

Z<sup>B</sup>

Ref. A083/1395

PRIME MINISTER

A Defence Suppression Weapon for the RAF

## BACKGROUND

You are holding a meeting at 2.45 pm on Tuesday 17 May to discuss the proposal by the Secretary of State for Defence in his minute of 10 May to meet the requirement for an anti-radar missile for the RAF with the British missile ALARM instead of the American HARM.

2. Mr Heseltine originally wished to announce a decision in favour of ALARM today, but the Chief Secretary, Treasury, in his letter of 11 May, said that he could not agree to this without further discussion. On 12 May the Minister of State for Industry and Information Technology wrote to the Chief Secretary to say that he and the Secretary of State for Industry warmly endorsed the Secretary of State for Defence's choice of ALARM.

3. Factors governing the choice of missile are set out in a paper by Ministry of Defence officials attached to the Secretary of State for Defence's minute. One important factor is that improvements in Russian surface-to-air missiles are likely to have the effect of doubling the attrition rate of the Tornado aircraft between 1985 and 1990. The RAF believe that this growing threat to Tornado must be countered urgently by acquiring an anti-radiation missile with the earliest possible in-service date. 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) Co-production 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. Z





- (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.

All the calculations have been done at an exchange rate of \$1.59-£1: the fixed price contract offered by British Aerospace is subject to a variation of price clause (ie the price goes up roughly in line with inflation in the economy generally).

4. The Treasury dispute some of the assessments on which the Secretary of State for Defence's recommendation is based: the Chief Secretary has drawn attention to the fact that the Ministry of Defence have themselves assessed that the ALARM programme is 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.

5. You should know that the Chairman of Lucas, Mr Messervy, is actively lobbying on this subject. He is well aware that co-production 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 co-production 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.

#### HANDLING

6. You will wish to invite the Secretary of State for Defence to speak to his proposal, and the Chief Secretary, Treasury and the Secretary of State for Industry to comment upon it. In the discussion it will be important to consider and weigh these factors in particular:

- (a) The importance of the in-service date, not only to the RAF but to the prospects of ALARM being successfully exported (eg to the Germans and the Italians who also have the Tornado aircraft).





- (b) The consequences of the extra cost of ALARM for the rest of the defence programme, particularly as the extra costs will occur primarily in the years 1984-85 to 1986-87. You might like to ask the Secretary of State for Defence whether the choice of ALARM would mean that other orders with British industry would have to be postponed. Is there a risk that the political advantages in the short term of choosing ALARM might be offset later by cutbacks elsewhere?
- (c) The importance of the ALARM programme for the defence industries and their technological base. If ALARM were not chosen, what would we have to do to keep alive the important homing-head technology to which the Ministry of Defence attach importance?
- (d) The relevance of the choice to exports and therefore employment. The Government's declared policy is not to allow the public sector to pay a substantial premium in order to buy British. But if the development of a British piece of equipment is likely to strengthen the ability of industry to compete in overseas markets, then a premium can be justified. The export prospects of ALARM have to be weighed against two opposing factors: there are prospects of production export orders for HARM if we go for co-production and set up a production line at Lucas, and a decision to go for the more expensive ALARM could damage our prospects for persuading the United States Administration and Congress to open up the United States defence market to competition from the United Kingdom. The Chief Secretary maintains that the choice of ALARM would cut the ground from under the feet of those in the United States who have warned Congress that their restrictive attitude to foreign purchases has been damaging American relations with Europe and he suggests that the consequences of choosing ALARM might include the loss of major prospects in the United States such as the Hawk trainer aircraft and the





use of Rolls-Royce engines in the advanced Harrier/AV8B. Sir Oliver Wright has also warned (Washington telegram No 1346 - copy attached) of what is at stake in the United States. The Secretary of State for Defence should be asked how he proposes to deal with this problem: is there a real risk of lost American orders for British equipment or is the main point that the credibility of our advocacy of a genuine "two-way street" in defence equipment will be irreparably damaged?

