MEMORANDUM FOR THE SECRETARY OF DEFENSE

Subject: SENTINEL Program Review (U)

1. (TS) In response to your request, the Joint Chiefs of Staff have reviewed the SENTINEL program in relation to the projected threat, military objectives, and political and fiscal constraints. Preliminary alternative deployment levels and modes have been examined toward an objective of protecting the US second strike capability and National Command Authorities, while maintaining protection of the United States against the early threat posed by the Chinese People's Republic or a small number of ICBMs from any source.

2. (TS) The Joint Chiefs of Staff consider that the most serious threat to the security of the United States is the rapidly expanding Soviet strategic offensive missile capability. In developing a posture for strategic forces capable of countering this threat, our general objectives are clear. We want to deter Soviet nuclear attack on the United States and if deterrence should fail, be able to inflict severe damage on the Soviet Union while limiting damage to the United States so as to terminate the attack with the United States in a position of relative advantage.

3. (TS) The Joint Chiefs of Staff have previously accepted the SENTINEL as a useful first step toward a ballistic missile defense capability. In a preliminary review of possible alternative SENTINEL deployments, options have been identified which range from a deferral of the approved program deployment schedule through major revisions to the SENTINEL program including reduced sites, radars, and missions, as well as alternative sitings of radars and missiles relative to large population areas. Based on an accelerated program review, a revised SENTINEL deployment, Deployment Model 1-69, developed by the Army and described in the Enclosure hereto, has been prepared and is summarized below.
a. Deployment Model 1-69, in comparison with SENTINEL, consists of a reduced number of sites, Missile Site Radars and Perimeter Acquisition Radars and missiles, but with an increased number of radar faces, and proposed locations further removed from cities. Surveys are now being conducted to determine such locations. The cost comparisons for the revised deployment, less Atomic Energy Commission costs, are $5.8 billion investment and FY 1968-1976 total costs of $8.7 billion; approved SENTINEL program costs for the same period are $6.0 billion investment and $8.8 billion total. The site completion for the 1-69 deployment can be accomplished between October 1973 and April 1975, based on 15 March 1969 start date for full site survey investigation, congressional notification on land acquisition by 25 April 1969, and maintaining present R&D pre-production and production efforts.

b. Deployment Model 1-69 could provide: additional warning for CONUS-based bombers against SLBMs and FOBS; some protection against ICBMs, SLBMs, and FOBS; an option for protecting a portion of MINUTEMAN force; protection against a moderately heavy attack on National Command Authorities at Washington, D.C., with an option to protect the control centers at Colorado Springs and Omaha; coverage for the more populous areas of CONUS against the early CPR threat with damage denial against this threat or a small number of ICBMs from any source; and a basis for subsequent improvement as required.

c. An alternative deployment, employing an Improved SPARTAN missile is described in the Enclosure and is an option for which development should be continued to provide advanced capabilities should the threat dictate. The decision for deployment of an Improved SPARTAN to meet the IOC date of 1 July 1975 reflected in the Enclosure, however, would not be required, for budget purposes, prior to 1 October 1970 or submission of the FY 1972 budget.

4. (TS) The Joint Chiefs of Staff consider that while the revised ballistic missile defense deployment described in the Enclosure clearly does not provide the necessary capabilities against the primary threat, it will add to the overall defensive capability and strategic posture of the United States against that threat, and will be compatible with future improvement.
The Joint Chiefs of Staff consider the SENTINEL Deployment Model 1-69 best reflects the guidance parameters contained in your request and they can support approval and implementation thereof. Additionally, they consider that it is essential to proceed with selective research and development programs that will provide for feasible improvement of a ballistic missile defense within the considerations of both technological and fiscal attainability.

For the Joint Chiefs of Staff:

Earle G. Wheeler
EARLE G. WHEELER
Chairman
Joint Chiefs of Staff

Attachment
ENVELOPE

SENTINEL PROGRAM REVIEW

Annex A - Deployment
Annex B - Effectiveness
ANNEX A
DEPLOYMENT

1. The purpose of this Annex is to describe a reoriented SENTINEL deployment 1-69 which supports the following objectives:

   a. Add essential protection of our second strike capability by:

      (1) Installing, as early as practical, with first generation SENTINEL components to provide additional warning for CONUS-based bombers against SLBM and POBS; some protection against ICBM, SLBM, and POBS; and an all-around self-protection of SENTINEL sites.

      (2) Protecting National Command Authorities in the Washington area against a moderately heavy attack by ICBM, SLBM, or POBS.

      (3) Rapidly and beginning immediately carry forward research, development, test, and site preparation as necessary for an Alternate Deployment (1-69A) to bring into the inventory beginning in mid-1975 Improved SPARTAN, provided R&D is successful and dependent on the threat.

   b. Provide defense against the CSS threat of a few operational missiles in the mid-1970's and at least a few tens of missiles on launcher by the end of the 1970's. Coverage thereby provided also would protect against an accidental launch of a small number of ICBM by any power.

   c. Provide the further options:

      (1) To protect a portion of our MINUTEMAN.

      (2) To incorporate Alternate Deployment (1-69A).
Remaining 30 pages remain classified per EO 12958 1.5 (a)