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NATIONAL SECURITY COUNCIL

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URGENT ACTION

July 10, 1971

MEMORANDUM FOR MR. KISSINGER

FROM: Helmut Sonnenfeldt
SUBJECT: NSSM 123: US-UK Nuclear Relations

We have received the completed study in response to NSSM 123 (Tab F), and written comments from the agencies (Tab C). Our Analytical Summary is at Tab E. You need now to decide whether you want to hold an SRG, or to forward a decision memorandum directly to the President.

Through Defense channels the UK has requested our assistance in upgrading their Polaris system so that it will be capable of penetrating Soviet ABM defenses and hitting Moscow. Known as Super Antelope, this program would involve improved hardening and spacing of their RV's, and adding pen aids of a different design from our own. Following a UK Ministerial decision last fall, the British have already begun an approximately two-year Project Definition study, after which they may decide to proceed to deploy. They could also return to other options, such as developing a MIRV for their Polaris A-3, or asking us for Poseidon.

The British would like us to provide:

- analysis and design critiques on their approach to RV and pen aid design, including possible use of US contractors;
- continued access to US underground nuclear tests to expose their hardware samples; and
- possibly the use of White Sands Proving Ground for flight test of components.

Although no formal reply has yet gone to the British, Dave Packard wrote you on March 25, 1971 (Tab D) that Defense intends to respond affirmatively to the UK request for assistance through Project Definition, while reserving our freedom of action beyond that point. Initial consultations with the British have already begun, and the next round is scheduled for the week of July 26. We need to decide whether to overturn Packard's decision, or whether we want to modify it.

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If we go ahead, it will be important to set up a mechanism to supervise this program on a continuing basis. As described in our Analytical Summary (Tab E), Super Antelope has implications for our entire European nuclear policy. If we are not careful, it could get us into a Skybolt-type situation two years hence.

The options presented at the end of the study are essentially two:

1) Decline cooperation on Super Antelope (or at least tell the British we are postponing a decision on assistance).

2) Continue US assistance through Project Definition, per Packard's March, 1971 letter to you. This would mean helping the UK with RV hardening, development of pen aids, and allocation of space at our Nevada underground tests.

Two sub-options involving operational considerations are also suggested under option #2:

2a) Assistance through Project Definition, but with the understanding that some requests pertaining to highly visible assistance (e. g. flight tests on US ranges, or the presence of UK personnel at US underground tests) be considered on a case by case basis.

2b) An add-on to 2a, this would also envisage lending assistance on requests relating to Post Project Definition before the end of the Project Definition phase (e. g., use of US contractors to begin fabrication of long lead-time items), although such requests would also be reviewed on a case-by-case basis.

We have solicited formal agency views on the options (Tab C): State, Defense, JCS, and AEC all favor option 2b.

-- Especially concerned that they be included in a coordination mechanism to supervise our cooperation on Super Antelope, State also stresses the need to review all UK requests which may have political implications (e. g. with respect to UK entry into the EC and SALT). Reportedly, State would not raise serious objections if 2a were selected over 2b as our final policy.

-- Noting that it represents essentially the position under which it has already been operating, the AEC, long a proponent of UK nuclear co-operation, not unexpectedly favors this forthcoming stance.

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-- Defense, while noting that portions of the study do not fully reflect, in their view, the extent of past and present cooperative programs with the UK, indicates that option 2b most nearly conforms with the position taken in Packard's letter to you of March 25, and to our present activity in support of the UK. Still maintaining that we should hold open our options regarding support beyond Project Definition, nevertheless Packard is apparently willing to consider some follow-on support before the end of the Project Definition phase.

-- Also proponents of 2b, the JCS are willing to go on record now in favor of assisting development and deployment of Super Antelope.

No agency recommends against assistance, but CIA and ACDA take more cautious stands:

-- ACDA favors option 2a, stressing that we should not get ourselves committed to follow through to the conclusion of Super Antelope until the value of the project is established, or before the British decide themselves to go ahead, or before possible complications in SALT are clearer. ACDA appears satisfied that assistance in Project Definition is not likely to jeopardize our SALT interests, but that assistance in deployment could easily do so.

-- CIA, while taking no position on the particular options, voices reservations about the potentially negative effects cooperation on Super Antelope could have on US-French relations and UK entry into the European Community. (The points are well taken.)

On balance, there are some reservations about moving forward at this time with an extension of the US-UK nuclear relationship, given our interests in British entry, stepped-up West European defense cooperation in the future, and SALT. However, it is also true that we are already partly into Super Antelope, on account of discussions which Defense has already had with the British. A decision to cut off now could have adverse effects on the entire

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US-UK political relationship, including the President's relationship with Heath.

The trick would seem to be to proceed with Project Definition, but in such a way as to preserve maximum flexibility in regard to later decisions on what to do beyond Project Definition. The answer is probably to be frank with the British and to tie our future stand to a further review later on. By then, London, hopefully, will be a part of Europe, and we will know the contents of any SALT agreement and also know more about how French policy is developing with respect to European cooperation.

Since no agency supports termination of cooperation, and the differences between options 2a and 2b are not that great (given the built-in review mechanism), you may decide that an SRG meeting is unnecessary. Alternatively, you may want to have a meeting, viewing it essentially as an educational forum as well as an opportunity to probe more deeply the differences between options 2a and 2b. If so, it would be slightly preferable to have a meeting in Washington so that staff level experts could attend; the principals are not likely to have grasped all the nuances of this subject. If you wish to have a meeting in San Clemente, we can DEX talking points to you early next week.

In case you decide against a meeting, we have prepared a memorandum for the President (Tab A) and an NSDM (Tab B), recommending that we 1) proceed with cooperation on Super Antelope through Project Definition, 2) maintain our flexibility regarding actual assistance later in production and deployment, and 3) establish the Under Secretaries Committee as a review mechanism to scrutinize certain sensitive, highly visible aspects of our cooperation on a case-by-case basis. This is essentially option 2a, but does not foreclose further decisions by the President in the direction of 2b as and if specific requests arise relating to post Project Definition support. However, you should realize that this position does differ somewhat from the one taken by most of the agencies.

RECOMMENDATIONS

1. That you handle the Super Antelope matter directly by memorandum to the President.

Approve _____ Disapprove _____ Prefer a meeting _____

2. That you approve the NSDM and sign the memorandum forwarding it to the President (Tab A).

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THE WHITE HOUSE
WASHINGTON

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ACTION

MEMORANDUM FOR THE PRESIDENT

FROM: Henry A. Kissinger
SUBJECT: US-UK Nuclear Relations

The British have approached us for assistance in a two-year project definition study of ways to improve their Polaris missile system and make it more effective against Soviet ABM defenses. Known as Super Antelope, the project involves hardening and redesigning existing British Polaris A-3 warheads and introducing penetration aids. The UK wants us to provide analysis and design critiques, continued access to US underground nuclear tests to expose hardware samples, and possibly the use of White Sands Proving Ground for flight tests. Further assistance relating to the production phase of this program, such as use of US contractors, could be requested before the end of the two-year period.

While the project study has been approved at Ministerial level, the British government has not yet decided to deploy this system. They could return to other options we know they are considering, such as developing a MIRV for their Polaris A-3, or asking us for Poseidon. Their ultimate decision will depend to a considerable extent on the outcome of SALT.

Since our involvement in Super Antelope could cause us some problems in SALT and could reduce your flexibility should you wish to encourage greater UK defense/nuclear cooperation in a West European framework in the future, we have done an interagency study of the British request.

-- State, Defense, JCS, and the AEC favor assistance through the project definition phase and even beyond, recommending that we should consider on a case-by-case any British requests for support on post Project Definition projects, such as fabrication by US contractors of long lead-time items, even before conclusion of the two-year study. It is also suggested that we review on a case-by-case basis certain aspects of our assistance which might be highly visible, and could cause us problems in SALT or have other political implications.

