point that I will come to in a moment."

He then stressed that the figures for fatalities shown in the paper are quite sensitive to small variations in the assumptions. He concluded that given time, sufficient money and patience, we could achieve the damage limiting results shown in
the tables and similar results in Europe. Minister Healey asked whether the shorter reaction time in Europe would not reduce the efficiency of an ABM deployed in Europe. Secretary McNamara replied that he did not think so. You might need more SPRINT in Europe but he pointed out that SPRINT has a very fast reaction time. It literally explodes from the ground. General Wheeler agreed that an ABM defense in Europe would not be substantially more difficult than one for the US. Secretary General Brosio said he had understood that MRBMs were slow and, therefore, might be easier to intercept. Secretary McNamara said that he did not think this made much difference.

Secretary McNamara then posed the question: "If an ABM can do as well as I have just indicated, why don't we recommend deployment?" He responded that we don't recommend deployment because we are sure that the Soviets will respond to our ABM deployment. In our US planning we are placing our reliance on being able to absorb a first strike and still inflict unacceptable damage on the Soviet Union. We believe that the Soviets have the same philosophy. If their 1976 force can inflict 100 - 120 million fatalities against the US in the absence of a US ABM, would the Soviets consider 20 million fatalities to be an adequate deterrent? He didn't think so. Thus, they must react to our ABM deployment if they can. There is no question that they have the technical capabilities and the financial resources to react. Secretary McNamara then showed the results if the Soviets do react to an ABM deployment. In effect, fatalities in the US would be increased to 90 - 100 million. This, he said, is our argument for not deploying a heavy defense against a Soviet attack.

Secretary McNamara then said that he wanted to describe the views of the JCS because, as most of his colleagues know, the JCS had recommended ABM deployment. Essentially, the Joint Chiefs believe that the Soviets will not react to our ABM deployment as he had indicated earlier, or if they do react, their reaction will be imperfect or incomplete. He asked General Wheeler if this was a fair summary of the Chiefs' views. General Wheeler said it was. He went on to say that the figures shown by Secretary McNamara assume an equal and opposite reaction by the Soviets. The JCS does not believe that the Soviets will
necessarily react this way. They might react by building more
defense or some combination of offense and defense. General
Wheeler also noted the footnote on the chart which stated that
the figures were very sensitive to assumptions made regarding
the type of attack. Secretary McNamara pointed out that in his
view neither technical nor financial resources are a limit for
either the US or the Soviet Union.

Minister Hellyer asked Secretary McNamara to comment further
on the financial costs to the Soviets. Secretary McNamara said
that if we spend $40 billion on ABM, they can offset it by
spending less than $1 for each $1 we spend. The higher they
try to get fatality levels, however, the more it costs them.
But the fact is that offense technology is ahead of the defense
and will be for the foreseeable future. He knows of no senior
official in the US Government that doesn't agree with this. Thus,
the cost to the offense to overcome the defense will inevitably
be less than the cost to the defense.

Secretary General Brosio asked: "If, as you have previously
stated, the Soviets have a deterrent philosophy, why are they
deploying an ABM?" Secretary McNamara said historically the
Soviets have spent much more than the US on air defense. They
have deployed something like 10,000 surface-to-air missiles. He
noted that these missiles are the same as the ones they have
furnished to North Vietnam. In North Vietnam some 1900 missiles
have been launched against US aircraft. They have shot down
something like 49 of our airplanes. General Wheeler added that
there were 37 positive kills by SAMs and 12 probables in North
Vietnam. Secretary McNamara concluded that the Soviets have not
gained anything from this vast expenditure on air defense. Some
85% - 95% of our bombers would get through. However, the Soviets
are emotionally oriented to defense. It is a "religious fanatic-
cism". The same fanaticism underlies their ABM program. Actually,
the Soviets will be worse off as a result of deploying their ABM.
Because we are uncertain about the exact effectiveness of their
ABM and how widely it will eventually be deployed, we have to
base our deterrent force on "worst case" assumptions. The only
reason that we are buying POSEIDON is to be sure that we can
penetrate the Soviet ABM. We will be spending $3.1 billion on
POSEIDON and it is essentially bought now. It is because of
their ABM that the numbers of our warheads are increasing from roughly [REDACTED] as previously indicated. Undoubtedly we have "over-bought" and thus they have increased their risks.

Minister Healey noted that Secretary McNamara had said [REDACTED] of our bombers would get through and only [REDACTED] of our missiles. Does this strengthen the probability that the Tallinn system is intended to be primarily for use against bombers? Secretary McNamara replied no. There were other technical reasons which lead us to believe that it was probably primarily an anti-bomber system. But he reiterated that we must still plan on the assumption that it is an ABM or that they will have some other ABM extensively deployed.