#### CONCLUSION

7. The basic reason for the differences in cost is that the Americans have already paid the cost of developing HARM, while we would have to meet the whole cost of developing ALARM ourselves. This is not an unfamiliar situation: it is nearly always cheaper to buy American equipment off the shelf rather than develop our own, and the economic balance becomes favourable only if we succeed in exporting a considerable proportion of the results of our investment. Lucas believe that British Aerospace-GEC, whose tender is already substantially above that of Texas Instruments - Lucas, have made over-optimistic estimates of both the cost and the time required to develop ALARM in this country. A balance clearly has to be struck: the Government has generally preferred to buy British rather than American defence equipment, with the notable exception of Trident. The Chief Secretary's points are perfectly valid, but the Secretary of State for Defence's choice of ALARM appears to be dictated primarily by political considerations, since he is prepared to accept the financial and operational consequences for the defence programme of choosing ALARM rather than HARM. Do these considerations outweigh the political, cost and timing arguments for choosing the Lucas co-production option? If the meeting decides in favour of British Aerospace-GEC, you may wish, in summing up, to stress the importance of keeping British Aerospace firmly to their fixed price quotation.





8. There remains the question of the timing of an announcement. A decision has been long awaited by industry and by the Press, and there seems little risk of the Government being accused of rushing to announce it before the Election. The "Financial Times" has the attached front-page report today that you are to take a decision this week. On the other hand the greatest care will need to be taken to avoid an adverse reaction from the Americans just before Williamsburg: to minimise this it will be important to stress the technological factors which affect the choice and as far as possible to minimise the cost differences.

*Re*

Approved by  
ROBERT ARMSTRONG  
and signed in his absence.

16 May 1983

CONQUEROR



FOCAB00315

OO CABINET OFFICE

GPS 620

CONFIDENTIAL

ECLIPSE

DESKBY 160900Z

FM WASHINGTON 132020Z

TO IMMEDIATE F C U

TEL NO 1346 OF 15 MAY 1983,

INFO IMMEDIATE MODUK, CABINET OFFICE.