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-- ACDA, on the other hand, while favoring assistance, is more cautious, recommending no commitments to assistance in the production phase until the British have themselves decided to proceed, and until the results of SALT are clearer.

-- CIA points out that assistance poses some risks of affecting adversely our relations with France, should it become known, and UK entry into the European Community, which could be viewed, particularly in France, as incompatible with new US-UK defense ties.

Since Defense has already held initial consultations with the British on Super Antelope, any negative decision at this time would surprise them and could have negative repercussions on the whole range of US-UK relations, including your relationship with Prime Minister Heath. Moreover, since the UK nuclear force contributes to Western deterrent strength, it is in our interest to assist the British in evaluating ways of modernizing their force. On the other hand, we would not want to deepen our cooperation with the British to the point where it would virtually foreclose possible Anglo-French or West European defense cooperation after likely British entry into the Community.

I recommend that we proceed with assistance through Project Definition on Super Antelope. At the same time I see no compelling reason for you to commit the US to longer term cooperation on this particular project, until we know whether it will succeed and whether the UK will in fact decide to deploy it. Accordingly, I have prepared a NSDM which would confirm our decision to assist the British, subject to a limitation that permits you to review the question of assistance beyond Project Definition when and if the British choose to raise it. The NSDM also establishes the NSC Under Secretaries Committee as the mechanism to keep this project under review.

RECOMMENDATION

That you approve the NSDM at Tab A, confirming your decision to proceed with assistance to the UK on Super Antelope through the Project Definition phase.

Approve _____

Disapprove _____

See me _____

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DEPARTMENT OF STATE

Washington, D.C. 20520

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July 9, 1971

MEMORANDUM FOR MR. HENRY A. KISSINGER
THE WHITE HOUSE

Subject: Department of State Position on Response
to NSSM 123 -- US-UK Nuclear Relations

The Department of State is satisfied with the study on US-UK Nuclear Relations (response to NSSM 123) as drafted. The Department favors sub-option 2b (page 39). The Department recommends that the supplementary action outlined under "Operational Considerations" (pages 40-42) be carried out.

The Department of State fully endorses the program of cooperation with HMG on Super Antelope; it realizes, however, that there may be some aspects of the program, as the study points out, which would be ill-timed and have adverse political impact during the forthcoming period. It is for this reason that the Department, while not wishing to interfere with the operational aspects of the project, supports establishment of a coordination process that will bring to its attention in timely fashion those British requests or elements of the program which may have political implications.


for Theodore L. Eliot, Jr.
Executive Secretary

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THE DEPUTY SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301

10 JUL 1971

MEMORANDUM FOR THE ASSISTANT TO THE PRESIDENT FOR NATIONAL SECURITY AFFAIRS

SUBJECT: NSSM 123 - US/UK Nuclear Relations

DOD has reviewed the NSSM 123 study on US-UK nuclear relations forwarded by your staff on July 2, 1972. While there are portions of the study that do not fully reflect the extent of past and present cooperative programs, we believe, on the whole, it is an adequate assessment of the problems and issues pertaining to our current action in supporting UK development of an improved POLARIS System. My staff has prepared some specific comments on the study which I have attached for your information.

As you will recall, I outlined in some detail in my memorandum of March 25 the projected extent of the Super Antelope program, and stated my intent to assist the UK, within certain limits, in the project definition stage of Super Antelope, holding open our options for support after that. I believe the current study bears out the course of action I took at that time. Of the options the study presents, Option 2B most nearly conforms to my position and to our present activity in support of the UK.

There are several other factors which seem to me to present strong reasons for continuing our support to the UK. As I stated on March 25, in view of the nature of our past and present relationship with the UK, it is appropriate and proper to give them this type of limited assistance. The alternative -- a US decision to terminate assistance -- would raise fundamental questions for the British about the future of the US-UK relationship and could create problems concerning US base rights in the UK and its territories, particularly as regards the Holy Loch SSBN base. Additionally, US support to the UK in the project definition phase of the Super Antelope program can be without prejudice to our (or the UK's) ultimate position on whether to support further development of such a system.

In view of the above, I recommend the approval of Option 2B.

The Joint Chiefs of Staff also recommend adoption of Option 2B, but in so doing note their support for development and deployment of an improved UK

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POLARIS System. I have attached their memorandum to the Secretary of Defense on this subject, including their detailed textual comments.



Enclosure
a/s

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By SP NARA Date 12/24/07

Recommended Changes to NSEM-123 Study

1. Page 24, line 15, add "not" between "has" and "evaluation."

Comment: This important typographical omission changes the whole meaning of the sentence.

2. Page 25, delete paragraph one.

Comment: The paragraph overstates the impact of failure for the UK. The failure of the Super Antelope program during the project definition phase would certainly be a disappointment to the British, but would not present them with any new or more serious strategic and political problems than they already have.

3. Page 28, delete first full sentence, lines 2-4.

Comment: The UK and EC have reached agreement on the terms of British entry, hence this statement is no longer relevant. Only a rejection of the EC terms by the British Parliament could preclude now UK entry into the Common Market.

4. Page 32, paragraph 4, delete third sentence.

Comment: Article VII of the 1958 Agreement provides that "neither party...shall communicate classified information or transfer or permit access to or use of materials, or equipment, made available by the other party...to any nation or international organization." In view of this, the third sentence is inappropriate.

5. Page 34, option 1, third point, delete the parenthetical clause.

Comment: The assumption that the UK can presently penetrate the existing Galosh system is not warranted by US intelligence estimates.

6. Page 34, option 1, delete fourth point.

Comment: The assumption that the UK would divert resources to improving conventional force postures if the US terminated assistance on project definition for Super Antelope is not valid.

7. Page 35, option 1, third point under cons, delete "...and in particular might deny the US new information on hardening of RV's"

Comment: The potential value of such information to the US is not sufficient to warrant the statement.

8. Page 35, option 1, delete fifth point under cons.

Comment: It is not clear how a US refusal to assist the UK in project definition could encourage the UK to ask us for help with Poseidon or MIRV.

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9. Page 35, add the following con: "US assistance is almost essential if the UK is to reach a successful conclusion to its POLARIS improvement program."
10. Page A-6, delete paragraph 4.

Comment: US statements to the UK of January 1970, quoted on page A-6, were made in the context of receiving a series of UK papers discussing present and potential Soviet ABM threats to their POLARIS system. The summary statement that, given its limited size, the UK force could not achieve high effectiveness against defended targets, even with "improved Antelope," was made in the context of potential Soviet ABM expansions, especially potential terminal intercept systems. Against the presently estimated 64 Moscow launchers, such an improved system should allow penetration to be made.

As seen in Appendix C, the UK system poses a reasonably credible exoatmospheric penetration scheme against present and potential Soviet ABM systems using radar techniques. If the present Galosh system is not capable of loiter intercept allowing atmospheric discrimination, this system should materially enhance the probability of penetration of the Moscow defenses provided they are not augmented by terminal interceptors.

11. Page C-8, paragraph 3, delete the words "will almost certainly" from the first line and substitute "might possibly"; and add to the end of the sentence, "and would require a searching re-examination on their part of the ultimate validity of the project."

Comment: The ability and willingness of the UK to continue Super Antelope without US aid is far more problematical than the paragraph would suggest.

12. Page C-18, lines 3-4, delete "...which is part of the existing strategic balance..."

Comment: We do not count British forces in our calculations of the strategic balance between the US and USSR.