Minister Healey asked if the SPRINT could be used against bombers. Secretary McNamara replied no. If we deploy an ABM we would have to improve our air defense or we might open an attractive option to the Soviets. While their air defense is poor, ours also is poor. Minister Hellyer asked how many Soviet bombers might get through our air defense. Secretary McNamara said that we estimate that the Soviets can put 100 bombers over the US on two-way missions. Something like 50 of these might get through. General Wheeler agreed that 50 was a good rough approximation. He noted that the Soviets would use air-surface missiles and thus could stand off from the air defenses to some extent. Secretary McNamara concluded that if we left a vacuum in our air defense, this would provide an incentive to the Soviets to build a new bomber.

Secretary McNamara then addressed the status of US efforts to open discussions with the Soviets on limitation of strategic forces. He noted that in the current US Defense Budget there is some $560 million for research and development on ABM. In addition, there is some $377 million which would permit us to initiate production and deployment should a future deployment decision be made. Beyond that there is $168 million appropriated by Congress last year which we have not used. He pointed out that the President's Budget Message stated that we had not decided to start production but instead would endeavor to engage the Soviets in discussions designed to restrict ABM deployment.

Secretary McNamara noted that we had broached this subject to Ambassador Bobrynin early this year. After some delay.
Dobrynin came back to us and asked what we had in mind. We said we think you are foolish to be deploying an ABM. This did not get us very far, however. On January 27 the President sent a message to Kosygin indicating that we were prepared to discuss both offensive and defensive weapons as the Soviets had previously suggested. The Soviets came back again and asked us for a specific proposal. We have indicated that we would prefer to enter into general discussions without a specific agenda before setting forth any specific proposals. On March 2 the President announced that the Soviets had agreed to talk with us. On March 23 Ambassador Thompson talked to Gromyko about specific arrangements for discussions. As yet, we have had no further reply from the Soviets. Secretary McNamara said that he believes that the Soviets are torn internally between those who agree with us that massive expenditures on ABM are nonsense and those who argue that dollars should not stand in the way of saving lives. He referred to the Kosygin statement in London as an indication that the Soviets are not yet wholly convinced that it does not make sense to deploy an ABM.

Secretary McNamara posed the question of what the US should do if we cannot reach agreement with the Soviets, and if they continue to deploy. He said that he hoped the discussion today had made clear that our response to their ABM should not be an ABM but improvements in our offensive forces. He went on to say that we expect to receive a reply from the Soviets but it will probably be an inconclusive one. He does not expect that we can reach any formal agreement to limit strategic forces in the next one or two or three years, but this does not mean that discussions could not be fruitful. It may be possible to reach tacit agreement to move along parallel lines without a formal agreement.

Secretary McNamara concluded by saying that he was convinced that if we deploy an ABM the Soviets will respond to that deployment to maintain their deterrent. Thus, it is very doubtful that we should try to deploy a heavy defense against a large Soviet attack.

Minister Hallyer said that he was surprised at the statement it would cost the Soviets $1 for every $1 that we spent on ABM to bring fatalities back up to 90 million. He thought
the relative cost to the offense was less than this. Secretary McNamara referred to the figures in the US ABM paper. He noted that it does cost the offense much less than the defense unless the offense wants to achieve very high casualties. If the Soviets wish to achieve only 40 million fatalities it would cost them only 25¢ for every dollar the US spent on defense. Some have argued that they might not ever achieve a force capable of inflicting 100 million fatalities and they might be satisfied they had a deterrent with fewer potential fatalities. If so, the relative cost to them would be less.

Minister Healey said that he thought he spoke for all of his colleagues in expressing their gratitude to Secretary McNamara for consulting fully with them and bringing them into his confidence on an issue of such vital importance to US security as well as to NATO. He thought this was a very substantial precedent which demonstrated the importance which the US attaches to the Alliance. Secretary McNamara responded by saying that he appreciated Minister Healey’s remarks. The US would not act unilaterally on ABMs without consulting its allies. If we did consider deploying ABMs in the future, we would not do so without taking into account fully Alliance interests. Secretary McNamara said in his view the ABM was less important than the unity of the Alliance. He suggested that we should consider in our future work the implications for NATO of three sets of circumstances: First, only the Soviets deploy an ABM. Second, the US and the Soviet Union deploy an ABM. Third, the US, the Soviet Union and Western Europe deploy an ABM.

Minister Hellyer noted that the cost for an ABM would be immense. If the cost in the US was $40 billion and the cost for Western Europe was equivalent, this would approach $100 billion. Secretary McNamara agreed and noted that we must also expand our offense in response to their ABM and this would add further to the cost. Of course, we have already begun this expenditure on the offense.

