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THE SECRETARY OF DEFENSE
WASHINGTON, D.C. 20301

Ch XIV

4 MAR 1969

15

MEMORANDUM FOR THE ASSISTANT TO THE PRESIDENT FOR NATIONAL
SECURITY AFFAIRS

SUBJECT: Amendments to FY 1970 Defense Budget (NSSM 23)

Attached is a revised paper on two principal items in the
FY 1970 Defense Budget: The Sentinel Program and Operations in
Southeast Asia.

Attachment
A/S

Office of the Secretary of Defense *5 USC Sec 552*
Chief, RDD, ESD, WHS *and*
Date: 16 JAN 2013 Authority: EO 13526
Declassify: _____ Deny in Full: _____
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Reason: 3.3(4)(5), (8)
MDR: 12-M-1579

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See Def Cont Nr. X- 1113

12-M-1579

AMENDMENTS TO FY-70 DEFENSE BUDGETS

This paper will address two principal items in the FY-70 Defense Budget; the Sentinel Program and Operations in Southeast Asia.

A. MISSILE DEFENSE ALTERNATIVES

INTRODUCTION

In 1967, the United States initiated a ballistic missile defense deployment program called Sentinel. This ballistic missile defense system was composed of the radars and interceptor missiles developed by the Army in its Nike-X development program. These components were designed to defend a variety of missile threats and to be put together in many ways so as to perform any one of several missions or any combination of missions. This paper summarizes the results of a review of several defense missions and of possible arrangements of the Sentinel components to determine if changes should be made. This review also considered deploying no missile defense at this time.

In order to understand the alternatives we have at this time, it will be useful to review the characteristics and operational capabilities of the various Sentinel components.

There are basically two types of ballistic missile defense, area and local (terminal) defense. In area defense, a single interceptor can defend areas of the country several hundreds of miles across. In local defense, the area defended can be 30-40 miles in diameter.

In Sentinel, a large radar called the Perimeter Acquisition Radar (PAR), has been designed to detect and accurately track missiles at ranges up to

[REDACTED]

is launched to intercept the incoming warhead high above the atmosphere and hundreds of miles from the launch site. A much smaller radar, the Missile Site Radar (MSR), is located at the Spartan launch site and is used to guide the Spartan to an intercept by accurately tracking both the incoming warhead and the Spartan. Because of the large area coverage from a Spartan site, 12-15 sites will provide protection for the entire United States. PARs are needed around the borders of the US to provide detection and tracking of ICBMs, submarine-launched missiles (SLBMs) and fractional orbital bombardment systems (FOBS). JS 3.3(b)(8)

[REDACTED]

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JS 3.3(b)(5), (8)



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ALTERNATIVES

Four basic alternative ways to combine these defense components for several objectives have been examined. Each will be discussed below. The alternatives are summarized in the Table on page 15.

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1. DEFENSE OF CITIES AGAINST USSR

a. Objectives and Options

- (1) Limit damage to U.S. urban/industrial centers in event of nuclear war and enhance national survival and recovery possibilities.
- (2) Provide area defense [redacted] and accidental launches.

OSD 3.3(b)(5)(8)

b. Description

This defense system would essentially be the Sentinel system as originally designed with three major additions: (1) two PARs to give complete radar coverage against SLBMs and Fractional Orbital Bombardment Systems, (2) Sprints to the MSR sites already near the large cities, and (3) new MSR/Sprint sites near additional cities. Such a defense system would have terminal defense for 25 of our key industrial centers with a minimum of about 1000 Sprints as well as an area defense with a minimum of 500 Spartans. The deployment could be started in early 1973 and would be completed in 1977.

c. Costs

The estimated investment cost for such a minimum system would be \$11 to \$12 billion. The required funding per year, including operations and R&D, is estimated to be:

<u>FY-68</u>	<u>FY-69</u>	<u>FY-70</u>	<u>FY-71</u>
\$590M	\$960M	\$2B	\$3B

d. Discussion

Pros

- (1) Deterrence of Soviet attacks is a function of our over-all strategic capabilities, not only our retaliatory capacity. This system would strengthen our deterrent against the Soviets.
- (2) In the event deterrence fails and U.S. urban/Industrial centers are attacked, it would save lives and help ensure a favorable war outcome.
- (3) It would also satisfy other missile defense objectives [redacted] and accidental launchings.