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THE JOINT CHIEFS OF STAFF
WASHINGTON, D. C. 20301

JCSM-322-71
8 July 1971



MEMORANDUM FOR THE SECRETARY OF DEFENSE

Subject: US-UK Nuclear Relations: NSSM 123 (U)

1. (U) Reference is made to a memorandum by the Staff Secretary, National Security Council, dated 2 July 1971, subject as above, which forwarded and requested agency views on the study on US-UK nuclear relations.
2. (U) The study has been reviewed, and the changes reflected in the Annex hereto are submitted for incorporation into the study.
3. (TS) The Joint Chiefs of Staff support the British effort to develop and deploy an improved POLARIS System and recommend an affirmative decision on Option 2b.

For the Joint Chiefs of Staff:

Frank B. Clay

FRANK B. CLAY
Major General, USA
Deputy Director, Joint Staff

Attachment

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ANNEX

- | | |
|--|-----------|
| RECOMMENDED CHANGES IN THE RESPONSE TO NSSM 123 (U) | <u>1</u> |
| 1. (U) <u>Page 5, line 13.</u> Add "further" before "diminished." | <u>2</u> |
| <u>REASON:</u> Accuracy. | <u>3</u> |
| 2. (U) <u>Page 18, lines 16 and 17.</u> Delete sentence, "This | <u>4</u> |
| risk ... flight tests." | <u>5</u> |
| <u>REASON:</u> The risk is not defined. | <u>6</u> |
| 3. (U) <u>Page 19.</u> Delete last paragraph. | <u>7</u> |
| <u>REASON:</u> Does not necessarily represent the policy of the | <u>8</u> |
| British Government. | <u>9</u> |
| 4. (U) <u>Page 20.</u> Delete. | <u>10</u> |
| <u>REASON:</u> Same as paragraph 3 above. | <u>11</u> |
| 5. (C) <u>Pages 24 and 25.</u> Delete paragraphs under the heading | <u>12</u> |
| "The Effectiveness of Super Antelope -- The Risks of Failure." | <u>13</u> |
| <u>REASON:</u> The risks of failure of the UK program are | <u>14</u> |
| properly the responsibility of the UK. | <u>15</u> |
| 6. (U) <u>Page 34.</u> Delete statements 1, 2, 3, and 5 of the | <u>16</u> |
| "Pro" factors for Option 1. | <u>17</u> |
| <u>REASON:</u> These statements are much too problematical to | <u>18</u> |
| be established as valid "pros" for this option. | <u>19</u> |
| 7. (TS) <u>Page 35.</u> Delete the last three statements of the | <u>20</u> |
| "Con" factors and substitute the following: | <u>21</u> |
| a. "--US assistance to the UK is almost essential if the | <u>22</u> |
| UK is to reach a successful conclusion to its POLARIS improve- | <u>23</u> |
| ment program." | <u>24</u> |
| b. "--A failure to provide information or assistance would | <u>25</u> |
| be regarded as an abrupt shift in US policy." | <u>26</u> |
| <u>REASON:</u> Statements are problematical. | <u>27</u> |
| | <u>28</u> |

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- 8. (U) Page 37, line 7. Delete "advanced" and substitute "specific." 1
2
REASON: Accuracy. 3
- 9. (TS) Page 37. Add new statements under "Cons" as follows: 4
 - a. "-- Highly probable failures of 2/3 reentry vehicle (R/V) scale models in initial underground tests at levels between 250-400 cal/cm² may imply US capability to design hardened R/Vs." 5
6
7
8
REASON: The United States has not demonstrated the ability to design, build, and test successfully an R/V to a design hardness goal without subsequent underground testing to eliminate design weakness. 9
10
11
12
 - b. "-- Present US underground test schedule probably is not optimum for orderly development of UK-hardened R/V." 13
14
REASON: The driving force for the underground R/V test program has been to assess the survivability of US strategic systems which appear to be completed, and, thus, UK participation must receive similar priority if the development program is to be successful. 15
16
17
18
19
- 10. (U) Page A-1, lines 17 and 18. Delete "without paying any part of the great R&D costs required to develop the system" and substitute "and have paid only a small part (5 percent) of the development cost." 20
21
22
23
REASON: Accuracy. 24



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UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

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JUL 8 1977

July 7 1977
U. S. ATOMIC ENERGY COMMISSION
BY: *Walter E. Miller / Stan St. Wilcox*
DOCUMENT NO. LXI / 5017-1A

30259

Honorable Henry A. Kissinger
Assistant to the President
for National Security Affairs
The White House

Dear Henry:

At the request of the Ad Hoc Group preparing the response to NSSM 123, the AEC staff has assisted in the study recently transmitted to the National Security Council and upon which written agency views have been requested. The AEC for a number of years has been actively cooperating with the United Kingdom in the design and development of nuclear weapons, and in the past several years this has centered on the hardening of their Polaris warhead. Because of the above, it was thought you may wish to have the Commission's comments on the NSSM 123 study.

Of the several options set forth in the study, the Commission favors Sub-Option 2b which provides for continuing assistance to the U.K. on their Polaris Improvement Program through the Project Definition phase and further considering U.K. requests related to the Post Project Definition Program on a case-by-case basis.

The policy set forth in Sub-Option 2b is essentially the same as that under which the Commission has been cooperating with the United Kingdom. A recent statement of this policy is summarized in my letter to Senator John O. Pastore, Chairman of the Joint Committee for Atomic Energy (Enclosure 1 to NSSM 123). The Secretary of Defense and the Secretary of State concurred in the views expressed in this letter.

Cordially,

Chairman

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This material contains information affecting the national defense of the United States within the meaning of the espionage laws, Title 18, U.S.C., Secs. 793 and 794, the transmission or revelation of which in any manner to an unauthorized person is prohibited by law.

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UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY
WASHINGTON

ACDA-5156

OFFICE OF
THE DEPUTY DIRECTOR

July 8, 1971

MEMORANDUM FOR MR. HENRY A. KISSINGER
THE WHITE HOUSE

SUBJECT: Comment on the Study on U.S.-U.K.
Nuclear Relations: NSSM-123

The subject study presents a sound, comprehensive review of a problem with many ramifications. Among the points made, we would single out two as deserving special emphasis:

1. Assistance to the British on the early stages of Super Antelope could easily evolve into an implied commitment for support in the full program. Both sides recognize that our underground test facilities and the Atlantic test range are "almost essential" for completion of Super Antelope, and a decision to proceed with Project Definition would seem futile, if there were no possibility to proceed further if Project Definition succeeds as planned. The British deserve to be apprised in good time if our hesitation to make an explicit commitment on Super Antelope as a whole is for substantive rather than merely procedural reasons.

2. While U.S.-U.K. collaboration on the Project Definition phase of the British Polaris program is not likely to jeopardize our interests at SALT, both the negotiation process at SALT and the viability of any agreement reached could be affected by more strategically significant forms of collaboration which might develop

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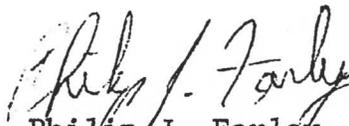
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later, such as U.S. manufacture of operational reentry vehicles for Super Antelope or assistance on a MIRV program for the British. The problem will be a continuing one and could be a factor in the projected follow-on SALT negotiations which are intended to secure comprehensive offense limitations.

With these considerations in mind, we would support Sub-Option 2a (page 38 of the study) which calls for continued U.S. collaboration through Project Definition, subject to case-by-case review of some requests such as those pertaining to relatively visible assistance. Option 1, which would involve breaking commitments and interrupting a project already well advanced, appears infeasible at this stage. Additional assistance as envisioned by Option 2b would be tantamount to a commitment, strongly implied if not explicit, to follow through to the conclusion of Super Antelope if the British so desire. I don't think we should put ourselves in this position before the value of the project is established, or the British government makes a formal request, or before the shadow cast by possible difficulties at SALT is removed.

