

Ref. A0250

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PRIME MINISTERMISC 7: Future of the United Kingdom Strategic Nuclear Force

## BACKGROUND

When MISC 7 discussed this on 24th May they agreed that a team of officials should visit Washington to explore, without commitment, four alternative options: the Trident C4, Submarine-Launched and Air-Launched Cruise Missiles (SLCM and ALCM) and a modernised version of the Polaris A3. Mr. Wade-Gery, who led the team, sent your Private Secretary on 24th August an initial summary of the outcome. My minute of 14th September, sent in my capacity as Chairman of the Official Steering Group, gives a fuller account and seeks agreement to the next steps.

2. The main point that has emerged from the discussions is that our initial thinking seems to be confirmed by the technical information which the United States have very helpfully made available to us. This has enabled us to do the further necessary work on Part III of our report on the future of the United Kingdom strategic nuclear force which deals with the comparative evaluation of system options. Although much information that the Americans gave us tended to support the case for the Trident the other options (but see below on ALCMs) are being scrupulously examined and kept open by the team. Their report should be ready for consideration and a decision in principle on the preferred option by the end of October. Meanwhile for this meeting Professor Mason, who is leading the work on Part III, will be available outside the Cabinet Room if there should be any detailed questions which the Committee wish to put to him.

## HANDLING

3. You will wish to ask the Secretary of State for Defence whether he is content with the position set out in the interim report. The points to establish in subsequent discussion are:-



- (a) Is it generally accepted that our discussions with the United States are proceeding along the right lines?
- (b) Do we now know sufficient about the possible disadvantages of an Air-Launched Cruise Missile force to be ready to discard this option at this stage? The military objections seem significant.
- (c) Is it agreed that we should aim to take a decision on which system to go for this autumn i. e. at the same time as we take a decision about Theatre Nuclear Forces (TNF)?
- (d) How far is American anxiety for our help in persuading our continental allies to accept United States Long-Range TNF proposals likely to be to our advantage in negotiating a successor to Polaris?
- (e) Are Ministers content to wait for the comparative evaluation of systems options report to emerge for their consideration or are there any specific political considerations that they would wish to see taken into account in the evaluation? For example, are they content that a successor system should depend on the United States for some of the key elements of its logistic support, as Polaris does?
- (f) The United States team in Washington have indicated five other topics which they wanted to consider at the further round of discussions which they wish to have. These topics include "possibilities for co-operation in other fields". Are your colleagues content for officials to try to establish what they have in mind?

## CONCLUSION

4. In the light of discussion on these points the Committee might be guided to reach the following conclusions:-

- (a) To note the position reached.
- (b) To agree that an ALCM force should be excluded from further consideration.
- (c) To agree that further discussions should be held with United States officials.
- (d) To agree to reach a decision on this subject in the light of the proposed further discussions with United States officials and the report on the comparative evaluation and costings of systems options which will be available at the end of October.





Foreign and Commonwealth Office

London SW1A 2AH

The Foreign & Commonwealth  
Secretary mentioned this to the  
Prime Minister yesterday.

28 September 1979

R. Whitmore & Co. 28/9  
28/9

Dear Michael,

In a private conversation in New York on 24 September, Mr Vance raised with Lord Carrington the future of the British nuclear deterrent. He volunteered that he would recommend very strongly to the President that the Americans should make available to the UK the Trident C4 system, including the associated MIRVED technology, should we decide to ask for this. Lord Carrington was struck by the firmness of Mr Vance's assurances, though he recognises of course that the final decision will depend on the President.

I am copying this letter to the Private Secretaries of the Secretary of State for Defence, and the Chancellor of the Exchequer; to Sir R Armstrong; and to Martin Vile.

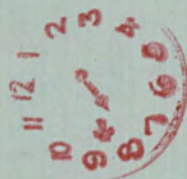
*Yours ever*  
*GGH*

(G G H Walden)

M O'D B Alexander Esq  
10 Downing Street



1979



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Ref: A0233



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TOP SECRET

PRIME MINISTER

*[Handwritten signature]*

Future of the United Kingdom Strategic  
Nuclear Force

I attach a paper produced by my Steering Group on Nuclear Matters for consideration at the meeting of MISC 7 arranged for Wednesday, 19th September.

I am sending copies of this minute to the Home Secretary, Foreign and Commonwealth Secretary, Chancellor of the Exchequer and the Secretary of State for Defence.

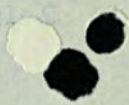
LONDON

*[Handwritten signature]*

(John Hunt)

14th September 1979





SECRET

STATE DEPARTMENT

Department of the United States

Office of the Secretary of State

Washington, D.C.

Office of the Secretary of State

Washington, D.C.

SECRET

John H. [Name]

14 SEP 1958

Washington, D.C.



FUTURE OF THE UNITED KINGDOM STRATEGIC NUCLEAR FORCE - INTERIM REPORT

Note by the Chairman of the Official Steering Group on Nuclear Matters

INTRODUCTION

1. At their meeting on 24 May (MISC 7(79) 1st Meeting) Ministers gave preliminary consideration to the three-part report prepared last year by officials on the future of the UK strategic nuclear force after the present force ceases to be viable early in the 1990's. They directed that a team of officials should visit Washington for further exploration with the US Government of four system options, without either commitment of policy or order of likely preference. The four options were:

- i. A submarine force carrying the Trident I (C4) ballistic missile.
- ii. A submarine force carrying a modernised version (A4) of Polaris.
- iii. A submarine force carrying cruise missiles (SLCMs).
- iv. An aircraft force carrying cruise missiles (ALCMs).