OSD 3.3(b)(5)(8)

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(4) The area defense aspect of this system would provide some protection for our retaliatory forces; options would exist for increasing this protection by deploying additional Sprints around ICBM sites, for example.

(5) It would provide defense of our National Command Authority.

Cons

(1) Our basic strategic objective is deterrence of a nuclear attack on the U.S. and its allies. To meet this objective, we first buy forces that give us a very high confidence retaliatory capability. We also buy conventional forces to handle situations that otherwise might escalate to nuclear war. We believe these forces make nuclear war an extremely remote possibility. If deterrence works, we avoid nuclear war altogether.

(2) We believe that the Soviet Union also places great emphasis on avoiding nuclear war and that they size their strategic offense forces to have a retaliatory capability that could survive an attack by the U.S. Thus, we expect that the Soviets would and could respond to large U.S. missile defense deployments that tend to diminish their retaliatory capability by expanding and improving their offense forces. In the long-run, it does not appear possible to materially reduce the vulnerability of our urban/industrial centers to Soviet attacks, independent of our expenditures on missile defense of cities.

(3) If we desire [redacted] accidental launches, or Soviet threats to our retaliatory forces, we could do so at significantly lower costs with different deployments. OSD 3.3(b)(5)(8)

(4) A decision to defend our cities against Soviet attacks would stimulate further expenditures in the already expensive strategic arms race, and would adversely complicate possible future arms limitation talks.

(5) There would be adverse domestic political reactions to the deployments in this system.

(6) Allied reaction might well be that the U.S. is retreating toward a "Fortress America" strategy.

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2. AREA DEFENSE [REDACTED] (SENTINEL)

a. Objectives and Options

OSD 3.3(b)(5)(8)

(1) Provide area defense [REDACTED] attack and guarding against accidental or demonstration launch of a small number of ICBMs from any nation.

(2) Provides some protection for Minuteman and the option for additional defense of these forces when and if needed.

b. Description

The Sentinel system would consist of 16 MSR/Spartan sites providing area defense of the continental U.S. and Alaska. A Sprint battery would protect the island of Oahu. Six PARs would be located across the northern U.S. and Alaska. No radar coverage against SLBMs would be provided. The PARs would be collocated with MSRs and given Sprint protection. Approximately 500 Spartans and 200 Sprints would be deployed. Four of the MSR-Spartan batteries would be located in Minuteman fields to provide a portion of CONUS area defense and the option for later addition of Sprints for local defense. The other MSRs would be located near cities to provide [REDACTED] and to provide for Sprint defense of the city should that become desirable in the future. The deployment could be started now with the first site becoming operational in early 1973 and the last early 1975.

c. Costs

OSD 3.3(b)(5)(8)

The estimated investment cost is approximately \$6 billion. This cost plus operating and R&D costs require funding at roughly the following rate:

<u>FY-68</u>	<u>FY-69</u>	<u>FY-70</u>	<u>FY-71</u>
\$590M	\$960M	\$2B	\$2B

d. Discussion

Pros

(1) There is evidence [REDACTED] by 1972 and about 20 ICBMs by 1975. The Sentinel system can provide a damage-denial capability against this emerging threat: [REDACTED]

OSD 3.3(b)(5)(8)

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OS 3.3(b)(6), (8)

[REDACTED]

(2) This system can provide protection against accidental ICBM launches.

(3) This system can also provide through qualitative and quantitative improvements a damage limiting capability against an improving [REDACTED] in the late 1970s.

OSD 3.3(b)(5)(8)

(4) It provides some limited protection for Minuteman sites, bomber bases, and command-control centers from ICBM attacks.

(5) It provides options for adding terminal defense to Minuteman sites; to some cities.

(6) By enhancing U.S. deterrence, it strengthens the credibility of our commitments to defend our allies against nuclear intimidation.

[REDACTED]

OSD 3.3(b)(5)(8)

(8) This level of ABM defense may strengthen our position in entering possible future arms limitation talks.