We endorse the proposals of the study under "Operational Considerations" regarding discussions with the British and for coordination among the concerned U.S. agencies on these sensitive questions.


Philip J. Farley
Acting Director

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CENTRAL INTELLIGENCE AGENCY
WASHINGTON, D.C. 20505

JUL 1971

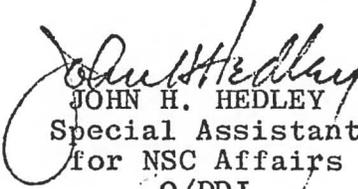
MEMORANDUM FOR: Jeanne W. Davis
Staff Secretary
National Security Council

SUBJECT : NSSM 123, "US-UK Nuclear Relations"

REFERENCE : NSC Memorandum of 2 July 1971

1. The Central Intelligence Agency has reviewed and found no serious fault with the study on US-UK Nuclear Relations, prepared by an Interdepartmental Ad Hoc Group in response to NSSM 123. We have expressed reservations previously and continue to question, however, certain judgments found on pages 11 and 14 of Annex C and reflected on pages 27-28 of the main paper. These reservations have to do with benefits to Franco-US and to European Community-US relations which allegedly would result from the proposed US assistance to the British.

2. We believe that US relations with the French could be adversely affected in the future if the French inferred from US assistance to the UK that such aid would subsequently be extended to France. As for the possibility of strengthening Britain's political position in the Community, we consider it equally possible that new measures which retain the special US-UK relationship in the military field may lead to a fresh round of suspicions with regard to British intentions. Moreover, since presumably the French are in mind when the draft (at the top of page 14 of Annex C) allows that maintenance of close US-UK ties may not be unanimously favored in the Community, we question the compatibility implied between the alleged potential boost to US-French relations and the possible enhancement of US influence over the enlarged Community.


JOHN H. HEDLEY
Special Assistant
for NSC Affairs
O/DDI

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THE DEPUTY SECRETARY OF DEFENSE
WASHINGTON, D. C. 20301

25 MAR 1971

Honorable Henry A. Kissinger
Assistant to the President for
National Security Affairs
Executive Office of the President
Washington, D. C. 20500

Dear Henry:

As you are aware, and as was discussed briefly at the SRG meeting on 3 March, the British are asking our assistance in a program to improve the capability of their Polaris A-3 missiles against a defended target. The attached fact sheet sets forth a summary of our assistance to date, and details of their current request.

In brief, they currently are buying from us the boost-phase hardening modifications we developed, under our Antelope program, to improve the nuclear hardness of the A-3 missile below the re-entry system. They were offered, but are not procuring, the RV hardening modifications and penetration aids also developed by us under Antelope. Instead, their preference has been to devise re-entry system modifications similar to those of Antelope, but with a higher level of nuclear hardening for RVs and pen aids, and with also a larger number of pen aids.

They have been working on the basic techniques involved in their own laboratories, and we have rendered assistance by providing technical information relative to Antelope, and also by providing space on our underground nuclear tests for exposure of samples of nuclear-hardened material developed and furnished by them.

Until recently, their efforts have been relatively modest and primarily exploratory in nature, with no decision on whether to proceed with system development or deployment. Now, however, there has been a Ministerial level decision, taken in late 1970, to implement project definition on an improved design. Because of its similarity to the U.S. Antelope program, but with anticipated improved performance characteristics, they refer to the program as Super Antelope, with a code name of ARTIFICER.

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The British are quite anxious to secure U.S. assistance in the program as quickly as possible. The extent of total assistance desired is not presently defined, as British thinking has not yet fully crystallized. Initially, they are asking for the following:

- (a) U.S. comment and guidance on their proposed designs of RVs and pen aids.
- (b) Commitment to allocation of space on future U.S. underground tests -- roughly-through-1975.

There is little doubt that, if the program were carried to completion, and if we complied fully with British needs (as they become known) the total U.S. involvement would go much deeper than the above. As the attached fact sheet notes, it could include such items as provision of range test facilities, flight test hardware, design, analyses, and perhaps overall system development or integration. They have mentioned the possibility of hiring Lockheed, the U.S. Antelope system contractor, to function in a similar role in this case, although they also have said they wish to do as much work in the U.K. as possible.

I should note that this represents a somewhat different form or level of assistance than we have provided to date. Heretofore, we basically have provided them the opportunity to purchase items we had developed for our own use. In this case, we would be providing facilities, manpower, technical guidance, etc., for the development of a major modification specifically for the U.K. Polaris, without projected U.S. application. Even though they would expect to work out a suitable basis for payment, the distinction in kind still should be noted.

The question arises, of course, as to what position we should adopt -- to help or not, and to what degree. Considering our past and present relationship with the U.K., I believe it proper to lend them assistance, and I plan to do so. I do not feel it should be open-ended, however, nor represent a firm, long-term commitment. In fact, insofar as underground testing is concerned, our own planning is uncertain beyond a year or two in the future. But the British, themselves, are committed only

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to project definition -- approximately a two year endeavor -- not to a complete program, including engineering development and follow-on production. I believe this provides a reasonable U.S. position -- i. e., to commit to assistance in the project definition phase, but with the understanding that this commitment is made without prejudice to our freedom of action beyond that point, and that further assistance would have to be the subject of a future decision. I realize, of course, that, once we start down this path, future refusal becomes more difficult. Nevertheless, I believe that we should hold open our options and that the point should be clearly understood. Since the British have adopted essentially the same position themselves, I see no real difficulties with this approach.

I feel you should be fully aware of this matter and the course I intend to follow. In providing the assistance requested, I intend to impose the following qualifications, in addition to the general one noted above:

- (a) No information will be furnished which reveals specific vulnerabilities, or vulnerability levels, of U.S. weapons.
- (b) No significant interference to U.S. programs is occasioned thereby.
- (c) Suitable provisions for reimbursement are effected.

I should note that the British have established a very rigid security policy concerning this program, limiting access within the U.K. to a relatively small number of people. They ask that the U.S. establish similar procedures.

In the 3 March SRG meeting on NSSM 100, you requested a U.S. technical assessment of the chances of success for the U.K. design, particularly in the next series of underground tests, in which they plan to have scale models of their re-entry vehicle designs. You implied that we have knowledge or experience which indicates they are on a wrong path, are wasting their time and money, and that we should tell them so.

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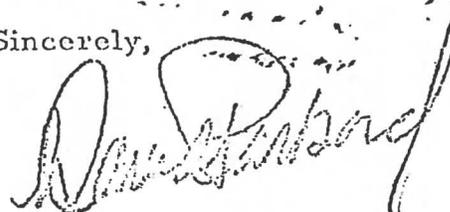
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We convened a special meeting of knowledgeable U.S. experts to examine this question. In summary of their conclusions, such is not the case. There is no U.S. experience directly applicable to the U.K. design; any U.S. evaluation must be based primarily upon theoretical considerations. In the opinion of the convened group, however, there is no reason to believe the U.K. design to be unsound. Their designers appear well grounded in the theoretical aspects and to have chosen their configuration with care and awareness of the problems involved. Our recommendation is that they proceed as planned and our expectation is that the U.S. will learn something in the process.

I shall keep you periodically informed of the progress in the matter and, particularly, will advise you if, at any time, the situation takes a turn in significant variance from that described above.

We have had informal discussions on the U.K. request with State. I am sending a copy of this letter to John Irwin.

