NOTE BY THE SECRETARIES

to the

JOINT CHIEFS OF STAFF

on

REVIEW OF JCS NSYL AND SIOP-62 (U)

Reference: J.C.S. 2056/194-3205 (17 Aug 59)

The enclosed memorandum by the Commander in Chief, Atlantic,
serial COO1, dated 19 January 1961, is referred hereby to the
J-3 for consideration in connection with the review of the
NSYL and SIOP-62 which will be directed toward possible changes
in developing the next NSYL/SIOP, as indicated in paragraph 5
of the Enclosure to J.C.S. 2056/194.

F. J. BLOUIN,
M. J. INGELIDO,
Joint Secretariat.
ENCLOSURE

THE ATLANTIC COMMAND
Headquarters of the Commander in Chief

Ser: 00011/JO8 19 January 1961

From: Commander in Chief, Atlantic
To: The Joint Chiefs of Staff
Subj: JCS NSTL and SIOP-62, Review of (U)
Ref: (a) JCS Msg 092127Z, JCS 987018 DEC 1950*

1. Reference (a) approved the JCS NSTL and SIOP-62 and requested recommendations from Unified and Specified Commanders relative to future improvement in developing the next Single Integrated Operational Plan (SIOP) and National Strategic Target List (NSTL).

2. The JCS NSTL and SIOP-62 were developed on a crash basis. Because of the extremely short time available to the planners at the Joint Strategic Target Planning Staff (JSTPS) it was necessary to utilize certain procedures and methodology which subsequent review has indicated could be improved. The basic guidance to the JSTPS was also developed hurriedly, and can be modified and improved to permit more economical utilization of the committed forces. Specific areas, in which change is recommended, are discussed in the following paragraphs.

3. Establishment of an Essential National Task: Although the basic guidance to the JSTPS stated the specific objectives which were to be achieved, and called for a list of a minimum number of specific targets whose timely and assured destruction would accomplish these objectives, the JCS NSTL and SIOP-62 actually

* Joint Chiefs of Staff message to CINCLANT and other addressees, JCS 987018, DCG 092127Z December 1960; on file in Joint Secretariat
resulted from a full application of all committed forces. The damage assessment of the probable effect of this very large weight of effort against the Sino-Soviet Bloc, even with the application of very high base loss factors, shows that it is probably greater than that required to achieve the specified objectives. It is recommended that the JCS take the earliest possible steps to establish the Essential National Task which must be accomplished should the national policy of deterrence against general war fail, and to develop a plan to accomplish that specific task.

4. Damage Criteria:
   a. The level of damage specified in the JCS guidance essentially requires destruction of all important target elements by blast damage. An exorbitant weight of effort is required to accomplish this. The level of damage required by the National Strategic Targeting and Attack Policy (NSTAP) is much higher than that previously required by JCS guidance. Moderate damage is considered to be sufficient to meet the concept expressed in the NSTAP. It is recommended that the damage criteria be modified that "moderate damage" be substituted for "severe damage" where appearing. Due to lack of tract data, the JSTFS did not follow the guidance to achieve ninety per cent probability of severe damage to fifty per cent of industrial floor space. Either the guidance should be changed to indicate some other method of achieving the required level of damage or the tract data should be made available to JSTFS. Total floor space is considered a more meaningful measure of damage. Therefore, it is recommended that the guidance be modified as follows:

"Ninety per cent probability of moderate damage to fifty per cent of the total floor space..."
b. The over-all damage effects of nuclear weapons should be considered. In addition to blast, these weapons have significant thermal and radiation effects which should be considered in the determination of the level of damage actually achieved. The JCS NSTL and SICP-62 also does not take full advantage of the over-lapping effects of adjacent bursts, but generally treats each desired ground zero (DGZ) in isolation, with a resulting excessively high weight of effort above that needed to neutralize many enemy installations. A change in the damage criteria specified in the NSTAP is recommended to ensure economical use of forces by specifying that all weapons effects be considered, and that over-lapping effects of adjacent bursts be fully examined in the interest of achieving destruction or neutralization with the least practicable weight of effort.

5. Assurance of Delivery at BRL: The basic guidance called for planning for at least seventy-five per cent assurance of delivery at each bomb-release line (BRL) of the weapons required to achieve the specified damage levels. On most high priority targets an extremely heavy weight of effort is planned in order to ensure the arrival of at least one weapon at the BRL. When the assurance of delivery of at least one weapon is ninety per cent or greater the most likely event is that multiple delivery will in fact be achieved. Clarification of the basic guidance to specify avoidance of excessively high assurance of delivery is recommended.