(9) It provides some protection against small Soviet attacks and complicates their targetting.

(10) It provides all of the above yet does not deprive the Soviets of their second-strike capability, whatever way they might measure it.

(11) The first site can become operational by the end of 1972 and the system completed by 1975.

Cons

(1) Our overwhelming strategic offensive forces and our conventional force capabilities are sufficient [REDACTED] on ourselves and on our allies.

OSD 3.3(b)(5)(8)

(2) [REDACTED]

OSD 3.3(b)(5)(8)

(3) It might also suggest to other nations that we think [REDACTED] might act irrationally, thereby adding to the above concerns.

OSD 3.3(b)(5)(8)

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(4) It might keep Asian countries from adhering to a non-proliferation treaty by drawing attention to the threat and causing them to raise demands for their own defense, possibly as a step toward developing their own offensive nuclear capability.

(5) The Soviets may perceive this limited ABM system as a first step towards U.S. deployment of a larger system, and may begin to take offensive counteractions to hedge against such a possibility.

(6) The Soviets have slowed down their ABM deployments, although R&D is continuing; they have expressed strong interest in discussing limitations of both defensive and offensive systems. Insofar as we would get committed to the full deployment of this system, this might complicate any agreement we might seek to negotiate with the Soviet Union on ABM limitations.

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3. MODIFIED SENTINEL

a. Objectives and Options

(1) Provides some defense for our Minuteman sites, additional warning for SAC bomber bases, and defense of our National Command Authority and its communications against a Soviet attack. Additional defense of Minuteman can be provided when and if needed.

(2) Provides coverage of our more heavily populated areas [redacted] with the option to include defense of Hawaii and Alaska.

OSD 3.3(b)(5)(8)

(3) Provides protection against the accidental launch of a small number of ballistic missiles from any power.

(4) Provides further options to (a) incorporate protection of the Combat Operation Centers at Colorado Springs and Omaha against a moderately heavy attack, and (b) incorporate new generation radars and missiles from R&D programs to provide improved capabilities should the threat dictate.

b. Description

The Sentinel system as designed would be rearranged to provide for the above objectives. Complete radar coverage against ICBMs, SLBMs, and FOBs would be provided and the MSR/Spartan sites would be moved away from large cities to locations that provide additional warning for our bomber bases against surprise attack by SLBMs. The PAR sites at Alaska are eliminated and two PARs are added, one in Southern California and one in Northern Florida. Five MSR/Spartan sites or MSR/Sprint sites would be eliminated, three from the interior of the U.S. and one each from Alaska and Hawaii. There would be a total of about 12 MSR/Spartan locations. The four MSR/Spartan sites in the Minuteman fields would be able to provide a portion of area defense and would preserve the option to add additional Sprints for local defense of Minuteman. A MSR/Spartan/Sprint site would be located at Washington, D. C. to protect the National Command Authority and its communications. A few Sprints would be added at each of the radars to provide some additional defense against attack. About 450 Spartans and 200 Sprints are needed for this system. Due to the requirement for new detailed site selections and evaluation analyses, the first site would not be operational until late 1973; the deployment would be completed in early 1975.

c. Costs

The estimated DOD investment cost of this system would be about that of the Sentinel, or a little over \$6 billion.

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The estimated total funding requirements, including operations and R&D, would be:

<u>FY-68</u>	<u>FY-69</u>	<u>FY-70</u>	<u>FY-71</u>
\$590M	\$750M	\$1.5B	\$2.0B

d. Discussion

Pros

(1) It allows some protection of our Minuteman ICBMs against the Soviet missile threat.

(a) The Soviets are not expected to have an adequate force (an accurate MIRV) to destroy Minuteman for several years, but we must maintain options against the possibility that they could. Therefore, by providing the modified Sentinel as a base, we can make follow-on decisions at an appropriate time.

(b) We have investigated several alternatives for protecting Minuteman against a range of "greater-than-expected" Soviet threats: (a) ABM defense, (b) adding or relocating Minuteman in superhard [REDACTED] silos, and (c) combinations of above. We have examined these options against the accurate Soviet MIRV threat and have compared the near term and relative costs to keep about one-third of the Minuteman force surviving. Assuming highly accurate Soviet ICBMs, ABM defense of Minuteman is preferable; assuming threats with advanced penetration aids or many small MIRVs, the HRS is preferable; however over a wide range of threats a combination of the two is better and cheaper than either alone. Furthermore, since neither the threats nor the environment can be predicted with confidence it seems prudent to develop both programs.