THE WASHINGTON VISIT

2. The team of officials, with FCO and MOD members under Cabinet Office leadership, visited Washington in mid-August. They were helpfully received and given much technical and financial information. No major surprises emerged in either the technical or the resource fields. The information is now being used in the reworking of Part III of the earlier report - the comparative evaluation of system options. This should be ready for Ministers by the end of October. It will of course contain the best available estimates of cost.

3. The US team, led by the Deputy Director of the National Security Council Staff, reaffirmed the basic US political decision to help us in the maintenance of our strategic nuclear capability after Polaris. It was implicit that this should be on the same basis as now: ie we would have full independence as regards operational control while remaining dependent on the Americans for some key elements of logistic support. The Americans seemed content that (as we would wish) a regime comparable to the present Polaris Sales Agreement would continue, although they may want to revise some of the details.

4. The Americans stressed that no decisions had been taken beyond the main point of principle, and that the talks accordingly could carry no policy commitment on their side, any more than on ours. Subject to this, they said that there was



at present no particular US policy preference among the four options.

5. Some signs of American thinking on the pros and cons of our four options were however visible. In military terms, they were clear that ALCMs would be a poor choice, because of our vulnerable geography; and that C4 would be the most effective. There was some suggestion (not strongly put) that a cruise missile choice might give logistic savings through a degree of commonality with a CM theatre force (which they are for other reasons eager to see us acquire, though they fully understand that we have taken no decision on this). They foresaw a security complication over letting us have data for the sophisticated guidance system which we would want for cruise missiles; but they seemed confident it could be overcome.

6. Two points emerged on which our team gave preliminary explanations but the US will clearly want to be satisfied before they take policy decisions:-

a. The Americans stressed that the supply of MIRVs (under the C4 option) would be a major step requiring careful thought.

This point appeared to relate to the possible impact of a sharp increase in UK strategic warhead numbers upon the Soviet attitude, especially on deep cuts within SALT III (though the US reaffirmed their basic view that UK systems should not be included in SALT III). It would in the Steering Group's view be wrong to interpret this message as a preliminary to intended refusal. But it puts us on notice that if we want MIRVs we must make a good case to help the Administration meet domestic or Soviet criticism. This can certainly be done, and contingent preparation is in hand.

b. They indicated concern that the resource burden of a successor system should not imperil our conventional contribution to NATO.

It is not possible to assuage this concern in detail, since the size of the Defence Budget in the relevant years cannot be known now. But we can make a good case in present circumstances that no major distortion need be feared. Briefing work is in hand on this also.



7. They agreed that our eventual decision on a successor to Polaris should be carefully presented to the other Allies. They appeared to have France particularly in mind.

8. They also talked in general terms about the possibility of extending into other fields the close Anglo-American co-operation so successfully practised over strategic nuclear weapons. It is not clear whether this is the first hint of a political price-tag.

NEXT STEPS

9. We see much merit in seeking to carry matters forward briskly enough for Ministers to be able, should they so wish, to put a firm request to the US this autumn, before the US Presidential primaries are under way and also before the SALT process has moved to a point where the Administration focus more on their relations with the USSR over SALT III than on those with Congress and their allies over SALT II. This would also fit well with the timetable within which Ministers are likely, for Alliance reasons, to need to take a decision on British long-range theatre nuclear forces. The two decisions are of course distinct; but their interaction is such that neither can sensibly be taken on its own.

10. The United States team in Washington indicated that they would like to have a further round of discussion on the same basis in October, before the UK decided finally what request to make. We must clearly accept this, and may gain further useful insight into American thinking. They mentioned five rather disparate topics on which they wanted to reflect further before this next round: MIRVs; CM guidance arms control; implications for other Allies; and possibilities for co-operation in other fields. They did not rule out putting to us at that stage considered policy preferences as between our options.

11. Our reworking of the comparative evaluation of system options is throwing up issues of detail on which further exploration with the US is desirable at a technical level not suited to the main contact team. This will be undertaken on a limited and discreet basis.

12. These consultations can be completed in time to meet the timetable for submission of the revised report on system options by the end of October. The only substantive decision which Ministers may wish to consider now is whether the studies could be shortened and simplified at this stage by concentration on



the three submarine-launched options. The Washington discussions confirm the earlier view of officials, which the Chiefs of Staff endorse, that an ALCM force is a highly unattractive option. A note on the main consideration is at Annex.

RECOMMENDATIONS

13. Ministers are invited:

- a. to take note of the position reached and the work in hand;
- b. to consider whether the options to be evaluated should continue to include an ALCM force;
- c. to agree that further discussion of the options should be held with US officials;
- d. to agree that a comparative evaluation and costing of system options should be presented to them at about the end of October.

Cabinet Office

14 September 1979



AN ALCM-BASED STRATEGIC FORCE

1. The critical feature of an ALCM-based strategic force is that it would have to use airfields. There is no prospect whatever that an aircraft with large CM carrying capacity yet not dependent on runways will be available this century.
2. The location of airfields in the UK will be known to the Soviet Union, whose land and sea-based missiles could readily destroy all of them. The proximity of the UK to the USSR means that missile flight times would be only a few minutes. This makes the UK situation widely different from that of the US, whose ALCM-carrying fleet (besides being only one of three large and complementary strategic forces) would have warning time long enough for a large proportion to take off from ground-based alert and get clear of any pre-emptive strike.
3. Before the RN assumed responsibility for the UK nuclear deterrent with their Polaris SSBs, the task was fulfilled by the RAF 'V bomber' force. 15% of its aircraft were maintained at a permanent 15 minute Quick Reaction Alert (QRA) readiness to launch. In periods of tension the whole of this force could be brought to the same state of readiness by deployment to dispersal airfields (not more than 4 aircraft to each). This readiness time could be reduced to 5 minutes for periods up to 4 hours (with crews in aircraft) and, for very brief periods only, to 2 minutes (engines running and aircraft located at the end of the runway).
4. The warning time - provided by the Ballistic Missile Early Warning System - of a nuclear ballistic missile attack on UK, could still be as little as 4 minutes. It follows therefore that unless in the 1990s and beyond the UK were content to go back to a risk of pre-



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emptibility which was abandoned as unacceptable in the 1960s (when Soviet pre-emptive power was far less than now), an ALCM force would have to be capable of maintaining an airborne alert posture for long periods, if not permanently. The number of missiles kept airborne would have to be capable of meeting whatever damage criterion Ministers judge deterrence to require in the post-Polaris era.

