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Page 1 of 3 pages

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PRIME MINISTER

THE STRATEGIC DETERRENT

In their minutes to you of 14th and 29th November, the Chancellor of the Exchequer and the Foreign and Commonwealth Secretary have commented on the papers we shall be discussing at the MISC 7 meeting this week on the future strategic deterrent.

2. I am glad to note that there is much agreement about the relative merits of the system options. Cruise missiles are plainly an unattractive option operationally or financially. If the Americans will supply it, Trident C4 MIRV is clearly the best buy. I believe that the Chancellor's comparison with Chevaline is the wrong one. The closer parallel is with the original Polaris buy, which kept remarkably close to the original estimates because we were buying into a known and costed programme. Chevaline involved just the kind of risky UK-special "front-end" research and development we would be trying to avoid by buying the complete Trident system (apart from warheads, which represent about 10% of the total capital cost). A new strategic deterrent is obviously - as I have always recognised - expensive, but there are, of course, other defence programmes, such as Tornado, of similar capital cost and peak expenditure.

3. All the indications I have support the Foreign and Commonwealth Secretary's judgement that our NATO Allies value highly this special contribution to collective security, which no other European country provides to NATO. France could - but doesn't.

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TOP SECRET



4. There are sound operational and practical reasons for a five-boat force - with any smaller force we could have two boats on patrol for only part of the time. The Soviet Union is investing massively in anti-submarine warfare. Despite further quietening and larger operating areas for our submarines, the risk of the Soviet Union being able to locate and destroy a single SSBN will increase, though we cannot sensibly attempt a precise forecast now. The risk should still be low by the mid 1990s, but not negligible; whereas the possibility of being able to locate and destroy simultaneously the two submarines at sea provided by a five-boat force would be infinitesimal. The larger force would also provide insurance against the risk of accidents, give greater flexibility and reduce the likelihood of our needing expensive mid-life improvements to counter improved Soviet capability. The Labour decision to drop the fifth Polaris boat was a false economy.

5. We cannot measure scientifically what is needed to deter, and it is not surprising that judgements differ in degree. The four alternative criteria drawn up by officials in Part II of their report are illustrative, and it would be wrong to suppose that the case for five boats hangs on the stiffest one. The key points are that with a five-boat force, even if one were lost, the second at sea could still inflict massive damage [\*] and with two boats on patrol there would be a greater prospect of defeating Soviet measures [\*] How gravely the force could disrupt the Soviet Governmental system [\*] I would not argue that it is essential that we have the capability for total disruption; but, as I indicated in my minute of 1st November, the nearer we approach it the more certain our deterrence. We must seek to look 30 years ahead, as the Foreign and Commonwealth Secretary rightly emphasises.

6. For these major benefits, the increase in cost for a fifth boat is obviously substantial yet proportionately modest (about 17%). I am quite clear that on present evidence no alternative application of the money would bring as much advantage. There is no doubt in my mind that we should deal with the US and in public announcements on the basis of firmly

\* ~ \*

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planning for five boats. If we go for four now, and then find a few years later that five are needed after all, we could find the change extremely difficult to make and we might then indeed face the "white elephant" risk.

7. Nevertheless, I understand the Chancellor's concern. We must obviously monitor the expenditure process very carefully and I would propose to report regularly to you and our colleagues on our commitments and expenditure. The Treasury will of course be fully associated with the progress of the programme.

8. A final decision on the options must await the President's response. I believe, however, that the work which has been done shows that we can continue to maintain a strategic deterrent at a cost that will, of course, be high overall, yet will be essentially manageable when spread over its life span. I recommend that we take a firm decision in principle now on the lines proposed in my minute of 1st November.

9. I am sending copies of this minute to the Home Secretary, the Foreign and Commonwealth Secretary, and the Chancellor of the Exchequer; and to Sir Robert Armstrong.

3rd December 1979

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COPY NO 1 OF 6

PAGE 1 OF 3 PAGES

PM/79/98

PRIME MINISTERThe Successor to Polaris

1. The minutes of the Defence Secretary of 1 November and the Chancellor of 14 November make it clear that there are two principal factors in our decisions about a Polaris successor: the damage criteria and the resource cost. But there are also subsidiary foreign policy considerations.

*Paragraph 2 deleted and retained under  
Section 3(4).*

*W Wayland  
15/12/11*

3. Such insurance is offered only by the MIRVed C4, which I think we agree is the best system option. If so, the question is narrowed down to whether we need four or five boat-loads of missiles. (I see no sense in building five boats and arming them with only 12 missiles each.) A four-boat force seems to meet the  problem. But there is some doubt about whether it offers an adequate hedge against ASW developments. The basic question facing us, therefore, is whether the extra cost of a fifth boat is justified by the insurance it provides against the ASW threat.