Minister Healey said that he spoke on behalf of his Government in saying that they agreed with the US decision not to deploy, that a heavy ABM makes no sense for the US or for Europe, and that it is better to concentrate our resources on offense. He very much hoped that the US can make some progress in discussions with
the Soviets. He was concerned that political pressures may force the US to deployment. In Europe we must consider where we put our priorities. Minister Healey said that he hoped the glamour of the ABM, which is a fascinating subject, won't distract our attention from problems that were most critical for Europe. In his view, if war occurs, it will start at the low end of the conflict spectrum. Thus, he felt NATO should concentrate particularly on the interface between conventional and tactical nuclear weapons and the interface between tactical and strategic nuclear weapons.

Minister Tremelloni said he wished to associate with Minister Healey's comments of appreciation to Secretary McNamara. This whole ABM subject was very complex. He felt that it needs more study. We need additional information. The stability of strategic relationships is transitory in a rapidly changing technology. ABM deployment would bring a new arms race. This would have negative effects on our security. He agreed heartily with US efforts to negotiate with the Soviets. However, he noted that European security factors differ from those affecting the US. He suggested caution in bringing conventional forces into the discussions with the Soviets. Limitation on conventional forces might affect the security of Europe. He hoped the US would continue to consult with its allies.

Minister Schroeder expressed his gratitude for the very complete briefing. It has helped us get a better understanding of the problem. The whole question of ABM is quite fascinating at first look. It is important to understand the psychological motives which underlie Soviet ABM deployment. Thus, he believes it is a good idea for the US to get the Soviet views. He had two brief questions. First, if you deploy an ABM, will it work against the Soviet sub-launched missile threat? He noted that this threat and the short-range tactical missile threat exists in Europe. Second, did the Test Ban Treaty present any difficulties for us in developing an ABM? Secretary McNamara said in reply that NIKE-X would be effective against SLBMs. The limited Test Ban Treaty does present some restriction on our testing of the SPARTAN missiles, but this restriction is not too limiting. At the worst, we can just reduce the size of the
SPARTAN warhead from about [redacted]. We could offset this reduction by buying 20% more warheads. Thus, the limited Test Ban could impose some financial penalty but not a real security penalty on ABM. The SPRINT missile, which is much smaller, we can test adequately underground.

Secretary General Brosio summarized saying he felt it was the consensus that the US position not to deploy ABM now and to seek discussions with the Soviet Union was a wise one. As he understood it, the US was not foreclosing ABM deployment, but wanted to explore the matter with the Soviets first to see if some agreement could not be reached to limit the strategic arms race. It seemed the US was well aware of the political difficulties connected with ABM deployment. The US currently is leaving future options open. Mr. Erosio referred to Secretary McNamara's suggestion that we might study the ABM matter further in NATO. He thought that there were aspects of the ABM which could be studied in the NFG. In particular, he thought the political importance of ABM deployment might be considered.

The meeting reconvened at 3:25 PM after Secretary Rusk's luncheon at Blair House for Secretary General Brosio and the Defense Ministers (MODs), Washington Ambassadors and Permanent Representatives to NATO of the NFG countries.

Secretary General Brosio, in the chair, apologized for being late and introduced Minister Healey, the discussion leader on NFG Agenda Item II - Review of NFG Conclusions on Tactical Nuclear Forces. Minister Healey referred to the conclusions of the London meeting of the Nuclear Planning Working Group (NPWG) which were based on the results of extensive SACEUR, SAENAT and national war-gaming. He said it was thought at first that tactical nuclear weapons were necessary as a counter to the Soviet superiority in conventional forces. The Soviet build-up in tactical nuclear weapons had led to the conclusion, however, that large numbers of tactical nuclear weapons would have to be used to counter the increased Soviet threat. As a consequence, prolonged tactical nuclear war would no longer be possible since it would lead to the total destruction of the combatants. To prove his point, Minister Healey estimated that civilian populations and cities would suffer as much in one day of fighting in tactical
nuclear war as they had in a whole year of World War II. Minister Healey suggested, however, that tactical nuclear weapons did provide a credible threat of escalation to strategic nuclear war and could possibly be used as an inducement to negotiation prior to an escalation to strategic hostilities. Tactical nuclear weapons should be used in such a way, therefore, that escalation to strategic war would not be automatic and that time for possible negotiations could be provided for in the ladder of escalation.

