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B.06987

PRIME MINISTER

c Sir Robert Armstrong

European Fighter Aircraft

(OF(85)8)

BACKGROUND

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In their joint Memorandum of 2 May, the Defence Secretary and the Secretary of State for Trade and Industry have set out views on the options for the replacement of the Royal Air Force's Phantom and Jaguar aircraft in the mid-1990s. Both Secretaries of State appear to favour proceeding with the European Fighter Aircraft (EFA), if acceptable terms can be agreed between the five potential partners. But the Trade and Industry Secretary expresses a more favourable view of the alternative possibilities of a national project or a more restricted European collaborative venture, possibly in association with the United States.

2. The immediate issue before the meeting will be the minimum conditions under which the United Kingdom could agree, at a meeting of Defence Ministers of the five nations on 16 May, to proceed with the Project Definition phase of EFA. On this the Trade and Industry Secretary is far more stringent than the Defence Secretary - paragraphs 10 and 11 of the Memorandum.

3. All members of the Committee, with the exception of the Lord President of the Council, are expected to attend. The Chief Secretary, Treasury and the Vice Chief of Defence Staff (Air Vice Marshal Sir Peter Harding) have also been invited.



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HANDLING

4. You should invite the Defence Secretary and the Secretary of State for Trade and Industry to introduce their joint Memorandum. Since Ministers have not recently discussed EFA formally, you may wish to structure the discussion to cover some of the wider issues before concentrating on the decision concerning Project Definition -

(a) The military requirement

The project is seen as providing replacement aircraft for the Phantom and Jaguar in the mid-1990s and not for the Harrier, as was planned when work began on this project five years ago. You may wish to satisfy yourself about the Defence Secretary's plans to meet the requirement to replace the Harrier GR5 and the Sea Harrier. Another important issue is the relationship between performance and cost: is the emphasis on achieving high agility in the EFA justified, given its high cost and the capability of weapon systems in the mid-1990s? The Vice Chief of Defence Staff might be invited to advise the Committee.

(b) Budgetary issues: the opportunity cost of the EFA

The Defence Secretary has made it clear that the EFA project would have a substantial opportunity cost; it is understood that British expenditure of £4,750 million on the collaborative programme would peak in 1996 at just over £600 million. You may wish to seek the Defence Secretary's advice on the effect of this on the front line strength of planned forces and other projects. The Chancellor of the Exchequer and the Chief Secretary should comment.



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(c) Relative merits of the national and collaborative approaches to this fighter replacement programme

You will wish to ask the Defence Secretary, the Trade and Industry Secretary, the Chancellor of the Exchequer and the Foreign and Commonwealth Secretary to comment on the pros and cons of alternative national and collaborative approaches. The principal advantage claimed for collaboration is the cost saving, estimated at between 10 per cent and 30 per cent depending on the performance level of the national alternative. You will wish to ask the Defence Secretary to advise on this critical aspect. Is this comparison based on an assumption that for the most part avionics and equipments would be common to collaborative partners? If so, is this a reasonable assumption given the variation in national requirements and industrial interests?

The Secretary of State for Trade and Industry is concerned (paragraph 6 of the Memorandum) about the need to protect and enhance the pre-eminent position in Europe of the British aerospace industry. He fears that at worst French design leadership on the airframe would eliminate British Aerospace as a credible designer of fighter aircraft and considers that a national solution would protect and enhance the United Kingdom industry's technical capability. You will wish to seek views on whether a national programme would have a viable production run. Would the resulting aircraft sell overseas in competition with a potential European (let alone United States) rival? (The sale offer of British Aerospace shares, published on 3 May, gives greater prominence to EFA than to a national programme - see attached extract.)

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(d) The preferred form of collaboration

The group of five now discussing EFA offers wide distribution of costs and a large production run. The Trade and Industry Secretary should be asked to expand on his view that collaboration with the United States either bilaterally or with a smaller group of European partners would have advantages. Should this be regarded as a second best arrangement, only to be pursued if France cannot be brought to compromise on the weight and other characteristics of the EFA? The Defence Secretary should be asked to give his views on what the best alternative for the United Kingdom would be if the five nation project is blocked by France. Would Germany be willing that the project be pursued by the other four, thus accepting an open split with France? Or would the Federal German Government simply delay its decision? Is there any risk that Germany would go for a four nation project with France and without the United Kingdom? Could we use leverage on the Germans, in terms of British forces in Germany? How would that react on our wider interests (NATO, EC, European defence co-operation) in relations with the Federal Republic? The Foreign and Commonwealth Secretary should advise on the political implications.

(e) Minimum conditions for British agreement to collaborative Project Definition of EFA

Although the cost to the United Kingdom of Project Definition would be only £10 million, a political commitment would also be implied. Judging from their memorandum, the Defence Secretary and the Trade and Industry Secretary should be able to agree that the aircraft's specification should fully meet the Royal Air Force's requirements on



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performance; and that the weight should not be less than 9.5 tonnes and the engine should have at least 88 kilonewtons in-service thrust. You will wish to invite the Defence Secretary and the Trade and Industry Secretary to speak on the matters where they differ:

(i) Engine. Is it (a) essential and (b) feasible to use the RB 199 for EFA prototypes?