JS 3.3(b)(5), (8)

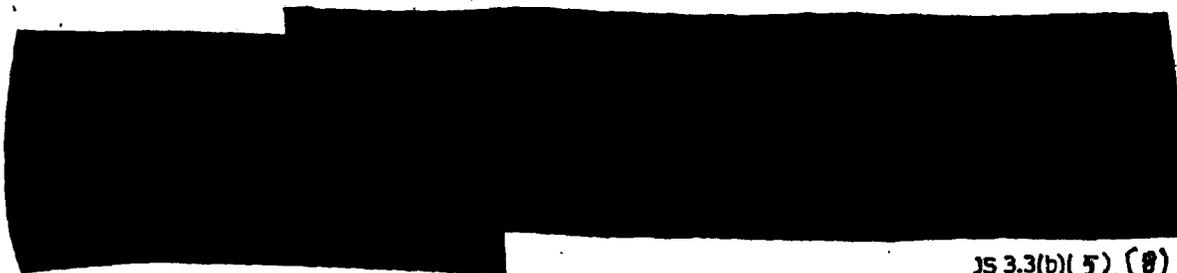
(2) It provides an effective means of reducing the vulnerability of our bomber force to a surprise attack from the new Soviet SLBMs.

(a) Our Strategic bombers are a major component in our retaliatory force because (a) they force the Soviets to pay large costs for a balanced defense against bombers and missiles, (b) they hedge against the unexpected failure of missile forces, (c) they are useful for non-nuclear conflicts, and (d) they allow us to quickly increase our force size by simply increasing the alert rate. Bombers can be vulnerable to a surprise Soviet attack, since they rely almost exclusively on tactical warning for survival.

JS 3.3(b)(5), (8)

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(c) ABM defense of the bomber bases against new long-range SLBMs with a good warning system can provide additional time to launch the bombers. In the years after 1973, this defense, with the new warning system and dispersal, significantly increases the bomber survivability and reduces the dependency of the bombers on tactical warning for survival. Such a defense could be completed by 1975.

(3) Since missile and radar sites would not be located in large cities, it would not be perceived by the Soviets as a first step towards a major U.S. ABM program. Because of these reasons, this system is not expected to complicate strategic arms talks.

(4) It would provide nearly the same level of protection of our population [redacted] small attacks from any nation, and accidental launches as the Sentinel system. However, Hawaii and Alaska could be a risk if we did not exercise the option to defend them. **OSD 3.3(b)(5)(8)**

(5) It would protect our National Command Authority; and maintains the option to protect the COCs in Colorado Springs and Omaha.

(6) It does not call for deployment of ABM interceptors in any major cities, thereby reducing domestic criticism.

(7) It could provide some defense against each of the threats; ICBMs, SLBMs, FOBS, and growth threats.

Cons

(1) Even after we deploy the system, there is a possibility that the Soviets might develop means to degrade it, e.g., warheads with small radar signatures, depressed trajectories, and other penetration aids. Thus, the effectiveness of the system may become uncertain, or without improvements, become degraded. Such uncertainty is not consistent with our requirement for the maintenance of a high-confidence retaliatory capability, especially if we require a reliable capability in each element of our strategic forces, i.e., our bombers, ICBMs, and SLBMs.

(2) We will have a high-confidence retaliatory capability in our ICBMs and SLBMs, even if the Soviets do deploy a large ABM system. Thus, even if the bombers can be destroyed in a surprise attack, we still would retain an adequate deterrent.

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(3) If the capability to protect bomber bases is to be maintained in the future in the face of growing threats, additional Spartans would probably be needed. However, the Spartans are also capable of defending cities. Thus, the Soviets might view an increase in the number of Spartans as a destabilizing move on our part. It might lead them to increase the size of their offense force to maintain their retaliatory capability.



