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May 23, 1969

MEMORANDUM

THE WHITE HOUSE
WASHINGTON

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MEMORANDUM FOR THE PRESIDENT

FROM: Henry A. Kissinger

SUBJECT: Analysis of Strategic Arms Limitation Proposals

A member of my staff in analyzing preliminary results from the current study of strategic arms limitation proposals has tentatively concluded that:

-- some of the options that have gained the greatest popularity within the government would appear to give the Soviet Union significant improvements in its retaliatory capability;

-- the most comprehensive proposal, one that bans both MIRVs and ABMs, would leave U.S. retaliatory capability unchanged but would improve Soviet retaliatory capability by over 70 percent. It would leave them in a position where they could kill more than half of the American people in a second strike;

-- the option that looks good to us in terms of retaliatory measures, one that retains at least 500 ABM launchers, MIRVs, and a large U.S. bomber force, may well not be acceptable to the Soviet Union.

Proponents of the comprehensive proposals will argue that we should not be concerned that an agreement increases Soviet retaliatory capability. We will be deterred from attacking them without an agreement, they point out, and improvements in the Soviet deterrent cannot increase the threat to us. In fact, they argue, allowing the Soviet deterrent to improve is a reasonable price to pay to get an agreement, since our own retaliatory capability would not be impaired. Also, other aspects of our
strategic capabilities, such as how well we can limit damage to ourselves if the Soviets strike first, are unchanged even with a comprehensive agreement, and these are more important yardsticks for evaluating an agreement than Soviet retaliatory capability.

My staff is still analyzing these results, because there are some important problems with the underlying analysis. In summary, my very tentative judgments would be:

1. Agreements which ban MIRVs may mean a significant decline in our second strike capability or increases in Soviet second strike capability or both.

2. Soviet second strike capability increases in all but one option, and the increases are greatest when ABMs are banned. Thus, an ABM ban would appear to be much more in the Soviet interest than in ours. In fact, it is probably not in our interest.

3. All agreements except one would increase the number of deaths we would suffer if we struck first and reduce any advantage we might gain by striking first. On the other hand, Soviet deaths in wars they start are relatively unchanged by any of the agreements, and they acquire no advantage from striking first as a result of agreements.

There is a paradox underlying these results, however. The Soviets are assumed to develop a much more effective strategic posture under an agreement than they would in the absence of an agreement. In part, this reflects the fact that Soviet forces in the absence of an agreement are agreed intelligence projections made months ago, whereas Soviet forces under the agreements are recent judgments of the worst the Soviets could do and still be within the agreement.

There is a real question, however, as to whether both sides might feel compelled by uneasiness and caution to go to the limits under an agreement and do more than they would have done otherwise. The same phenomenon occurs when rationing is in effect in wartime; people buy everything they are allowed to buy even though they have no urgent need for it all.

I question whether the strength of an American President's resolve in a crisis will be unaffected by the magnitude of Soviet nuclear retaliatory
capability. The prospect of reaching an agreement which would 'légitimize' significant increases in their capabilities may explain why the Soviets are so interested in proceeding with arms control talks. It also confirms the requirement that our own preparations be measured, orderly and thorough.

I suggest that you read the brief paper my staff prepared, which is at Tab A. The numbers in the table are taken directly from the current interagency study of strategic arms control options and have been agreed to by the agencies involved.

Enclosure
Tab A - Comments on Strategic Exchange Analysis
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COMMENTS ON
STRATEGIC EXCHANGE ANALYSIS
NSSM 28

At least three relatively specific objectives have motivated interest in a strategic arms limitation agreement with the Soviet Union:

1. An agreement could freeze or codify strategic relationships in a manner which preserves "equality" at worst and a U.S. edge at best.

2. Since both nations may be on the verge of new strategic deployments, an agreement might mean significant budgetary savings compared to the situation that would prevail with no agreement.

3. An agreement could reduce uncertainties in the strategic relationship, making both sides less nervous about potential threats to its strategic capabilities.

The analysis done to date raises questions about whether these objectives can be met with the strategic arms limitation options that have been considered.

1. The following table compares strategic exchange results for 1978 if there is no agreement and if any of several possible agreements is reached.

