

Nord 2207

Telegrams: Britair London Telex Telex: 24353

British Aerospace

PUBLIC LIMITED COMPANY

100 PALL MALL LONDON SW1Y 5HR

TELEPHONE 01-930 1020

From the Managing Director,
SIR RAYMOND LYGO, KCB

The Rt. Hon. Norman Tebbit, MP,
Secretary of State for Trade and Industry,
1, Victoria Street,
London, SW1H 0ET.

1st August, 1985

Dear Norman,

I enclose my comments on the documents to hand together with some recommended changes.

Annex. A. comments on M.O. 26/11/9

Annex. B. comments on CDEC 000203

I also enclose copies of letters to Secretary of State, Ministry of Defence which you have not seen. All these make clear the BAe position.

Annex. C. I.R.Y./LDT/DMD/1076 dated 26th July, 1985.

Annex. D. I.R.Y./JDP/DMD/1043 dated 2nd July, 1985

Annex. E. Letter from Sir Raymond Lygo to S.o.S. M.o.D. of 19/7/85

Annex. F. Woerner proposals.

We understand that in a Reuters report of an interview, Woerner intimated that they could accept a delay of a further week.

Yours,
R Lygo

COMMENT ON M.O. 26/11/9

1. Sir Raymond Lygo had not seen the above document but assumed it to be based on the Woerner proposals (Annex F.). He was familiar with the general theme but he assumed that the Headquarters would be in Munich. The BAe position on work share with Dassault was well known to be, BAe to have a share and responsibility equal to Dassault and to include the design and manufacture of the front fuselage of the aircraft and for flight testing to take place at Warton. An acceptable minimum compromise would be, two front fuselage production lines with a common joint Anglo/French design team. Flight testing to be shared between Istres and Warton.
2. Mr. Yates was given a sight of the draft and questioned the wisdom of the phrase "as opportunity arises" wishing the drafters to take a stronger line. He assumed that "have a share" meant as described in 1 above. His notes of the meeting made it clear that Munich was to be the location. He left Annex. C. with D.C.A.
3. Proposed minimum amendments to MO26/11/9 to make it acceptable subject to the explanations in paragraphs 1 and 2.

Paragraph 8(b) amend to read:-

"British Aerospace should have an "equitable" share of two . . ."

Paragraph 9(d), delete "as opportunity arises", insert after British Aerospace "having an equitable share . . ."

REF: CDEC 000203

This document, if it is meant to be signed, leaves many of the crucial issues completely open:- Work share: management: location. In the event of the French wishing to join, these issues must be resolved to our satisfaction. As a location, Paris is unacceptable to British Industry (see Annexes D. and E.) London is our preferred location.

Munich is an acceptable compromise and the Woerner proposals for management appointments are generally acceptable.

BAe's views on work sharing are set out in my comments on M.O. 26/11/9.

1. The British N.A.D. should be instructed to insist that if the French are inclined to join, the only acceptable compromise location is Munich and the only acceptable management structure is on the basis of the German compromise proposal and that these must be included in the document.
2. The British N.A.D. should understand that if the French are inclined to join, para 3 (3) "an equitable allocation" means in relation to BAe and Dassault. (See comments on M.O. 26/11/9). It also means that Rolls Royce get the hot end of the engine. His position on both these points must be made clear and minuted.

British Aerospace
PUBLIC LIMITED COMPANY

ANNEX. C.

100 Pall Mall
London SW1Y 5HR

Telephone: 01-930 1020
Telegrams: Britair London
Telex: 24353

IRY/LDT/DMD.1076

26th July 1985

Mr D Spiers
Deputy Controller Aircraft
Ministry of Defence (PE)
Main Building
Whitehall
London SW1

IN STRICT CONFIDENCE

Dear Donald,

BASIS OF EFA PROGRAMME

The attached notes represent what I understand to be the UK 'bottom line' as a basis for a 5 nation programme in the event that a ministerial meeting in the near future leads to such an eventuality. I hope it is useful background to the letter now being drafted for Secretary of State to send to the Prime Minister, as agreed in Mr Heseltine's office last evening.