(5) We run some risk of not having the system deployed in time. JS 3.3(b)(5)(e)

(6) Locating MSR sites away from the cities will reduce or eliminate their potential for use in local defense of major urban/industrial areas.

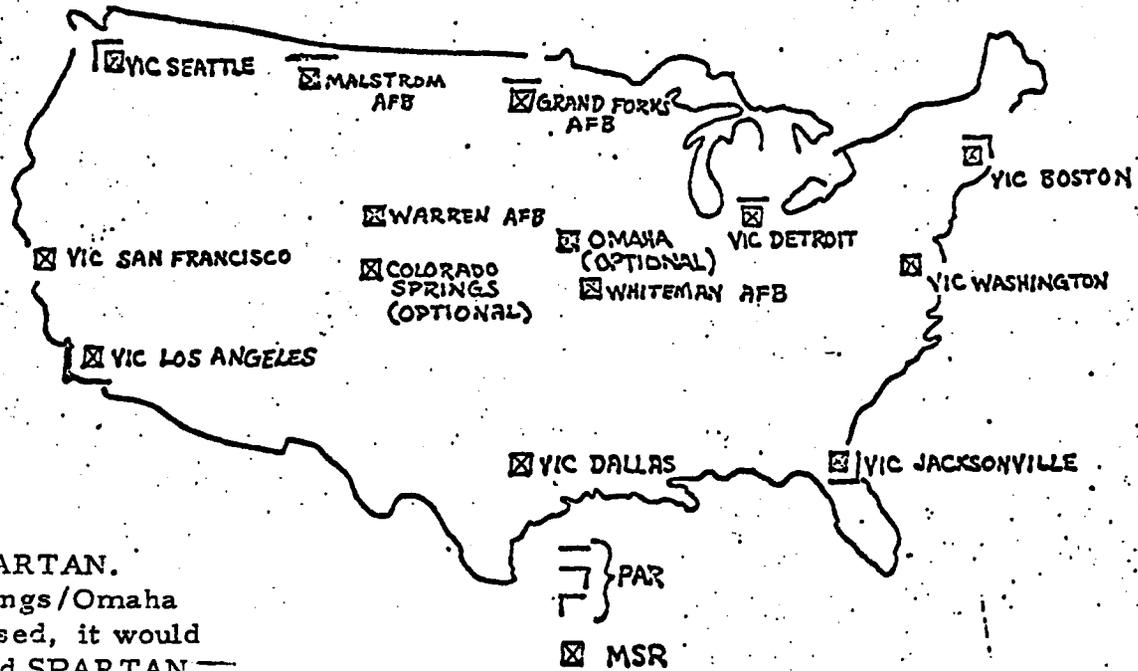
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Location of Sites for Modified SENTINEL Deployment



All sites have
SPRINT and SPARTAN.
If Colorado Springs/Omaha
option is exercised, it would
have SPRINT and SPARTAN.

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4. NO MISSILE DEFENSE DEPLOYMENT

a. Objectives and Options

- (1) Continue reliance on strategic offensive capabilities.
- (2) Maintain options to deploy various systems now under consideration (SABMIS, NIKE-X, etc.) with emphasis on options for protecting retaliatory forces.
- (3) Reduce costs and domestic criticism.

b. Description

- (1) Cancel Sentinel.
- (2) Continue ballistic missile defense R&D.

c. Costs

Sentinel can be cancelled shortly. Non-recoverable costs have been incurred. This would result in roughly a \$600 M loss, i.e., if the program had never been started, we could have saved \$600 M exclusive of R&D costs. The funding requirements to date for Sentinel and for continuing R&D only would be roughly:

	<u>FY-68</u>	<u>FY-69</u>	<u>FY-70</u>	<u>FY-71</u>
Sentinel and NIKE-X	\$590M	\$750M	\$400M	\$400M

d. Discussion

Pros

(1) Although ABM defense provides the least costly alternative to the protection of our deterrent force against a Soviet attack, we do not have to deploy an ABM defense. We could rely on other alternatives for force protection.

(2) [REDACTED]

OSD 3.3(b)(5)(8)

(3) The high cost for the defense system could be applied to other pressing national needs.

