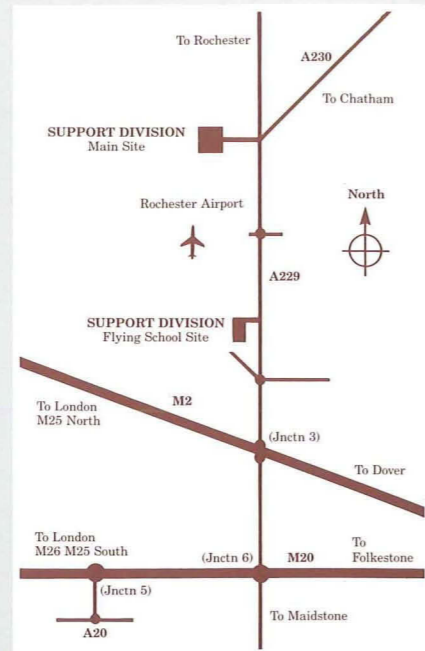
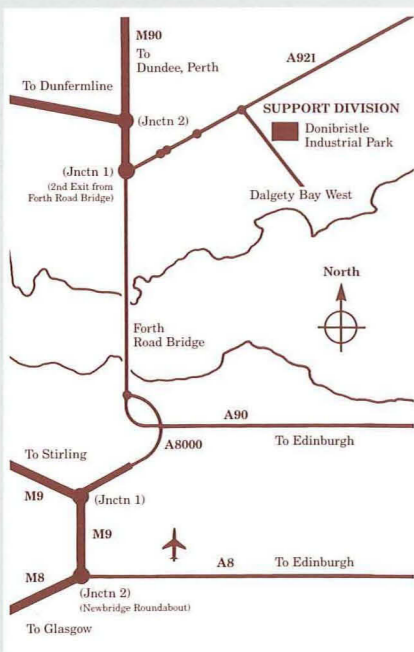


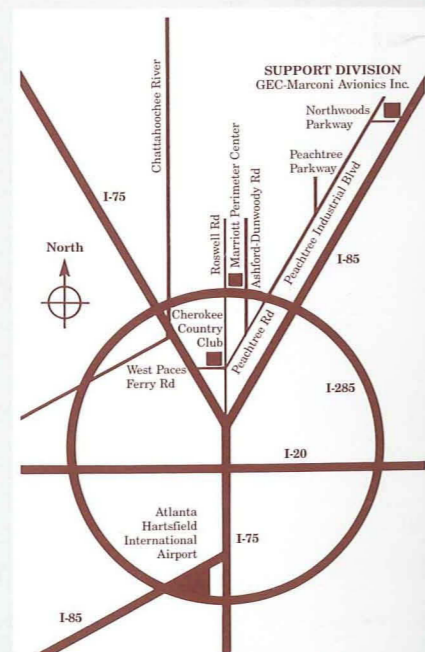
SOUTH GYLE



ROCHESTER



DONIBRISTLE



ATLANTA

The Support Division of GEC-Marconi Avionics forms an integral part of the largest avionics manufacturer in Europe today. Its business is the support management of land based, seaborne and airborne avionics equipments, systems and facilities including the provision of Integrated Logistic Support disciplines, training, publications, design, development, manufacture, installation, overhaul, modification, repair and maintenance services – including 24hour/day, 365 day/year AOG services.

Four sites in the UK and USA provide one-stop-shop capabilities in design and development of Civil and Military test, measurement and diagnostic equipments and systems including a comprehensive range of associated software.

In addition the Division offers calibration services traceable to national standards, environmental testing, and, electromagnetic compatibility (EMC) testing to both Military and EEC regulations with accreditations which include NAMAS and NVLAP certifications.

SUPPORT



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TRAINING
PUBLICATIONS
TEST SYSTEMS
FIELD SERVICES
EMC TEST FACILITIES
SUPPORT ENGINEERING
CALIBRATION AND TESTING
INTEGRATED LOGISTICS SUPPORT
REPAIRS, SPARES AND MANUFACTURE

GEC-Marconi AVIONICS

TOTAL SUPPORT

GEC-Marconi Avionics Limited has a long-standing commitment to support a wide range of products, and to this end established its dedicated Support Division in 1960. This Division now comprises three business units, located at Rochester, Edinburgh and Donibristle, and maintains an extensive network of support offices and representatives world-wide. The Division employs more than 1300 specialist support staff, making it one of the largest dedicated avionic support organisations in Europe. Support of the Company's extensive customer base in the United States is the responsibility of our associate company, GEC-Marconi Avionics Inc, located in Atlanta, Georgia and Redmond, Washington.

