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CONFIDENTIAL:

22nd August, 1986.

The Rt. Hon. Margaret Thatcher M.P.,
The Prime Minister,
No. 10 Downing Street,
London SW 1.

Dear Prime Minister,

You may like to have an up to date briefing on the European Fighter Aircraft Project and Ferranti's particular interest, before you visit Scotland.

This has been prepared by Mr. Philip Atterton, Managing Director of Ferranti Defence Systems.

This issue is of the utmost importance to Ferranti who employ about 8,000 persons in Scotland, and are the largest Science based Company North of the Border.

It must not be underestimated that the entire Radar Contract is worth at least £1 billion, and Ferranti's possible interest might be worth 1/3 of that figure over a period of years.

Yours sincerely,

James Douglas-Hamilton

M.P. for Edinburgh West.

EUROPEAN FIGHTER AIRCRAFT

1. Ferranti Defence Systems Limited is involved in the production phases of the multi-national Tornado air programme. Equipment provided includes, for the IDS (strike aircraft), the Inertial Navigation System, two major Cockpit Displays, the Laser Ranger and Marked Target Seeker and a significant amount of the Nose Radar. The ADV (air defence) aircraft is supplied with two Inertial Navigation Systems and a significant part of the Foxhunter Radar and a Data Recorder.
2. The Company is involved in a number of major national programmes including the Buccaneer update (Navigation System and Radar update), the Jaguar (Navigation System), the Harrier GR5 (Navigation System), Sea Harrier and EH101 Helicopter (new radar development and manufacture).
3. A significant proportion of our output is for export which has been won against international competition. This includes Displays and Laser Ranger for the F-18 (US), part of Radar for the JAS39 (Sweden), Inertial Guidance System for Ariane (France), Radar for Sea King Helicopter (FRG), Nav-Attack System for A-4 Aircraft (Singapore), Head-Up Display for A-4 Aircraft (New Zealand), Display for Jaguar and Navigation System for Army (India), and Radar for Helicopter (Turkey).
4. The foregoing projects and programmes are based on the most modern technologies for Navigation, Radar, Displays and Electro-Optics, our chosen areas of business. The Company has invested heavily in capital equipment and in training skilled manpower over many years and this must be a considerable National asset. The European Fighter Aircraft presents the opportunity to apply this technology to many of the equipments and the Company is negotiating with several European companies to compete for a significant amount of this work. We are confident that, in true competition, we could obtain a substantial proportion of the programme.
5. The major avionics equipment on the EFA is the Radar and, together with Italian and Spanish partners, the Company is proposing the European Collaborative Radar (ECR 90) which is based on the Ferranti Blue Vixen Radar, now well into development for the Sea Harrier mid-life update. Regrettably Germany (AEG) withdrew from the consortium in order to promote an American radar, the Hughes APG65. We understand that this was at the prompting of the German Government who claim savings due to commonality of equipment with their F-4 aircraft. The F-4 programme has not yet been approved. The adoption of a US Radar for an essentially European programme with all the attendant security and commercial problems must be a retrograde step and, unless radar technology is retained and supported in Europe, the future of the fighter aircraft industry must, in the longer term, be in doubt. A European radar is essential to the health of the European military aircraft industry.

6. The following brief comments summarise two of the contending radars:

a) The Hughes APG 65

- i) This American radar is based on technology and concepts now 10 years old and will require extensive modification even to fit into the EFA airframe. There are real problems in meeting the EFA technical requirements and the costs and technical risks will be much higher than might at first sight appear to be the case.
- ii) If fitted in a European aircraft it would be open to US political influence and thus likely to be difficult to export, and there are real technology transfer problems.
- iii) The gain to European technology would be limited only to such licensed technology as was finally agreed. Real design and development technology of the critical items would be likely to remain in the US.
- iv) The choice of a US radar for a European built aircraft would be a major setback for the European aerospace industry and a major weapon in the hands of the US industry for the future. It might begin to erode the EFA project as a whole, and would certainly put in doubt the European ability to design a total weapon system.

b) The ECR 90

- i) This modern radar stems largely from fully funded advanced (1985) technology radar projects now flying in Europe.
- ii) The radar systems concepts used will continue to be viable well into the twenty-first century.
- iii) It is free of US technology and free of all possible technical or external political restrictions and therefore more likely to be exportable.
- iv) Final development and production will consolidate European capability in the most modern radar concepts.
- v) It will enable the European industry to produce an up-to-date aircraft entirely designed and built in Europe and thus maintain the industry wholly competitive with the rest of the world.

7. The political, technical and industrial case for the European radar is sound and the Company will fight strongly for its adoption. It is hoped that the Government and the main contractors will support the case with vigour. Ferranti will, in addition, bid for other significant equipments for this programme which it sees as essential to the long term future of the Industry and the employment here in Scotland.