

MEMORANDUM

THE WHITE HOUSE
WASHINGTON

~~TOP SECRET/SENSITIVE~~

April 18, 1973

MEMORANDUM FOR: HENRY A. KISSINGER
FROM: BRENT SCOWCROFT *B*
SUBJECT: British SLBM Upgrade

The ball is in the British court regarding the matter of upgrading British FBM deterrent forces. They are looking at four different options, and you have received authority from the President to offer them all of those options. Schlesinger has provided them with rough cost figures. They may be prepared to propose a particular option at this time, or they may seek more information.

Should they wish to talk further on the technical details, I can have the expert from Schlesinger's old office available on very short notice.

Attachment

DECLASSIFIED
E.O. 13526, Section 3.5
Per Sec. 6.2(a); Hr. 7/27/2018
By *RS/WAL* NARA, Date *4/21/2022*
NLN 64-45/1347 [e.1 of 7]

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March (?) 1973

Summary of Discussions with the United Kingdom on
Upgrade Alternatives for the UK FBM Deterrent Force

1. The UK, in exploratory talks with the US in mid-1972, expressed its desire to examine upgrade alternatives for its FBM deterrent forces. The objectives were to maintain over the foreseeable future a credible threat to the USSR NCA. This would involve a penetration capability of any MOSCOW ABM system and provide operational flexibility to handle upgrades of that system plus minimizing Soviet ASW threats to its FBM force.
2. During informal discussions on August 10, the US offered the UK four assistance options with the following US cost estimates:

Option 1 - Unequivocal support of the SUPER ANTELOPE program (\$100 million additional research and development).



*Option 3 - Sell full POSEIDON missiles less the MIRV "bus" (as high as \$700 million).

*Option 4 - Sell ULMS-1 missiles to be adapted to modified UK POLARIS boats (about \$600 million).

Two statements regarding options 2 through 4 were made by the US:

- (1) that an assured penetration capability, based on exhaustion rather than deception (as provided by the SUPER ANTELOPE system), would be necessary in the likely event of an upgrade of the MOSCOW NCA ballistic missile defense system; exhaustion could be assured with one boat load of missiles with at least 4 RV's per missile.

*Includes: \$120 million for boat refurbishment.
\$130-150 million for RV's with UK-produced warheads.
\$250-350 million for missiles and spares.

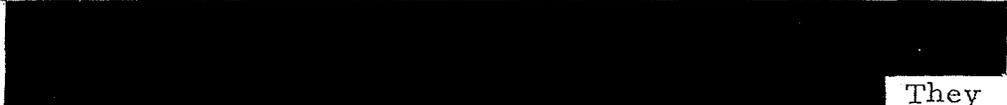
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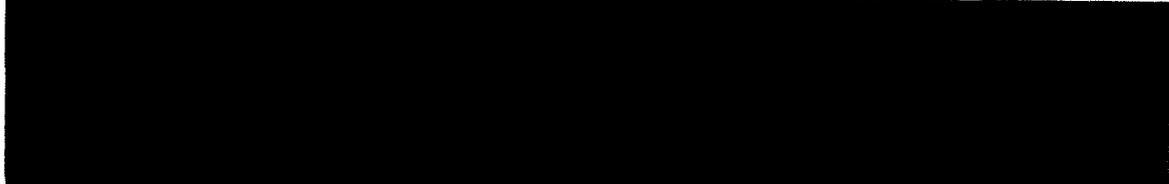
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- (2) that needed operational sea room would be provided by the longer range POSEIDON or ULMS missile.
3. On February 2, 1973, the UK presented the US with an aide-memoire indicating two possible options for the improvement of the UK deterrent:

a.  They felt that this system would provide adequate penetration capability at a cost of some loss of range in POLARIS.

b.  The POSEIDON MIRV capability would be eliminated and a guidance and dispensing mechanism, adequate for UK purposes, would be developed. The UK feel that this would provide a similar penetration capability but the greater lift capability of POSEIDON would eliminate the range problem and provide more payload flexibility for further penetration capability if needed in the future.

4. 

a. 

b. That unfavorable reaction from the Soviet Union over this technology transfer would affect the viability of the ABM treaty which might destroy the very basis on which the current upgrade alternatives are being planned.

- c. [REDACTED] (Testing of a UK-built warhead would be necessary to prove design changes resulting from different safety and, possibly, hardening requirements. Such testing may run past 1976 to 1978, depending upon degree of adaptation.)
- 5. Additional concern was expressed over:
 - a. [REDACTED]
 - b. The accuracy of cost estimates for boat refurbishment and the new RV dispenser.
 - c. [REDACTED]
 - d. Logistic support necessary for a POSEIDON or ULMS missile.
- 6. [REDACTED] This is central to any sensible upgrade option for a credible penetration capability of a future MOSCOW ballistic missile defense system.
- 7. The UK is planning to send two documents to Dr. Kissinger within two weeks:
 - a. An aide-memoire on the political points raised in paragraph 4 above.
 - b. A document on broad cost estimates for various options, including areas of cost which needed clarification in relation to figures previously given.
- 8. Some observations:
 - a. The UK will approach any changes to its current FBM deterrent upgrade by stages. There are vested interests in the SUPER ANTELOPE program which will make it difficult for the advocates to switch to other options.