Minister Healey termed SACEUR's Scheduled Program (SSP) as entirely inappropriate because the nuclear forces assigned to him are targeted in such a way as to invite a strategic response only. Changes in the SSP might permit an extension of the time between the initial use of nuclear weapons and an all-out strategic exchange. The main task, therefore, was to come up with a restraints policy on the use of tactical nuclear weapons that would permit intermediate steps in the ladder to provide for negotiations as a possible alternative to automatic escalation of the conflict. Minister Healey observed that at the London NFWG meeting it had been agreed to undertake studies in the above areas.

Minister Healey praised the Turkish and Italian papers and said they were indicative of the need for studying this problem under varying scenarios. In this regard, he said, the Turks had reflected their government's view that in certain cases the use of tactical nuclear weapons (particularly ADMs - atomic demolition munitions) would not necessarily lead to escalation. Minister Healey wondered if certain tactical nuclear weapons (e.g. ADMs) might not serve the same function in a nuclear war as the traditional "shot across the bow" had served in naval warfare. Could one tactical nuclear weapon be used to show firmness and intent and therefore stop a war before further escalation? Minister Healey suggested that this possibility be studied. He observed that the question of how and when tactical nuclear weapons were used was the single, most important issue facing the NFZG.

Secretary General Brosio thanked Minister Healey for his comments on a subject that is at the core of the NFZG's discussions. He pointed to the agreement reached at London to undertake further studies in the tactical nuclear weapons area and referred to the Italian paper which had also called for further studies in this field.
Minister Tremelloni thanked Minister Healey for his thoughtful observations and noted the latter's agreement that further studies were necessary. He noted also that the UK's position was different from that of the flank countries and suggested that separate studies be undertaken on a regional basis. Minister Tremelloni said that Southeastern Europe had particular characteristics, i.e., access routes to the area were mountainous and frontier populations were sparse. In such situations, the use of tactical nuclear weapons might have distinct advantages.

Minister Tremelloni had asked General Lemnitzer's opinion of this assessment last year and General Lemnitzer had agreed with it. Minister Tremelloni suggested that war games might lead to discovery of the best means for the use of tactical nuclear weapons and proposed that countries with greater experience in war-gaming (i.e., the US and the UK) join with Italy, Greece and Turkey in establishing a war-games facility for the study of southern and southeastern flank problems.

Minister Topaloglu said that with the creation of the McNamara Committee, Ministers had entered into consultation on NATO's use of tactical nuclear weapons. He referred to the British submission on this subject at the WPFWG's London meeting. Minister Topaloglu said that the Turks and Italians had now submitted their views which reflected the differences in conditions on the central front and southeastern flank. Minister Topaloglu said that the threat was different and NATO's defensive capabilities were different in the southeastern sector and that there might consequently be an advantage to NATO's initiating the use of tactical nuclear weapons in that sector. He called for further and separate studies on both the central front and southeastern flank. Minister Topaloglu thought the Italian proposal had merit and proposed moving ahead with implementing Minister Tremelloni's recommendation for the establishment of a southern flank war-games facility.

Minister den Toom said that The Netherlands had and pointed out that, for the Netherlands, it was difficult to see the difference between tactical and strategic nuclear weapons.
Minister den Toom asked about the future role of strike aircraft if the SSP were changed. Specifically, how could a downgrading of the nuclear role of QRA aircraft be compensated for?

Secretary McNamara said that he was in a small group and would speak frankly to friends. He asked that NATO face the realities. He agreed with Minister Healey's statement that SACEUR's Scheduled Program was inadequate and suggested that it be revised. Secretary McNamara pointed out that the SSP had been devised for use in a general nuclear war in cooperation with the mission of the US Strategic Air Command (SAC). He submitted that the US strategic capability was now completely adequate and could survive a first-strike. Therefore, the SSP was no longer needed as a supplement to SAC's Single Integrated Operational Plan (SIOP). He added that SACEUR's aircraft were not only more vulnerable but were also less modern and their crews less well-trained than SAC's. Secretary McNamara also concluded that the SSP needed revision. He added that SACEUR's capabilities were not limited by a lack of nuclear weapons, of which he has over 7,000, but by a lack of plans for their employment. Without realistic plans, SACEUR would never get political decisions authorizing him to use his nuclear weapons. A revision of the SSP could lead to satisfactory plans and might also permit the release of aircraft for the conventional role, where they are needed, at no increase in cost. Secretary McNamara asked General Wheeler for his comments.