ANTI-RADAR MISSILE

1. I UNDERSTAND THAT A DECISION IS SOON TO BE TAKEN ON THE PURCHASE OF ANTI-RADAR MISSILES, WITH THE CHOICE LYING BETWEEN AN EXISTING AMERICAN SYSTEM (HARM) TO BE MANUFACTURED LARGELY IN THE UK, AND A BRITISH AEROSPACE SYSTEM (ALARM) WHICH HAS YET TO BE DEVELOPED. YOU MAY LIKE TO HAVE A VIEW FROM HERE ABOUT THE AMERICAN DIMENSION.
2. WE HAVE AN EXTREMELY BROAD AND COOPERATIVE RELATIONSHIP WITH THE AMERICANS IN THE DEFENCE FIELD, AND HAVE INVESTED A GREAT DEAL OF CAPITAL IN LOBBYING WITHIN THE ADMINISTRATION AND CONGRESS FOR THE TWO-WAY STREET. WE HAVE ARGUED FIRMLY THAT EACH SIDE SHOULD BE WILLING TO BUY FROM THE OTHER WHEN THE R AND D HAS BEEN SPENT, AND A PRODUCT EXISTS WHICH MEETS THE MILITARY REQUIREMENT. ON THE UK SIDE WE HAVE MOST RECENTLY PUT THIS FORWARD IN PROMOTING THE SALE OF SEARCHWATER RADAR AND THE ICS3 NAVAL COMMUNICATIONS SYSTEM. OVER THE YEARS WE HAVE SUCCEEDED IN BRINGING THE WIDE IMBALANCE IN PURCHASES DOWN TO A MUCH MORE RESPECTABLE RATIO OF 2:1, WITH THE GAP LIKELY TO NARROW FURTHER WITH THE IMPACT OF AV8B AND HAWK. IN RECENT YEARS, THANKS TO A HARD AND CONTINUING SLUG BY MEMBERS OF THIS EMBASSY AND BY VISITING MINISTERS AND OFFICIALS, WE HAVE BEEN ABLE TO TURN ROUND A NUMBER OF DECISIONS IN OUR FAVOUR, SUCH AS THE MARTIN BAKER EJECTION SEAT AND THE THREAT OF RESTRICTIONS ON IMPORTS CONTAINING SPECIALTY METALS. THERE IS A GREAT DEAL AT STAKE FOR US HERE.
3. IN THE CASE OF HARM, THE MANUFACTURERS, TEXAS INSTRUMENTS, HAVE RECOGNISED THE EMPLOYMENT IMPLICATIONS FOR HMG BY TEAMING WITH LUCAS AEROSPACE TO ENABLE THE COMPLETE MISSILE, EXCEPT THE SEEKER, TO BE MADE IN THE UK, A MOVE WHICH HAS BEEN WELL PUBLICISED.
4. IN THE LIGHT OF ALL THIS, A DECISION TO OPT FOR THE ALARM SYSTEM WOULD CERTAINLY NOT PASS UNNOTICED HERE. IT WOULD GIVE A DISPROPORTIONATE AMOUNT OF GRIST TO THOSE IN THE CONGRESSIONAL APPROPRIATIONS COMMITTEES WHO REGULARLY PRESS PROTECTIONIST DECISIONS ON THE ADMINISTRATION AND WOULD WEAKEN THE HANDS OF OUR FRIENDS IN CONGRESSIONAL ARMED SERVICES COMMITTEES WHO FIGHT FOR THE TWO-WAY STREET. WE WOULD NEED TO BE ABLE TO DEFEND SUCH A DECISION ON ITS MERITS AND WE SHOULD NEED VERY CONVINCING TECHNICAL AND COST ARGUMENTS, AS WELL AS TIME, TO TRY TO PREPARE THE GROUND WITH PEOPLE IN THE PENTAGON AND ON THE HILL.



5. THERE IS A PARTICULAR POINT AS REGARDS OPINION ON THE HILL. SENATOR TOWER, IN WHOSE BASKET WE HAVE MANY EGGS, IS FROM TEXAS, WHERE HARM IS MANUFACTURED. AN ADVERSE DECISION BY US COULD PLACE HIS LOYALTY TO THE TWO WAY STREET UNDER CONSIDERABLE STRAIN AND PUT HIM IN A DIFFICULT POSITION IN HIS OWN STATE, WHERE HE FACES A DIFFICULT, RE-ELECTION NEXT YEAR.

6. THESE FACTORS POINT CLEARLY TOWARDS A DECISION TO OPT FOR THE EXISTING US SYSTEM. BUT I RECOGNISE THAT THERE WILL BE STRONG ARGUMENTS POINTING IN THE OTHER DIRECTION. ONE POSSIBLE WAY OF GETTING OVER THIS MIGHT BE TO TRY TO DEVISE A PACKAGE TO BE PUT TO THE PENTAGON. WE COULD DISCUSS OUR PROBLEM FAIRLY FRANKLY WITH THEM, AND INDICATE A READINESS, FOR REASONS OF INTEROPERABILITY, COST-EFFECTIVENESS, RATIONALISATION OF R AND D EXPENDITURE ETC TO SEEK TO PURCHASE HARM, PROVIDED FOR EXAMPLE MARCONI WERE GIVEN A FAIR OPPORTUNITY TO PARTICIPATE IN DEVELOPMENT OF THE IMPROVED SEEKER HEAD FOR THE US NAVY. IF SUCH AN OFFER WERE REFUSED, WE SHOULD OBVIOUSLY BE ON STRONGER GROUND FOR DEVELOPING A NATIONAL PRODUCT.

WRIGHT

NNNN

SENT AT 15/2226Z RD

RECD AT 15/2226Z PJ

FILE