Support Division comprises teams of professionally qualified engineers who will work in concert with you, the Customer, to provide innovation, obsolescence solutions, operational changes and enhancements. We aim to optimise support of in-service equipments through to total platform programmes with the provision of:

Integrated Logistic Support

Training

Test Systems

Calibration

EMC and Environmental Testing

Field Support

Repairs and Manufacturing

Technical Publications

Packaging and Spares Provisioning

COMMITMENT

EXPERTISE

PEDIGREE

The products supported cover civil and military avionic systems, sea and land equipments. The Division takes pride in its ability to provide through life support embracing a thirty year span of technology. We provide support for equipment on aircraft as old as the VC-10 and BAC1-11 and as new as the Boeing 757 and 767 in the civil field, and from the F-4, A-4 and A-7 through to the latest Tornado and F-16 variants in the military field in-service. Planning for support of equipment on the EuroFighter 2000, the F-22 and the Boeing 777 is currently being undertaken. In addition to the support of GEC-Marconi products, the division also provides support of other manufacturers' equipment; currently these include the Texas Instruments radar for Tornado and Westinghouse radar/EW products.

SUPPORT DIVISION

Integrated Logistic Support

In addition to the traditional product support services which are focused on in-service support of the equipment operator, Support Division provides Integrated Logistics Support (ILS) services. The services offered range from supportability design disciplines such as reliability, maintainability, testability, safety, and human factors engineering, to the principal elements of ILS:

Maintenance planning/analysis

Creation of the logistics support analysis record (support database)

Spares provisioning, Support and test equipment

Training

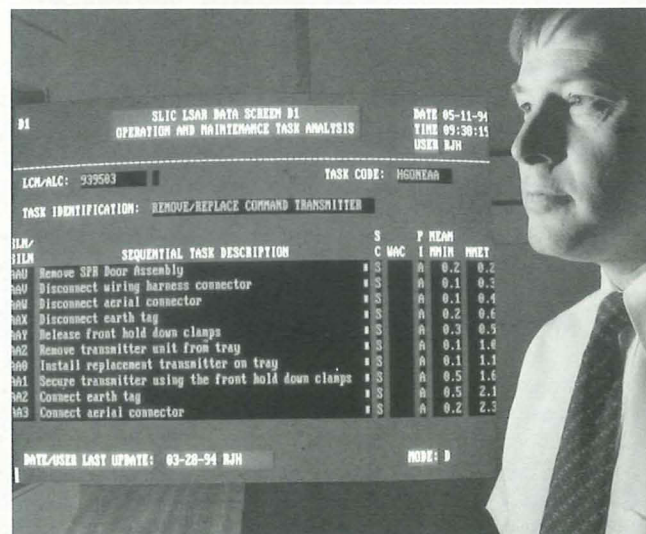
Technical publications

Packaging, handling, storage and transportation

Facilities and computer resources support.

Support Division participates in a number of Agency and Industry sponsored logistics standards groups and organisations, and is actively represented on the UK Computer-aided Acquisition and Logistics Support (CALs) committees (the UK CALs Industry Council - UKCIC).

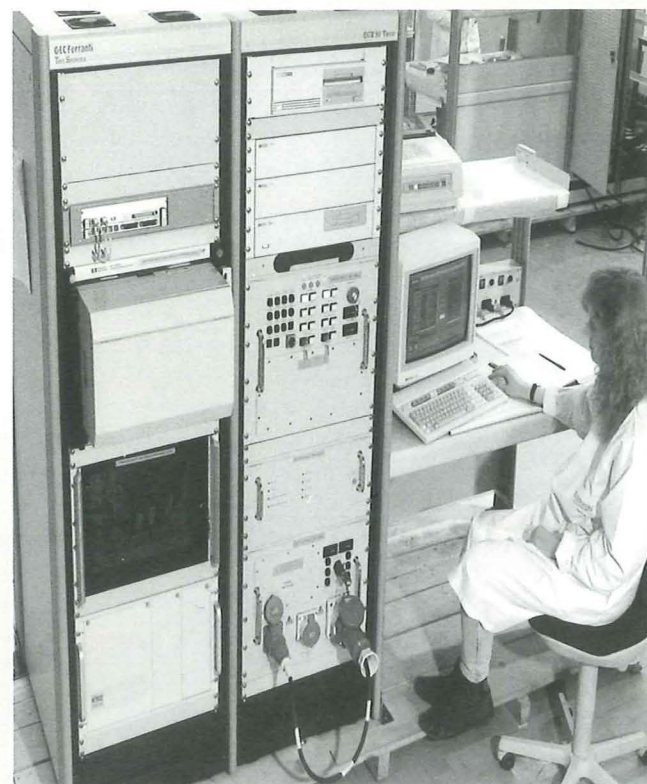
We use a wide variety of automated logistics tools and models to enhance support trade off studies and analyses to MIL-STD 1388-1/1A, and expedite preparation of support databases and reports to MIL-STD 1388-2/2A. These include all Government approved and/or Industry accepted commercial models.



Integrated Logistic Support

Training

Support Division has the capability of providing a wide range of training courses for personnel at all levels of management, operations and maintenance. Experienced instructors are responsible for the preparation and presentation of both formal classroom courseware and 'hands-on' training. Courses include specialised equipment training and general technology/specific disciplines. Arrangements can be made for external courses linked to universities etc. The Division maintains fourteen training rooms fully equipped with the latest audio-visual training aids and course-specific training equipment. Computer-based training is supplied for many programmes.



ECR90 Test System

Test Systems

Support Division is a leading UK supplier of automatic and special-to-type test equipment. This capability includes the following categories of these equipments:

Turnkey test, measurement, and diagnostic facilities for total weapon system avionics, subsystems, line replaceable items/weapon replaceable assemblies, and modules. These include ATE's of both embedded PC and VXI types.

