



ACTIVE DIGITAL FLIGHT CONTROL SYSTEM

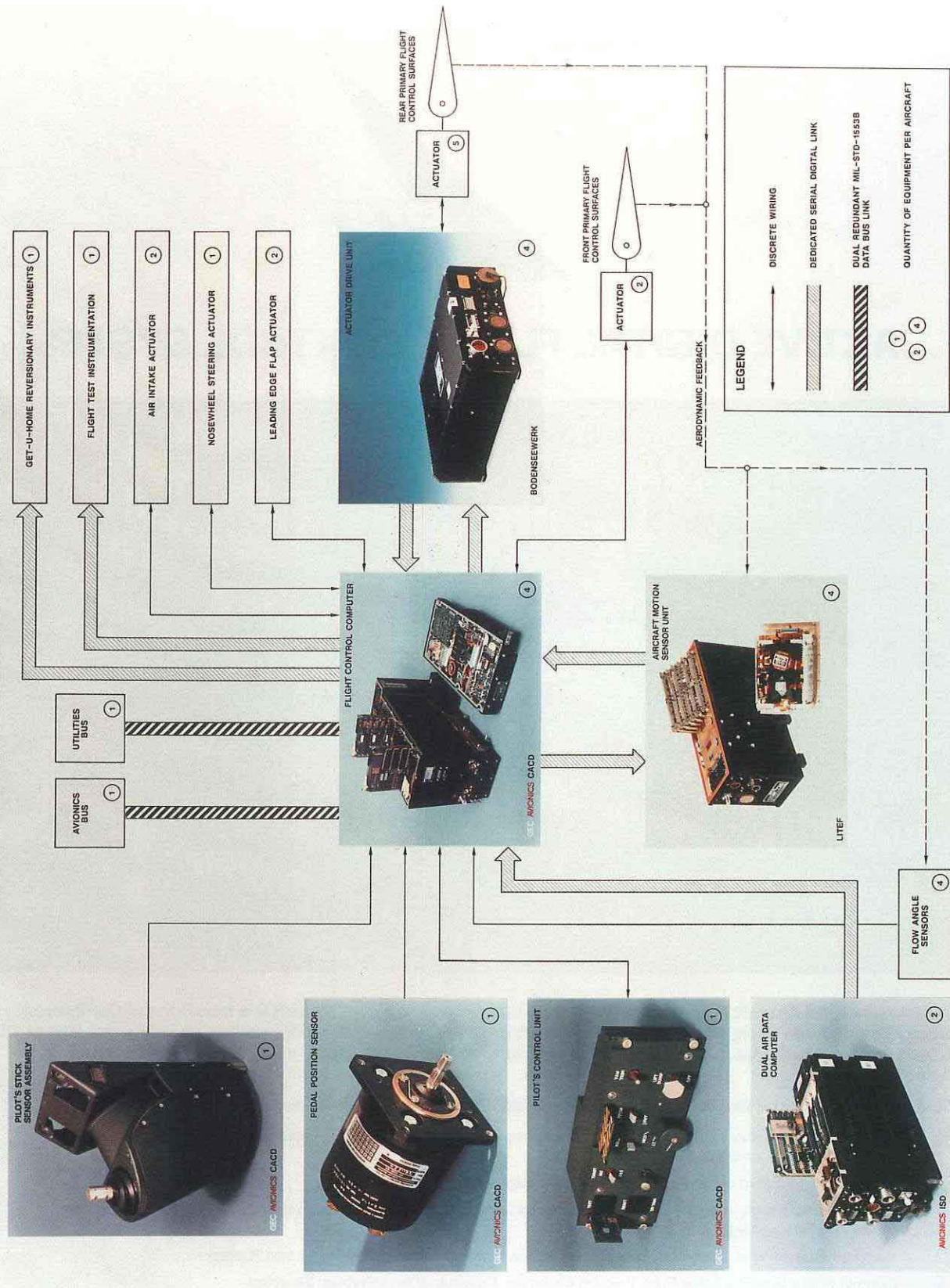


The Experimental Aircraft Programme (EAP) technology demonstrator aircraft is a true Control Configured Vehicle having been designed from inception to fly in a totally unstable configuration, enabling reductions to be made in aircraft size, weight and aerodynamic drag thereby resulting in improved aircraft flying performance.

Main achievements and features of the Flight Control System Programme are:

- ④ Full Time Quadruplex Digital Fly-By-Wire Integrated Flight Control System with no Reversionary mechanical or electrical flight controls.
- ④ Production standard environmentally tested equipment.
- ④ Programmable high integrity software for Digital Computation of all Flight Control Laws, Signal Redundancy, Mode and Failure Logic and Data Handling.
- ④ Two Fail Operational Control of Foreplanes, Inboard and Outboard Flaperons and Rudder.
- ④ Control of the Leading Edge Flap, Engine Air Intake Cowls and Nose Wheel Steering.
- ④ High integrity centre pedestal fly-by-wire Pilot's Control Stick with finite displacement and mechanical spring forces and damping.
- ④ Integrated Triplex Air Data Capsules and Computing.
- ④ Delivery of Reversionary Flight Instrument Data (Heading, Pitch and Roll Angle, Barometric Information etc) via a Dedicated Serial Link.
- ④ Communication of the Flight Control System and Air Data Information to the Aircraft Avionics and with the Utilities System via MIL-STD-1553B Multiplexed Buses.
- ④ Comprehensive Pre-Flight and First Line automatic BITE fault detection and location capability.
- ④ High degree of EMC hardness and lightning strike survivability.
- ④ Effective Multinational Collaborative Development team.

EAP FLIGHT CONTROL SYSTEM



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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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