

high G training facility

case study / RAF Cranwell / Ministry of Defence



INTEGRAL

projects

delivering engineering excellence

£2.3m new build flight training facility...

SITE REFERENCE:	MoD Training Facility
SITE LOCATION:	RAF Cranwell
BUSINESS SECTOR:	Public Sector / Defence
CONSTRUCTION PERIOD:	9 months



Scope of works:

- New LED lighting installation using Isotera Lighting Controls.
- Self-contained HV installation of transformers to supply the building and centrifuge.
- HV Earth mat for the centrifuge.
- x6 rooms installed with aerosol suppression system.
- x2 aspiration fire systems.
- Containment infrastructure for the centrifuge cabling.
- Site wide PA system.
- New photo voltaic system using black panels and grey framing to prevent reflective problems to affect aircraft.
- Electrical infrastructure to support the maintenance and functionality of the
- AMST installed centrifuge.
- Centrifuge gondola cockpit cooling.
- Heating and cooling via a VRF system.
- VRF hot water system.
- x3 New AHU supplying Toilets, offices and centrifuge chamber.
- Humidifier to supply humidified air to the centrifuge chamber.
- Stainless steel breathing to the Cock pit.
- Denco units supplying cooling to server room and basement motor room.
- Leak detection system for water and oil leak detection.
- External cat 5 water outlet.

Project description

RAF College Cranwell in the heart of Lincolnshire was the world's first Air Academy and continues to select and train the next generation of officers and aircrew. It is here that future RAF pilots receive elementary flying training for fixed wing and multi-engine aircraft.

This project consisted of a new build flight training facility, spread over two floors, incorporating a High Gravitational Trainer with associated training rooms, offices, meeting rooms, locker room and toilet facilities. In addition, we installed riser service routes throughout the building and multiple plant rooms, chamber areas, switch rooms and transformers, to house the required electrical services.

The key focus throughout was on achieving the programme milestones in order to allow AMST to install the hi-tech centrifuge used in training to mimic sustained g-forces.

We project managed this time critical programme by working closely with main contractor Galliford Try and collaborating with sub-contractors. Weekly DTM meetings with the construction teams ensured that issues were swiftly communicated and resolved, avoiding un-necessary hold ups.

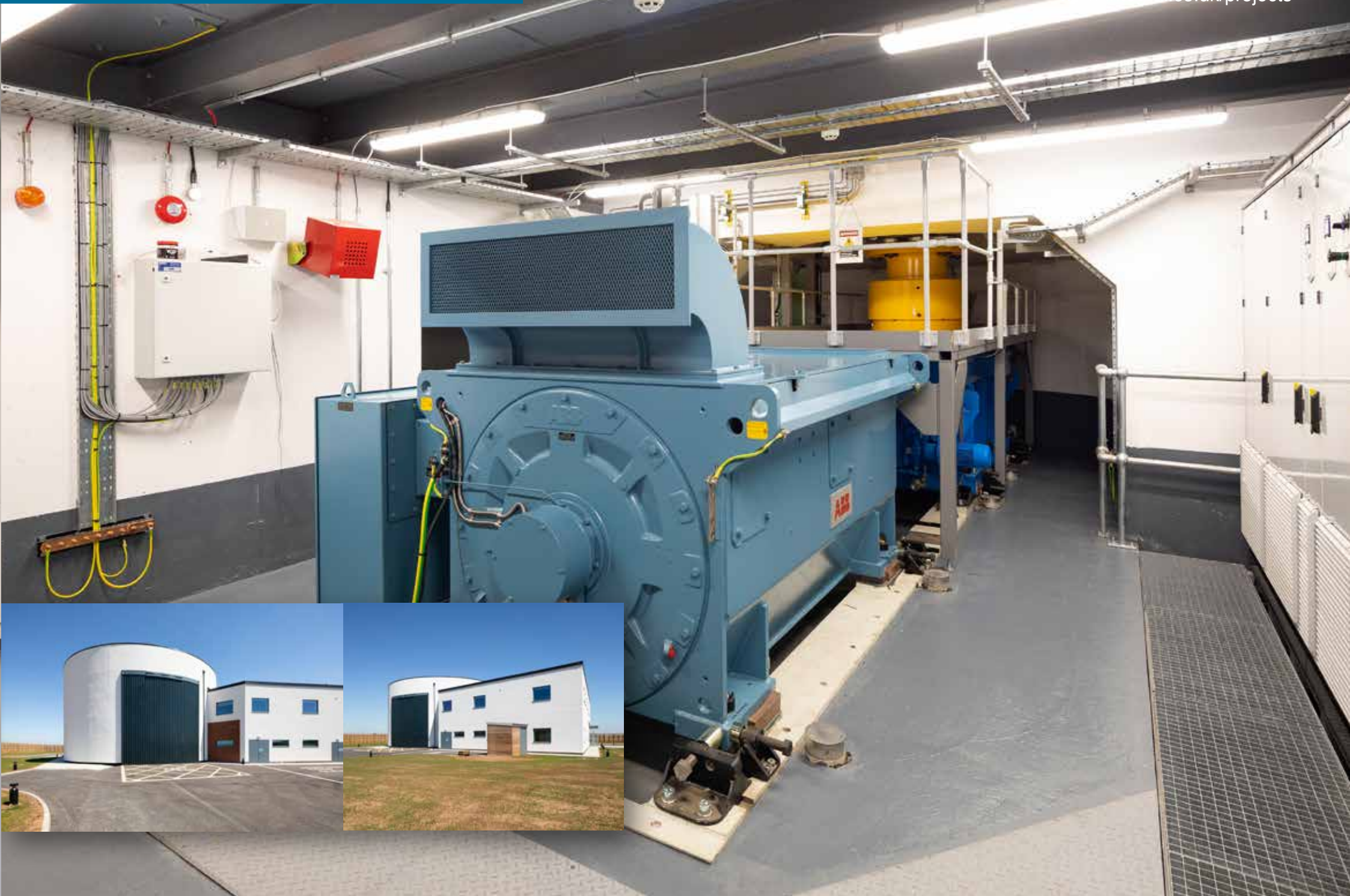
The result was a project delivered on time and within budget, meaning the facility is now operational and helping to prepare RAF pilots for the rigours of flying modern, high performance aircraft.

Contact: chris.argent@integral.co.uk
 Integral Projects: **07764 803209**



“ ...a successful delivery compliant with MoD standards. ”







projects

south west
south east
eastern
northern

07764 803209	chris.argent@integral.co.uk
07764 803209	chris.argent@integral.co.uk
07739 874700	mark.dixon@integral.co.uk
07802 686280	roy.nixon@integral.co.uk

Head office: Integral UK Ltd. 1290 Aztec West, Almondsbury, Bristol BS32 4SG

Registered Office

JLL, 30 Warwick Street, London W1B 5NH

Company Registration No. 5307588



INTEGRAL

projects