5. Computation of how many missiles airborne this entails depends not only on the damage criterion laid down and on system reliability, but also on assumptions about in-flight losses to future enemy air defences. Precision now is impossible. However, the work being done on the SLCM option, which will be set out fully in the autumn report to Ministers, is based on a minimum requirement to launch 300 CMs. The current US concept of a purpose-built ALCM-carrier for the 1990s envisages an aircraft carrying 28 CMs (and costing \$75-110M). Eleven would be needed to launch 300 CMs. To provide and maintain for (say) 20 years a force capable of maintaining 11 aircraft on airborne alert would be likely to require the purchase of some 45 aircraft (allowing for ready reserves, turn-around between flights, repair and maintenance, training and losses). Officials judge it most unlikely that such a force, plus weapons, bases and all aspects of support, would prove materially cheaper than submarine-launched forces (BM or CM) of equivalent damage-inflicting capability; it could well be much more expensive.

6. Even if a force capable of airborne alert on this scale were provided, there would remain the difficulty (unless redundant base support facilities were provided on a huge scale) that a small-scale pre-emptive Soviet strike on its home airfields would reduce to a matter of a few days, or even of hours, the time for which we could keep our capability operational.

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7. A broad costing for this force could be developed in parallel with that of the submarine-launched options. Before further staff effort is assigned to this, however, Ministers may wish to consider whether the concept of a force which entailed having some hundreds of strategic nuclear warheads permanently or frequently airborne in or near UK airspace, and which remained also subject to the operational drawback noted in paragraph 6 above, offers enough promise of acceptability to warrant continuing study.





CABINET OFFICE  
70 WHITEHALL  
LONDON SW1A 2AS

Prime Minister

On para. 5, there is always the possibility of a leak in Washington.

01 233 8378

Ref: B 05803

24 August 1979

B G Cartledge Esq  
10 Downing Street  
SW1

If there is one, would you be happy with the public line at 5(a)?

5(b) should, I think, be avoided - it would start too many heads running and it should be possible to hold to (a) alone: do you agree? Ben  
24/8 average.

Dear Bryan,

SUCCESSOR TO POLARIS

The restricted group of Ministers agreed on 24 May (MISC 7(79) 1st Meeting, item 1) that a small team of senior officials should pay an early visit to Washington to discuss, without commitment, details of 4 possible options for a successor system to Polaris as the UK strategic nuclear deterrent: the Trident C4 missile, submarine launched cruise missiles (SLCM), air launched cruise missiles (ALCM) and a modernised version of the Polaris A3 missile (known as A4). Following an exchange between the Prime Minister and President Carter, in which he confirmed that all these 4 alternatives remained open under the Salt II treaty, the visit finally took place last week. I led our team, accompanied by Ron Mason and Michael Quinlan from the Ministry of Defence and by Patrick Moberly from the Foreign and Commonwealth Office. In John Hunt's absence I am writing to let you know how we now expect matters to go forward; and to ask for one specific piece of guidance (see para 5 below).

2. The visit took place later than we had hoped because of what seem to have been genuine American difficulties in fielding their own team, which was led by David Aaron, Brzezinski's deputy on the National Security Council, and included officials from the Department of Defense, State Department and White House. We were cordially received. Aaron emphasised the importance which the US Government attach to the British deterrent and made clear that they have taken a firm decision to co-operate with us on its future. Beyond that he indicated, as foreseen, that the talks were without policy commitment on the US side (as on ours). But the two teams had a useful exchange of views and we acquired new technical and cost information on the basis of which we are now starting work on a revised paper on the systems options. This will replace Part III of the study by officials on factors relating to the future of the UK deterrent, which was before the May meeting of MISC 7.

3. Ron Mason is taking the lead in preparing this up-dated analysis, which we aim to complete in the course of October. It could then form the basis for a meeting or meetings of MISC 7, and a Ministerial decision between the policy options. This would put the Prime Minister in a





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position to send President Carter a further message indicating which we want to go for. A timetable of this kind would in fact fit in well with Ministerial consideration of the separate but related question of Theatre Nuclear Force Modernisation. Decisions on that will be needed in time for Nato meetings in November and December.

4. Meanwhile an earlier meeting of MISC 7 has (as you know) been arranged for 19 September. This will enable Ministers to take an interim look at the Polaris Succession issue as well as at the Theatre Nuclear question. It will also enable Ministers to provide guidance for a further Anglo-American meeting of officials, on the same basis as last week, which Aaron indicated that he would like to have sometime in the next two months. We will arrange for that to take place after 19 September. It may offer a convenient way of pursuing some of the technical issues thrown up by our current studies; and our team may need to be slightly enlarged for that purpose.

5. Only one point needs to be settled now. Subject to the Prime Minister's views, my colleagues and I agreed with Aaron that both sides should for the present do all they can to avoid any publicity for our contacts; that any questions about the subject of last week's visit (which has so far attracted no notice) should be answered by general reference to topics of mutual interest in the defence field; but that, if there are direct questions about whether the Polaris Succession issue is under Anglo-American discussion, the reply should be

(a) that Anglo-American discussion over a wide range of defence nuclear questions has been for many years, and remains, a continuous process;

(b) (if it becomes absolutely impossible to get by with (a) alone) that contacts of a preliminary kind are taking place about a successor to Polaris.