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This table has a number of interesting implications:

a. If ABMs, but not MIRVs, are banned or held at low levels (500 Spartan-type ABM missiles), U.S. second strike capability will be about the same as it would be with no agreement. However, Soviet second strike capability will increase significantly in all but one case: Option III, which is a comprehensive offensive and defensive agreement that allows 500 Spartan-type ABM missiles on both sides.

b. The most comprehensive proposal -- Option IV with a MIRV and ABM ban -- would leave U.S. second strike capability about as it would be without an agreement but it would increase Soviet second strike capability by over 70 percent, equivalent to over 40 million Americans killed. The reasons Soviet second strike capability increases so sharply are:

-- because MIRVs are banned, the number of nuclear weapons we have available for attacking the Soviet Union is cut back sharply from 8000 to less than 4000, so much more of the Soviets' offensive capability survives a U.S. attack.

-- because ABMs are banned, more retaliating Soviet missiles will hit their targets in the U.S.

c. If we adopt Option IV with MIRVs banned but 500 Spartan-type ABM missiles allowed, the no agreement relationship between
U.S. and Soviet retaliatory capabilities is reversed; a U.S. edge
by this measure becomes a significant Soviet edge. This is because:

-- with the MIRV ban we are giving up a significant amount
of the offensive capability we would use in a second strike.

-- because we have less offensive capability, a U.S. first
strike would not destroy as much of the Soviet second strike capability.

d. The "simplest" agreement -- Option I, which is basically an
ICBM launcher freeze -- would sharply increase Soviet second strike
capability. This is because CIA assumes that the Soviets would build
a ballistic missile submarine force twice as large as ours and put
MIRVs on them, and we are assumed to allow this to happen.

e. A comprehensive offensive and defensive agreement that
allows MIRVs and about 500 Spartan-type ABM missiles would produce
a balance of second strike capabilities that is better as far as we are
concerned than the balance that would prevail in the absence of an
agreement. (In the table, this is Option III with 500 ABM missiles.)

Since this option preserves our ABM, our MIRVs and our bombers, it
is hard to see how the Soviets could find it acceptable.

The analysis shows that during the next decade the Soviet deterrent
is significantly more sensitive to MIRVs and ABMs than the U.S.
deterrent.
The Soviet deterrent is more sensitive to ABM levels because the Soviets have only a small long-range bomber force, whereas we have a large one with an independent second strike capability. (In fact, the results in the table show that a U.S. ABM system with 500 Spartan-type interceptors has a significant anti-Soviet capability.)

The Soviet deterrent is more sensitive to MIRVs than ours because they lag significantly in developing a large and invulnerable submarine-based MIRV capability.

Based on our calculations, the Soviets should be extremely interested in an ABM ban, or a very low limit on them, and in a MIRV ban. But such an agreement might be difficult to justify in the light of the improvements in Soviet retaliatory capability that we would be ratifying in all options but III.

2. The cost analysis can be summarized as follows:

<table>
<thead>
<tr>
<th>No Agreement:</th>
<th>Arms Control Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. Programmed Force vs. High Intelligence Projection of Soviet Forces</td>
<td>I</td>
</tr>
<tr>
<td>Soviet Costs $ Billions</td>
<td></td>
</tr>
<tr>
<td>Annual Avg. for 1969-78 (No ABMs in Arms Control Options)</td>
<td>$12.44 (Hi ABM)</td>
</tr>
<tr>
<td>$10.90 (Lo ABM)</td>
<td></td>
</tr>
<tr>
<td>U.S. Costs $ Billion</td>
<td></td>
</tr>
<tr>
<td>Annual Avg. for 1969-78 (Including Safeguard Phase I)</td>
<td>$15.85</td>
</tr>
</tbody>
</table>
This table shows that only if the Soviet Union is planning a large
ABM deployment in the absence of an agreement will an agreement
mean significant cost reductions for the Soviets. U.S. strategic budgets
for the next decade, according to the analysis, are relatively insensitive
to whether or not there is an agreement and to what kind of an agreement
it is.

3. The analysis to date has not attempted to compare uncertainties
and the costs of hedging against them with and without an agreement.
Also, the study has not analyzed how unilateral U.S. policies might be
used to stabilize the strategic relationship and reduce risks.

