

UNCLASSIFIED
SECRETED

DECLASSIFIED

Authority MR 88-353 #4

By DJH NLE Date 8/7/91

THE PRESIDENT'S SCIENCE ADVISORY COMMITTEE
 EXECUTIVE OFFICE BUILDING
 WASHINGTON, D. C.



October 18, 1960

MEMORANDUM FOR THE RECORD

SUBJECT: Nike-Zeus

There has been very considerable progress in the Zeus program within the last year. There does not now, however, appear to be any reason for changing the major conclusion that we drew last year to the effect that production of Nike-Zeus on a large scale of 70 batteries as proposed by NORAD is not now justified, nor do we believe that it is likely to be justified in the foreseeable future. We believe that it has not been established that Zeus or a Zeus-type system can provide a satisfactory continental defense against a massive attack of ICBM's. It still appears that any efforts to defend a target with the presently configured Zeus could be countered by the enemy by a lesser expenditure of resources on missiles than is required for the Zeus defense itself. We would also point out, as we did last year, that with respect to defense of population against a major attack, fallout shelters should have priority over extensive Zeus deployment.

Despite the fact that there now appears to be little promise for a Zeus-type defense within the near future that can be effective against a determined Soviet effort, we believe that the R&D and the Kwajalein test program should be vigorously pursued. There is no more promising system concept in sight and it is possible that evolution of the system or at least development of some of the components may eventually lead to an effective defense capability.

While we would recommend against the decision to go into a major production program with Zeus at this time, we nevertheless feel there may be valid arguments for a more limited deployment in the near future. Some of these are enumerated below:

THE DIVISION OF CLASSIFICATION, U.S. ENERGY
 RECOMMENDS THAT THIS DOCUMENT BE DECLASSIFIED AS SOON AS POSSIBLE
 EXCEPT WHERE SHOWN OTHERWISE BY THIS OFFICE OR BY THE
 ORIGINAL SOURCE OF THE INFORMATION. NO DATA
 FROM THIS DOCUMENT IS TO BE RELEASED TO THE PUBLIC
 UNLESS IT HAS NO OBJECTION TO ITS DECLASSIFICATION.

SECRETED

K-S-11165, Series C
 Copy 24 of 40 Copies
 (3 pages)

[Signature]
 REVIEWED BY

OCT 9 1975
 DATE

SECRET

UNCLASSIFIED



- 2 -

(a) Possession by the U. S. of a limited Zeus defense capability would increase the uncertainty in the minds of the Soviets as to the effectiveness of their missiles and might thereby make less likely a Soviet decision to attack;

(b) A limited defense capability would be adequate to cope with one or a few missiles that might be fired at the most critical points in the U. S. as a result of accident or in a situation of gradually expanding conflict;

(c) A limited defense capability might be effective against powers other than the Soviet Union;

(d) The experience gained in limited deployment would be important in that it would make possible sounder future decisions with respect to production and deployment of Zeus or other similar systems;

(e) With respect to arms control, a limited defense capability might aid the solution of the problem of limitation on numbers of ballistic missiles that each side might have. Such a defense capability makes the consequences of limited clandestine production of missiles far less serious and hence would make the inspection problem much easier;

(f) Finally, there are the political and psychological disadvantages that would result if the Soviet Union were to develop a ballistic missile defense system while we did not.

Considering that large-scale production of Zeus is not likely to be justified within the foreseeable future but that there may be persuasive reasons for production of a limited number of batteries, we believe that it would be desirable if the Department of Defense would reconsider the objectives of the program and develop a plan consistent with the more limited objectives that may be reasonable for the near future. The number should be kept sufficiently small so that a design freeze is not implied. It is important that the system continue to evolve, e.g., the design must be left sufficiently open to permit such modification as introduction of infrared homing. We believe that a limited deployment can and should be accomplished on a much shorter time-scale than the present large scale production and deployment plan.

UNCLASSIFIED
SECRET

UNCLASSIFIED
SECRET



- 3 -

In considering the FY '62 budget for Nike Zeus, it is our understanding that the "A" budget (\$143 million) would not permit either the Kwajalein test program nor engineering improvements. The "B" and "C" budgets (\$214 million), while permitting the test program to go forward, are stated to necessitate a more austere target program and to limit engineering development of the system. The "D" budget (\$335 million) is stated to permit the R&D program to proceed at what we believe to be a more desirable rate. However, within the "D" budget request there is also included some \$63 million for development funded activities that are deemed necessary, not for the development of the missile system, but rather in preparation for large-scale production and operational deployment of the 70-battery program, as proposed by NORAD. We do not believe that such development is justified at this time.

We recommend, therefore, that the Nike Zeus budget be tentatively set at a level of about \$272 million with no funds included for preproduction development for the 70-battery NORAD program. However, we would also recommend that additional funds be allocated to the program, if as a result of the development plan for early limited deployment of Nike Zeus, a satisfactory plan for such a program is developed.

UNCLASSIFIED
SECRET