Since a direct question could well be asked in Washington, e.g. during resumed Senate hearings on Salt II, Aaron has asked me to let him know if the Prime Minister agrees with this line, for use (but only if necessary) by either Government. I should therefore be grateful if you could seek the Prime Minister's instructions on whether I may do so.

6. I am sending copies of this letter for information to the Private Secretaries of the other members of MISC 7, viz the Home Secretary (in his personal capacity), the Foreign and Commonwealth Secretary, the Chancellor of the Exchequer and the Defence Secretary.

*1 should much prefer to stick to (a). The question is whether - rather than a flat denial (which would be worse) - we should go to (b). <sup>7 am, even</sup> Robert*

R L WADE-GERY

*The U.S. only take the view that if asked in detail a direct question they would prefer to rest on (b). Remember also going with Wilson's request to me*

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UK EYES A

*Defence Re* 15  
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10 DOWNING STREET

*From the Private Secretary*

30 August 1979

Successor to Polaris

Thank you for your letter of 24 August in which you summarised, for the Prime Minister's information, the outcome of your visit, with other senior officials, to Washington to discuss the various options for a successor system to Polaris as the UK's strategic nuclear deterrent.

The Prime Minister has seen your letter and was glad to have your account of your discussions with the Americans.

On the question of publicity, the Prime Minister agrees that questions about the purpose of your team's visit to Washington should be answered by a general reference to topics of mutual interest in the defence field. If there are direct questions about the Polaris successor problem, the Prime Minister would strongly prefer that our line, and that taken by the Americans, should not go beyond the formulation in paragraph 5(a) of your letter. If, however, a direct question is put to the Americans during the Senate hearings, the Prime Minister would not object if the Americans were to use the line in paragraph 5(b) as a last resort.

I am sending copies of this letter to John Chilcot (Home Office), George Walden (Foreign and Commonwealth Office), Martin Hall (HM Treasury) and Roger Facer (Ministry of Defence).

B. G. CARTLEDGE

R.L. Wade-Gery, Esq.,  
Cabinet Office.

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MINISTRY OF DEFENCE  
MAIN BUILDING WHITEHALL LONDON SW1  
Telephone 01-938 7082 218 2111/3

*Prime Minister*

SECRET

MO 25/2/1/2

*23/7*  
20th July 1979

*[Handwritten initials]*

*Dear Bryan .*

Among the subjects which the Defence Secretary discussed in Washington on 17th July with the US Secretary of Defense, Dr Harold Brown, was the question of a Polaris successor.

Mr Pym referred to the forthcoming visit of a small group of experts to investigate the options. The Government had not yet taken a decision about the option we preferred. We had not ruled out the possibility that our national strategic deterrent and our contribution to the Long Range Theatre Nuclear Force might be most economically made by the same system. Dr Brown said that the US Administration was ready to welcome the group of experts and would provide them with full details about all our options, in order to explore their characteristics and costs. Any of the systems which he believed we were considering could be transferred without infringing the SALT II Treaty. But the US Government still had to make the policy decision. Strategic and long range theatre systems served different political functions, and that was why the TNF question was the more urgent. But he would like to encourage us to consider both systems together in terms of their military functions, since it would be wrong to spend too much on nuclear weapons at the expense of conventional forces.

I am copying this letter to George Walden (Foreign and Commonwealth Office) and Martin Vile (Cabinet Office) and to Sir Robert Armstrong.

*Yours sincerely,*  
*Roger Facer*  
(R L D FACER)

B G Cartledge Esq.,  
10 Downing Street

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10 DOWNING STREET

*From the Private Secretary*

27 July 1979

Thank you for your letter of 20 July about the Defence Secretary's discussion with Dr. Harold Brown, in Washington on 17 July, on the question of a Polaris successor.

The Prime Minister has seen your letter and has taken note of these exchanges.

I am sending copies of this letter to George Walden (Foreign and Commonwealth Office) and Martin Vile (Cabinet Office).

B. G. CARTLEDGE

Roger Facer, Esq.,  
Ministry of Defence.

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PRIME MINISTERRestricted Meeting on Thursday, 24 May at 1700 on  
Nuclear Matters

I attach your briefs for the restricted meeting on nuclear matters, now arranged for tomorrow at 1700, which is to discuss four items:-

Future of the UK deterrent  
SALT II  
Comprehensive Test Ban  
Nuclear release procedures

You have already read most of the papers in this folder but I should draw your attention to some new ones, namely:-

A note (at the front of the folder) conveying Sir John Hunt's advice on how you might handle the agenda.  
The folder has been arranged in the order he suggests.

- C A minute by the Foreign and Commonwealth Secretary on the CTB item.
- D A minute by Sir John Hunt on handling the CTB item.
- E The CTB papers also include a note on the National Seismic Stations issue which I do not think you have yet seen.
- F A note by Sir John Hunt on how you might handle the SALT II item; and
- G A brief on the non-circumvention issue.

23 May 1979

*Roger Carter*  
 (Duty Clerk)

*Bryan Cartledge.*



SECRET

8



CABINET OFFICE

70 Whitehall, London SW1A 2AS Telephone 01-233 8319

From the Secretary of the Cabinet: Sir John Hunt GCB

Ref. A09621

23rd May, 1979

Dear Bryan

Nuclear Matters

There are now four separate items for discussion at the meeting of the Restricted Group of Ministers at 5.00 pm on Thursday, 24th May, and Sir John Hunt suggests that they should be taken in the following order.

Item 1 (a) Future of the United Kingdom Deterrent

The relevant papers are:-

- (i) The brief on "The Future of the United Kingdom Strategic Deterrent" that was prepared for incoming Ministers.
- (ii) The three-part study by officials entitled "Factors relating to Further Consideration of the Future of the United Kingdom Deterrent".