General Wheeler invited those present to take a historical journey back to 1951-52 when, because the strategic stockpile was much smaller, SACEUR had a real need for nuclear weapons in order to strike targets of interest to him. General Wheeler said that the US was also unable to make precise distinctions between tactical and strategic targets. Now, the old SSP targets are or can be targetted under the SIOP although the SSP has remained unchanged. Changes in the SSP can and should be considered now because the US currently has more strategic and tactical nuclear weapons and much better delivery vehicles. General Wheeler said that he did not agree with all of Minister Healey's comments. He stated further that the SSP's targets could best be struck by missiles, not aircraft. Missiles were more accurate and less vulnerable and therefore NATO should move more toward missiles and dual-capable aircraft. General Wheeler submitted that there would always be some tactical nuclear role for aircraft but that their primary role should be conventional.
Secretary McNamara observed that a real problem did exist but that it was one of the easier ones to solve since the logical solutions were not expensive and not politically sensitive. He said the F-104 could be made dual-capable.

Minister Healey said that the UK was replacing its nuclear-capable Canberras with Phantoms designed primarily for conventional use. He saw dual-capability in aircraft as the first priority in order to achieve a needed ground-support capability.

Minister den Toom pointed out that another role would be needed for NATO's strike aircraft if their current mission were altered. He said the 104 cannot be made dual-capable easily.

Minister Hellyer asked what would be done with older aircraft like the F-104? He agreed with Minister den Toom that the 104 cannot easily be made dual-capable.

Secretary McNamara said that all strike aircraft must be dual-capable and that he would not have non-dual-capable F-104s in the inventory.

Secretary General Brosio said that changing the SSP was completely consistent with the Turkish and Italian proposals for further studies. He asked what further studies the central front countries envisaged.

Minister Hellyer asked what likelihood there was of escalation if low-yield tactical nuclear weapons were used?

Secretary McNamara said that a number of uncertainties on how we would use low-yield weapons and on how the Soviets would respond to them made it very difficult to make predictions in this area. No one, he said, feels very easy at predicting how a nuclear war might evolve. If the Soviets responded - how and in what numbers would they do so, what targets would they hit? The uncertainties make prediction impossible. Anti-aircraft weapons and AEWS might be excluded from those which give rise to the above uncertainties. He added that CINCLANT considers that use of nuclear weapons at sea would be disadvantageous for NATO.
Minister Healey submitted that NATO's conventional forces were inadequate. How long, he asked, could they withstand a conventional attack from the East? The forward-defense concept is a troublesome one, he said, and will not work. The FRG must make up its mind, therefore, whether it seriously wants to accept the risk of nuclear war or whether it can accept a rear defense line strategy. Minister Healey stated that unless NATO builds up its conventional forces it must either abandon its forward strategy or accept the higher risk of nuclear war. Minister Healey admitted that tactical nuclear weapons had helped deter aggression for 17 years but he had been appalled to learn, upon assuming office in 1964, of the lack in planning for the use of tactical weapons. We must, he said, provide realistic plans for the use of tactical nuclear weapons as an alternative to surrender in the event of nuclear war.

Minister Schroeder noted the general agreement on the need to revise the SSP and said he was all for studying such revisions. Whether war-games were scheduled on the central front or on the southern flank, they should be done separately and not simultaneously. Minister Schroeder said that the SSP had psychological aspects for Europe because it had both underscored European participation and had provided better means than SAC for accuracy in striking targets of importance to SACEUR. Accuracy is no longer a problem, he said, but the problem of European psychological attachment to the SSP remains and must be considered in any efforts to change it.

Minister Schroeder said he felt "forward defense" sounded too aggressive and he preferred to term it "frontier defense". He did in any event prefer a defense at the front-line and any attempt to abandon such a strategy would have disastrous political implications for Germany.

Minister Schroeder said that he basically agreed with the concept of dual-capability but that it did create problems. He felt that these problems could be overcome although he did not want a complete renunciation of the nuclear role for strike aircraft.
Secretary McNamara said that he would not advise abandoning the nuclear strike role but he felt better plans for that role were needed.

Minister Healey observed that there were understandable differences in the points of view of front-line countries and those not on the front-line. Europeans wanted to go "strategic" if conventional forces failed because in Europe "tactical" equalled "strategic", but that asked too much of the US. He felt it was absurd to ask the United States to jump right into a tactical nuclear war with no alternatives to national suicide and, therefore, a tactical nuclear doctrine should be developed to provide intermediate responses in order to minimize the risk of escalation. Present plans do not provide for such intermediate steps. Minister Healey added that changes were being proposed in the Defense Planning Working Group (DPWG) and elsewhere, but that further studies in the field of tactical nuclear strategy were definitely needed and could be undertaken in various war-games. Minister Healey said he could not understand why such studies could not be done simultaneously. He asked if an operational analysis group could be set up under the Military Committee to carry out such studies.

Secretary General Brosio suggested that everyone was exposed to the risk of escalation once nuclear weapons were available for use. The problem, therefore, is to work out means by which possible escalation can serve as a deterrent. He admitted that this was a highly speculative question but added that without realistic planning the deterrent would not be credible. Secretary General Brosio proposed that studies be authorized for the south-eastern flank and, when the FRG agreed, for the central front as well. He thought the Germans should be the leaders for the central front game. He asked if the Ministers agreed to such a proposal.