Test Programme Sets for exiting in-service ATE.

These consist of test application software, unit-under-test adaptors and documentation for serviceability and diagnostic test of line replaceable items and modules (Digital, analogue electronic, electro-optical *et al*).

General Purpose ATE configured around the GEC-Marconi Avionics AST 1200 ATE system.

This is an advanced, configurable, instrument-on-a-card, compact/transportable, rugged ATE suitable for forward deployment, shipborne and 2nd line (intermediate) support applications.

Special-to-Type Test Equipment

– electronic, optical (full spectrum range) and mechanical. This includes stand-alone manual test equipment and active transmission testing of lasers, radars etc. in both commercial and military environments.

Special-to-Type tools, jigs, fixtures, and handling equipment

– for on-weapon system use and during related military support test/repair procedures.

Calibration

The Calibration and Test Centres are together one of the largest and most comprehensive facilities in the UK – with temperature controlled laboratories and extensive automated measuring systems served by the Electrical Standards and Mechanical Standards Laboratories for the provision of calibration services traceable to National Physics Laboratory Standards.

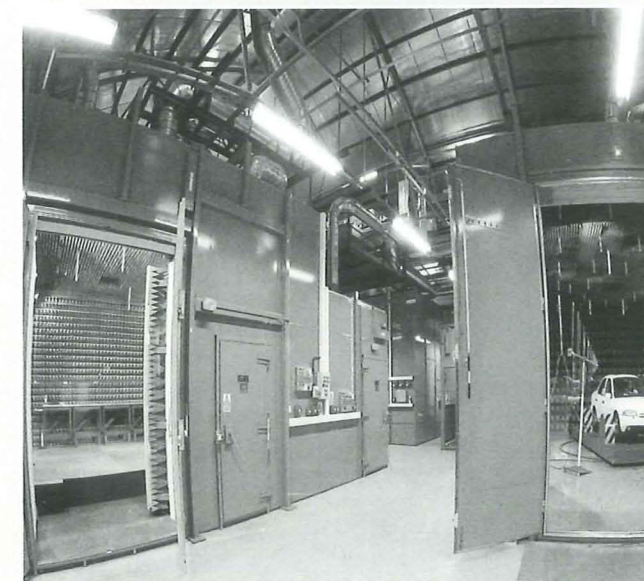
EMC/Environmental Testing

EEC and US Civil and Military specifications require that today's electronic systems undergo formalised evaluation of their susceptibility to electromagnetic interference, and of their own radiated emissions.

The objectives are to produce electronic systems which firstly have all undesired emissions reduced to within specified limits, and secondly, to have 'designed-in' immunity to all external influences.

The facilities we offer at Rochester, Donibristle and Edinburgh enable the total electromagnetic spectrum to be measured to certified standards including NAMAS, FCC, NVLAP and is a DTI Appointed Competent Body.

Environmental testing services include Shock and Vibration, Temperature, Humidity, Acceleration, Thermal Shock, Corrosion, Waterproofness and Contamination.



EMC Testing

Field Support

Field service engineers are available to provide a range of services. These include:

Permanent on-site representation to liaise directly with the customer

and to provide:

Modification and repair services

On-call support services to solve specific problems

Focal point for all customer technical queries

Central point for collection, collation and distribution of operational support data.

Repairs and Manufacturing

Support Division's repairs and manufacturing departments are fully equipped and staffed to provide 24 hour service to military and commercial customers. The general workshop areas are fully air-conditioned and include Clean Rooms built to Class 100 of US Federal Standard 209A. All work areas are operated under strict controls of UK Defence Standards and CAA Regulations. The Division has ISO 9000 approval, inclusive of Software ISO 9000-3, across all areas.

In addition to their highly trained operations staff the repairs and manufacturing departments are supported by experienced teams of equipment engineers, test and calibration personnel, quality assurance specialists, and inspectors. Over 150,000 items of spares and repairs parts are held in inventory to ensure that products are repaired and returned to the customer with minimum turn-around time.



Clean Room Repairs

Technical Publications

The Division has a comprehensive technical publications capability which can satisfy a wide range of customer requirements including user manuals, operation manuals, maintenance manuals, overhaul manuals, illustrated parts lists/catalogues, visual training aids and contractually deliverable data. The publications department can also prepare proposals, product brochures, and exhibition displays. The latest techniques in electronic 'desk-top' publishing, word processing, and photo-typesetting, to the requirements of AECMA 1000D, are used. Technical publications may be created from data provided by design engineers or inter-actively from a logistics database such as a MIL-STD 1388-2A LSAR.

Packaging

The Division is fully approved to carry out packing of equipment, to all military packaging levels, in accordance with Defence Standard 81-41 "Packaging of Defence Material" for UK military products. The Division is also approved to pack to US military standards and to the requirements of the civil airlines.

Design of the packs and compilation of the Service Packaging Instruction Sheet (SPIS) for each item of equipment is done in-house. The manufacture of the packaging containers is subcontracted to approved suppliers.