Item 2 (b) SALT II: Non-circumvention

The note by officials which Sir John Hunt circulated with his minute A09598 of 21st May to the Prime Minister is relevant.

Item 3 (c) Comprehensive Test Ban: National Seismic Stations in the United Kingdom and Dependent Territories

The relevant paper is the note by officials attached to Sir John Hunt's minute A09597 of 21st May to the Prime Minister.

Item 4 (d) Nuclear Release Procedures

The note by the Cabinet Office attached to Sir John Hunt's letter A09589 of 18th May to the Home Secretary is relevant.

I am sending copies of this letter to John Chilcot (Home Office), George Walden (FCO) and Roger Facer (MOD).

Yours ever  
Marti Wile

(M. J. Vile)  
Private Secretary

B. G. Cartledge, Esq.



27

*Prime Minister has seen  
from**Mr. Vance made the  
same point to you.**6/21  
23/5*

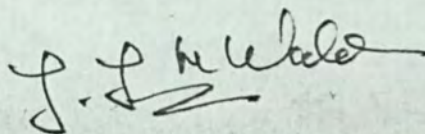
Mr P Moberly

SALT/Future of the UK Deterrent

You should know that, in a brief private conversation with Mr Vance yesterday, at which only the Lord Privy Seal was present, the Secretary of State asked Mr Vance whether the SALT II Treaty would inhibit the US in any way from helping the UK with the development of any replacement to our present deterrent, based on Polaris missiles.

In reply, Mr Vance said with great emphasis that in no eventuality would the terms of the SALT II agreement stand in the way of US aid to the UK over a Polaris replacement, though the provision of such aid would of course be a political decision.

You may recall that, in reply to the questions put to the State Department in October 1978 about the transfer of ALCMs to the UK, the Americans said that "any actual UK request would of course pose policy issues and would have to be dealt with in the light of the circumstances of the situation and taking into account all relevant policy considerations".



(G G H Walden)

22 May 1979

cc:- PS/Lord Privy Seal  
PS/PUS  
Sir A Duff

Mr Cartledge (No 10)  
Mr Martin Vile (Cabinet Office)



PRIME MINISTER

RESTRICTED MEETING ON NUCLEAR MATTERS

Although you have now agreed to postpone Monday's meeting until Thursday, 24 May, you may nevertheless wish to take advantage of the weekend to look through the papers in this folder. Briefing on the other matters which are to be considered at the meeting - SALT and CTB - will follow.

————— *DM*

*AS*

18 May 1979



Ref. A09588

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PRIME MINISTERPrime MinisterFuture of the British DeterrentGWS  
10/11

This will be the principal subject for discussion at the meeting of the Restricted Group of Ministers which has been arranged for 5.00 pm on ~~21~~<sup>4</sup> May. All those who are attending (the Home Secretary, the Foreign and Commonwealth Secretary and the Secretary of State for Defence) will have seen both the background brief attached to my minute to you of 4th May and the full study which I sent you with my minute of 14th May.

A

B

2. As you will have noted from the text, the study was prepared on the basis of terms of reference under the previous Government. Although these determined the way in which it was conducted and the ground covered, I think the content of the three parts of the study speaks for itself and does not require any further background explanation. As mentioned in the background brief (paragraph 9), the study was prepared entirely within Government and no consultations have so far taken place either with industry or the Americans. While this has not been a limiting factor as regards Part I or Part II, it has meant that there are a number of areas of uncertainty in Part III on which further work is required, including in particular discussion with the Americans, before final decisions can be taken.

3. Parts I and II provide the background against which the conclusions on systems options in Part III have been reached. In order to reach decisions on Part III it is not necessary for Ministers to endorse everything in Part I. The conceptual and political analysis contained in that part were debated over a period of several months by the small group of officials which produced the draft. The general approach is on orthodox lines, but it represents an attempt, for the first time in recent years, to work out a concept for the United Kingdom deterrent. Apart from any detailed points you or other Ministers may wish to raise, I suggest that you might ask your colleagues whether the general analysis in paragraphs 1-15 and the political assessment in paragraph 16 and the Annex is broadly acceptable to them. Paragraphs 19 onwards attempt to set out the case for and against retaining a British deterrent. Given the circumstances in which the study was commissioned, the absence of any conclusions is deliberate; the intention was to provide Ministers with arguments on either side on the basis of which they could reach a decision in principle.



4. Part II takes the process a stage further by seeking to establish criteria which a British deterrent force should be required to meet. These relate to the concept for deterrence by the United Kingdom discussed in paragraphs 8-15 of Part I and the key purposes which a British deterrent would be required to serve, as described in paragraphs 21-23 and paragraph 28 of Part I. Together these are the factors which determine the criteria. This part of the study raises some difficult problems. What constitutes "unacceptable damage" and thus what would deter a Soviet attack on the United Kingdom are essentially matters of political judgment. Officials have tried to set down the various ingredients and then to quantify them in terms which will provide a basis for examination of the hardware (system) options in Part III. But the results must be to some extent "subjective". The main issue is whether or not we require a capability [to destroy Moscow.] So far it has always been assumed that, in order to deter effectively, we must be able to [strike Moscow;] this is the basis of our existing capability and the improvements (Chevaline) which are being made to the Polaris force. The cost of continuing to provide this capability in a successor system is likely to prove very high. Officials therefore considered whether it was essential and reached the conclusion that other targeting options could provide adequate deterrence. Their conclusions and the reasons for them (and qualifications attaching to them) are set out in paragraphs 11-14. But there are other important criteria besides targeting; these are discussed in paragraphs 15 and 16 and Annex C. You may like to take the summary of conclusions in paragraph 18 as a basis for the discussion of this part of the study. It should be noted however that a final decision on targeting options is not essential at this stage; it will be possible to make some progress in elaborating the systems options discussed in Part III without such a decision. But it would be helpful to the further work which needs to be done to have a preliminary indication of Ministers' views. If, for example, it were concluded that targeting Option 1 should be eliminated as unnecessarily exacting and that any reduction in the level of damage below that indicated in Option 3 (either variant) would involve a step-change in the effectiveness of our deterrent which could undermine its credibility, this would leave a broad middle area on which further planning could be based.