Minister Schroeder said the FRG was willing to undertake war-games applicable to the central front but was not prepared to do so alone. He called for the participation of other NATO countries in such an exercise.

Secretary General Brosio said he meant only for the FRG to be the leader. He queried Minister Schroeder about timing - did
the FRG prefer to have preliminary studies or to go right into war-games?

Minister Schroeder said he only wanted agreement on the tasks and composition of a study group. He remarked that there was discussion in the FRG reflecting concern that a nuclear war might only be fought in Europe. Minister Schroeder felt it was necessary to seek means for alleviating this concern and therefore the Alliance should get ahead immediately with its studies of this problem.

Secretary McNamara suggested that there were three possible stages for such studies: (1) each interested country might submit papers for (2) review multilaterally in the NPG forum, prior to (3) recommendations for changes in the plans of military commanders. Secretary McNamara suggested that work could be done in all three of the above areas but asked whether we were not already at stage (3) for ADMs. He added that at the present time NATO does not even know how many ADMs are needed for the defense of the Treaty Area. We needed detailed tactical plans for the Center and South. Secretary McNamara stated that he would not worry much about political consultation on the release of nuclear weapons as long as rational plans for their use were developed, and he suggested that Brosio be asked to arrange for the Military Committee to get the plans done. Secretary McNamara suggested that SACEUR start with plans for the use of ADMs since they were more predictable and the consequences of their use could be determined more easily.

Secretary General Brosio asked Minister Topaloglu if he would agree to tasking SACEUR with developing plans without additional war-games. In reply, Minister Topaloglu opened the discussion on Agenda Item III - A Study of ADMs. The Southeastern Flank with an expression of gratitude for the interest which his colleagues had already shown in the conclusions arrived at by the Turks in their study. Copies of the statement by Minister Topaloglu (NPG/TU/2-67) were then circulated to the Secretary General's staff and other delegations. Minister Topaloglu said that he would not go into the details of the Turkish paper but said that its basic conclusions were: (1) Turkey sees advantages in [redacted] and makes no claim that different factors might not apply elsewhere.
(2) ADMs are principally denial not destruction weapons. They are neither a substitute for other weapons nor a be all-end all in themselves. They are useful in demonstrating NATO solidarity and determination. Minister Topaloglu said that Turkey had studied conventional alternatives to ADMs and was convinced that the latter were uniformly better for dealing with the defense problems facing Turkey as a supplement to conventional land and other forces.

Minister Topaloglu said that a delay in the use of ADMs would mean disaster for Turkey - if used too late they may kill the enemy, not just create barriers to his advance, and therefore lead to escalation. Minister Topaloglu suggested that studies be undertaken by ADM host and supplier countries on the questions of pre-emplacement, numbers of ADMs needed and the cost factors involved.

Minister Topaloglu said that Turkey was conscious of the threat of escalation and had concluded that every effort must be made to avoid it. With regard to political factors, Minister Topaloglu said that authorization for the use of ADMs must be received early in the event of conflict. To be timely, release authorization must be pre-delegated. This concept, said Minister Topaloglu, raised qualms among certain Allies who feel that changes in their legislation will be needed. He submitted that this problem should not be serious, however, because ADMs would only be used as barriers in Eastern Turkey and only in accordance with advance plans. A "blank check" is not being requested, only authorization to let the local commander decide, on the basis of existing plans, when to use ADMs. Political decisions would be incorporated into plans under a variety of possible scenarios and the local commander would only be the custodian of those decisions. The local commander would be vested with authorization to use ADMs only after a state of political vigilance had been declared and the relevant plans had been invoked. Minister Topaloglu suggested that in developing such plans, pre-delegation should neither be disregarded nor viewed as a blank check. He said that plans for ADM use should be based on the following precepts: (A) the denial of ADM employment would ruin Turkish defense plans; (B) ADMs are really quite similar to conventional high-explosives; (C) ADMs are used only on friendly territory; (D) they do not kill the enemy; and (E) ADMs do not invite an
enemy response in kind. Furthermore, pre-planning the use of ADMs would not circumvent the Political safety catch.

Minister Topaloglu suggested that if the Soviets were determined to escalate a war, the use or non-use of ADMs would not deter them from doing so. On the other hand, ADMs could not lead to involuntary escalation because they do not invite retaliation in kind.

In conclusion, Minister Topaloglu called for further studies by Allies and military commanders in order to develop plans that would permit advance authorization to use ADMs.

