TOP SECRET

WEAPONS SYSTEMS EVALUATION GROUP
400 ARMY NAVY DRIVE
ARLINGTON, VIRGINIA 22202

4 August 1971


Conducted by: WSEG

This report completes the response to SHA-92-70, 12 February 1972. This phase of the study concentrates on issues identified or only partially covered in Phase I (WSEG Report 154). Those issues include potential Soviet ASW capabilities and U.S. countering ASW options; U.S. defensive capabilities including air defense options, advanced ABM systems (beyond SAFEGUARD) and ASW in close-in areas; and a preliminary analysis of U.S. capabilities to control and execute strategic forces. The purpose of this report is to study the implications on U.S. strategic requirements of significant changes in the capabilities and effectiveness of Soviet and U.S. strategic forces, which are possible in the period extending through 1981, and evaluate the suitability of alternative U.S. strategic options for maximizing effectiveness in the threat and for achieving U.S. military objectives.

Methodology:

1. A behavioral model is used to project future STRATCOM targeting strategies and to analyze the resulting effects on the strategic forces of both the U.S. and the Soviet Union. This model is based on the current behavior exhibited by U.S. and Soviet strategic forces in achieving their military objectives. The model utilizes a behavioral framework to project future strategic behavior, and the resulting forces can be used to evaluate the likely effects of specific strategic options.

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(b)(1)

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MEMORANDUM FOR THE DIRECTOR, WEAPONS SYSTEMS EVALUATION GROUP


1. Reference is made to WSEG Report 166, dated 4 August 1971, subject as above.

2. On 4 November 1971, the Joint Chiefs of Staff approved the comments in the Appendix hereto for inclusion as the preface to Volume I: Final Report of WSEG Report 166. It is requested that these comments accompany any additional distribution of the report.

3. Without attachment, this memorandum is UNCLASSIFIED.

For the Joint Chiefs of Staff:

WILLIAM P. CANTWELL, Jr.
Captain, USN
Deputy Secretary

7 MAR 1974 INVENTORIED

Attachment
APPENDIX

COMMENTS BY THE JOINT CHIEFS OF STAFF
ON WSRD REPORT 166

1. There are important cautions which must be observed to avoid making erroneous conclusions when using the report. For proper understanding, the principal findings and conclusions as summarized in Volume I of the report must be evaluated in context with the purpose of the study. Footnotes and explanatory comments in the report must be carefully noted to insure complete understanding of each discussion.

Following are specific comments:

a. As noted in the comments by the Director, Weapons Systems Evaluation Group, the study frequently adopts worst case estimates of Soviet capabilities in analyzing the effectiveness of individual weapons or force elements.

b. The Joint Chiefs of Staff note that alternatives are considered that deemphasize elements of the strategic offensive forces. While it is circumspect to review a range of alternatives for analysis, the Joint Chiefs of Staff believe that a force-mix of mutually supporting forces—land-based missiles, sea-based missiles, and bombers—should be maintained.

c. The study does not analyze the impact on sea-based systems of Soviet high-threat forces, although this was done in the case of land-based forces. The lack of these additional analyses precludes a balanced report.

d. The study concludes that, in the absence of an effective ballistic missile defense of US cities, there seems to be no reasonable justification for a damage-limiting air defense
capability beyond that provided by configurations
designed for lesser objectives, such as the deployment of
terminal defense for the National Command Authorities and
other key points and a thin area defense against limited or
Nth country bomber attacks. The Joint Chiefs of Staff
believe that failure to provide for a defense against air
attack would increase the flexibility available to the Soviets
by providing a range of attractive and relatively inexpen-
sive options against the United States employing bombs, air-
to-surface missiles, or submarine-launched cruise missiles.
An effective air defense deployment would deny the Soviets
assurance that they could achieve major objectives in their
general war plans through the use of air-breathing weapon
systems.

e. The Joint Chiefs of Staff note that the technical
capabilities of the Soviet and PRC offensive forces assumed
during Phase I of the study are instrumental to deriving the
study conclusions relating to the effectiveness attributed
to the SAFEGUARD system. The final phase of the study con-
sidered hard site defense of MINUTEMAN but addressed quantita-
tively only the terminal element (SPRINT and missile site
radar) of the SAFEGUARD deployment in the MINUTEMAN fields.

2. (U) The Joint Chiefs of Staff have noted this report and
regard it as an addition to the growing body of strategic
weapon systems studies.