5. Part III of the study is intended to provide the basis for an initial discussion by Ministers of systems and collaborative options. It takes as its starting point the targeting options considered in Part II. There are two points in particular which you may wish to address in the Restricted Group on 21st May. The first is whether we should seek to establish any form of collaboration with the French. Our collaboration with the United States since we began developing our Polaris force (and indeed before then) has been close and continuous. We shall need to maintain it throughout the remaining life of the Polaris missiles. There is a general presumption in both London and Washington that we should wish to continue to collaborate with the Americans over any successor system. So far little work has been done on the possibility or desirability of involving the French in any future project. At various times in the past there have been hints of possible French interest and a commentary by AFP immediately after the Election said that French observers were "waiting with interest for the new Government's reaction to the possible development of common projects for certain sorts of nuclear military equipment, to replace old or obsolete missiles or submarines". Our Embassy in Paris believe that this comment reflects official French briefing. We should of course need to ensure that any form of collaboration with the French did not prejudice our relations with the Americans and this would very much restrict the scope. This is a matter which President Giscard might raise with you on 5th June. You may wish to ask that a brief should be prepared on the line you should take.

6. The second point, which was referred to in paragraph 9 of the background brief I sent you on 4th May, is the need for early consultation with the Americans. Without this, it will be difficult to make further progress with the detailed examination of successor systems options and their implications. We need to know much more about the cost, availability and other aspects, including technical factors, of e.g. Trident C4, SLCM and a modernised and remotored Polaris A3. I explained to you in my minute of 4th May that Mr. Callaghan had opened up with President Carter the possibility of a visit, on a confidential basis, by senior officials to Washington for initial exploratory talks and that the President's response had been forthcoming. Your colleagues have not been informed of this exchange which, so far, has not been followed up. You have



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agreed that I should mention to Dr. Brzezinski when I see him on Friday that it is likely that you will be sending a message to President Carter about a possible visit by officials for bilateral discussion about our possible future needs in connection with our deterrent. You may wish now to seek the agreement of your colleagues to your sending a message to this effect. The intention had been that the team should consist of Sir Clive Rose (Cabinet Office) and Professor Mason (Ministry of Defence) and I suggest that Sir Antony Duff (Foreign and Commonwealth Office and Chairman of the JIC) should now be added. In the message you send to President Carter it may be advisable to seek a specific assurance that there is nothing in the SALT II Agreement which would in itself inhibit the Americans from making available to us any of the systems about which we wish to consult them. This is related to the possible application of the non-circumvention provisions in SALT II which is discussed in detail in a note which I shall be submitting for consideration by the Restricted Group at your meeting on 24th May.

7. The main decisions which are needed, in relation to Part III, are:

- (i) Whether you should send a message to President Carter seeking his agreement to an early visit by a small team of officials (paragraph 6 above).
- (ii) Whether officials should review possibilities of collaboration with the French (paragraph 5).

You may also wish to seek your colleagues' provisional approval for the conclusions in paragraph 18 of Part II, and to record the Group's preliminary views on the targeting options (paragraph 4). As regards Part I, no decisions are called for.

JOHN HUNT

18th May, 1979



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Copy on Defense, May 1979 (Nuclear Release)

3

PRIME MINISTER

Sir J. Hunt  
informed.

NUCLEAR MATTERS

P.A.  
G.M.  
17/r

The main purpose of the papers in this folder is to give you the necessary background for your meeting with the Foreign and Commonwealth Secretary, the Home Secretary and the Defence Secretary on Monday 21 May at 1700.

Sir John Hunt's minute (the top paper within), however, seeks your agreement to the line he might take when he meets Dr. Brzezinski in Washington on Friday 18 May, when he will discuss nuclear issues among others. The minute also suggests that something might be said to the Germans about these matters.

Sir John leaves for Washington at 1700 on Thursday 17 May. It would be very helpful if you could confirm, before then, that you are content with the points at "X", "Y", and "Z".

G.M.

16 May 1979

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Ref. A09550

Copy No. 1 of 3 Copies

PRIME MINISTER

*Prime Minister*

Nuclear Matters

*Agree X, Y and Z? GWS*

[A]

When you considered my minute A09454 of 4th May 1979 on the future of the United Kingdom nuclear deterrent you said that you wished to discuss the matter in a Restricted Group of Ministers comprising the Home Secretary, Foreign and Commonwealth Secretary and the Secretary of State for Defence (your Private Secretary's letter of 5th May). You also said that you intended to consider at the same meeting the reaffirmation of our various understandings with the United States and the designation of your Nuclear Deputies: these were both matters covered in my minute A09450 of 4th May on nuclear release procedures. You agreed, in addition, to receive a short presentation on our nuclear release procedures and facilities, and this is being arranged for this week.

2. Because of the forthcoming absences overseas of the Foreign and Commonwealth Secretary and the Secretary of State for Defence it has not been possible to arrange the meeting of the Restricted Group before 21st May. In the meantime, however, I have already been in touch with Mr. Whitelaw, Lord Carrington and Mr. Pym to suggest that they read not only the brief attached to my minute of 4th May but also the three-part study on the future of the deterrent in preparation for the meeting. I now attach a copy of the study for you, and will of course let you have a brief on it before the meeting.