Sincerely,



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FACT SHEET ON UK REQUESTS
FOR MISSILE ASSISTANCE

BACKGROUND:

The UK has four Polaris submarines, each equipped with 16 Polaris A3 missiles. The missile and other parts of the weapon system were procured from the US and, with one exception, are identical with our own. The exception is the nuclear warhead within the re-entry vehicle. This warhead is a UK design, furnished by them. The submarines themselves also were built by the UK. -

The British have been concerned for some time over the proper steps to keep their missiles modernized. Improved penetration capability and hardening of the RVs to nuclear effects have been their chief concerns.

Several years ago, the US developed a series of modifications for the A3 missile, under our "Antelope" program. The modifications included "boost phase hardening" -- a series of changes to harden the missile, other than the re-entry system, to nuclear effects -- and a series of modifications for the re-entry system which included nuclear hardening for the RVs and provision of penetration aids. In this latter modification, one of the three RVs was replaced by a Penetration Aid Carrier (PAC), which contained simple guidance and propulsion systems. This PAC was released simultaneously with the RVs and then flew in such manner as to dispense penetration aids in a long "threat cloud," in the midst of which were the two remaining RVs.

The US deployed the boost-phase hardening modification, but not the re-entry system modifications.

The UK was offered both modifications. They have procured the boost-phase hardening, but not the re-entry mods. Their feeling was that they needed a greater degree of RV hardening as well as more, harder, and more sophisticated penetration aids. They have studied the problem for the last several years and have now come to a decision on the type of improvement they wish to pursue. They want to obtain US help in the matter.

WHAT THE BRITISH WANT:

The basic British philosophy, apparently, is to have the capability to pose a serious threat to Moscow. With, say, two boats on patrol at any given time (containing 32 missiles), the present A3 system would have difficulty achieving this objective in the face of the Moscow ABM. They would therefore like to modify the missile in a way to improve the situation.

NOTE: This document contains sensitive information on the British "Super Antelope" program, which the U.K. has asked be held closely, on a stringent need-to-know basis. Reproduction and dissemination hereof should be strictly limited in accordance therewith.

Their current plan is to modify the re-entry system in a manner patterned broadly after our own Antelope design, but differing in detail. Because of the similarity, and also for the hoped-for improved performance, they have called their program "Super Antelope." In brief, they would like to do the following:

a. Replace one of the three bodies with a Penetration Aid Carrier (PAC), which dispenses pen aids. The pen aids would be completely different in design from those developed by the US, and the objective is to have twice as many "aim points" per missile as did we (eighteen instead of nine). The PAC also would be a new design.

b. Increase the deployed spacing between the two remaining RVs, and harden them to nuclear effects to a sufficient degree, so that a single ABM interceptor would have a low probability of killing both RVs. Their preference is to harden the RVs to a level of 400 calories/sq. cm., (which is higher than US systems) but they will compromise down to a level of 250 cal/sq. cm., if necessary. Achieving this hardness will require a completely new RV shell -- i. e., the old UK warhead will be placed inside a completely new design RV. However, depending upon the design of the RV shell, the warhead and its mounting may also need redesign. The increased spacing will require other changes in the re-entry system mounting and deployment design.

The British are pursuing a primary RV design based upon a solid beryllium shell, with a bonded overcoat layer of 85% porous beryllium and a loaded carbon undercoat. (This design is not similar to any US design.) There is evidently a well-developed base in beryllium technology in the UK.

They are also pursuing a backup design using three-dimensional quartz phenolic (3DQP) for the RV shell. This backup was suggested to them by the Defense Atomic Support Agency. 3DQP is an experimental US material which has been tried in our ABRES program and has demonstrated good strength and re-entry heatshield performance. There are no plans to use it on any US RVs, however. It has a drawback in that, under exposure to a "cold" X-ray environment, it passes a much greater shock to the warhead (carried within the RV shell), than does the beryllium shell. With beryllium the present UK warhead could be used as is; with 3DQP it will require considerable redesign from a shock mitigation standpoint. The British are aware of these effects, however. There is no present experience in the UK with 3DQP.

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The UK is scheduled to place a 2/3 scale model of each design in a US underground test (Misty North) scheduled for spring, 1972, and additional samples of modified designs in another test (Diamond Sculls) scheduled for late 1972.

The overall effect of the above is a major modification to the re-entry system -- different from both the current A3 system and from that worked out under the US Antelope program.

WHAT THE BRITISH WANT FROM THE US:

There has been no concrete statement from the UK regarding the extent of assistance desired from the US. They admit frankly to not having defined their program in sufficient detail to project this. They desire to do as much work as possible themselves but, even so, there would still remain a major contribution necessary by us. An indication of what this could entail will be given below.

Thus far, the British have identified two general areas in which they would like assistance:

- a. US comment, guidance, and probably analysis, on British approach to RV design, from both hardening and aerodynamic standpoints. The same for pen aids, as well as guidance on pen aid carrier. They wish to avoid the delay and cost of going down any blind alleys which our previous experience could help them avoid.
- b. Support on US underground nuclear tests for exposure of British design samples. This would be for a period extending into approximately 1975, and would entail space, including enough for full size RVs, on a schedule and at the proper exposure levels, to mate properly with their development program.

Regarding the above, it should be noted that, first, the UK RV design is sufficiently different from that of any US design that US experience is not directly applicable. Any comment would be based primarily upon theoretical considerations, perhaps coupled to some degree with an extrapolation of our own experience. Secondly, we do not have our own underground test program planned far enough ahead to permit firm commitment thereon to support the British in the time frame they are requesting. These points notwithstanding, we could undoubtedly be of considerable help to them.

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In addition to the above, it is probable that they will want to have a systems flight test program consisting of approximately twelve missiles. These would be flown from our Eastern Test Range. Flight test hardware, with the possible exception of the test RVs, as well as flight test supporting activities, would be provided by the US. The British also mention the probability of needing a special RV test series, in addition to the above flight test program, using something like the Athena test vehicle. They indicate a preference for use of White Sands Proving Ground for this, since to provide the necessary test instrumentation at their own range at Woomera would be too expensive for them.

Design help also would be required of us, at least in interface areas, to insure that the redesigned re-entry system is compatible with the rest of the missile, to redesign the submarine-carried fire control system to provide the required pre-setting information to the PAC, to do trajectory analyses, and probably help in other areas as well. It is probable that they would prefer the overall integration task be performed by the US. They have mentioned informally, for example, the possibility of contracting with Lockheed (the system contractor on the US Antelope program), to undertake such a responsibility.

In sum, the US role could involve:

- a. Significant contribution in underground testing support.
- b. Significant contribution in design, design critique, analysis, system integration, fabrication, and related support activities.
- c. Significant contribution in use of test ranges and facilities.

SPECIAL NOTE:

The present British commitment is only to conduct a program definition phase which is expected to last approximately two years. They have not made, themselves, a decision to enter full engineering development, or production. The US could support such a program definition with a relatively modest effort and can face the question of further support at such time as the British themselves address the problem.

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NATIONAL SECURITY COUNCIL
WASHINGTON, D.C. 20506

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July 2, 1971

MEMORANDUM FOR:

Under Secretary of State John N. Irwin II
Deputy Secretary of Defense David Packard
Chairman, Joint Chiefs of Staff Admiral
Thomas H. Moorer
Director, Central Intelligence Richard Helms

SUBJECT: US-UK Nuclear Relations: NSSM 123

Attached is the study on US-UK Nuclear Relations prepared
by the Ad Hoc Group in response to NSSM 123.

In order to prepare for early decisions on this issue, may
we please have written agency views on the paper, particu-
larly the options, by close of business Thursday, July 8.