Spares Provisioning

The Division has many years of experience and a wealth of expertise to call on to identify the range and depth of spares required to support products in their operational environment, whether civil or military.

Extensive proprietary software has been developed to automate the generation of provisioning parts lists, particularly in compliance with the requirements of commercial aircraft specification ATA 200. The expertise of the division's specialists in the use of maintenance task analysis to identify parts required for maintenance has enabled the division to play a major role in the development and application of AECMA 2000M, the new international material management specification which is partially based on ATA 200. AECMA 2000M is a requirement on current European military programs, including TRIGAT LR/MR, EuroFighter 2000, Merlin, Tornado EPS, NH90, and the Tiger attack helicopter.

We offer a number of options for spares acquisition. The customer may choose to take advantage of a Spares Acquisition Integrated with Production (SAIP) if up-front support funding is available; alternatively, we will either acquire the spares prior to line closure, invest in our own spares holding based on the number of prime items in the field, or take over the production rights for the spares items to be produced and repaired in our own facilities.

Facilities

Divisional personnel have accrued many years' experience in the planning of new and modified facilities and the installation, commissioning and operation of large and complex equipment in such facilities. Such activities have been carried out for the MoD in the UK, and for prime equipment manufacturers and operators overseas. The requirements of the Armed Services and the Property Services Agency for modification and adaptation of buildings designed for other purposes are fully understood, as is the planning required for New Building Construction. The services of specialist architects are retained for the latter.

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Support Engineering

Teams of professionally qualified engineers work with the customer to provide a complete range of product support and post design services throughout the life of an equipment. The service provided can range from simple phone or fax advisory expertise, to taking on the total responsibility for the maintenance and management of a range of avionics on a fleet of aircraft.

The full spectrum of engineering disciplines enables major benefits to be provided for:

- New operational roles
- Equipment life extension
- Obsolescence avoidance
- Reliability and safety improvements
- System upgrade and enhancements.

Support Division is ISO 9001 Approved plus TickIT



GEC-Marconi

AVIONICS

REPAIRS, SPARES AND MANUFACTURE

GEC-Marconi
AVIONICS

**REPAIRS, SPARES
AND MANUFACTURE**



- **Repair and overhaul of electronic and electromechanical equipment with direct exchange service as required**
- **Spares and modification kits produced and supplied for civil and military equipments**
- **Manufacture of Special-to-Type and General Purpose Automatic Test Equipment**
- **24 Hour AOG Service**
- **Guaranteed Turn-Round-Times**
- **CAA, FAA, JAA approved**

 **SUPPORT DIVISION**

With fully approved repair workshops for civil and military equipment, the Support Division's Repairs, Spares and Manufacturing capability is dedicated to the support task. It provides a 24 hour repair capability for over 2,600 different types of LRUs and modules used on over 70 aircraft, ships and vehicle types. The typical monthly throughput exceeds 600 equipments involving over 250 separate orders. The technology generations addressed range from thermionic valves to the latest digital microprocessors, optical devices, and radar systems.

These facilities occupy over 84,000 sq ft, of which more than 34,000 sq ft of factory space is air conditioned to FED STAN 209A (Class 10,000).

It utilises more than 800 test sets including general purpose Automatic Test Equipment (ATE) and Special-to-Type Test Equipment (STTE). These test equipments are supplemented by a comprehensive inventory of associated test instruments. Facilities include an additional 2,800 sq ft laminar-flow super clean room built to US FED STAN 209A (Class 100).

These areas are available for the servicing of precision electro-mechanical devices such as gyro assemblies, barometric instruments and tape transports, together with the latest generation of analogue and digital electronic equipment and Radar systems. Also Licensed Production of major items, eg. Tornado IDS Terrain Following Radar in collaboration with Germany and Italy.

Computer controlled flow soldering and circuit board processing is undertaken as part of the manufacture of digital automatic test equipment designed to meet the test needs of modern bus structured weapon and avionics systems – for forward development, intermediate and depot level servicing and trials applications.

"Safe Posts" for handling static sensitive devices are also available which meet the exacting requirements of UK standards. Dedicated test and calibration areas are available for the maintenance and testing of optical systems.

In addition, the facility includes 13,000 sq ft of NAMAS approved Calibration and Repair Laboratories, EMC and Environmental Test Laboratories.

All activity in the workshop is tracked and documented with the aid of a modern data collection and processing system. Management of the workshop benefits from this system by having access to the repair status of equipment and the ability to adjust repair programmes to minimise cost and turn-round-times for the benefit of the customer. Records are available to ensure full traceability of repairs and modifications.

Customers have the choice of several support schemes to match their particular type of operations.

This choice includes:

- Fixed price – fixed turn-round
- Cost per flying hour
- Industrial Depot Level repair schemes
- Ad-hoc repairs
- Special maintenance schemes
- AOG facilities 24 hours per day, 7 days per week

Any one or combination of these schemes may be arranged and embodied in a General Terms Agreement (GTA) or support contract between the customer and Support Division.

