ASSISTANT SECRETARY OF DEFENSE
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SYSTEMS ANALYSIS OFFICE OF THE SECRETARY OF DEFENSE

14 MAY 1969

MEMORANDUM FOR DEPUTY SECRETARY OF DEFENSE

SUBJECT: SENTINEL Deployment (U)

The decision to proceed with the SENTINEL deployment was made last year for the following reasons:

1. The lead-time required to achieve an initial operating capability (IOC) for SENTINEL seemed to match the Chinese ICBM lead-time. Although our overwhelming offensive forces make a Chinese attack on the U.S. very unlikely, we could buy a highly effective defense as insurance.

2. SENTINEL would provide added protection for our MINUTEMAN force against the Soviet "greater-than-expected" threat (accurate MIRVs plus Heavy ABM defense) though the appearance of such a threat is unlikely. We would not expect to be able to observe the Soviet MIRV/accuracy program until two years before they achieve an IOC and three years before a major deployment. The introduction of SENTINEL might discourage such a Soviet program, and if it did not, would enable us to counteract their first generation MIRV deployment and then match a growing Soviet offensive threat on an equal lead-time basis. Otherwise, most of our land-based missiles could be destroyed by a Soviet preemptive strike. SENTINEL appeared as the best option to match the uncertainty in the threat at low cost.

3. We faced pressures to buy a new strategic system --- the JCS had proposed Contract Definition and Engineering Development of an Advanced ICBM and AMSA, procurement of SRAMs for B-52s, production and deployment of AWACS/F-12 and production of an anti-Soviet ABM, Nike-X. Although none of these programs, including SENTINEL, was neces y, SENTINEL was the most useful and strengthened our case for rej ion of these other more expensive programs.

4. We thought SENTINEL investment cost would be no more than $5 billion, a reasonable price to pay for the protection it could provide.

However, the decision to proceed with the SENTINEL deployment was a marginal one and, as such, is sensitive to changes in the threat, in

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U.S. forces and in the cost of deploying the system. I believe the situation has changed since the deployment decision was made:

1. We predicted that the Chinese would launch an ICBM late in 1967. This would have allowed them to deploy an initial ICBM force in 1972. However, they have not yet launched an ICBM, nor is there any evidence that they plan to do so in the near future. This might indicate that the Chinese ICBM program would slip at least one year.

2. The greater-than-expected Soviet offensive threat, which could destroy a large number of our land-based missiles, is not materializing according to intelligence estimates. Last year we were predicting that only 230 MINUTEMAN would survive in FY 1972 against the greater-than-expected offensive threat. Over 400 would survive against our current prediction for the FY 1972 greater-than-expected threat. Revisions of this threat, now in progress, should increase even further the number of MINUTEMAN surviving.

In addition to the weaker greater-than-expected offensive threat, we have reduced our estimates of the Soviet greater-than-expected ABM defenses. There has been no evidence to support estimates of the development of a strong terminal ABM system. Last year we projected that the Soviets could have 4,000 terminal interceptors and 1,200 area interceptors in addition to 250 interceptors in the Moscow area by FY 1972. Our last estimate showed only 3,000 terminal interceptors, 500 area interceptors and 125 interceptors in the Moscow area. These ABM estimates also are now being revised since no evidence is yet available on terminal ABM development and should reflect an ever lesser capability.

Since the Soviets do not appear to be developing a greater-than-expected threat there is less reason for proceeding with the defense of MINUTEMAN with SENTINEL. The case for MINUTEMAN defense is further weakened by the introduction of the superhard silo development program - an alternative preferred by the Air Force.

3. There have been no unusually strong pressures for new strategic systems. Since the SENTINEL deployment decision we have elected to proceed with development of AWACS as a key element in our air defense system; we have supported R&D activities on a dual purp[illegible] superhard silo program for MINUTEMAN or a new ICBM; and we have approv[illegible] the procurement of SRAMs for a limited number of B-52s. The margi[illegible]al decision to deploy SENTINEL was based on the premise that it would be hard not to buy some new system and that the SENTINEL was the most useful of the alternative strategic programs presented. This decision could possibly be reconsidered in light of the recent decisions on new forces and as part of a general reduction in defense expenditures imposed by the Congress.