4. A fifth boat is estimated to cost an extra 17% in terms of capital and running costs - a total of £1,180 m. As the Defence Secretary notes in his minute, the total cost of a five-boat programme will affect not only the timing of our conventional and theatre nuclear programmes but also perhaps their scale. The question here is not in my view so much whether the resources saved by a four-boat force could be used more profitably in building more tanks, but whether other defence capabilities which are already planned might

/have to



have to be deferred or foregone if we agreed to the fifth boat. We can expect our Allies to have a keen interest in this aspect of our decision, particularly to the extent that it will involve changes in our planning for forces committed to SACEUR (see paragraph 5(d) below).

5. There are, I think four foreign policy factors which are also relevant to our decision:

- (a) Arms Control: Whatever successor we adopt, we will face intense Soviet pressure for our deterrent to be constrained through arms control. The greater the difference between Polaris and its successor, the greater will be the Soviet concern to limit UK systems through the SALT process. The Defence Secretary's recommendation would involve 640 warheads - five times as many as Polaris with Chevaline. Other governments (including some of our Allies) may feel that the Russians have a case for including such a force in SALT. A four-boat force, with ~~512~~ 512 warheads, would be vulnerable to similar pressure. But it would be marginally easier to justify, since it is clearly a minimum force and we already have a precedent for excluding our four-boat force from SALT I and II;
- (b) Dependence on the US: Either option will entail dependence on the Americans over the next thirty or so years - a period in which relations between Europe and the US are bound to change in ways which we cannot now foresee. Our dependence will give the Americans scope to exert political leverage on us. They may feel that the more significant the system they now give us, both in quality and in warhead numbers, the more we should do for them in return. There are signs that the Americans too are aware that the larger our nuclear force, the more problems it will present for them in the SALT process and the heavier the price they will have to pay for its continued exclusion;
- (c) Comparison with the French: There is a political case for our maintaining a nuclear deterrent roughly comparable to that of the French: it would be undesirable for European nuclear deterrence to be too French dominated. This might argue marginally in favour of a five-boat force (the French will probably have six). But the four UK submarines armed with Trident C4 MIRVs would not necessarily appear any less formidable than the French deterrent;

/(d)



COPY NO 1 OF 6

PAGE NO 3 OF 3

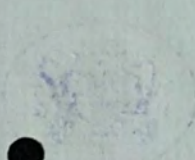
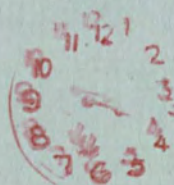
(d) Attitude of the Allies: The views of our other European Allies are ambivalent. In private at least they approve of our decision to maintain an effective nuclear deterrent. But they would have second thoughts if this could be done only at the price of reducing our conventional contribution to NATO. This would be particularly serious if the Germans felt that an extra boat would in any way increase the risk of further thinning out in British Forces Germany or that these forces would be starved of adequate equipment. Presentation of our decision to our Allies will therefore be important.

6. These foreign policy considerations are not, of course decisive. But they tend to reinforce the resources argument in favour of the four-boat option. The key question, in my view, remains whether it is essential to pay an extra £1 billion or so in order to insure against the technological future. With the many other demands on our defence budget, we should be chary of paying a high premium merely to insure against the worst possible case or to meet the most ambitious damage criteria. On the other hand it would clearly be futile to spend about £7 billion on a four-boat force which turned out to be a white elephant.

7. There are bound to be many uncertainties in a project with such a long life as this. In my view the most important is the likely ASW threat at, and after, the turn of the century. I believe that, ideally, we need to know more about this and about its impact on the four-boat option (viz the last part of Annex D to Part III of the Report).

8. I am sending copies of this minute to the Secretary of State for Defence, the Chancellor of the Exchequer, the Secretary of State for the Home Department and Sir Robert Armstrong.

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Only to note at this stage, without going into detail. You will want to study these minutes more closely near the meeting of MISC 7 next month.

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PRIME MINISTER

Future of the Strategic Deterrent

*AR*

The Chancellor of the Exchequer sent you a minute on this subject on 14th November. His minute takes up a number of the recommendations made by the Secretary of State for Defence in his minute to you of 1st November. I believe that you will wish to discuss the contents of both minutes at the MISC 7 meeting which was postponed from 5th November to the first week in December. Meanwhile I do not think that you will want to comment substantively on any of the points raised by the Chancellor, although I suspect that the Secretary of State for Defence may do so: he may, for instance, wish to point out that another 400 tanks are not likely to be an attractive alternative to a fifth boat, given that the Army cannot even man all the tanks it already has.