3. The delay in holding the meeting of the Restricted Group means that Ministers will not have had an opportunity to consider the future of the deterrent before I see Dr. Brzezinski on Friday, 18th May. Nonetheless, I think he would find it surprising if I said nothing to him on this subject given certain exchanges which passed recently between Mr. Callaghan and the President. If you agree, I propose simply to tell him that Ministers are giving the matter urgent consideration and that it is likely that you will then be sending a message to President Carter about a possible visit by officials for discussions in Washington.

*X*  
*M*

*||*

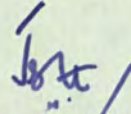


  
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4. I have not warned the other members of the Restricted Group that you also wish to discuss Nuclear Deputies, etc. This is a matter which hitherto has been kept to a very small circle indeed, and I think that the less is said on paper the better. I suggest therefore that you raise the question orally during the meeting and say that you propose to designate Lord Carrington and Mr. Pym as the first and Second Deputies and, against the contingency where you and they are all out of the country simultaneously, you have in mind to make Mr. Whitelaw a third Deputy. We will cover this point in your brief. They would then be given the same presentation as you are to receive this week.

5. This leaves the question of our understandings with the United States on nuclear release. There is in fact little to discuss on this: the agreements are in the interests of both countries, and, important though they are, their reaffirmation whenever the office of President or Prime Minister changes hands is little more than a formality. If you agree, I could take the opportunity when I see Dr. Brzezinski to tell him that you will of course be ready to confirm the understandings. He and I can then set in train the preparation of the messages to be exchanged between you and President Carter. I do not think these will give rise to any problems but you would of course have an opportunity to discuss them at the restricted meeting before the messages are exchanged.

6. Finally, if we proceed in this way, we need to decide what to do about the agreement on nuclear release procedures with the Germans. In my minute of 4th May I said that although no formal reconfirmation is necessary it was important to keep knowledge of this understanding alive both here and in Bonn and I thought that there would be advantage in our letting the Germans know that you have been made aware of it. Do you agree that I should now arrange for this to be done?

  
(John Hunt)

14th May, 1979





I have not asked the other members of the Executive Committee of the British Council to do so. I think it is a matter which should be decided by the Council as a whole. I think that the fact that the Council has not yet decided on this matter is a reflection of the fact that the Council is a very large body and it is not easy to reach a decision on such a matter. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting.

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14 MAY 1979

BRITISH COUNCIL

I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting. I think that the Council should be given the opportunity to discuss this matter at its next meeting.

(Signature)





The National Archives

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\* Note: The final version of this report has been released on MOD file DEFE 19/275



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Ref. A09454

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PRIME MINISTER

*AW*

The Future of the Deterrent

I attach a note showing the current situation with regard to the future of the Polaris force. This has been prepared by the Cabinet Office in conjunction with officials of the Treasury, Foreign and Commonwealth Office and Ministry of Defence. It is also being submitted to the Chancellor of the Exchequer, the Foreign and Commonwealth Secretary and the Secretary of State for Defence.

2. The only point on which an early decision is needed is whether to authorise the contacts with the Americans referred to in paragraph 9 of the note. In this connection I have Mr. Callaghan's agreement that I should tell you that he had already opened up this possibility with President Carter and that the latter had been very forthcoming, although nothing has yet been arranged. I can expand orally a little on this but you should be aware that senior officials in other Departments are not aware of this exchange between Mr. Callaghan and Mr. Carter. It is known only to a very limited number of people in No. 10 and the Cabinet Office. Your colleagues will not therefore have been briefed about it.

3. Before authorising the proposed visit of Sir Clive Rose and Professor Mason to the United States you will presumably wish to see the three-part study referred to in paragraph 8 of the attached note and to have at least a preliminary discussion of it with your colleagues most closely concerned. I should be glad to know in what forum you would like to handle the discussion of this very sensitive subject. Would you propose to confine it to yourself and the three Departmental Ministers directly concerned or to bring in any other <sup>No.</sup> Ministers? If you wish any other Minister to see the study I think this should be on a personal basis since officials in other Departments have not been, and should not be, involved.

*Agreed  
mt.*

*Yes  
mt.*

*JH*

JOHN HUNT

4th May, 1979



THE FUTURE OF THE UNITED KINGDOM STRATEGIC DETERRENT

This note is concerned with the Polaris submarine force. It does not cover the 55 Vulcan bombers which are due to be phased out of service in 1982. It is for information only, and no immediate Ministerial decisions are needed. There is however one point, dealt with in paragraph 9, which Ministers need to consider soon.

The present Polaris submarine force

2. The Polaris force consists of 4 nuclear powered submarines each armed with 16 Polaris ballistic missiles. The submarines were constructed in the United Kingdom and entered into service in the late 1960s. The missiles were purchased from the United States during the same period. The present front end of the Polaris A3T missile contains three United Kingdom developed warheads which are targetted against a single target. The range of the present system is 2,460 nautical miles.
3. Soviet ABM developments made it necessary some years ago to take steps to maintain the effectiveness of the Polaris system. Although the Russians are limited, by the SALT agreements, to a single ABM system centred on Moscow, such steps were needed to ensure that our missiles can penetrate the ABM defences in order to reach the targets laid down in the current criteria for deterrence. After detailed consideration of various possible options, the Conservative Government decided, in October 1973, to develop a front end system which is now known as Chevaline. This has two warheads and, in place of the third, a large number of decoys designed to confuse the Soviet defences. Because of the additional weight, the range of the Polaris missiles armed with Chevaline will be ~~be~~ \* ~~~~~ \* The Chevaline programme has been continued by the Labour Government. Under present plans, Chevaline is due to be deployed operationally in the summer of 1981 (with continuous deployment from mid-1982).