In any event, since we cannot be sure of the outcome (and it is quite likely that a clearcut situation may not arise from the present political activity) the initiative suggested by Sir Raymond Lygo in his letter to the Secretary of State dated 19th July, namely that the UK should proceed to fund the Definition Phase of the 4 Nation solution in collaboration with whomsoever of the Partners wishes to join, should be given serious consideration. It is essential that we do not lose momentum, Industry needs support to keep the 4 Nation design work proceeding, and this is the most effective way to ensure a positive outcome, with 5 Nations or with a reduced number of partners, within an acceptable timescale.

James

Lee

att.

From: I. R. YATES, C.B.E., B.Eng., F.Eng., F.I.Mech.E., F.R.Ac.S., F.A.I.A.A., C.B.I.M., Deputy Managing Director (Aircraft)

Registered in England & Wales No. 1470151

Registered Office: 100 Pall Mall London SW1Y 5HR

Industry would generally agree with the Woerner package, noting the following key points:

(the reference numbers quoted correspond to the numbers of the German proposal)

1. (a) The aircraft design must be completely new - a "clean sheet of paper" - the French proposal (to prescribe side intakes and fuselage mounted undercarriage) is intended to force the use of the Dassault ACX as the basis for the design; this is unacceptable to BAe and the UK equipment industry.
- (b) Technology from the ACX and EAP programmes must be available to all partners for use in the new design.
- (c) In any case (even if the German proposal to use the 4 Nation configuration is accepted) Industry must be asked to define the overall configuration of the airframe and engine in order to meet a clear 'check point' early in the Definition Phase. Failure to achieve an agreed configuration (by the end of September?) must be reported to Ministers and resolved quickly.
- (d) Acceptable performance, thrust and wing area, must be set by MOD/RAF. However, 89KN and 49.5m² wing as 'bottom-line' is acceptable to Industry - anything less is regarded as very unwise indeed, having due regard of the threat.
3. The Project Definition Phase should be started as soon as possible, with full programme "go-ahead" before mid 1986. In Service dates of 1995 must be respected.
4. Organisation
 - (a) Industrial Consortia, generally agreed but some responsibilities may need further discussion.
 - (b) Note that the French proposed GIE is not an acceptable legal structure for the company (it must be in Germany, a GmbH).
8. Location in Germany is acceptable, on basis that UK and France are mutually unacceptable. This also allows UK and France to be compensated, for the prestige accorded to Germany by Munich location, by the allocation of technically significant items of the worksharing package.

9. The basis of the workshares and principles accepted, but must be augmented by agreement on certain physical workshares in order to provide an acceptable overall package:-
- (a) Both BAe and Dassault will wish to have a major share in two key areas
 - (i) The design and manufacture of the front fuselage,
 - (ii) Location of the Flight Testing

Note These are not prestigious symbols, but key to control of the programme

- Control of the front fuselage is de facto control of the aircraft design (and equipment specification) process
- Control (location) of flight testing gives effective control of the whole development programme which is key to the overall programme timescale.

These cannot reasonably be balanced against each other (British nose, French Flight testing), therefore, the aim will have to be a compromise by an equitable split of both, which can be done on basis of:

- (i) There are going to be more than one (national) weapons systems/cockpit arrangement, so have the front fuselage jointly designed with shared manufacture and two equipping lines.
- (ii) Flight testing can be split by allocating the key tasks between Warton and Istres (as achieved effectively on Tornado).
- (b) Since the French do not have the technical capability within SNECMA to achieve the engine performance in anything like the timescale, then Rolls Royce have to do the hot (turbine) end of the engine. This is a 'stand alone item' and whilst the French if necessary could possibly be 'compensated' for this, it can only be within the parameters of the engine itself, not by unbalancing workshares in the airframe or the equipment sectors.