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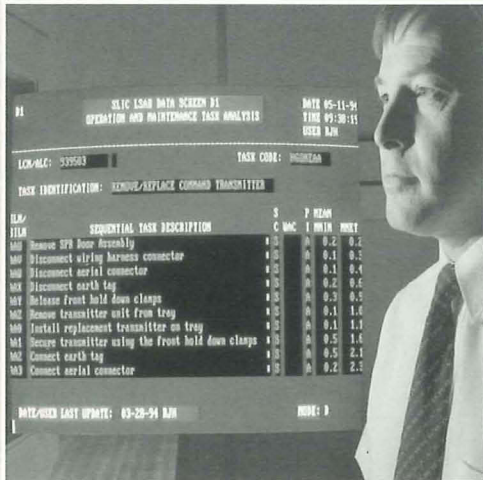
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GEC-Marconi
AVIONICS

**INTEGRATED
LOGISTIC SUPPORT**



- ILS Management
- Logistic Support Analysis (LSA)
- Level of Repair Analysis (LORA)
- Reliability Predicting
- Testability
- Manprint
- Maintainability
- Life Cycle Costs (LCC)
- FMECA

Support Division offer a full range of Integrated Logistic Support including the management of all ILS activities associated with individual equipments or total systems as well as the implementation of individual elements of the ILS package.

Our specialists are expert in MIL-STD-1388-1A tasks, and are equipped with Type III validated Software for LSAR. We are playing a lead role in the development and implementation of AECMA 2000M and are fully conversant with AECMA 1000D. Commercial aircraft support is provided in accordance with ATA100/1000 and ATA 200/2000 using in-house developed software systems.

ILS Management

Available to integrate individual elements of ILS into a total package.

LSA

Based on generic data and carried out in accordance with MIL-STD-1388-1A. LSA records (LSAR) are generated in accordance with MIL-STD-1388-2A using Type III tools.

LORA

Based on equipment usage rates (deployment/reliability) and a knowledge of servicing policy we are able to cost optimise repair strategies using models such as EDCAS and RPA90.

Reliability Prediction

Based on generic design data using MIL-HBK-217 or carried out either as a specific task or as a part of an overall analysis. Component stress analysis can be carried out for use in conjunction with reliability predictions to ensure that component derating criteria are satisfied.

Testability

Support Divisions long established expertise in testing and test systems enables our specialists to make recommendations at an early stage of design to ensure optimum testability of the final product with minimum impact on circuit functionality.

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Maintainability and Manprint

30 years of repairs and maintenance enable our engineers to advise designers on the most practical maintenance features to ensure maximum equipment availability, whilst manprint expertise is available to ensure that the needs of the whole target audience are considered.

Life Cycle Costs

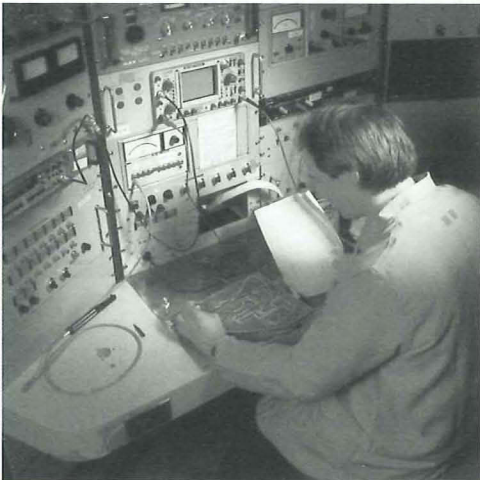
A range of models is available for LCC analysis based on prediction failure rates and customer utilisation requirements. These analyses help to establish the optimum long-term support philosophy tailored to specific equipment applications.

FMECA

Failure Mode Effects and Criticality Analysis can be carried out to functional block level using modelling techniques to meet individual customer requirements. If carried out during the early design stage, predictable failure modes can be identified and improved or eliminated to minimise the LCC of the equipment. Further analysis of the Built in Test (BIT) effectiveness can be carried out in conjunction with reliability prediction data.

GEC-Marconi
AVIONICS

**CALIBRATION
AND TESTING**



- **Traceable to National Standards**
- **NAMAS approved No. 0212**
- **Compliance to ISO 9000/EN 29000 BS5750/MIL-STD-45662**
- **Instruments and Systems for Radar, Electro-Optic, Inertial Navigation and Display Technology**

Traceability

Customers are increasingly demanding authenticated measurements for design and production, for evidence of fully traceable calibration and a test equipment recall system.

In order to achieve this, all calibration measurements must be supported by a chain of traceability to national standards.

The GEC-Marconi Avionics Calibration and Test Centre based in Edinburgh, is one of the largest and most comprehensive Test Equipment Calibration and Repair facilities in the UK with a fully trained and experienced staff. It has been providing service and traceability to the highest standards for over 40 years. The main laboratory is temperature controlled, extends to more than 13,000 sq. ft. and makes extensive use of automated measurement systems.

Wide Applications

In addition to Commercial Test Equipment Calibration, the facility has extensive experience of calibration, modification and repair of general purpose and 3rd party Special-to-Type Test Equipments associated with Radar, Electro-Optic, Inertial Navigation and Display technologies.

The Calibration and Test Centre is equipped with the best instrumentation so providing a total support for your calibration and maintenance needs. Calibration can range from a simple digital voltmeter with a test certificate showing its performance, to total maintenance and calibration of all your test equipment.