6. Constraints. It has always been the understanding of CINCLANT that the basic reason the Joint Chiefs of Staff prescribed constraints was to avoid unnecessary damage, radiation fall-out effects and casualties to allies, friendly, and neutral
peoples, unless these occurred through unavoidable military necessity. The radiation levels due to fall-out resulting from SIOP attacks were kept within JCS prescribed levels principally by air bursting weapons which otherwise would have been surface burst. However, the unrealistic assumption was made that only one weapon would be delivered at each DGZ, and "average season" wind template was used in the calculations rather than the "most unfavorable season" template in common use prior to the SIOP planning, and it was assumed that all SIOP forces were in one command. Current JCS guidance specifies that calculations to determine fall-out will assume that each command programming on a given DGZ will deliver one weapon. Two or three Unified or Specified Commands are involved in most DGZ's in SIOP-62. These unusual measures to reduce fall-out levels were taken in a sincere effort to follow JCS guidance, but from a practical, realistic standpoint they cannot be regarded as successful. In a great many cases air bursting instead of surface bursting reduces fall-out but actually increases casualties. An entirely new examination of this problem is recommended to develop a constraint policy and new guidance which are both effective and practical.

7. Evaluation of Target Worth: A point system in use by the Strategic Air Command to list targets in order of priority was utilized for SIOP-62. This system consisted of two separately developed point systems for (alpha) and (bravo) installations to make it possible to assign these installations a point value based on their worth or importance. These two sub-systems for point values could not be readily mixed, so the relative importance of installations in the optimum-mix target system under attack in SIOP-62 could not be established except by arbitrary means. In addition, the alpha and bravo points were assigned to installations principally from the point of view of their importance in the SAC mission. Many installations of
relatively low importance to SAC are of high importance to other commands. There is a need to develop a system for rating installations in the optimum-mix target system in accordance with their importance to all commands.

8. Mathematical Probability Factors: Many factors were utilized to calculate the probabilities of success of the various delivery systems. These factors had to be developed in a very short time. Subsequent careful examination of these factors indicates that many are not entirely valid or could be refined to represent more accurately actual system capabilities. A case in point is the weather factor as applied to visual delivery forces. A review of all such mathematical factors and the manner in which they were applied in SIOP-62 is recommended with an eventual goal of establishing better, jointly agreed factors.

9. Base Loss/Survivability: It was not possible in the time available to develop factors for expected losses due to enemy action. It was generally agreed that without such factors there is considerable doubt as to the probable contribution of follow-on forces. A study by a group such as Net Evaluation Sub-Committee (NESC) or Weapons Systems Evaluation Group (WSEG) could produce meaningful, realistic factors for expected survivability of the fixed and mobile bases from which the various delivery vehicles are launched. Development of such factors as a matter of priority is recommended.

10. Missile Targeting: The first generation of strategic missiles is employed in SIOP-62, with target assignments for both a retaliatory and initiative role. When these missiles, which are all assumed to have a [redacted] CEP, are targeted using the specified damage criteria they make a very small apparent contribution. Inordinately large numbers would
have to be planned against most ECZ's in order to achieve the specified damage levels. At the present time, the available strategic missiles are not well suited for the task of destroying hard point targets. However, if utilized against total floor space, they can be very effectively used in their intended role of deterrence/retaliation. The growing inventory of missiles indicates a shift in the principle instrument of deterrence. Appropriate changes in the damage criteria are recommended (paragraph 4a) to permit the optimum use of the available missiles.

11. **Flexibility:** There are no provisions in SIOP-62 to provide for circumstances that might make it advisable to cease execution of a part of the plan. The provisions for withholding in the absence of Warsaw do not conform to previous JCS guidance. Specifically, there are no provisions for withholding attack against specific targets. Procedures should be developed for cessation of attack when appropriate.

12. **Organization of the JSTPS:** It is considered that the current organization of the JSTPS could be substantially improved by making it work as an integrated joint staff. A better SIOP would inevitably result from placing officers from all the services with their varying backgrounds of experience in the many delivery systems in the various key staff positions of importance and influence. At present "two-hatted" officers from the SAC staff serve concurrently in all the key JSTPS staff billets as Heads of all Divisions, Branches and Sections. It is clear in the memorandum of the Secretary of Defense of 16 August 1960, which originally set up the JSTPS, that a joint staff was intended. Therefore, earliest steps to make the present JSTPS Staff joint and "single hatted" are recommended.

/s/ FITZHugh LEE
Acting

JCS 2056/206
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Enclosure