

Ref: B06797

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PRIME MINISTER

c Sir Robert Armstrong

OD: A Defence Suppression Weapon for the Royal Air Force

BACKGROUND

FLAG A

The Committee is to discuss the proposal by the Secretary of State for Defence in his minute of 10th May to meet the requirement for an anti-radar missile for the RAF with the British missile ALARM instead of the American HARM. The choice of missile lies between three options, all of which are basically acceptable to the RAF on operational grounds (though the RAF are believed to prefer HARM).

- a. HARM, bought directly from the United States, to be in service in September 1986 at a total cost (for the likely requirement of 750 missiles) of £235 million, of which 86 per cent would be spent in dollars.
 - b. Coproduction of HARM in the United Kingdom by Lucas at a total cost of £254 million (54 per cent of which would be in dollars) generating a minimum of 3,500 man years of work for British industry.
 - c. To develop and produce ALARM, on a fixed price contract with British Aerospace in conjunction with MSDS (part of GEC), Thorn-EMI and others, with an in-service date of August 1987 at a total cost of £388 million, generating some 9,400 man years of work for British industry.
2. The Treasury dispute some of the assessments on which the Defence Secretary's recommendation is based: the then Chief Secretary drew attention to the fact that the Ministry of Defence had themselves assessed that the ALARM programme was likely to slip by perhaps two years, making the in-service date three years later than HARM and risking an increase in cost of some £60-70 million.
 3. The Chairman of Lucas, Mr Messervy, is actively lobbying on this subject. He is well aware that coproduction of HARM in the United Kingdom by Lucas would be technologically satisfactory, would be cheaper, and would produce a usable weapon substantially earlier than the British Aerospace-GEC ALARM. A

decision to go for coproduction of HARM would also save 2,500 jobs in the West Midlands which Lucas would otherwise have to shed. The British Aerospace-GEC project would for the most part be done at Stanmore.

4. The Defence Secretary originally wished to announce a decision on ALARM on 16th May, but the then Chief Secretary, Treasury, in his letter of 11th May, said that he could not agree to this without further discussion. On 12th May the Minister of State for Industry and Information Technology wrote to the then Chief Secretary to say that he and the Secretary of State for Industry warmly endorsed the Defence Secretary's choice of ALARM. On 16th May the then Foreign and Commonwealth Secretary wrote to the Defence Secretary expressing his concern that the implications of a choice of ALARM for our relations with the United States should be taken fully into account in reaching a decision. On 17th May the private secretary to the then Secretary of State for Trade wrote to Mr Coles saying that Lord Cockfield shared the concern expressed about the effect on United States opinion, and would like to see a more detailed analysis of the export potential for HARM under the coproduction programme.

5. On 17th May you held a meeting with the Ministers principally concerned to discuss the question. The meeting concluded that it would be right to postpone a decision until after the Election. The then Chief Secretary maintained his opposition to ALARM on grounds of cost and timescale, and argued for coproduction of HARM, with the United Kingdom's homing-head technology being preserved by means of feasibility studies and a demonstrator programme. The Secretary of State for Industry supported the purchase of ALARM, and the Foreign and Commonwealth Secretary maintained his reservations as to the potential effect of a purchase of ALARM on our defence trading relationship with the United States. The meeting agreed that Sir Oliver Wright's suggestion (Washington telegram no. 1346) that we might seek to persuade the Americans to offer Marconi an opportunity to participate in the development of an improved seeker head in return for purchase of HARM should be studied. The meeting also agreed that further work should be done to establish whether British Aerospace and the other companies involved would be able to meet their stated in-service date for ALARM at the agreed price, and that a more detailed analysis should be carried out of the export potential both of ALARM and of HARM under the coproduction programme.

6. The Defence Secretary will be providing further information on these points in a minute to you this afternoon. I understand that the advice on Marconi's participation in the American programme to develop an advanced seeker head is likely to be pessimistic; the United States Government's stipulation that we should only be able to obtain the HARM seeker head through Government channels and with a minimum knowledge of its internal workings, shows the sensitivity with which they regard this area of advanced technology. We should need to exert considerable pressure to get them to consider the possibility of a British source for an improved HARM seeker head. Even then we could not expect Marconi to be given more than the opportunity to compete for the work with American firms; there could be no guarantee that they would succeed.