Other services include the operation of a recall system with monthly advice on which instruments are due for calibration.

Accreditations

The Calibration and Test Centre is accredited by NAMAS (National Measurement Accreditation Service) in the fields of dc/LF and RF/ μ Wave measurements.

All calibration work is compliant with ISO 9000/EN 29000/BS5750 series of standards as well as MIL-STD-45662.

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Test Equipment Calibration

The facility currently supports Special-to-Type Test Equipment used for 3rd line repairs of modern aircraft systems both in the UK and abroad using teams of engineers based on-site at customer's premises. This on-site support covers test equipment such as specialised computer and microprocessor controlled automatic test systems together with a range of general purpose test equipment.

A detailed schedule of the parameters covered by the Calibration and Test Centre is available and includes all types of Electrical, Mechanical and Physical calibration and repair. Fault diagnosis is carried out to component level. Current throughput is in excess of 20,000 items per annum.

*Setting
the Standard -*
**Calibration and
Test Centre**



GEC-Marconi
AVIONICS

**SUPPORT
ENGINEERING**



- **Innovative Support Solutions**
- **Obsolescence Solutions**
- **Focused ILS**
- **Operational Changes and Equipment Enhancements**
- **Optimised Support of In-Service Equipment**
- **Support for Other Manufacturer's Equipment**
- **Total Platform Support**

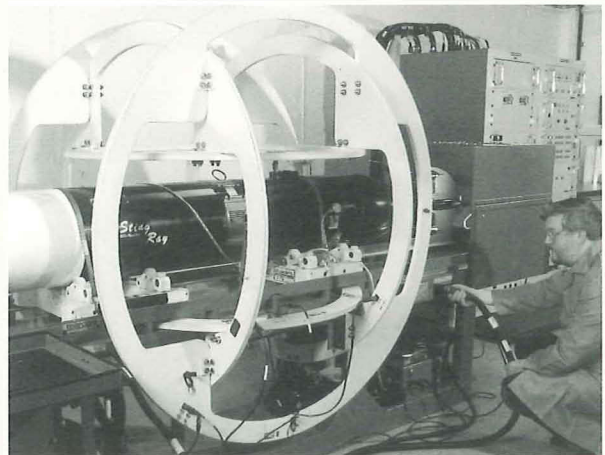
Support Division's teams of professionally qualified engineers work with and respond to the customer to provide a complete range of product support and post-design services throughout the life of an equipment. The Support Service provided may be as simple as being contactable by telephone or fax to give advice on an equipment or answer queries as they arise. At the opposite end of the scale, Support Division will undertake total responsibility for the maintenance of a range of avionics on a fleet of aircraft.

The Division has a significant design and development capability with expertise in many disciplines including Electronic, Mechanical, Software and Systems Engineering. This allows full design authority to be applied to many equipments bringing major benefits through the life of an equipment, as solutions will be developed for:

- New Operational Roles
- Equipment Life Extension and
Obsolescence Avoidance
- Reliability and Safety Improvement
- System Upgrade and Enhancement

Partnerships

GEC-Marconi Avionics Support Division is the ideal partner for overseas companies wishing to sell equipment into the UK. The Division's knowledge of and reputation with the UK Customer positions it to support strongly such proposals. The dedicated support facilities of the organisation have allowed it to undertake support of a large number of OEM equipments in service with the UK armed forces. This has included the establishment of in-country maintenance and repair facilities, and taking on UK design authority to develop modifications and enhancements. Current examples include the Texas Instruments radar for the IDS Tornado, the Westinghouse ALQ101 ECM Pod, and the Hughes Angle Rate Bombing Set (ARBS) for the Harrier.



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AVIONICS

A management company for GEC-Marconi Limited

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**EMC
TEST FACILITIES**



- **Emissions/Susceptibility (Radiated and Conducted)**
- **Electrostatic Discharge, Lightning**
- **Electromagnetic Pulse, Transients**
- **Compass Safe Distance**
- **Test and Control Plans**
- **NAMAS Approved Nos. 0047, 0461 and 1290**
- **DTI Appointed Competent Body**



FCC Listed

EMC – Protecting your electronic environment

EU and US Civil and Military specifications require that today's electronic systems undergo formalised evaluation of their susceptibility to electromagnetic interference, and of their own radiated emissions.

The objectives are to produce electronic systems which firstly have undesired emissions reduced to within specified limits, and secondly, to have 'designed-in' immunity to external influences.

The services we offer at Rochester, Donibristle and Edinburgh enable the total electromagnetic spectrum to be measured to certified standards.