Minister Tremelloni remarked that he had examined Turkey's presentation with interest. He thought that the Turkish proposals were based on geographic and strategic factors which made Turkey's arguments convincing. Minister Tremelloni understood, however, why the concept of pre-delegation created problems for others. Italy had suggested in its paper, he said, that ADMs pose a minimum risk of escalation and are in many ways quite similar to conventional weapons. They provide demonstrable advantages for the defense. He added, however, that they are subject to the time factors required for political release. All factors must be studied, therefore, to permit maximum time for consultation. Minister Tremelloni suggested that authorization to use ADMs might be pre-delegated to SACEUR when a state of political vigilance is declared. In declaring a state of political vigilance, the Alliance would of course be required to act with the full knowledge that it was also pre-delegating the use of ADMs.

Minister Schroeder praised the Turks for their interesting presentation which he felt formed a good basis for further studies. Minister Schroeder offered to submit the detailed results of the FRG's studies on ADM employment at the next NFG Meeting. He observed that the FRG's studies revealed several factors which did not apply in Turkey: Germany's plans for an advance defense call for a mobile concept with maximum flexibility and the creation of barriers with ADMs would not permit such flexibility. Turkey does not envisage civilian population
problems, but the FRG does not know whether evacuation would even be possible under certain scenarios. Minister Schroeder said that the FRG did agree with the Turks, however, that timely release of ADMs was absolutely essential. Minister Schroeder suggested studies of selective release procedures that would reduce consultation time to a minimum.

Minister Healey observed that the central front countries should try to focus on the problems of the flank countries. He recognized the need for early release of ADMs but wondered if conventional high explosives could not be used as a suitable alternative to pre-delegation.

Minister Topaloglu turned to General Tulga who said that ADMs were ideal for delaying an enemy's advance and for canalizing his line of attack. The use of conventional explosives for these purposes would be too slow, too expensive, and too demanding on manpower and logistical support. He added that were NATO to refuse to use ADMs, the enemy would immediately take this as a sign of weakness, defeatism and lack of resolve on the part of the Alliance. General Tulga observed that 120,000 tons of high-explosives and great amounts of time would be needed were Turkey not authorized to use the [omitted] which she feels would be sufficient for her defense plans.

Minister den Toom referred to the psychological factors mentioned earlier by Minister Schroeder and said such factors were also relevant to the Low Countries. He said that Belgium and the Netherlands would want to be closely involved in any planning done on central front problems.

Secretary General Brosio called for plans for ADMs to be made by the Military Committee, with the question of pre-delegation to be studied by the NPG at a later time on the basis of the plans. He also called for tactical nuclear studies, separately for the Center and South, by the Military Committee and Permanent Representatives. The PMRARPs might also discuss arrangements for setting up war-games, with the cooperation of the military authorities as appropriate.
At 4:50 PM, at Secretary General Brosio's invitation, Minister Schroeder opened the discussion on Agenda Item IV - Arrangements with Host-Countries in Respect of Nuclear Weapons. Minister Schroeder said he would not go into all of the details submitted in the German paper on this subject but would cover the following relevant points. The German paper must be considered in the light of the FRG's particular situation. The fact that a substantial part of the nuclear weapons in Western Europe are located on German territory makes the question of host-country rights and responsibilities particularly important to the FRG. Additionally, NATO's nuclear weapons are targeted on the Soviet Zone of Germany and this also forces a special responsibility on the Federal Republic. Minister Schroeder observed that planning depended to a very great extent on stockpile data and on the custodial arrangements for nuclear weapons and that the FRG was not fully informed on these matters.

Minister Schroeder said that the German paper had put forth no conclusions on the host-country matter because the FRG had not wanted to prejudice the interests of other host-countries. Germany did feel, however, that the responsibility for the nuclear defense of the Treaty Area was indivisible and that no one country should carry such responsibility alone. Accordingly, said Minister Schroeder, NATO needs uniform procedures for all host-countries and the FRG hopes that the NPG will be able to develop such procedures. Toward this end, he suggested that the NPG Permanent Representatives work with the Military Committee in developing both a data base on the nuclear stockpile as well as plans for guaranteeing a role to host-countries in planning and release procedures.

Secretary McNamara suggested three projects:

(a) A basic study on release procedures and host veto rights to be undertaken by Permanent Representatives and submitted for further consideration by the NPG.

(b) A study to be done by the Military Committee to determine ways and means for giving national governments a meaningful role in planning.

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(C) Insofar as its legislation permits, the US would be happy to supply data on nuclear weapons stockpiled in Europe, with the FRG and other host-countries submitting statements on their specific needs in this regard.

Minister Healey thanked the Germans for their interesting paper and said that the UK would willingly help in any studies undertaken.