Jeanne W. Davis
Staff Secretary

Attachment

cc: Director, Arms Control and
Disarmament Agency
Chairman, Atomic Energy Commission

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NSSM 123 -- US-UK NUCLEAR RELATIONS

Analytical Summary

I. The Problem

We need to take an early decision on how to respond to a British request for assistance in upgrading their Polaris system. Conveyed to the US last fall in a letter to Dr. John S. Foster from Sir William Cook of the UK MOD, this request followed a Ministerial level decision in London to proceed with a Project Definition study of ways to improve the hardness and penetration capability of the warhead of the UK Polaris. The ostensible objective: a UK capability to penetrate Soviet ABM defenses and strike Moscow, or other major cities in the Western USSR. Known as Super Antelope, this program has already begun and will run until the end of 1972 or early 1973. At that time the British will decide whether they wish to produce and deploy this system, and possibly seek further US assistance in doing so. Alternatively, they could return to other options which we know they must be considering, such as developing a MIRV for the Polaris A-3 or asking us for Poseidon (which the Royal Navy is believed to want, but which Whitehall has so far rejected).

On March 25, 1971, Deputy Secretary of Defense Packard wrote you a letter summarizing the UK Super Antelope request and informing you of DOD's intention to respond affirmatively for the Project Definition phase, but without prejudice to our freedom of action beyond that point. This NSSM is intended to review that decision and to ensure that all interested agencies have an opportunity to present their views.

As described in the study, present British plans are to modify the reentry system of their Polaris A-3 by:

-- replacing one of the three RV's with a penetration aid carrier which dispenses pen aids in larger numbers and of different design than those developed by the US; and

-- widening the deployed spacing between the two remaining RV's, whose hardening would be increased to the point where a single ABM interceptor would have a low probability of killing both RV's.

A considerable amount of RV redesigning will be necessary to accommodate these changes, and possibly some redesigning of the missile and weapon system.

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As elaborated in a series of Pentagon meetings in late April, the British would like the following from the US:

-- the benefit of our analysis and design critiques on their approach to RV and pen aid design, including possible use of US contractors;

-- continued access to US underground nuclear tests to expose UK hardware samples, including at least one underground proof test of their new RV design;

-- possible use of White Sands Proving Ground for flight test of components.

Although they are only asking our assistance through a two year Project Definition phase, it is clear that the British would seek further US support of some kind in producing and deploying this system, should they decide to do so. (This would represent a much deeper US involvement in UK weapons modernization and an extension of the present US-UK special nuclear relationship. It could narrow our range of choice in our future European nuclear policy.) US involvement in the Post Project Definition phase might include:

-- additional underground effects test support;

-- continuation of design analysis and design critique support, with extension to redesign of affected portions other than the reentry system;

-- possible use of US contractors for RV fabrication; and

-- use of facilities of the Eastern Test Range in the Atlantic, possibly including US test missiles.

The British could request assistance in matters relating to post-Project Definition prior to completion of the Project Definition phase.

II. Commitments to the UK Under Existing Agreements

Although not presenting a rigorous legal analysis, the study reviews various agreements relating to US-UK nuclear cooperation:

-- The 1958 Agreement for Cooperation on the Uses of Atomic Energy for Mutual Defense Purposes, essentially a "framework" agreement, provides

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for cooperation in a number of areas, including improvement of atomic weapon design and attainment of delivery capability with particular atomic weapons; it leaves for subsequent determination the specific nature of the parts and information to be transferred. This agreement does not commit us to cooperation with the UK on Super Antelope, but it is broad enough to include such assistance if we decide to proceed.

-- The 1963 Polaris Sales Agreement commits us to make available to the UK, in addition to Polaris missiles, such related equipment and supporting services as the UK may from time to time require, plus any modifications we might make to the Polaris weapons system. Cooperation relating to warheads and penetration aids is, however, specifically excluded.

-- A September, 1969 joint US-UK memorandum stated that the US would work with the UK in evaluation of the hardness and vulnerability of the UK Polaris, make available to the UK information on the Antelope modification to Polaris (essentially RV hardening and addition of penetration aids) which we had developed ourselves, but rejected when we opted for Poseidon. We offered to provide support if the UK decided to go ahead with that modification, exchanging information on pen aids, and allowing the British to expose a limited number of samples in US underground effects tests. The AEC arranged to make available space in three US underground effects tests in 1970. Subsequently, however, the UK decided against Antelope.

-- While none of the foregoing agreements expressly commits us to assist the British with Super Antelope, which -- unlike Antelope -- is a system the UK is seeking to develop and which we ourselves have not developed, the impression has been given the British in a number of on-going technical exchanges that these same channels will be available for cooperation with respect to Super Antelope. In addition, Defense, which has informed the British in general terms (per Packard's March 25, 1971 letter to Kissinger) that we will assist them in the project definition phase of Super Antelope, has already established special channels under the 1958 agreement for the supply of information relevant to that program. Thus, a decision at this time not to assist the British with Super Antelope could be regarded in London as a shift in US policy. (However, the British are aware that Defense's approval of US cooperation on Super Antelope has been submitted to the White House for review.)

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The basis of the 1969 memorandum of understanding with the British was a series of recommendations emerging from a Senior Interagency Group study of US-UK nuclear relations in the fall of 1968, the most recent overall policy review. It recommended (in somewhat contradictory fashion) that we:

-- maintain existing arrangements with the UK, but limit exchange of weapons information and materials to what the British need "to carry forward their programs in nuclear weapons research and to maintain the effectiveness of their existing nuclear forces."

-- not, "in the absence of advance Presidential approval, encourage or commit ourselves to support any significant modification to existing British programs or any major new British program."

-- release, in response to British requests, "nuclear weapons information which the British need to maintain the effectiveness of their existing nuclear forces and to evaluate fully the alternatives available to them for improvement of these forces." (Note: This partially contradicts the guideline immediately above.)

Based on the SIG recommendations, the President submitted to Congress an amendment to the 1958 Agreement, which Congress approved, extending through December 1974 provisions for the transfer of certain atomic weapon parts and special nuclear materials to the UK.

(Comment: US nuclear cooperation with the UK has been continuous since 1958. While none of the above mentioned specific agreements commit the US to helping the British with Super Antelope, we have been working with the UK for the last several years in helping them to explore ways to improve their existing Polaris system. And we did offer them our Antelope modification in 1969, although they turned it down.

As set down in the 1968 SIG study, US policy is presently based on contradictory guidelines, as noted above. So far, Defense in its contacts with the British on their Super Antelope request, has created the presumption that we would assist the UK through project definition, although no formal reply has yet gone to the November, 1970 letter from Sir William Cook to Dr. Foster. Nevertheless, US-UK nuclear relations are Presidential business. The Super Antelope program can be considered a significant modification of the UK Polaris system and has only now been submitted for White House/NSC review. Obviously, it could be overturned by a Presidential decision, though this could have negative political consequences for US-UK relations as discussed below.)

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III. Implications of an Affirmative ResponseStrategic:

After examining available intelligence information, the British government has apparently concluded that Super Antelope will substantially improve their Polaris system's capability to penetrate Moscow defenses into the 1980's. They have not shared their analyses with us. (Indeed, one of the recommendations at the end of the study calls for an early joint intelligence review, if we do decide to assist the British, to ensure that we are both operating from the same data base, taking into account the latest information regarding the Soviet ABM program.) As far as we can tell, the British assume:

-- that Soviet ABM defenses will continue to emphasize very high altitude exo-atmospheric intercepts, with no high acceleration Sprint-type interceptor available;

-- that the loiter capability of Galosh is inadequate to achieve atmospheric sorting and be effective against Super Antelope when the two RV's are separated as planned; and

-- that no upgrading of existing SAMs for terminal defense is expected.

The study makes the judgment that Super Antelope is probably strategically sound and has a reasonable chance of success. However, it is also noted that Soviet ABM modernization could change this situation and force the British to conclude later that Super Antelope will not be adequate to meet their strategic objectives.

