

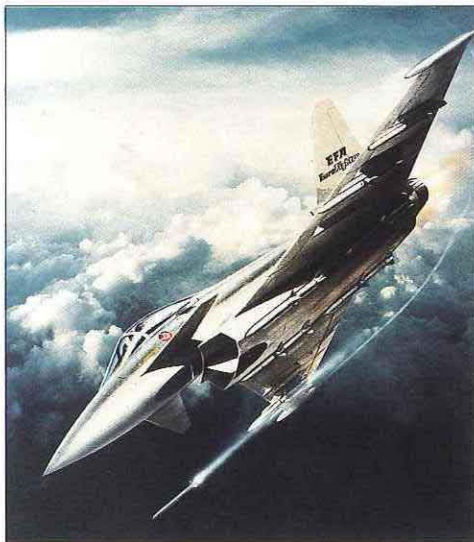
EFA FLIGHT CONTROL SYSTEM



Following the major successes in providing flight control equipment for the Tornado and the Experimental Aircraft Programme (EAP), the Combat Aircraft Controls Division of GEC Avionics is leading the consortium which will supply the Flight Control Computers (FCC) and the Stick Sensor and Interface Control Assembly (SSICA) for the European Fighter Aircraft, Europe's next generation air superiority fighter.

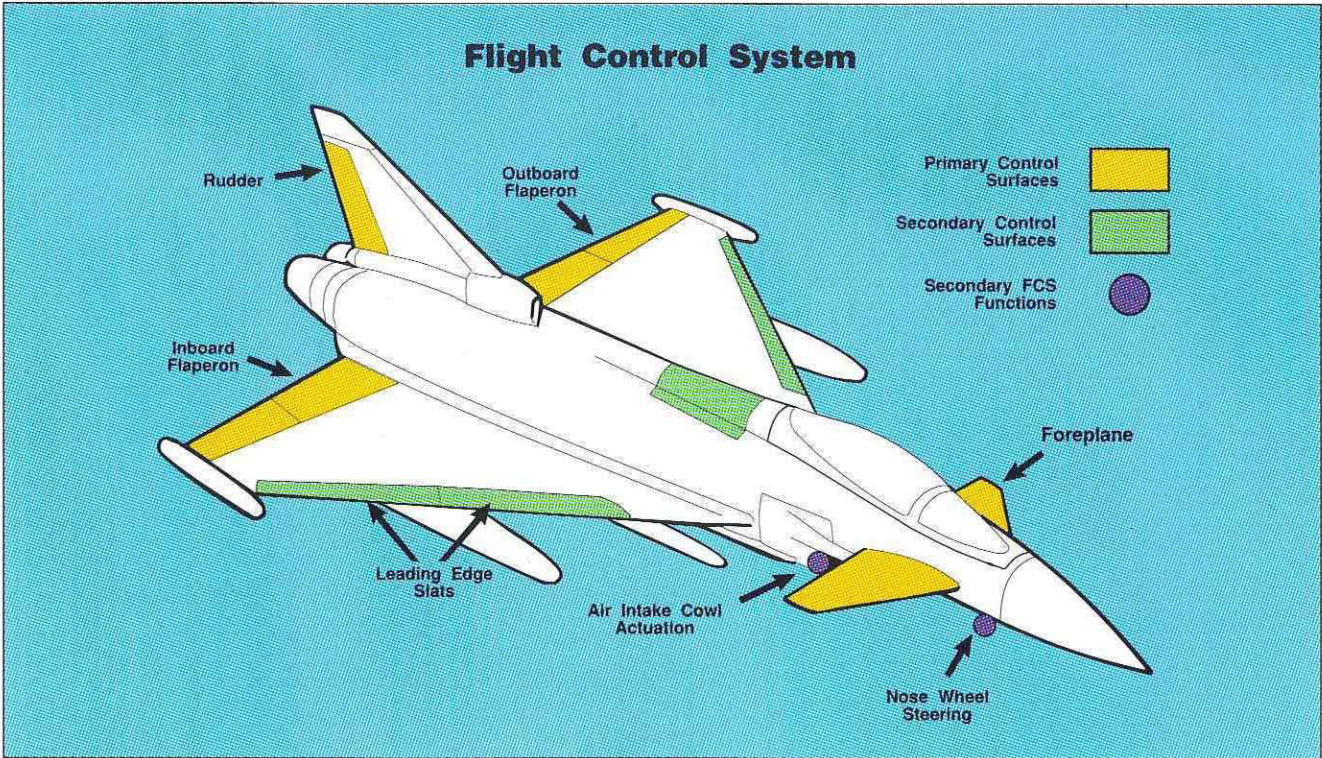
Flight Control Computer (FCC)

The European Fighter Aircraft is designed to be aerodynamically unstable and therefore requires a full-time full-authority flight control system to both stabilise the aircraft and provide the agility and manoeuvrability required for its role as an air superiority fighter. The Flight Control Computer forms the core of this fly-by-wire system.



The system uses a quadruplex design for high integrity and safety. Based on 32 bit Motorola 68020 microprocessors, the FCC contains software written in Ada. Comprehensive built in test will provide continuous system monitoring, to assure the high integrity performance required and for easy system maintenance. The FCC uses the latest Application Specific Integrated Circuits (ASIC's) designed and developed by the company to maximise performance and reduce system size and weight. Each complete FCC will be packaged in a single 1/2 ATR box and will weigh less than 10 kg.

The FCC contains interfaces to the aircraft MIL-STD-1553B utilities bus to provide integrated vehicle management and to the avionics bus which uses the STANAG 3910 high speed optical data bus.



The side stick designed for the YF22 with the centre stick for the EAP.

The Stick Sensor and Interface Control Assembly

The SSICA forms part of the Flight Control System (FCS), and is the main input interface between the pilot and the Flight Control Computer (FCC).

The SSICA is a centrally mounted displacement Fly-By-Wire control stick which provides the pilot with a means of inputting pitch and roll commands to the Flight Control Computer. The feel characteristics of the SSICA are produced by a modular arrangement of springs and dampers within the unit. The desired control input in each axis, is measured from the stick displacement via a quadruplex arrangement of LVDT's (electrical position sensors). The electrical signals from the LVDT are decoded within the SSICA and then fed on to the FCC via the FCS bus.

This brochure is intended only to give a general impression of the products and services which are available and none of the descriptions contained herein shall form part of any contract.



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