

Product design-manufacture-repair-overhaul

Oxygen systems and equipment

- Airborne modular oxygen storage (AMOS)
- Ground installations
- Liquid oxygen (LOX) trolleys and spares
- Onboard oxygen generation systems (OBOS)
- Oxygen pipework
- Oxygen systems
- Oxygen valves
- Oxygen vessel cleaning
- Oxygen vessels
- Regulators

Capsules

- Capsule assemblies
- Capsules
- Diaphragms
- Precision welding

Pressure vessels

- Cleaning of oxygen vessels
- Life extension testing
- Flotation vessels
- Inspection
- Oxygen storage

Marine equipment

- Compass bowl repeaters
- Flotation vessels
- Marine anemometers
- Marine data distribution (SDDS)
- Marine displays

Test equipment

- Ground support equipment
- NBC test equipment
- Bryans test equipment
- Walk round kits
- LOX trolleys

Instruments and sensors

- Accelerometers
- Altimeters
- Anti G valves
- Cabin altimeters
- Cameras - Agiflite
- Capsules and diaphragms
- Data acquisition and processing unit (DAPU)
- Electronic processing unit (EPU)
- Engine monitoring unit (EMU)
- Fatigue meters
- Flight data acquisition unit (FDAU)
- Flight data recorders - SCR 200/300/500
- Indicating accelerometers
- Moving coil indicators
- Pressure switches

Capabilities

Mechanical

- Altitude testing (large hypobaric chamber)
- Bourdon tube manufacture
- Burst testing
- Capsule manufacture
- Centrifuge - for G testing airborne equipment
- Cleanroom assembly
- Combined altitude/climatic/vibration testing (Qualmark machine)
- Environmental test
- Fatigue pressure rig
- Fine mechanical assembly
- High pressure testing
- High vacuum testing
- Leak test/detection
- Liquid oxygen handling and storage
- Oxygen standard cleaning - oxygen vessels
- Precision instrument mechanisms
- Pressure vessel testing - life extension
- Publications and supporting documentation
- Vibration testing and qualification
- Welding - precision TIG
- X-ray

Electrical/electronic

- Design
- ESS (environmental stress screening)
- Gas rework (surface mount)
- HALT (highly accelerated life testing)
- Hardware design, development, production and documentation
- HASS (highly accelerated stress screening)
- Publications
- Repair - down to board level
- Software design, development and documentation
- Vibration testing and qualification

Certifications

- BS EN ISO 9001:2000 Aerospace Sector Certificates Schemes TS157 Issue 4
- EN ISO 9001:2000 Software to TickIT Guide Issue 5
- AS9100 Rev.A:2001
- BS EN ISO 14001:1996 Environmental Management Systems approval
- CAA E1 Design Organisation approval
- JAR 21 Sub part G Production Organisation approval
- EASA 145 Maintenance Organisation approval
- FAR 145 Repair Station approval
- MoD Defence Procurement Agency design approval (Def Stan 05 123)

Due to Meggitt's commitment to continual product improvement specifications are subject to change without notice.

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Meggitt Avionics is a Meggitt group company. Headquartered in the UK, Meggitt PLC is an international group operating in North America, Europe and Asia. Known for its specialised extreme environment engineering, Meggitt is a world leader in the aerospace, defence and electronics industries.

Meggitt Avionics

7 Whittle Avenue
Fareham
Hampshire PO15 5SH
UK

Tel: +44 1489 483300
Fax: +44 1489 483340

www.meggitt-avionics.co.uk
www.meggitt.com

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Specialist skills and capabilities



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Company background

Meggitt Avionics can trace its roots back to the late 1800s when the partnership of H. Negretti and L. J. Zambra was at the forefront of meteorological instrument design. Much later the aviation product range was split from the industrial division to become Negretti Aviation. A number of acquisitions were made including the UK division of Kollsman Instruments, the aviation division of British Oxygen and the airborne camera product line from AGI, before Negretti itself was purchased by Meggitt PLC in 1985.