(Comment: Although the paper does not bring this out, the effectiveness of Super Antelope is probably contingent on the achievement of a SALT agreement which limits ABM's to the levels now being discussed, i. e., a moderate Moscow defense not exceeding 100 interceptors. If SALT fails and the Soviets move to a heavier or more sophisticated system, Super Antelope probably would not be sufficient. The British would probably need MIRV or Poseidon under these circumstances, assuming they still insist on hitting Moscow.

The paper also glosses over the point that the present UK Polaris system still has a reasonable chance of penetrating a Moscow ABM of 100 interceptors, assuming at least two British subs on station with 96 RV's plus some leakage and failures in the Soviet ABM. In this frame of reference, one option would be to try to persuade the British to save their time and scarce resources and

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forego what might prove to be a marginal improvement. It should also be noted that with their present system the British have the capability to hit other major Soviet cities not defended by ABM's, such as Leningrad, which is still a respectable deterrent. But the British choose to conclude otherwise.)

The study notes that the UK nuclear force makes a relatively small contribution to US strategic objectives. All UK strategic forces, when assigned to NATO are targeted solely against military targets, contributing currently about seven percent of the total coverage. The proportionate UK contribution will shrink even further as Poseidon enters the US force. Moreover, targets programmed to be struck by the UK are also programmed to be struck by the US in order to achieve the required damage expectancy and to hedge against the unavailability of the UK force. Under the Nassau Agreement, Britain retains the right to withdraw its force when "supreme national interests" are at stake. Under such circumstances, it is presumed that the UK maintains independent strike plans directed against Soviet urban targets. In short, the design objective which the UK has set for Super Antelope (penetrating the Moscow ABM) is more relevant to the national purposes of the UK Polaris force than to the role of that force in NATO strike plans. Moreover, an independent UK launch capability diminishes our control over the initiation and conduct of nuclear war, and thus poses a potential inconsistency with US objectives.

On the other hand, the UK force does contribute to deterring a Soviet attack against Western Europe, although the amount of that contribution is controversial. Two views are summarized in the paper:

-- Given that geography and politics tie Britain more closely to Europe than the US, and that recent changes in the US-USSR strategic balance have somewhat diminished the credibility of a US nuclear response to a Soviet attack on Europe, there are circumstances in which the Soviets might see a UK nuclear strike as more likely or credible than a US attack in the context of an incursion in Europe. SALT and US domestic pressures to reduce our troop levels in Europe reinforce this tendency. Thus, the UK (and also the French) nuclear force could assume increasing importance in adding to Soviet uncertainties regarding a nuclear war in Europe. This, it can be argued, is in our interest.

-- In another view, an independent UK launch -- which would invite the obliteration of the UK by Soviet missiles -- is basically so implausible as to have little decisive effect on Soviet calculations. Short of a direct Soviet attack on the UK, it is difficult to postulate plausible circumstances in which the Soviet Union might perceive the UK as more likely to launch a nuclear attack than the US.

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After this review, the study concludes, somewhat abruptly, that although US nuclear credibility may have been somewhat reduced, the US nuclear commitment still plays the primary role in deterring a Soviet attack against NATO. Neither French or UK nuclear forces are capable -- now or in the foreseeable future -- of supplanting the US nuclear guarantee, but these smaller nuclear forces do make a contribution to deterrence in Europe.

(Comment: Unfortunately, this study breaks no new ground on the subject of US interest in allied nuclear forces. There is a somewhat spurious quality to the argument that Super Antelope, aimed as it is at improving the UK city-busting capability which does not directly support NATO nuclear plans, will further diminish our control over the initiation of nuclear war in Europe. Whether or not we assist them, the British will continue efforts to improve their nuclear force and will doubtless continue to have separate national strike plans targeting their force against Soviet cities. Reminiscent of old US doctrine from the 1960's, maintaining central command and control over all alliance nuclear forces is no longer possible anyway, and perhaps not even desirable. Super Antelope will not change this situation. The study also skirts the point that the more credible and effective the UK force is in Soviet eyes, the greater its contribution will be to deterrence.)

Political:

Clearly as committed to maintaining an independent deterrent as was its predecessor, the present British government will probably pursue project definition with or without US assistance (although without access to underground nuclear tests and missile flight ranges this would be expensive and more difficult). A US decision to assist through Project Definition, although we are not obligated to do so, would be consistent with the US-UK special nuclear relationship as it has developed since 1958, and especially since Nassau. Indeed, the British could argue on political grounds that it is a natural extension of our relationship, especially since we offered them Antelope. A positive response would be consistent with the overall political relationship which the President wants to maintain with the Heath government. Rejection of the British request, on the other hand, could be expected to color other areas of our political and military relations (although perhaps not as seriously as suggested in the paper).

(Comment: The study notes in Appendix C that a US refusal to provide the help requested might in British eyes represent a change in US policy as significant as the cancellation of Skybolt in 1962. We doubt that this is

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necessarily the case, especially if our refusal were accompanied by a high level approach to the British government, stressing our interest in encouraging greater West European defense and nuclear cooperation and our concerns about SALT discussed below. Where the Skybolt analogy seems more relevant is in the case of US assistance through Project Definition, but then followed by a refusal of further support if London decided to proceed with deployment. The problem we face here is the difficulty of proceeding through Project Definition and yet maintaining our flexibility. How do we convey to the British that we mean seriously to review the whole situation at that point and can promise nothing further at this stage?)

The study correctly notes that the current UK request impinges on a range of multilateral defense relationships, including our relations with France and other European countries. Our entire European nuclear policy is affected, especially whether or not we want to change the Atlantic Alliance's nuclear status^{quo} in the years ahead. (A major deficiency is the absence of any new thought regarding what our European nuclear policy should be in the 1970's and how our response to the current UK request might be related to it.) The paper confines itself to the following contentions:

-- With respect to British entry into the European Community, Pompidou apparently accepts the special US-UK defense relationship, at least for the present, and does not consider this incompatible with British membership. Thus, US assistance to the UK is not likely to jeopardize British entry prospects. (On balance, this is a fair assessment. However, if US assistance became public knowledge, it could jeopardize ratification of British accession, especially in France. Pompidou might have to admit to ardent Gaullists that this was not a "European" policy; he could argue that it was contrary to his understanding with Heath. Sensitive on this point, CIA questions the judgment in the paper.)

-- The fact that we are now beginning some assistance to the French in nuclear-related areas would tone down any possible official French charges of discrimination, should new assistance to the British become known in Paris.

-- The moment is not at hand to encourage UK-French nuclear cooperation, since these countries have agreed to postpone the issue until European construction (and the evolution of the French force) is further advanced. Thus, US assistance to the UK conditional on London's exploring nuclear cooperation with the French would be inappropriate at this stage. (It would also complicate SALT.) US assistance to Super Antelope, if properly limited, need not reduce our future flexibility toward supporting or opposing such cooperation or movement toward a European nuclear force. (Basically

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sound, the problem with this judgment is again how to avoid committing ourselves at this time to deeper involvement in modernization of the UK force.)

(Comment: One problem, not addressed in the study, is that by assisting the UK with Super Antelope we are promoting further nuclear disparities in Europe by allowing the British to get further ahead of the French, thus making the possibilities of any Anglo-French cooperation later more difficult. In this context, saying no to the British might lead them to postpone action on modernizing their deterrent until SALT was clearer, at which time the French force would be more equal to the British and joint actions for modernization on a cooperative basis could be more easily discussed. Of course, if we held our assistance to Project Definition and then decided against further cooperation in two years time, we might still succeed in holding the UK at present levels. But this would be more difficult.)

