



Goonhilly Earth Station Satellite 6 (Merlin)

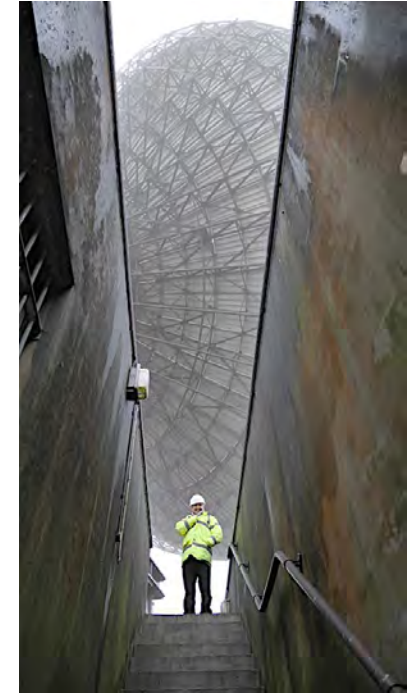
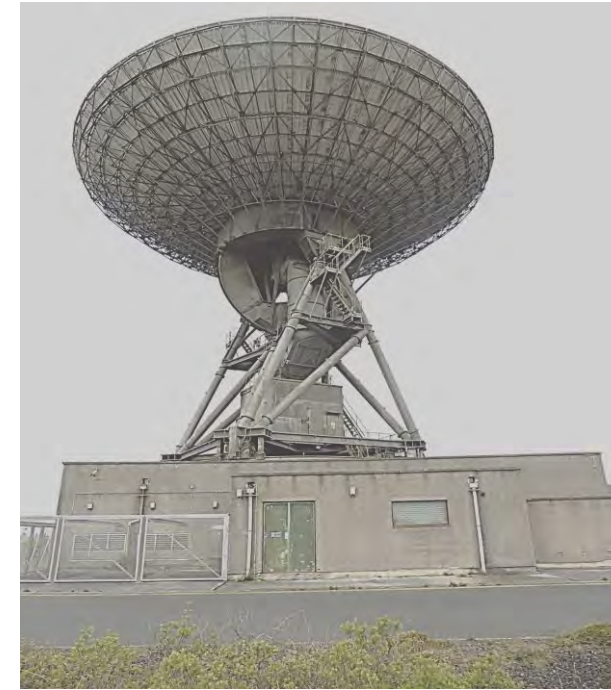
R&D, Specialist Structural Survey, Upgrade and
Remedial Treatment Project.

The Project.

The Goonhilly Satellite Station operations in west Cornwall were reprofiled in 2014 to provide a complete range of core satellite communications services for the European Space Agency (ESA)'s worldwide ground station network comprising more than 20 earth, observatory, planetary and exploration spacecraft as well as European launchers.

DESMONDE ASSOCIATES are proud to be a part of this Cornish investment delivering a significant technical and economic contribution to global space exploration. Our key activities included:

- Detailed Research of the original construction and recreation of the as constructed nature of it as far as reasonably possible.
- Compiling a 3D digital model from scan survey of the structure.
- Collaborative working with key Stakeholder.
- Analytical studies and delivery of specialist advisory works and services for the remedial treatment to the structure and fabric of the facility.
- Advice on works planning and cost profiles.



Sector: Aerospace Sector – R&D – Specialist
Structural Survey Assessment – BIM
Methodology – Refurbishment and
Regeneration.

Project Length: 3 years

Budget: Approx. £8.4m

The Details.

We provided support for an £8.4 million (€9.5 million) investment with specialist structural engineering advisory services for the upgrade of the Merlin 32m diameter GHY-6 antenna and its supporting structures, first erected in 1984, to meet the high-end performance and technology requirements needed by ESA, NASA plus private space exploration companies to enable deep-space tracking and satellite communication services on a commercial basis.

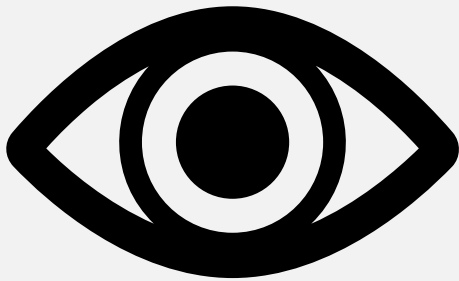
When complete in 2020, Goonhilly will have the ability to track and control proposed robotic and human missions to the Moon and Mars.



**DESMONDE
ASSOCIATES**

PROJECT MANAGEMENT
TOWN & COUNTRY PLANNING
STRUCTURES & HERITAGE

Desmonde Associates Role



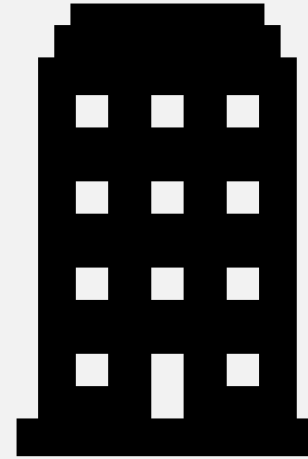
Structural Assessment

Site assessment to evaluate areas of concern and the level of remedial work needed.



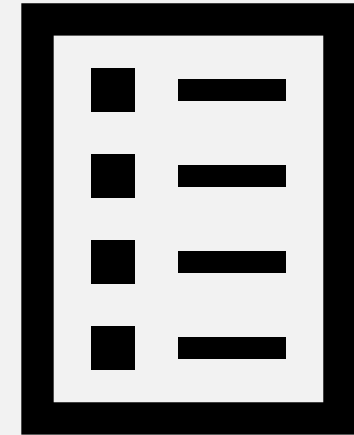
3D Modeling

Using a laser scan survey we created a 3D model of the structure that gave a clearer view of its construction and the best methods of remedial treatment.



Structural Engineering

Based on the previous two stages we created designs for the remedial work needed to restore the building to useable quality.









Report

Finally we developed a report that outlined our advice for the planning and cost of works needed.

What can we do for you?



Contact us

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