Our accreditations include:

NAMAS (Reg. Nos. 0047, 0461 and 1290),
BS3G100, NWS3,

MIL-STD-461, IEC801, DEF STAN 59-41
IEC 1000 Series, EN 5000 and 6000 Series, VDE 800
Series, IEC 601-1-2, TRG 1068, EN 45501

RTCADO-160, ISO 7637, OIMLR99, and NVLAP

FCC Listed

DTI Appointed Competent Body

Capabilities

Project Engineering Participation
Specification Origination
Control Plan Origination/Participation
Test Plan Origination
Test Report Origination
Type Approval Testing
Development Testing
On-Site Testing
Enclosure Testing
EMC Antenna Polar Plotting

Compass Safe Distance Testing
Site Surveys
Suppression of Interference
Electromagnetic Pulse/Transients
Electromagnetic Discharge/Lightning
Radiated Emissions 20Hz to 40GHz
Conducted Emissions 20Hz to 1GHz
Radiated Susceptibility 20Hz to 40GHz
Conducted Susceptibility 20Hz to 400MHz
Technical Construction File Origination/Approval

Facilities

Covered Open Area Test Site
21 Screened Enclosures including
Anechoic Chambers
External and Ground Plane Test Areas
Air Temperature Conditioning
Filtered Wall Penetration Panels

CCTV for Susceptibility Monitoring
4 Wheel Rolling Road Dynamometer
Vehicle Exhaust Extraction System
Forced Air Cooling for Vehicle Tyres
50/60/400Hz Supplies

EMC Test Centre

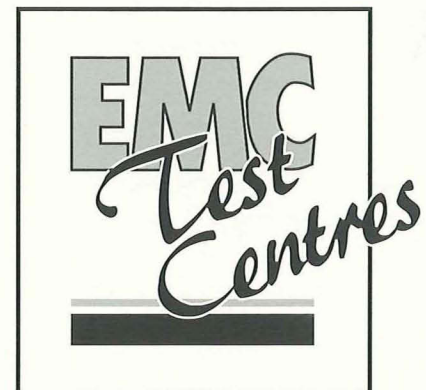
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FIELD SERVICES



- **System Development and Field Trials**
- **Build-Line Support**
- **Permanent On-Site Support**
- **On-Call Support**
- **Bulletin Service Information**

System Development and Field Trials

Our policy of active integration of FSRs into the Development and Trials phases of the Company's products enables them to supply in-depth technical assistance during subsequent support to our Customers.

Build-Line Support

FSRs support build-lines for both military and civil constructors to maintain maximum availability of new build equipment. This protects the constructors' delivery schedules and mutual warranty agreements.

Permanent On-Site Support

Customers Services provided by our On-Site FSRs include:

- Direct technical and commercial liaison between the Customer and the Company
- Project continuity during Customer staff change-overs.
- Detailed technical assistance

On-Call Support

A Quick Reaction service is available to reduce the Down Time of on-site equipment to a minimum.

Response times:

- Europe within 12 hours
- Worldwide within 72 hours.

On-the-Job Training

On-Site and On-Call FSRs give On-the-Job training and instruction, as necessary, in the maintenance and operation of Systems, LRUs and Test Equipment supplied by GEC-Marconi Avionics.

Service Bulletins/Information Letters

Field Service Modifications Engineers produce SBs and SILs in accordance with the current regulatory standards.

Refits, Retrofits and Modifications

The technical and management ability of our FSRs ensures that Support Division Field Service Personnel are competent to manage, service, instruct, carry out hands-on work and provide full technical support during Refits and Modifications of Customers' equipments, on location or at our Field Workshops.

Maintenance and Calibration

Field Service personnel offer a Management Service to provide routine maintenance and calibration of on-site equipment to the Customers requirements.

Product Support

Full product technical support is provided by Field Service personnel. Reliability is continuously monitored by regular visits to Customers and the collation of reliability data received from them.

Workshop findings are transmitted immediately to Customers when necessary, otherwise a summary is provided on a monthly basis.

Customer Queries

Field Service acts as a point of contact for new or undefined queries and enquiries. In accordance with the WASG all queries are acknowledged within 24 hours.

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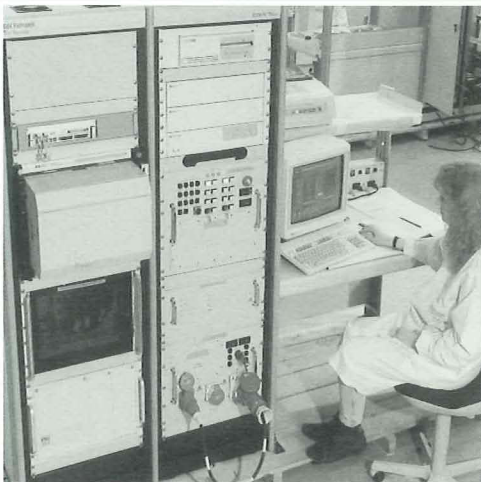
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2975 Northwoods Parkway, PO Box 81999
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GEC-Marconi
AVIONICS

TEST SYSTEMS



- **General Purpose Automatic Test Equipment**
- **Special-to-Type Test Equipment**
- **Deployable Test Systems**
- **Test Program Development**
- **Data Bus Analysers**
- **Total Parametric Envelope Product Range**
- **Military and Civil Programmes**



General Purpose

Automatic Test Equipment

Test Unit Adapters and Interfaces
VXI Based Systems
IEEE 488
Ruggedised and Portable
Analogue, Digital, RF, Microwave,
Optical and Manometric
UK and US Military Standards
Civil Standards (eg ARINC 608 based)