2. I shall submit a brief for the MISC 7 meeting which will propose ways of handling the points raised by the Chancellor of the Exchequer and any further rejoinders which the Secretary of State for Defence may offer. There are however three comments which I should like to make at this stage:-

(a) It is helpful that the Chancellor's minute concludes that, notwithstanding his other reservations, we should approach President Carter to establish on what terms we might be able to procure Trident C4 missiles with MIRV. MISC 7 should therefore have no difficulty in agreeing on this course of action.

(b) The Chancellor's paragraph 2e is understandably concerned about what would happen if the Americans were unwilling to supply the MIRV. He does not know, and cannot at present be told, that President Carter has in effect already reassured you on this point.

(c) The Chancellor's paragraph 3b. deals with the requirements for credible deterrence. I believe that the conclusion in Part II of the Study on which MISC 7 may wish to concentrate is the one that reads:

"The assessment of the level of damage which the Soviet Union would find unacceptable in relation to aggression against the United Kingdom must ultimately be a matter of judgment. There is no unique answer".



TOP SECRET

In reaching a judgment on this point MISC 7 will wish to consider not only the situation as it is now, but as it will be for the first quarter of the next century, as this is the time-span over which the successor to our Polaris force is likely to be in service.

RA

(Robert Armstrong)

19th November, 1979

CH/EX. REF. NO. TS/2  
COPY NO. 1 OF 9 COPIESTreasury Chambers, Parliament Street, SW1P 3AG  
01-233 3000PRIME MINISTERTHE STRATEGIC DETERRENT

It may assist our postponed discussions in MISC 7 if I describe the main conclusions on costs which I derive from the Study by officials attached to Sir Robert Armstrong's minute of 29th October to you, and relate them to the proposal put forward by the Defence Secretary in his minute of 1st November.

2. Part 3 of the Study shows that:-

- (a) the MOD now estimate that the costs of replacing the current Polaris force will be in the range of £7 billion to £13.6 billion at today's prices - i.e. approximately the current size of the total Defence Budget either for one year or for two. (Running costs would be spread over 20 years, but the capital costs, which account for more than 50 per cent of the total, would peak in 1987/8);
- (b) moreover, as Annex G points out, cost estimates made at the present stage are necessarily rough and ready, and the history of comparable projects suggests that escalation is inevitable. An index of its likely scale is provided by the Chevaline programme, the costs of which have risen by over 100 per cent in real terms (and will go higher if - as is likely - the delays described in the Defence



Secretary's separate minute of 1st November carry a further cost penalty);

- (c) among the various Options the Cruise missile solution is unattractive on financial as well as operational grounds, if the operational arguments against deploying Cruise missiles in attack submarines are accepted as decisive. An adequate force of dedicated Cruise missile submarines would be more expensive than any of the ballistic missile Options;
- (d) among the ballistic missile Options, the Trident C4 MIRV option would be the "best buy" on financial, as well as on operational, grounds. Provided the US price is in line with the missile cost assumption in Annex G, capital costs would be lower than for any other Option. The risks of substantial escalation would be on the warhead (provided that the US agreed to supply the MIRVs). And there would be substantial economies in acquiring and running a system which would be common to the Royal Navy and the US Navy;
- (e) however, the Trident C4 MIRV Option would not make financial sense if the US were not to supply the MIRVs. The technical difficulty of a UK development of a full MIRV system is described in paragraph 21: the costs would be prohibitive;
- (f) and even the less complex task of "front end" development for the A4 MRV and C4 MRV Options would be extremely expensive. As Annex G admits, MOD's current estimates are "extremely speculative". The Chevaline precedent is highly relevant; and



- (g) finally, to replace the present force of 4SSBNs with a force of 5 would carry a substantial additional penalty in capital and running costs, which would on the Trident C4 MIRV Option amount to over £1 billion.

3. The Defence Secretary argues that we must replace Polaris because "no alternative application of the resources available would offer a comparable contribution to our security and that of our Allies"; *Passage deleted and retained under Section 3(4) RWayland, 15/12/11* and that we should accordingly go for the Trident C4 MIRV Option, with 5 boats. I am sure that we should approach the Americans about Trident, but I am not sure that his case on any of these three points is yet proven.