(ii) Industrial leadership requirements. The Trade and Industry Secretary wants the United Kingdom to have design leadership for the engine and considers it most important that France should not have design leadership for the airframe. The Defence Secretary wants "no winners, no losers". This satisfies the Trade and Industry Secretary's second stipulation. Is his first essential?

(iii) Workshares. Is it necessary at this stage to go beyond the broad percentage share of 25 per cent suggested by the Defence Secretary for the development phase of both airframe and engine, leaving greater definition until later?

(iv) Project headquarters. Is the major requirement here to avoid the project headquarters being sited in France? Is the United Kingdom likely to prejudice its chances of achieving this by pressing for the headquarters to be located in this country?

(v) Marketing organisation. Is it necessary to make a decision on the details of the marketing organisation at this early stage?



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CONCLUSION

5. Subject to the discussion, you could lead the meeting -
- (a) to reach a conclusion on whether the five nation EFA project offers the best prospect of meeting the Royal Air Force's requirement for a replacement fighter aircraft at reasonable cost;
 - (b) in the light of (a), to decide on the conditions under which the United Kingdom could agree at the meeting of Ministers of the five nations on 16 May to enter the Project Definition phase of EFA.

C L G Mallaby

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3 May 1985

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Extract from the Offer for Sale
of British Aerospace Shares

3 May 1985

FUTURE OUTLOOK

Military Aircraft

The Board believes that British Aerospace's wide range of military aircraft projects, including the Tornado, Harrier and Hawk, as well as the collaborative nature of a number of these projects, puts it in a good position to achieve further significant orders. In particular, vigorous efforts are being made to export the Tornado. While the Board is confident of the Company's ability to achieve export orders for its military aircraft, competition is very strong and the level of support provided by HM Government (particularly in the provision of export credit guarantee facilities relative to those offered by competing countries) will be an important factor.

The decision on, and timing of, a new fighter aircraft for the Royal Air Force will be of major, long term importance for British Aerospace's military aircraft activities. The Defence Ministers of five nations, the United Kingdom, France, Germany, Italy and Spain, have agreed in principle on the need to develop and produce jointly a new European Fighter Aircraft (EFA) which, in the case of the United Kingdom, would be a possible means of meeting the Royal Air Force's need to replace its Phantom and Jaguar aircraft in the 1990s. British Aerospace and aerospace manufacturers from the other four nations have recently completed a technical and industrial feasibility study jointly commissioned by the five Governments. The results of this study are now being assessed by the five Governments, whose Defence Ministers will meet shortly to consider whether an acceptable basis exists for proceeding to the next stage of a collaborative procurement programme. Should the United Kingdom decide to participate in such a project, it would be the intention of HM Government and British Aerospace to work closely together to ensure that the United Kingdom aerospace industry would receive substantial work starting in the late 1980s. If collaboration does not come about, HM Government will be able to consider, as another option, the alternative of a national solution arising from a technical and industrial study submitted by British Aerospace under the terms of a contract placed with the Company. Meanwhile, in anticipation of the Royal Air Force's need to replace its Phantom and Jaguar aircraft in the 1990s, British Aerospace is developing (to cost and programme) an experimental aircraft (EAP), funded jointly by HM Government, the Company and other industrial partners, including Aeritalia and German equipment companies, to consolidate British Aerospace's fighter aircraft technology. The Board considers it important to the future of British Aerospace's military capability that decisions are taken by the relevant Governments in the near future in order that design and manufacturing capacity may be maintained as the Tornado programme runs down in the late 1980s.



TORNADO RE-ENGINEING

The present Tornado powerplant is the RB199 of which the Mk104 version enters service this year. The Tornado partners (the UK, Germany and Italy) have committed funds for an improved fan (the 62B fan) which will provide either increased thrust or reduced maintenance costs (from running the engine cooler at its original thrust rating). This modification will be incorporated in new Tornados from Batch 7 onwards. There are two demonstrator programmes, XG20 and XG40, designed to demonstrate the technology for further RB199 uprating, but no commitment yet exists to any such uprating.

The RAF, who are the only operators of the Tornado Air Defence Variant, are likely to want to re-engine it with an engine of increased thrust in the mid to late 1990s. This could be either the EFA engine or the P120 engine, which is derived from XG40. The re-engineing would probably not be considered worthwhile if the new engine had a nominal thrust of less than about 90kN (RB199 Mk 104: 74 kN). An EFA engine sized for 98kN would be about the largest that could be accommodated in the Tornado engine bay.

There would be little difference in the marginal cost of Tornado re-engineing with either the EFA or the P120 engine, (MOD estimates show the P120 engine as slightly cheaper), though the sharing of costs with the "parent" project would depend on the total production numbers in each case. But if a new engine were not developed (e.g in the case of an F18 purchase) the RAF would have to decide whether to take the expensive course of funding on XG40 based development exclusively for Tornado re-engineing, or to forego the increased performance.