Secretary General Brosio wondered if such an important question as the role of national governments in planning should be left solely to the Military Committee. He suggested that the Permanent Representatives work with the Military Committee in sorting out the whole problem.

Secretary McNamara said that he would agree with any procedure which guaranteed both national roles and a direct participation by national staffs.

Minister Healey said that he was frankly unable to understand German concerns on the host-country matter in that the FRG was already participating directly in the Military Committee and in the target planning carried out by SAC and SACEUR. Did the FRG feel that its voice was muted because its military were being absorbed in SACEUR? If so, this was clearly a political matter.

Minister Schroeder said that the FRG felt it needed a voice in addition to that of German officers serving in integrated military commands. He felt that there should be an assured vehicle for national participation at the political level in nuclear planning and consultation.

Secretary McNamara agreed that the Military Committee should not be asked to study means, for example, for assuring Turkish political participation in nuclear planning and suggested, therefore, that Permanent Representatives be charged to recommend how to assure an effective national voice in planning.

Secretary General Brosio said that the recommendations could be sent on to the Military Committee as appropriate.
Minister Tremelloni mentioned that a decision was taken at the December NATO Ministerial Meeting to ask the Military Committee to look into national roles in nuclear planning. He suggested, therefore, that the NPG give suitable guidance on this matter to the Military Committee. He also suggested that host-countries be kept currently informed of numbers, locations and yields of nuclear weapons stored on their respective territories.

Secretary General Brosio observed that the Italian suggestions appeared to be covered in the study proposals made earlier in the meeting.

The Chairman suggested that the NPG convene again at 9:30 AM, April 7th, to deal with the remaining agenda items.

Minister Healey suggested with a grin that he had wanted to take a swim in the Potomac and, therefore, asked that the adjournment be extended to 10:00 AM Friday morning. The American delegation unanimously counseled Mr. Healey against a swim in the Potomac.

The meeting adjourned at 5:25 PM and Ministers agreed to reconvene at 9:30 AM, April 7th.

Attachment:

List of Participants (Official Delegation)
OFFICIAL DELEGATION

PARTICIPANTS:

NORTH ATLANTIC TREATY ORGANIZATION

Manlio Brosio  Secretary General
Arthur S. Hockaday  Deputy Assistant Secretary General
John W. Sims  Office of SYG
T. M. Moran  Office of SYG

CANADA

Paul T. Hellyer  Minister of National Defense
C. S. A. Ritchie  Permanent Representative to NATO
Air Vice Marshall F. W. Ball  Deputy Chief of Operations,
                            Canadian Forces Headquarters
H. B. Robinson  Deputy Under Secretary of State
                for External Affairs
Andre Bissonette

FEDERAL REPUBLIC OF GERMANY

Gerhard Schroeder  Federal Minister for Defense
Wilhelm G. Grewe  Permanent Representative to NATO
General Ulrich de Maiziere  Inspector General, German Armed
                              Forces
Colonel Albert Kraus  Deputy Chief, Operations Division,
                            Ministry of Defense
Dr. Ulrich Scheske  Director of NATO, WEU and Defense
                    Affairs, Ministry of Foreign Affairs

ITALY

Roberto Tremelloni  Minister of Defense
Adolfo Alessandrini  Permanent Representative to NATO
General Giuseppe Aloja  Chief of Defense General Staff
Brigadier General Andrea Cucino  Chief of Plans and Operations,
                                 Defense General Staff
Diego Simonetti  Chief of NATO Section, Ministry
                of Foreign Affairs
PARTICIPANTS (Cont'd):

THE NETHERLANDS

Lieutenant General
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H. N. Boon
General H. P. Zielstra
J. S. de Ranitz

Minister of Defense
Permanent Representative to NATO
Chairman, Joint Chiefs of Staff
Director General of Political Affairs
Ministry of Foreign Affairs

TURKEY

Ahmet Topaloglu
Nuri Birgi
General Refik Tulga
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Colonel Kemal Soyupak

Minister of National Defense
Permanent Representative to NATO
Deputy Chief of the General Staff
Assistant Secretary General for
NATO Affairs, Ministry of
Foreign Affairs
Director of Plans, Department of
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Sir Bernard A. B. Burrows
Admiral Sir Nigel Henderson
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David Churchill Thomas

Secretary of State for Defence
Permanent Representative to NATO
Head, British Defence Staff,
Washington
Deputy Under Secretary of State
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First Secretary, Western Organizator
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UNITED STATES OF AMERICA

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Harlan Cleveland
General Earl G. Wheeler
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Permanent Representative to NATO
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Leon Sloss (Rotator)
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Department of State
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TOP SECRET