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- b. Leaving aside the political ramifications of US strategic technology transfer, the British Government may not have viable political support for the more costly options. The costs of the POSEIDON - ULMS-1 missile options clearly concern them since it appears that they will have to spend \$.5 billion to \$.7 billion if they are to stay in the credible deterrence game.
- c. There is great discomfort on the part of the UK MOD and Royal Navy in dealing "out of channels" even on these exploratory phases. There is a real possibility that the substance of these discussions may begin to leak because of the "old boy" arrangements between DOD/MOD and the USN and Royal Navy.

(Note that the UK summary of these discussions (copy attached) was distributed in 15 copies.)

- d. The DOD letter of February 1, 1973, indicates considerable possibility of opposition by State and Defense to upgrade options beyond SUPER ANTELOPE. The key issue is beating a MOSCOW NCA ABM system by:

- * exhaustion by real RV/warheads or

- * exhaustion by deception using exoatmospheric decoys.

Intelligence estimates on GALOSH performance and their current sitings indicates that SUPER ANTELOPE could defeat the present GALOSH system and its traffic limited radar system. Likely upgrade of MOSCOW ABM would undoubtedly include:

- (1) a higher acceleration missile of the type we have seen tested;
- (2) locating these missiles closer to the defended area;
- (3) a better discrimination radar which has also been tested.

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Endo-atmospheric intercepts would negate the SUPER ANTELOPE light decoys. An upgraded ABM could be deployed before the SUPER ANTELOPE retrofit could be accomplished (circa 1976-77). (See attached illustration.)

e.

 This was done after several hundred millions of dollars expenditures in penetration aid RDT&E.

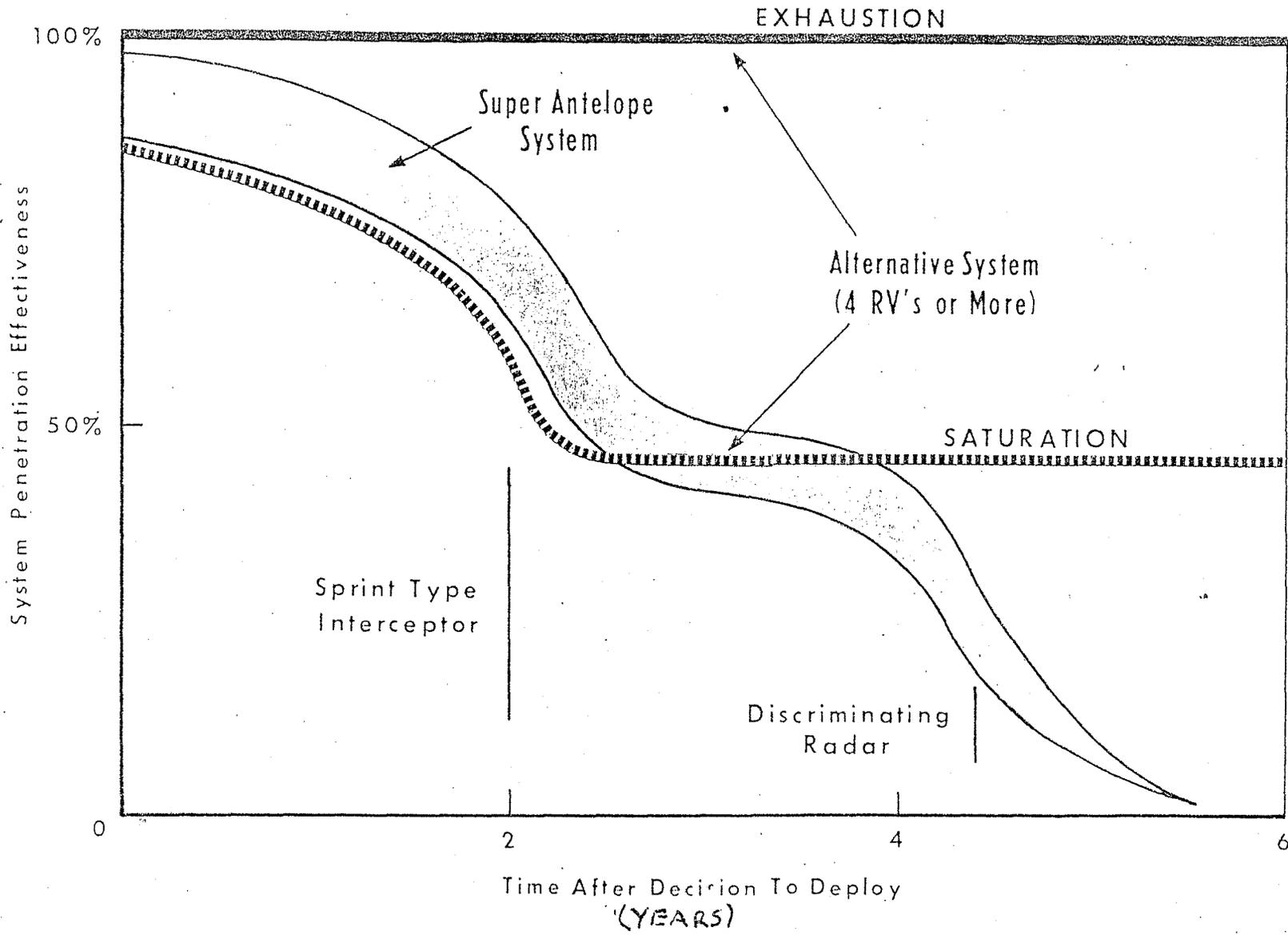
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Estimated Penetration Effectiveness

[41/15/89]



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