Other points, as a reminder:-

- (A) It is very important to keep the joint study work proceeding, particularly in the absence of any clearcut outcome to the present political activity. At the very minimum there should be a UK funded definition study initiated, for an aircraft aligned with the current compromise configuration (9.75t/90-89Kn/50-49.5m². (refer - letter from Sir Raymond Lygo to the Secretary of State dated 19th July copied to Mr Norman Tebbit).

- (B) Attention is also drawn to a number of additional points:-
- (i) The use of English language should not be a tradeable item; therefore, argue that it has already been accepted and anyway is the language of aeronautics.
 - (ii) Interim engine, we should press (at some stage) for use of the RB199 at least in the early UK assembled prototypes.
 - (iii) EAP must complete a useful flight test programme.
 - (iv) We have never asked for the EAP to be the basis of a new programme; Dassault have consistently pressed for the ACX to be the basis of the programme.
 - (v) If the ACX were to be used, even in a 'scaled up' 9.75t form, 90KN/50m², it puts a complete technological 'lid' on UK airframe and equipment industries, because all its equipment (important things like flying controls) is fully specified around French technology, and these technical specifications will, "in the interests of efficiency", be imposed on the other partners and suppliers who will become effectively just sub-contractors: By this means the French will have achieved their strategic objective of leadership in military combat aircraft in Europe (as well as space, helicopters and airlines).
 - (vi) Whilst fully supporting the proposed 5 Nation programme if it can be achieved on the above basis, the UK will be better served, in terms of technology and the total return to the country, by a 3 (or 4) nation programme with the Panavia Partners. Note that this will cost the UK (MOD) no more (and probably less) than the UK share of the 5 nations programme; indeed the cost of a programme with only 1 partner (say Italy - a good partner) compares very favourably with the UK share of a 5 nation programme.

British Aerospace
PUBLIC LIMITED COMPANY

ANNEX. D.

Richmond Road
Kingston-upon-Thames
Surrey KT2 5QS

Telephone: 01-546 7741
Telegrams: Britair Kingston-upon-Thames
Telex: 23726

IRY/JDP/DMD/1043

2nd July, 1985.

The Rt Hon Michael Hesletine MP
Secretary of State for Defence
Main Building
Ministry of Defence
Whitehall
London, S W 1.

Dear Secretary of State,

European Fighter Aircraft

It might be helpful to update you on the industrial perspectives prior to your meeting on 3rd July, following my file note to your office dated 26th June and the General Managers Meeting in Turin on 27th June. Two issues emerge as central to any industrial progress before the meeting of Ministers on 24th July, namely a joint aircraft configuration and certain aspects of organisation.

The Ministers requirement for an answer on the basis of single aircraft configuration has been discussed with Dassault who are now prepared to work in a limited way with the other companies, but they have reservations which will prevent us making a meaningful joint report to the N.A.D.S. We have therefore tried further initiatives in order to try and achieve a more wholehearted support for a single aircraft configuration, but so far we have not had a clear response from Dassault.

In the international forum we have not been able to make any further progress with discussions on organisation but we have pursued discussions with MOD (PE) and I have written separately to DCA.

The Management issue has been one of continuing concern; you may recollect that it was referred to most recently in Sir Raymond Lygo's letter to you on the 8th May. While we are all agreed on the need for a governmental international programme office (IPO) there remain uncertainties on how it would operate, especially in the placing of contracts. The primary question is its legal authority and the extent of the use of National governmental organisations. It is one thing to have an equitable IPO in Germany making use of their BWB at Koblenz to sign the contract; it would be a very different matter to locate the IPO in Paris and allow DTCA contractual control.

