

**From strut and wire  
to fly by wire**

**GEC AVIONICS**

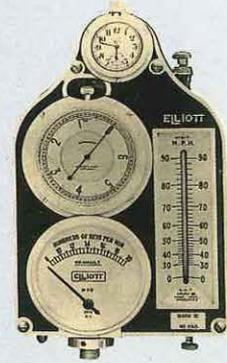
**advanced electronic  
systems for world  
aviation, defence and  
industry**

# technology is our tradition

When William Elliott founded an instrument-making business in 1800, he laid the foundation of the company which would become by far Britain's leading producer and exporter of electronic systems for aircraft - GEC Avionics.

As part of GEC, the UK's largest electrical and electronics group, we have the resources to apply our systems experience to civil and military aviation worldwide, as well as naval vessels, land vehicles, subsea energy production, defence and industry.

Our work, serving 70 nations, has twelve times won us the UK's highest accolade for technological and export achievement, The Queen's Award to Industry.



Elliott flight instruments equipped the Vickers Gun Bus (depicted overleaf). This 'flight board' was extensively used in the WW1 era.



GEC Avionics head up displays equip all General Dynamics F-16 aircraft (photo copyright Major Chuck Killberg, USAF).



We are prime contractors for pilotless aircraft and responsible for the British Army's Phoenix battlefield surveillance system (photo courtesy RAE Larkhill).



As industrial sponsors of the UK Experimental Aircraft Programme we are proving the fly by wire system, head up display, air data computer and maintenance and ground support equipment for the European Fighter.



We are responsible with SFENA for the advanced automatic flight control and blind landing system for Concorde.

**GEC AVIONICS**

# excellence our goal

In pleasant well-equipped premises are modern facilities for research, design, development, production and worldwide support.

## Our wide range of systems includes:

### AIRBORNE DISPLAYS

We are the world leaders in head up display production, including Queen's Award-winning dual mode and holographic types.

### AIRCRAFT UPDATES

More than 60 types are being updated with our avionics – including fully integrated systems.

### AIR DATA SYSTEMS

We also lead in producing standard central air data computers, designed to equip 39 types of US-built aircraft.

### AUTOMATIC TEST EQUIPMENT

We are major users and producers, for home and overseas customers.

### COMBAT AIRCRAFT CONTROLS

Pioneers of 'fly by wire', we are Europe's most experienced company in controlling high performance aircraft.

### FLIGHT CONTROLS

We contribute systems and experience for airliners, including Airbus and the latest Boeing 7J7 project. Our capabilities range from airships to hypersonic craft.

### GUIDANCE SYSTEMS

These include inertial and laser-based attitude sensors, for land, sea and air vehicles, digital maps and terrain-referenced 'stealth' navigation systems.

### LASER SYSTEMS

Gas lasers and rangefinders.

### MARITIME AIRCRAFT SYSTEMS

Acoustic Processing, Tactical Display and antisubmarine mission systems for fixed wing aircraft and helicopters include AQS 901, 902 and 903, for ASW defence worldwide.

### MOBILE RADARS

Man-portable radars and advanced perimeter protection equipment.

### NAVAL SYSTEMS

Central heading references, torpedo guidance, naval aircraft systems and ships' sonars are among our many naval systems.

### OFFSHORE

Seabed mounted wellhead control and platform instrumentation systems.

### POWER CONVERSION

Units for aviation

### POWERPLANT SYSTEMS

Electronic controls and automatic test equipment are supplied for a wide variety of gas turbine engines.

### RECORDING SYSTEMS

We supply for aircraft, missiles and the gas industry.

### SONAR SYSTEMS

Towed array sonar processing and display systems for ships and submarines.

### THROUGH-LIFE SUPPORT

Project management, research and quality assurance are complemented by through-life total logistic support, worldwide.



Night vision goggles such as export-winning 'Cats Eyes' help pilots to see in the dark.



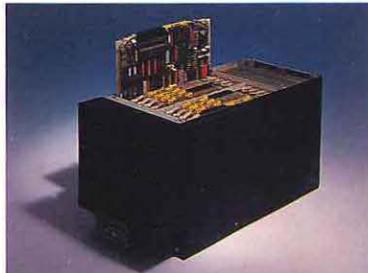
Queen's Award-winning night vision system, here installed in a Royal Netherlands Air Force F-16B.



Our ORION ATE helps us to achieve record production of air data computers ...



... which re-equip thousands of US Air Force and Navy aircraft, from the A-4 to the giant Galaxy.



This computer can operate safely despite a failure in either hardware or software ...



... to control the wing flaps and slats of the European Airbus.



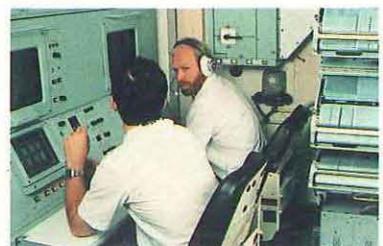
Automated powerplant test system, bought by four air forces, to save fuel and manpower and prolong engine life.



Queen's Award-winning acoustic processing and displays are at the heart of this integrated ASW system on the Fokker Maritime Enforcer.



Civil security systems include AIDA 2000 and SMS 2000 (illustrated)



Ships' sonar system for naval submarines and surface vessels.



*Main Photograph:  
Head and principal factory site,  
Airport Works, Rochester*

*GEC Avionics also has operations at  
Nailsea, Borehamwood and Welwyn  
Garden City*



*GEC Avionics Inc is an associated  
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*GEC Avionics premises at Nailsea near  
Bristol.*

# **GEC AVIONICS**

**Serving the world with technology**



**1983  
MARITIME AIRCRAFT  
SYSTEMS DIVISION**



**1983**



**1986  
AIRBORNE  
DISPLAY DIVISION**



**1987  
AIRBORNE  
DISPLAY DIVISION**



**1987  
ELECTRO OPTICAL  
SURVEILLANCE AND  
AIRBORNE DISPLAY  
DIVISIONS**