7. On cost and timescale of ALARM, the Defence Secretary is likely to acknowledge the risk of a slippage of up to two years in the ALARM programme, but to argue that a delayed in-service date of 1989 is as credible as the 1986 in-service date for HARM. He will also point out that the fixed price contract would provide a strong incentive for British Aerospace to minimise any slippage.

8. As to export potential, the Ministry of Defence's assessment has increased to a world-wide market of some 5,000 missiles (as compared with British Aerospace's estimate of 20,000). They believe that ALARM might at best capture 25-30 per cent of this, that is some 1,250-1,500 missiles. On HARM, the assessment is that coproduction would give Lucas the equivalent of some 1,550 missiles, when the United States own requirements are taken into account. If these assessments are right, there is little to choose between the two on export grounds: but assessments of the export potential of British defence systems have in the past been consistently over optimistic.

W 9. In the light of this further work, the Defence Secretary is expected to confirm that his support for ALARM remains unchanged. He continues to attach great importance to the maintenance of an indigenous seeker head and guidance capability, and believes that, given their own attitude to protecting their capability in this area, the United States Government will readily understand a decision in favour of ALARM.

HANDLING

10. You will wish to invite the Defence Secretary to open the resumed discussion of his proposal and the Chief Secretary, Treasury, and the Secretary of State for Trade and Industry to comment. In the light of the full discussion on the question on 17th May, you could guide the Committee to concentrate on the further information provided by the Defence Secretary. In particular -

- a. Does the Committee agree that the issue of exports is likely to be neutral as between the two systems? A 25-30 per cent market share for ALARM will require aggressive marketing: can British Aerospace realistically be expected to achieve it?
- b. Is it agreed that the prospects for Marconi's participation in the American advanced seeker head programme are slim? Was Sir Oliver Wright consulted further in the formulation of the advice?
- c. Could the fixed price contract for ALARM on British Aerospace be made watertight enough to prevent them evading its provisions?
- d. Is ALARM the only system in prospect for development by BAe/Marconi which will enable them to retain and develop a sophisticated seeker and guidance technology?
- e. Is a three year delay in the in-service date (1989 for ALARM instead of 1986 for HARM) militarily acceptable?

CONCLUSION

11. It is accepted that in order to maintain a sound defence industry in Britain, we should undertake the development of a number of weapons systems rather than buy them from abroad. In this case the question is whether this particular area of technology is important enough to make it essential for the United Kingdom to remain in it. A judgement on this depends firstly on the view taken about the longer term military importance of seeker and guidance technology, and secondly on the relative export potential of ALARM and ensuing generations of weapons as against HARM. The Committee will wish to decide upon ALARM if they judge that these and other considerations outweigh the political, cost and timing arguments for choosing the Lucas coproduction option.

David Goodall

15th June 1983

A D S GOODALL



Ref. A083/1702

MR COLES

HARM/ALARM

Mr Godfrey Messervy rang me at 9.30 am this morning, aware that a decision was about to be taken on the choice between the HARM and ALARM. Mr Messervy is, of course, the Chairman of Lucas, and an extremely interested party.

2. He was anxious to be sure that sufficient weight would be given to four points:

- (i) the concern of the Royal Air Force to have early availability of a proven missile.
- (ii) The fact that HARM would provide entry for United Kingdom manufacturers into a world market, which could be large. The world export potential for ALARM is much less certain, and perhaps negligible, since we have never succeeded in fitting British missiles to United States aircraft, and 80 per cent of the free world's fighting aircraft are United States made.
- (iii) The strong reaction that there would be in the United States if HARM were to be rejected on political grounds.
- (iv) The substantial cost differential in favour of HARM as compared with ALARM.

Rf.

Approved by
ROBERT ARMSTRONG
and signed in his absence.

16 June 1983