While four of the Nations' industries are seeking equitable management, Dassault continues to wish to dominate the project France has an excellent governmental procurement organisation and the closest of associations between it and Dassault. However, they have very little experience in multi-national military collaborative projects. They have many bi-lateral programmes but with French dominance or the concession of a partial or reciprocal lead, e.g. the Adour engine on Jaguar and the helicopter package, where it was in their interest. Dassault have never conceded their leadership position; when faced with it on the AFVG, they withdrew rather than concede. Our concern is that, if the governmental and industrial organisations were located in Paris, the French nationalistic attitude would drive them to utilise their capabilities to misdirect the international effort towards French national advantage. There is no way of protecting our legitimate industrial (and national) interests against such dominance by appointment of key executives in the joint company on a national basis (UK Technical Director, FRG Managing Director etc) even if the management structure is otherwise acceptable to us. (I need hardly add that in this environment the concept of a single central engineering office (Bureau d'Etude Commun) to control the programme is completely unacceptable).

We conclude therefore that the IPO must have full independent status - for instance a NATO agency - in relation to the joint Company. This is not only a BAe view, it reflects the considered opinion of the UK Aircraft Industry especially Rolls-Royce and the experience of the UK equipment and Avionics Industries for whom the implications could be even more serious. We need to have this point clearly established before we can hope to make any progress in establishing an acceptable industrial management arrangement with the other nations.

I hope this summary is helpful; I am arranging to be updated on all aspects prior to your meeting.

Yours sincerely
Ken Tuck

Copy: C.D.E.C.

British Aerospace

PUBLIC LIMITED COMPANY

100 PALL MALL LONDON SW1Y 5HR

TELEPHONE 01-930 1020

From the Managing Director,
SIR RAYMOND LYGO, KCB

The Rt. Hon. Michael Heseltine, MP,
Secretary of State for Defence,
Ministry of Defence,
Main Building,
Whitehall,
London, SW1A 2HB.

19th July 1985

FUTURE OF EFA

At the meeting we held with you on Monday I undertook to give some thought to the best way ahead to secure a collaborative programme. Subsequent to your meeting we had a meeting with Norman Tebbit in which we outlined the results of your meeting, but learned of one new development; that it was unlikely that there would be a meeting of Ministers until September. In the light of this information we made a firm proposal; that if the in service date of 1995 was to be met, then it was necessary for us to proceed with Definition Studies this Autumn. This is a view that we understand is shared by our German colleagues. I believe that the best way of ensuring a five nation solution would be to be seen to be making progress on an aircraft that meets the requirements of four of those nations. Whilst this may not be the ideal solution to the eventual achievement of a quintilateral aircraft programme, I do not believe that any other strategy is more likely to bring that about. To this end, we would propose that H.M.G. should announce that it is proceeding to fund the Definition phase of a study of the four nation solution which most closely meets the operational requirements of the Royal Air Force. We should further offer to do this in collaboration with whomsoever of the partners wishes to join and we should discuss this with them in advance. We should make it clear that at the conclusion of this Definition Study other Nations not participating, could still join the consequent programme in accordance with Para 3 of the Ministerial statement issued after their meeting in London on 18th June 1985.

I suggested that Norman should attempt to get Bangemann on side and I know you will be in touch with Woerner in order to understand better his position.

Continued/.....

- 2 -

There are five points I feel I must reiterate in the event that any further discussions on a quintilateral programme take place:-

- (a) our recommendation is that you stick to a thrust of 91.7 Kn. Anything less puts the supersonic combat capability increasingly and seriously at risk; ie. likely to fail to meet the minimum EST;
- (b) whatever aircraft is selected it must be a totally new design. We must be careful to avoid a situation where the French ACX is edged into the position as the basis for the programme;
- (c) since Dassault have consistently pursued their own objectives disregarding the instructions issued by the Ministers when they consider it appropriate, there can be little logic in believing that any minor concession will change their future attitude;
- (d) that wherever the International Programme Office is located it must in any event take the form of an independent (NATO) agency with full authority to place contracts on both the airframe and engine companies;
- (e) in the event that France were to become the likely Headquarters location then we would be deeply concerned about the degree of protection provided for British Industry and would need to review the situation with you before final decisions are taken.