Since that time, Evershed and Vignoles marine equipment was acquired by Meggitt as part of Bestobell and more recently the air data and data acquisition product lines were purchased from BAE Systems. These acquisitions have helped develop our skills and capabilities into what they are today. The largest part of our business now comprises cockpit display systems, air data sensing and health and usage monitoring (HUMS) - for further information visit our website www.meggitt-avionics.co.uk, where individual product datasheets are available to download.

The aim of this brochure is to illustrate the capabilities and skills that exist in the company including electro-mechanical instruments and sensors and life support equipment.

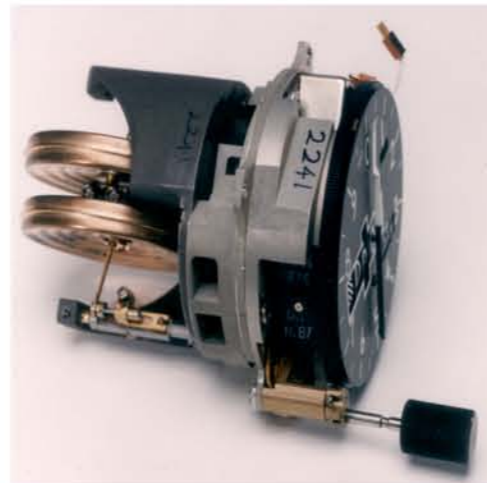
Electro-mechanical sensors and instruments

The manufacture and repair of both mechanical and electro-mechanical instruments is a strength of Meggitt Avionics. New build units are supplied to customers including BAE Systems and Boeing. We have ongoing repair contracts with the UK MoD, BAE Systems and L3 Vertex covering many front line UK and US aircraft.

If you have trouble supporting or sourcing aircraft instruments call us. We have the necessary skills and know how to repair, modify or design instruments in a range of case styles for civil or military applications.

Instruments include:

- ▶ altimeters
- ▶ airspeed indicators
- ▶ anemometers
- ▶ cabin altimeters
- ▶ fatigue meters
- ▶ pressure switches



Capsules

Modern micro electrical mechanisms (MEMS) are being used in more and more applications, but there are still a number of systems in existence that rely on precision mechanical capsules to sense pressures. Meggitt Avionics has the capability to design and manufacture capsule assemblies for a range of applications. We have produced capsule assemblies for use in a wide range of cockpit instruments, missiles, engine fuel systems, pressure gauges and regulators.



Pressure vessels

Meggitt Avionics has the capability to design, qualify, manufacture, test and certify pressure vessels in a range of sizes using special lightweight high strength steels. We also supply composite vessels and all the associated isolation and pressure control valves. Applications include systems for life support, stored energy, flotation, emergency oxygen and tyre inflation. A complete through life support capability that includes inspection, testing, cleaning and re-lifing ensures life cycle costs are kept to a minimum for pressure vessels of any make. We are one of the few companies in the UK that have a certified breathing oxygen vessel cleaning capability; which has already saved customers the cost of replacing vessels that had been contaminated. We can clean a wide range of vessel sizes and types for submarines, ships, aircraft or the medical industry.



Life support

We have the specialized skills, facilities and equipment for the design, development and production of equipment for airborne breathable oxygen. Storage vessels, regulators and the associated pipework and valves can be combined into systems ranging from ground-based liquid oxygen trolleys to parachutists life support. Our compact lightweight regulators supply breathable oxygen for aircrew, compensating for changes in altitude, supply pressure and demand to ensure that the right amount of oxygen is supplied at the correct pressure all of the time. Specified on a number of military aircraft, we also produce man-mounted models for parachutists. Our airborne modular oxygen system (AMOS) holds high pressure oxygen which enables up to 6 personnel to breath oxygen at high altitudes in non-pressurised aircraft.