Thus, the analysis leaves unanswered the following questions:
-- In what ways can a strategic arms agreement be in the interests
of the United States and its Allies?
-- Are there proposals other than the options considered which
would better serve U.S. and Allied interests?
-- If we insist on maintaining the area protection provided by
Safeguard, how many launchers must we retain, and how will this
affect the strategic exchange results and the relative rankings of the
options?
-- Alternatively, if the Soviets propose an ABM ban and we accept, can we justify to the Senate and the American people the resulting increase in Soviet retaliatory capability as compared to the no agreement situation?

-- Should we consider initiating talks but not tabling a proposal?
<table>
<thead>
<tr>
<th></th>
<th>NO ABMS</th>
<th>III</th>
<th>IV</th>
<th>ABM Limited to 500 Spartan-type ABM Missiles</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OPTION I (Comprehensive offensive &amp; defensive limits)</td>
<td>III-A (Allow Both sides to Superharden ICBM but MIRVs allowed)</td>
<td>IV (Comprehensive offensive &amp; defensive limits)</td>
<td>III-A (Allow Both sides to Superharden ICBM but MIRVs allowed)</td>
</tr>
<tr>
<td>U.S. Second Strike</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Capability (F Soviet people killed promptly)</td>
<td>40%</td>
<td>41%</td>
<td>40%</td>
<td>42%</td>
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<tr>
<td></td>
<td></td>
<td>38%</td>
<td></td>
<td>39%</td>
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<tr>
<td></td>
<td></td>
<td>44%</td>
<td></td>
<td>28%</td>
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<tr>
<td>Soviet Second Strike</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capability (F U.S. people killed promptly)</td>
<td>33%</td>
<td>51%</td>
<td>43%</td>
<td>57%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>54%</td>
<td></td>
<td>41%</td>
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<td></td>
<td>25%</td>
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<td>54%</td>
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<td></td>
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<td>40%</td>
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<tr>
<td>Crisis Stability a/</td>
<td></td>
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<tr>
<td>U.S. Lives Saved by Striking First Instead of Second</td>
<td>32 mil</td>
<td>3 mil</td>
<td>18 mil</td>
<td>5 mil</td>
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<td></td>
<td></td>
<td>11 mil</td>
<td></td>
<td>31 mil</td>
</tr>
<tr>
<td></td>
<td></td>
<td>19 mil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soviet Lives Saved by Striking First Instead of Second</td>
<td>-9 mil b/</td>
<td>3 mil</td>
<td>0</td>
<td>-6 mil b/</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-2 mil b/</td>
<td></td>
<td>-5 mil b/</td>
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<td></td>
<td></td>
<td>-8 mil b/</td>
<td></td>
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<tr>
<td>U.S. Deaths in Nuclear War</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>U.S. Strikes First: U.S. Deaths</td>
<td>87 mil</td>
<td>127 mil</td>
<td>111 mil</td>
<td>130 mil</td>
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<tr>
<td></td>
<td></td>
<td>117 mil</td>
<td></td>
<td>95 mil</td>
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<tr>
<td></td>
<td></td>
<td>107 mil</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soviets Strike First: U.S. Deaths</td>
<td>139 mil</td>
<td>142 mil c/</td>
<td>142 mil c/</td>
<td>141 mil</td>
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<tr>
<td></td>
<td></td>
<td>140 mil</td>
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<td>140 mil</td>
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<tr>
<td></td>
<td></td>
<td>135 mil</td>
<td></td>
<td></td>
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<tr>
<td>Difference between U.S. and Soviets killed in Soviet First Strike (if Soviets lose more)</td>
<td>4 mil</td>
<td>12 mil</td>
<td>12 mil</td>
<td>17 mil</td>
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<td></td>
<td></td>
<td>9 mil</td>
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<td>8 mil</td>
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<tr>
<td></td>
<td></td>
<td>11 mil</td>
<td></td>
<td></td>
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</tbody>
</table>

a/ The strategic relationship is considered to be unstable if one side could save a significant number of its own people (more than 20-30 million) by striking first in a crisis instead of striking second.

b/ This means that the Soviets would lose more lives by striking first than by striking second. This is highly desirable from our point of view.

c/ The calculations were done using a method which does not take into account fatalities above the 142 million level.