SALT:

If US assistance to the UK on Super Antelope became known in Moscow, the Soviets could charge that we were "circumventing" a SALT agreement by aiding a third country in the development of strategic arms. The Soviets could be especially sensitive since the objective of Super Antelope is to penetrate Soviet ABM defenses. This might make more difficult the task of negotiating a limitation on ABM's.

-- However, since the next round of SALT will be focused on an ABM agreement, coupled with some measures restraining offensive arms, the question of non-transfer of offensive weapons will take on less immediate importance. If there is a formal provision not to transfer ABMs, we would need to take into account the precedent of such a provision later applied to offensive systems.

-- The study concludes that Project Definition assistance on Super Antelope, if carried out prudently, would not be likely to jeopardize our objectives in SALT. But the subject should be kept under continuing review. And it would be wise to limit ourselves to less visible assistance, declining overt forms of cooperation such as US manufacture of RVs or allowing the British to use US flight test ranges. Any early US involvement in post-Project Definition projects of Super Antelope, or in a UK MIRV program, should be avoided from the SALT standpoint.

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IV. Options:

1. Terminate Assistance on Project Definition of Super Antelope. (Could be couched in terms of "postponement" of a decision on assistance.)

Pro: Avoiding a possibly troublesome issue in SALT, this might also encourage closer UK association with Europe by reducing special US-UK defense ties. It might also save the British effort and scarce resources, if we could persuade them that their present deterrent is adequate to hit Moscow, that Super Antelope would at best be a marginal improvement, and that they should wait for the outcome of SALT before making modernization decisions. More UK resources might be available to improve NATO conventional forces.

Con: By interrupting a project already launched and faulting on a firm UK space allocation at a forthcoming underground effects test, as well as cancelling scheduled meetings on cooperation, this course of action might adversely affect overall US-UK relations, not to mention the President's relations with Prime Minister Heath. In the military sphere it might mean jeopardizing some projects carried out with the UK in which we have a major interest (e. g. Holy Loch), as well as giving up any chance of profiting from future technical exchanges, e. g. on hardening of RV's where we might stand to learn. UK attention might be diverted toward requests for other kinds of assistance, such as MIRV or Poseidon, which would be more difficult for us to handle.

2. Continue US Assistance through Project Definition per March 25, 1971 Packard letter to Kissinger. We would help with RV hardening, development of pen aids, and allocation of space in underground tests, but preserve freedom of action beyond project definition.

Pro: Living up to the impression already created by Defense officials, such assistance would enable the UK to evaluate its options on how best to modernize its deterrent, thus increasing overall Western strength, and preserving UK confidence in the US. This cooperation, from which we might learn something ourselves about RV hardening, would not divulge advanced US missile technology.

Con: Reducing US flexibility by making it difficult not to aid the British beyond Project Definition in deploying Super Antelope, such a policy might lead us into a new "Skybolt-type" situation if indeed we anticipate eventual curtailment of the US-UK special nuclear relationship and promotion of West European defense/nuclear cooperation over the longer run. If it became publicly known, it could cause some complications for UK entry into

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the EC. It might annul the benefits from our recently initiated modest military cooperation with France. Difficulties could be caused in SALT.

Sub-Options on the Extent of our Assistance

(Comment: Two sub-options are suggested under Option #2: 2a would potentially limit our Project Definition assistance somewhat more than suggested in the Packard letter; 2b would go a step beyond. However, both have built in mechanisms to review relevant items on a case-by-case basis. To a degree, this is hair-splitting. But these operational considerations could be important, especially since 2b would involve early commitments to post Project Definition.)

2a. Assistance through Project Definition, but with an understanding that some requests pertaining to highly visible assistance (e.g. flight testing on US ranges, and, in State's view, presence of UK officials at US underground tests) should be considered on a case-by-case basis.

-- Limiting more visible assistance would lessen the chances of complications in SALT, while specifically indicating to the UK in advance that we plan to be cautious. We would be reducing chances for implicit commitment to assistance beyond Project Definition (in contrast to option 2b). On the other hand, UK planning for post Project Definition could be hindered.

2b. The same as 2a, but with the additional provision that we would envision at the outset lending assistance on requests relating to Post Project Definition (e.g. use of US contractors to begin fabrication of long lead time items) before the end of the Project Definition phase, although such requests would also be reviewed on a case-by-case basis.

-- A more forthcoming position, which could benefit UK planning, this option would still give us flexibility in considering UK requests. However, it could make it more difficult to reject future UK requests, and it could increase the chances of complications in SALT.

(Comment: State, Defense and AEC, -wishing to be forthcoming to the British as long as we preserve some flexibility and have a review mechanism, favor this option. The paper is not clear as to whether we would tell the British the substance of this option, or simply view it as our own internal USG guideline -- probably preferable.)

Procedural Recommendations:

If option 2 is selected, or variants thereof, the study proposes the following operational guidelines:

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1. Defense, in notifying the UK of Presidential confirmation of US assistance in Project Definition, would also indicate:

-- any restrictions on our assistance (per 2a or 2b);

-- our wish to consult at an appropriate time, should HMG formally decide to proceed beyond Project Definition;

-- that an early joint intelligence review would be desirable concerning the Soviet ABM program, to ensure that both the UK and the US are operating from the same intelligence data base.

2. Moreover, Defense would assume responsibility for future coordination within the USG on Super Antelope, including all interested agencies, preparing policy questions at appropriate times which require executive decisions. The Secretary of Defense would forward periodic status reports to the President, including any significant developments requiring Presidential decision.

(Comment: Other coordination mechanisms are possible. Consideration might be given to bringing this into the NSC system, although it is true that Defense has the primary action on handling our assistance on Super Antelope.)

3. State would inform the UK through diplomatic channels that:

-- we can give no assurance regarding the success of this project, since we have little experience in some of the areas (e. g. higher levels of RV hardening) that the British will want to explore;

-- because of sensitive developments under way in SALT and with respect to British entry into the European Community, this project should be closely held, and any aspects risking public disclosure should be carefully reviewed by each government before concurring. We will also need to review the possibility of a conflict between a SALT agreement and future US assistance to the UK as SALT V unfolds.

Concluding Staff Comment:

1) There has been a tendency, as this study reveals, for our UK nuclear policy to be formulated in a highly decentralized fashion, for example, at the working levels of Defense and the AEC. State, in particular, has felt left out of the action. One of the fruits of this NSSM will hopefully be a watch and review mechanism in which all interested agencies can participate, and which should be charged with bringing larger policy questions more

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promptly to White House attention. This is especially important if we decide to proceed to assist the British through Project Definition, but want to reserve our future options, since this could get us into a Skybolt-type situation in early 1973. -

2) This study offers no new insights into what our longer range European nuclear policy should be in the 1970's, and where our UK nuclear policy fits in. After the UK is in the European Community, and when SALT results are clearer, we will need to review this whole picture with a particular eye on whether West European defense cooperation might or should increase and what role we could play. This could involve reducing US-UK nuclear ties, or assisting the UK only on an equal basis with the French in some kind of Anglo-French or European framework.

3) NSSM 123 included a request for an assessment of a possible future UK request for MIRV technology (or Poseidon). Except for noting the fact that the British Navy continues to be interested in Poseidon, but has so far been held back by the top levels of Whitehall, the study does not suggest what our response should be if a UK MIRV or Poseidon request should come later. It simply flags the issue for future review.

4) Another point omitted in the study is the need to consult at some point with the Joint Committee on Atomic Energy if we decide to go ahead on Super Antelope. As evidenced by a letter from Holifield to Chairman Seaborg last fall, the Committee is sensitive to even our present level of nuclear cooperation with the British. (The Seaborg reply dated May 10, 1971, which was coordinated among the agencies and is appended to the study, carefully skirted the Super Antelope question.) With appropriate consultations any Committee opposition should be manageable, but this could, of course, be a problem.

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