Special-to-Type Systems

Radar
Electro-Optical:
Thermal
Laser
Collimators
Radio Communications
Acoustic Underwater Weapons Systems
Pneumatics
Missiles
Sonics
Electronic Warfare
General Avionics
Inertial Navigation

Test Program Development

Test Unit Adapters and Interfaces
ATLAS 626, 716/85/89/94, ATAL, Ada,
SMART™, SMART 716, TYX PAWS
ANSI C, C++, HP Basic, Sabre, HP Vee,
Lab Windows
Simulation Tools LASAR 5 and 6
Interface Device Fabrication

Test Equipment Products

EF2000 TECC Series of GPATE
LCDATE
AST Series of GPATE
Downsize Tester GPATE
ORION 608 DST and Switches
Tempest Tester (NATO Approved)
Automated Communications Test Set
CT2 Portable Telephone Tester

Data Bus Analyser Products

MIL-STD-1553 A/B
STANAG 3910 Fibre Optics
High Level Bus Analysers

Platforms Supported

Tornado, EF2000, Hawk, Nimrod, Harrier,
Sea Harrier FRSI and II, Jaguar, A-4 Skyhawk,
A-7, F-7/Mig21, F-16, Lynx
Boeing 707, 747, 777, Concorde,
Aerospatiale A300, A310, A319, A320, A321
AMX, Challenger MLRS, TICM, ADATS,
Sea Skua, Sea Dart, Tigerfish and
Sting Ray Torpedoes, RB199

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AVIONICS

PUBLICATIONS



- **Writing**
- **Technical Documentation**
- **Publishing Services**
- **Graphic Design**
- **Typesetting and Scanning**



More than 30 years experience in the Support Division's Publications Department enables the generation of a wide range of documentation types including technical manuals, reports, illustrated parts lists, catalogues, journals and promotional literature, to established national and international standards for both civil and military applications:

- JSPs
- ATA 100/101/102
- AvP70
- NES40
- AECMA 1000D/2000M
- Mil-Spec
- Panavia Building Blocks
- AQAP approval

Word processing format conversion facilities:

- From/to any format
- Output on hard copy/magnetic tape/floppy disc
- Secure and Confidential services

Technical Documentation

Technical authors and Spares engineers have specialist knowledge in air, sea and land-based applications of Radars, Inertial Navigation Systems, Displays, Electro-Optics, Weapon Systems, Test Equipments, Flight Control and Air Data Systems – and many more. Interactive Electronic Technical Manuals reduce trouble-shooting times and false removals; increase maintainer confidence and fault isolation success; minimise lead times and storage costs, and provides faster updating of manuals.

Publishing Services

The use of equipment compatible with CALS requirements for SGML and IGES offers a comprehensive publishing service with automatic integration of text and graphics from a wide range of sources, and conventional hard copy publications, data modules, IETMs, Common Source Data Bases, with Simplified English and Standardised Mark-up Language (SGML).

Graphic Design

A very wide spectrum of graphic and allied work is done including promotional literature, exhibition graphics, visual aids, illustrations and stationery. Artwork can be produced both manually and with the use of sophisticated computer graphic tools.

Typesetting and Scanning

The Publications Department can provide Postscript image setting; output on bromide paper, film and floppy disc. OCR scanning: Output in DOS WP packages and Apple Macintosh. Graphics Scanning: Output in HPGL, TIFF, EPS, WMF and PCX formats

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GEC-Marconi
AVIONICS

TRAINING



- **Operator Training**
- **1st Line Organisational Level Maintenance**
- **2nd Line Intermediate Level Maintenance**
- **3rd/4th Line Depot Level Maintenance**
- **Schools in Edinburgh and Rochester**
- **Computer Based Training**
- **Training Consultancies**
- **Train the Trainer Courses**



The GEC-Marconi Avionics Training Schools, located at Rochester and Edinburgh provide a wide range of training courses to all levels of UK and overseas management, operational and maintenance staffs, and are housed in purpose built accommodation with full time professional instructors.

There are nine main classrooms covering more than 6000 sq. ft. fully equipped with the latest instructional aids and techniques. Further classrooms are equipped to allow practical application of computer and associated electronic instrument practice. Advanced Technology Seminars and Technology Update Courses are available to redress the shortfall of knowledge and expertise amongst many engineers brought about by the pace of technological development.

Major training programmes are offered to cover Company supplied equipments for Boeing and Airbus civil aircraft, and military aircraft typified by Tornado and Harrier VTOL.

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Advanced Technology Training

- Automatic Flight Control
- Radar
- Air Data Systems
- Inertial Navigation
- Auto-stabilisation
- Global Positioning Systems
- Automatic Test Equipment
- Autothrottle Systems
- Electro-Optics
- Navigation and Weapon Aiming
- Electronic Warfare
- Stores Management
- Guided Weapons
- Acoustic Processing Equipment
- Airborne Displays
- Thermal Imaging Systems

Technology Update Training

- Logic and Digital Processing
- Microprocessor Systems
- MIL-STD-1553 and 3910 Databus
- Data Communications
- Electromagnetic Compatibility
- VXI Test Systems
- Television and Video Principles

GEC-Marconi
AVIONICS

A management company for GEC-Marconi Limited

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