I am copying this letter to Norman Tebbit.

COPIES TO:

The Rt. Hon. Norman Tebbit, MP,
Secretary of State for Trade and Industry,
1 Victoria Street,
London, SW1H 0ET.

Mr. P.H. Robins
Rolls-Royce Ltd.,

Mr. Derek Alun-Jones
Ferranti PLC

Sir Clive Whitmore, KCB, CVO,
Permanent Under Secretary of State

Mr. D.H. Perry,
Chief of Defence Equipment Collaboration

Air Marshal Sir John Rogers, KCB, CBE,
Controller, Aircraft

Internal Copies

Sir Austin Pearce
Sir David Evans
Mr. R. H. Evans
Mr. D. McClen
Mr. F. E. Roe
Mr. L. A. Sanson
Mr. I. R. Yates

At the NADs Meeting, Germany made the following compromise proposal:

1. Aircraft Design based on the 4 N configuration:

| | |
|-----------------------------|--|
| In-Service Basis Mass Empty | 9.5 to plus 140 kg equipment and 110 kg growth allowance in accordance with an BME-Ceiling of 9.75 to |
| Thrust | 90 kN nominal |
| Wing area | 50 m ² |

2. According to the results of the studies, the EST-requirements can be met substantially with an aircraft design of the above mentioned characteristics.

3. Based on these characteristics, the project definition phase can be started, provided all five nations are agreed on the characteristics and on the proposals for the organisation and worksharing.

4. System Consortium

As a System Consortium a joint company with adequate responsibilities/liabilities is to be established by the five national aerospace companies.

The five companies in this joint venture have equal rights and cooperate as partners.

The joint company is responsible for the system configuration total integration of the airframe, engine, avionics and equipment during the development, production and utilisation phases.

Execution of the worksharing packages is a responsibility of the national companies awarded by contract.

5. Structure of the airframe consortium (system)

The key-appointments should be shared, for example, as follows:

| | |
|--------------------------------|----|
| General Manager | FR |
| Technical Director | UK |
| Programm Director Coordination | GE |
| Finance Director | IT |
| Contract Director | SP |
| Flight Tests | UK |

6. Structure of the Engine Consortium (as a possible proposal)

| | |
|--------------------|----|
| General Manager | UK |
| Technical Director | FR |
| Programm Director | GE |
| Finance Director | IT |
| Contract Director | SP |

7. Official International Programm Office (IPO)

The IPO is responsible for the planning, control and monitoring of the programme and for the awarding of contracts. It acts on the bases of directives from the Steering Committee.

The key-appointments should, for example, be shared as follows

| | |
|--|-----------------|
| General Manager | IT |
| Technical Director | UK |
| Operational Requirements/ Logistic Director | GE |
| Finance Director | FR |
| Contracting | SP |
| Controller | UK, FR, IT, SP, |

8. To enhance their efficiency, all three organisations should be at the same location, i.e. Munich. The sharing of key appointments proposed under paragraphs 5 - 7 above takes into account that the seat of the organisations is in Germany. Over all, the weight of the five partners thus is balanced.

9. Worksharing among the System Companies
 Within the System Consortia, the National Aerospace Companies have equal rights and cooperate as partners. Execution of the worksharing packages is a responsibility of the national companies awarded by contract.

In accordance with current arrangements among the NADs the qualitative and quantitative worksharing during development for the airframe, avionics, and equipment will be as follows:

| | |
|----------------|-------------|
| For FR, UK, GE | 24.5 % each |
| IT | 16.5 % |
| SP | 10 % |

Production sharing will be done on the basis of firm orders for the aircraft from the participating nations at the beginning of the production phase.

Germany maintains the view that this proposal would enable all five nations to participate in the collaborative Programme. Italy and UK wish to review the allocation of responsibilities proposed in 5 to 7 but apart from this can agree to submit this proposal to the Ministers for their decision.