(4) It might enable us to negotiate a complete ban on ABMs with the Soviet Union and thereby simplify certain kinds of verifications problems.

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(5) No change in our alliance relationships.

Cons

(1) The pros of all previous alternative defense systems.

RECOMMENDATION

The review of the pros and cons have led us to select Alternative 3 (Modified Sentinel). On balance, we feel that defense of our retaliatory forces, [REDACTED] and an accidental launch are essential to U.S. national security.

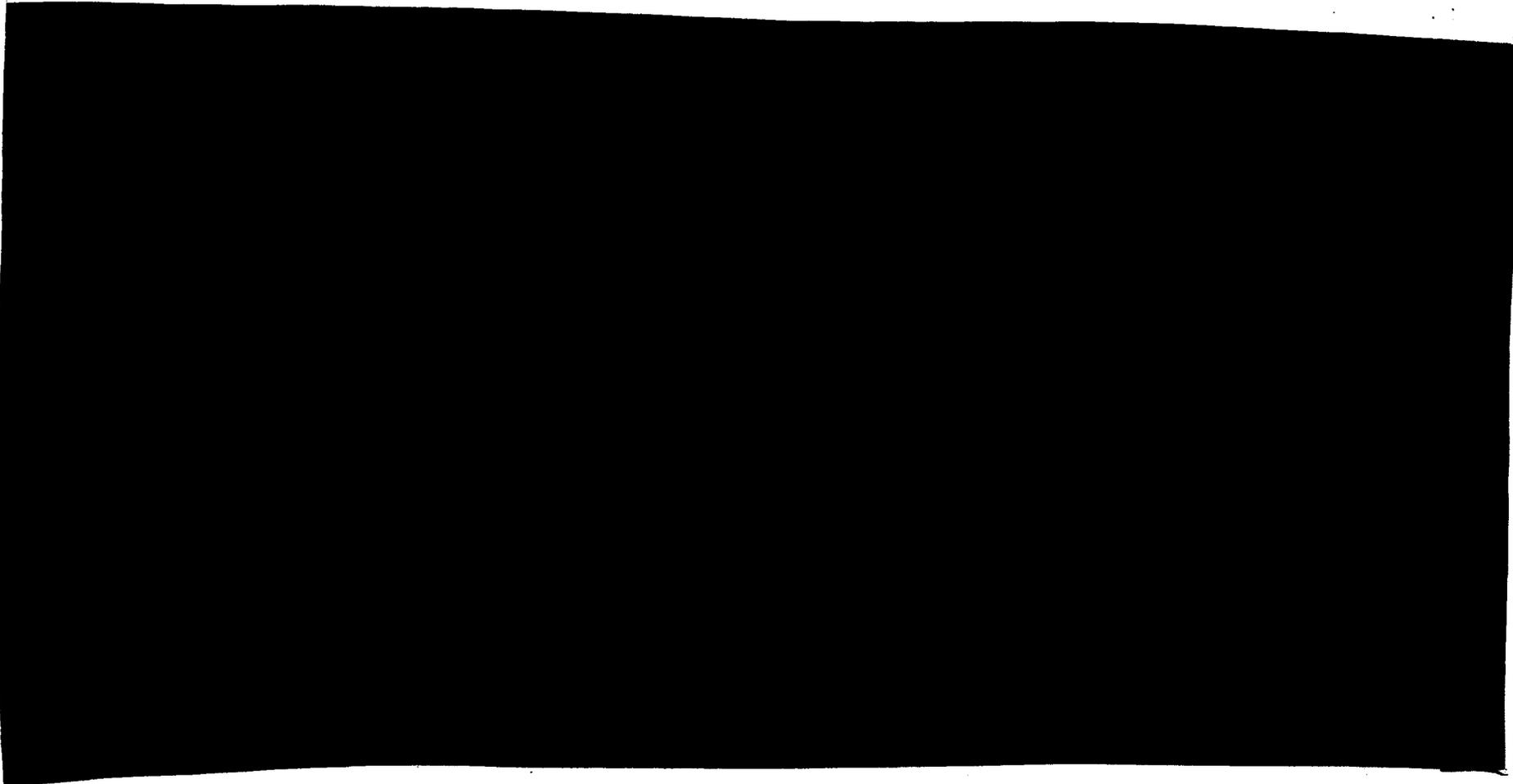
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DESCRIPTION OF ALTERNATIVE MISSILE DEFENSE DEPLOYMENTS