4. The estimated investment cost for the SENTINEL program has increased by about $1.3 billion in less than one year. In July, 1967 the Army briefed the Secretary of Defense on the SENTINEL deployment plan and claimed that the estimated investment cost was $4.5 billion (excluding AEC and operation costs). We expect the Army to submit a Program Change Request in mid-May 1968 reflecting an increase in investment cost to about $5.8 billion. This has occurred even in view of the fact that the Army was directed by the Secretary of Defense to undertake a cost reduction effort on SENTINEL. I believe that this substantial cost increase is probably not the last one; we are still in the planning stages and have not yet experienced the design changes and cost increases that will probably result from a highly concurrent development and production program.

Because of these recent changes in the Chinese and Soviet threats, decisions made on other strategic force alternatives, and rising costs, I believe we should reassess the direction we are taking on the SENTINEL program.

One of the most extreme decisions we could make would be to cancel the program now, relying fully on our nuclear deterrent to keep the Chinese or Soviets from attacking the U.S. However, cancelling the SENTINEL program at this time would be difficult to justify since the decision was announced only last September. Furthermore, even though the Soviets do not appear to be developing a threat capable of destroying MINUTEMAN, they could do so in the future. SENTINEL could effectively defend MINUTEMAN against such a threat and could also provide a significant damage limiting capability against an unlikely Chinese attack or Soviet accidental attack.

We need time to review our decision on SENTINEL incorporating into this review all of the changes that have occurred since the deployment decision was made. We could buy this time by slipping the SENTINEL deployment schedule. We could then review the reasons to proceed with the program throughout the current calendar year while spending as little money as possible. Slipping the schedule would also allow us to: (1) put pressure on the Army to see if they can bring the program under better financial control, (2) assess the reasons for the rising costs and attempt to find ways of reducing costs, (3) review and update the threat projections related to SENTINEL, (4) contribute toward reducing the total FY 1969 expenditures, and (5) reduce c[illegible]urrency between the development and production program. A minimum e[illegible]nditure program could be implemented by slipping the SENTINEL deployment schedule by one year while maintaining the current R&D program. This would reduce FY 1968 expenditures by about $15 million and FY 1969 expenditures by about $130 million. If we decided to proceed with the deployment prior to the

beginning of FY 1970, the slippage in the deployment could increase the total program cost by about $100 million. However, this cost increase could potentially be offset by cost savings achieved from a thorough review of the program. Even if not, this is a small price to pay to avoid wasting over $5 billion if the decision to proceed proved to be incorrect. If we decided to cancel the program at the end of FY 1969, rather than now, we will have spent about $110 million for delaying the decision.

A summary of the costs of the SENTINEL program alternatives (based on current cost estimates) is shown below:

	PROGRAM COSTS EXCLUDING RDT&E (Millions)					
	FY 68		FY 69		FY 70	
Alternatives	Expend.	TOA	Expend.	TOA	Expend.	TOA
Cancel Now [a]	$17	$50	-	-	-	-
Slip 1 year [a] Then Cancel by End-FY 69	23	94	$96	$300	-	-
Slip 1 year, Then Proceed	23	94	96	300	$282	$540
Current Program	38	206	225	651	640	1,537
RDT&E (All Alternatives)	11	23	168	313	303	292

[a] There is a question of how much money is recoverable in FY 68 if the program is cancelled or slipped.

Recommendation. In view of the current budet problems brought on by the actions of the Congress, the apparent lag in the Chinese ICBM program, the smaller Soviet threat to MINUTEMAN and other protective options, and the reduced pressure for new strategic forces, I recommend that we slip the SENTINEL deployment schedule by one year, maintaining minimum expenditures. This will allow us to bring pressure on the Army to curb rising costs and to review the reasons for proceeding with the program.

If you are sufficiently interested in this approach that you would like to see a detailed plan for its implementation prepared,

I will work with Dr. Foster, other OSD offices, and the Army to develop one for your approval.

Decision: Overtaken by events J.C.C. Plan dead

Prepare a plan - Yes _____
No _____

Alain Enthoven

Alain Enthoven
Assistant Secretary of Defense