- (a) on resources, annual expenditure on the least expensive of the Options under consideration would, on the current (and almost certainly optimistic) assumptions, run at over £0.5 billion in the late 80s. This must be found from whatever level we fix the Defence Budget for that period. I could not accept that the running costs of the deterrent should be accorded some special extra-Budgetary status as though we had assigned in advance the revenue proceeds of 1p on the Income Tax. Providing an extra tranche of this kind over and above 3 per cent growth on the Defence Budget proper (which we may well be unable to afford throughout the 80s), would raise Defence's share of total public expenditure from the current 11 per cent to some 15 per cent. If, as I assume and the Study appears to envisage, we do not go down that road, but divert to nuclear forces resources that would otherwise be devoted to conventional forces, we



need to be convinced that this is the right course for our national security and the one which the Alliance would want. (I note that the Americans have expressed some misgivings about the effect on our conventional forces);

- (b) as for the requirements for credible deterrence, Part II of the Study identifies four separate requirements, and concludes that a perceived capability to meet any one of them would constitute an adequate deterrent. I am not clear whether the Defence Secretary, in arguing that we must aim to meet the most demanding of the four, rejects the Part II analysis. If it is accepted, the economic arguments would point to our devoting to the successor system the minimum adequate deterrence requirements.

The minimum resources consistent with meeting

Passage deleted and retained under Section 3(x). CWayland 15/12/11

- (c) among the Systems Options under consideration, this points to our acquiring the Trident C4 MIRV system, but deploying it in a four-submarine force, as at present. The case for a five-submarine force seems to depend on the rejection of both the Part II conclusions and the argument at paragraph 7 of Part III Annex D (which would presumably be given greater force by the acquisition of a long-range C4 MIRV system, rather than the short-range Polaris or C4 MRV systems). The price we would pay for rejecting these arguments is a high one: the extra capital cost if we go for Trident C4 MIRV in five submarines rather than four would, on the current



estimates, be £680 million. Judging by the figures circulated in connection with the Jordanian deal, this sum would be sufficient to raise the number of tanks in the British Army from the present strength of some 600 to over 1,000. I mention this only as an illustration but I am not myself yet convinced that we would gain as much, in terms of security and standing in the Alliance, from buying a fifth SSBN as from building 400 tanks.

4. I hope that MISC 7 will shortly discuss the Study, the Defence Secretary's proposals, and these comments. My preliminary conclusion is that we might do well not to take firm and irrevocable decisions on the three questions posed in the Cabinet Secretary's minute of 1st November, and the additional question of the appropriate size of a successor SSBN force, until you have had your meeting with President Carter. His response, particularly on the key question of whether US MIRVs will be made available, and on what terms, should clarify the choices before us. We need to satisfy ourselves that the massive diversion of resources required by any of the Options under consideration in fact makes sense, in political, military, and economic terms.

5. I am sending copies of this minute to the Home Secretary, the Foreign and Commonwealth Secretary, the Defence Secretary, and Sir Robert Armstrong.

(G.H.)

14 November 1979



10 DOWNING STREET

THE PRIME MINISTER

14 November 1979

*C.F. / D. ADE*

*cc MOD 19.*

*DS*

*Defence*

*On equalities OK*

*Dear Mr. George.*

Thank you for your letter of 7 November concerning a successor to Polaris and the need for a debate on this in the House.

The Government have not yet taken a decision on what system should succeed Polaris. I have, however, already made it clear that we are fully committed to maintaining the effectiveness of our strategic nuclear deterrent, and we are continuing the programme to improve the present Polaris force so that it remains a powerful deterrent to aggression into 1990s. So far as a successor system is concerned, however, the Government are considering a number of options but we are not yet in a position to make any statement.

I note what you say about the need for a debate on this subject, and, as you say, the Defence Secretary and the Leader of the House have said in Parliament recently that this is a matter on which they would welcome a debate. I hope that this will be possible, but it is a question of finding time in what is a very full Parliamentary programme.

Although I was interested to read your criticism of defence debates, the conduct of previous debates is not, of course,

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something for which this Government is answerable. It is, however, an inescapable fact that the interests of national security place some limitations on the amount of detail which can be made public, but the Defence and External Affairs Sub Committee were provided earlier this year with a considerable amount of factual information on which the eventual decision will be based. So far as the basic case for the maintenance of a UK strategic deterrent force is concerned, therefore, I believe the House already has ample information at its disposal. However, the actual choice of a successor system will inevitably depend on highly sensitive technical and operational judgements which could not be made public without damaging our vital security interests.

So far as the public are concerned, I agree with you that it is the duty of Government to inform them on defence matters. I do not think it can be said of this Government, however, that we have not made it clear to the public that without security from attack we put our way of life and our liberty at risk. The Government will continue to make this clear both in Parliament and outside.

Yours sincerely

Reginald Hooley

Bruce George, Esq., M.P.