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PUBLIC INFORMATION PROGRAM

Whatever the final decision by the National Security Council and the President on the FY 70 Sentinel program, it is essential that the American public be promptly and fully informed. From a Public Affairs point of view, such communication to the public should come as soon after the decision is made as possible. This is so for two reasons:

1. The public is entitled to this information.
2. There is the increasing danger of leaks and damaging initial misinformation or discussions if prompt Public Affairs action is not taken.

Related to the Public Affairs requirements for the American public at large, there is the need of course, for appropriate notification to Congress and notification to our Allies, particularly Canada, as a member of NORAD.

A most effective forum for an initial report on the decision would be a public announcement by the President followed by the appearance of the Secretary of Defense before the Senate Armed Services Committee on March 18. This would be an open session, at which the Secretary could present, with other FY 70 budget changes, a detailed statement on Sentinel.

An alternative approach would be for the President or the Secretary of Defense to make a major speech on the Sentinel decision. Still another option would be for the President or Secretary of Defense to announce the decision at a news conference or at a news briefing.

Whatever option is chosen, there is a clear and urgent need for a comprehensive rationale statement ready to go shortly after the decision is reached. This statement should be so prepared that it will (1) answer the basic questions being asked by various segments of the public, and (2) provide the basic document for further public discussion of this matter by members of the Department of Defense, and others in government. Obviously, there will be some additional questions in which there will be public interest, but these could be handled on an individual query basis, as coordinated by OASD (PA).

The essential point is that we must be prepared immediately upon completion of the final study action to inform the public on such fundamental matters as to what has been decided, what are the cost factors, what has been rejected, how the decision will strengthen our defense posture, and how it might affect prospective talks with the Soviet Union.

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Statement by Secretary Laird
on the
MODIFIED SENTINEL DEFENSE SYSTEM

Mr. Packard, the Service Secretaries, the Joint Chiefs of Staff, and I have thoroughly examined the ABM defense issues and alternatives and have come to the following conclusions:

1. We have rejected the deployment of an anti-Soviet defense of our cities because (a) such a defense does not increase our security against a surprise Soviet attack, and (b) the defense for this purpose could stimulate a costly nuclear arms race.

2. We believe that it is both practicable and desirable to protect our country [REDACTED]. Although we judge such an attack to be highly unlikely in view of the overwhelming strength of our strategic offensive forces, we believe that protecting the U.S. against this possibility is a prudent move.

OSD 3.3(b)(5)(8)

3. We have found that there is also a need for an ABM defense for the protection of second-strike retaliatory forces, to protect our Minuteman missiles, warning for our strategic bomber force, and protection of our Command and Control against the growing Soviet ICBM and submarine-launched missile threat. Although these defenses enhance our second-strike capability, they would not cause a Soviet reaction since they do not remove the Soviet deterrent.

4. We need not deploy missiles and radars near the major cities as previously proposed (with the exception of protection of the National Command Authority at Washington). We have revised the Sentinel plan so as to move the missiles and radars to less populated areas.

5. The plan provides for Sprints around Washington, D.C. to protect the National Command Authority and with this, our retaliatory capability.

6. This modified Sentinel deployment does a better job in providing defense of our strategic forces against the real and potential threats from the Soviet Union, while at the same time, [REDACTED] and an accidental missile launch from any nation and adding new protection against submarine-launched attacks.

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7. We propose to continue a rigorous Research and Development effort to seek better means for protection of our citizens and our strategic forces.

8. This revised deployment will allow us to defer more than \$500 million in obligational authority from the previously estimated Sentinel budget in FY 69 and FY 70.

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9. The net effect of this change is to retain our capability [REDACTED] and to increase the stability of the strategic balance between the United States and the Soviet Union by enhancing our ability to deter a nuclear war.

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10. This decision is consistent with expressions of real interest by the U.S. in reaching agreement with the Soviet Union on the limitation of strategic offensive and defensive systems.

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