4. Chevaline is a project unique to the United Kingdom (though using American as well as British firms) and involves new and advanced technology. The cost escalated considerably during the earlier stages

\* ~ \* Words deleted and retained  
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of development but seems now relatively stable barring major programme setbacks. The total cost of the full programme is estimated to be £935 million, of which some 75 per cent has already been spent or committed. The Labour Government in January 1979 approved funding to completion, subject to a progress report in January 1980, or earlier if further significant cost increases were to occur.

5. Throughout the development of the Polaris force we have worked in close collaboration with successive United States Administrations. A note on the basis and range of this collaboration is attached at Annex. It will be seen that we have been, and still are, dependent on the United States for much of the technology and materials involved in our strategic deterrent. Such dependence does not affect our ability to operate the deterrent under sole national control. It does however mean that, in the hypothetical case that all United States support was cut off, there would be serious problems in maintaining the weapons system in a serviceable condition for more than a limited period.

Estimated life of the present force

6. There is no precise cut-off date at which the present force will cease to be operational. The Chevaline programme should provide an effective capability against likely Soviet ABM defences for the assumed lifetime of the force. Steps will have to be taken to replace the motors in the Polaris missiles, but, provided this is done, the missiles should remain serviceable well into the 1990s. It is expected that the launcher and fire control sub-systems can be kept operational for the same period. The latest assessments have shown that the submarine hulls should remain sound until the mid-1990s. The general conclusion is therefore that it should be possible to maintain the present force in operation into the 1990s, albeit with increasing costs and technical problems, and possibly with lesser degrees of assurance about the survivability of the boats and the reliability of the missile. If we are to develop a successor system it will need to enter into service by the mid-1990s.



Successor system

7. No decisions have so far been taken about a possible successor system. But decisions will be required within the next year, and a study has already been made of the factors which the Government would need to take into account when reaching them. This study was made by two groups of officials, under the chairmanship respectively of Sir Antony Duff, Deputy Under Secretary in the Foreign and Commonwealth Office, and Professor Mason, Chief Scientific Adviser in the Ministry of Defence. It was undertaken under the supervision of a Steering Group chaired by the Secretary of the Cabinet, of which the Permanent Secretaries of the Treasury, Foreign and Commonwealth Office and the Ministry of Defence and the Chief of the Defence Staff were members. The work was carried out entirely within Government; there was no contact with any outside body or with officials of any other Government; and knowledge of the study and access to the papers was confined to a relatively small number of officials.

8. The study is in three parts.

Part I The politico-military requirement

This was produced by a very small group of senior officials from the Treasury, Ministry of Defence and Cabinet Office under Sir Antony Duff's chairmanship. In it the concept of deterrence is discussed in terms both of NATO strategy and of the United Kingdom's national requirements. The case for and against maintaining a United Kingdom strategic deterrent is examined.

Part II Criteria for deterrence

This was produced by the same group as for Part I. Its purpose is to suggest what level of damage the United Kingdom needs to be able to threaten in order to assure deterrence. Other criteria needed to ensure the credibility of a United Kingdom deterrent are also considered.

Part III System options and their implications

This was produced by the group under Professor Mason's chairmanship consisting mainly of Ministry of Defence officials and senior officers of the Services and including the members of Sir Antony Duff's group. Various ballistic missile and cruise



missile options are examined and the possibility of collaboration with the United States or France is discussed. There is a section on the costs and resource implications, which are substantial. These would of course vary according to the option selected, but, by way of illustration, the group considered that the procurement of a 5-boat submarine-launched ballistic missile force might take up some 7 per cent of the total Defence Equipment Programme for 12 years.

9. A good deal of further work will be needed on the system options. Part III of the study has been taken as far as is possible without contacts with the Americans. But we need more information than is available from our own sources about the costs and other implications of the options considered. If we are to ensure that the full range of options is available, such contacts should take place soon. Ministers may wish to ask for early discussion of this subject to be arranged. The full study can be made available when required.

May 1979



United States/United Kingdom Agreements in the  
Military Nuclear Field

1. Since 1958, the United Kingdom nuclear defence programme has been based on the United States/United Kingdom Agreement for Co-operation on the Uses of Atomic Energy for Mutual Defence Purposes (the 1958 Defence Agreement) which provides for exchanges of information, equipment and special nuclear materials. Classified information exchanged under this Agreement has been concerned with all aspects of weapon design, development and production. There have also been extensive transfers of materials and equipment in support of both our nuclear weapons and nuclear propulsion programme. Under the Agreement also certain United States facilities are made available for United Kingdom use; notably the underground nuclear testing facilities in Nevada.
2. We obtained the Polaris weapon system, less the nuclear warheads, from the United States under the 1963 Polaris Sales Agreement and we continue to rely upon this Agreement for the maintenance of the missiles and fire control systems. The Polaris submarines themselves are, however, independent of American support except for the supply until 1980 of enriched uranium for their reactors. Under contracts already agreed we rely, again until 1980, on supplies of other special nuclear materials for our nuclear warhead programme, but thereafter we aim to be self-sufficient in these materials. Our basic nuclear warhead technology is our own, but it is heavily reinforced by information exchanges with the United States under the 1958 Defence Agreement.
3. For the present and foreseeable future, the continuation of the 1958 and 1963 Agreements is of vital importance to us. Our reliance on the Americans will in certain respects be reduced after 1980, but, until much nearer the end of the life of the present Polaris force, we shall need the support provided under the 1963 Agreement. The 1958 Agreement will continue to be essential to us in the event of a CTBT being concluded. Further ahead it is not yet possible to forecast. Our future requirements will depend on what decision is taken about a successor to the Polaris force and on the nature of the system selected. One of our principal aims in relation to the SALT II negotiations has been to ensure that, to the maximum possible extent, no options for future bilateral co-operation are closed by the terms of any provisions in the United States/Soviet Agreement. This point is covered in the separate brief on SALT.