

## Case Study



# ROYAL PTSG and Dodd Group: AIRFORCE Flying High at RAF Marham





#### PTSG and Dodd Group: Flying High at RAF Marham



Working on multiple individual assets within a secure, operational Royal Air Force (RAF) base in Norfolk, Premier Technical Services Group PLC (PTSG), Dodd Group and the multiple stakeholders within the Defence Infrastructure Organisation (DIO) and their existing framework partners are delivering essential Lightning Protection Systems (LPS) upgrades.

RAF Marham is a RAF military airbase near the village of Marham in East Anglia. It is home to No. 138 Expeditionary Air Wing (EAW) and is one of the RAFs Main Operating Bases. No. 138 EAW primarily consists of three squadrons of Tornado ground-attack jets.

In early 2013, Dodd Group issued an opportunity to bid for works associated with the maintenance, certification and testing of on-site LPS. Following a competitive process, PTSG was awarded the project to carry out the works in accordance with both BSEN 62305 and DIO standards.

From the outset, one clear objective was at the forefront of all organisations within the complex stakeholder group - the mitigation of any activity which could have a potential impact upon the operation of the site. This created a unique culture from the outset where each organisation recognised the likelihood of changes or cancellations at short notice, requiring adaptability, flexibility and innovative ways of working to become steadfast in the partnership.

PTSG and Dodd Group had to work in accordance with strict protocols of the DIO and co-ordinate the work-phase planning through a vast stakeholder group, including:

- The Defence Infrastructure Organisation Asset Owners
- The Royal Air Force Asset Operators
- The Deputy Commander Royal Engineers (DCRE) Works Service Manager and Establishment works consultant, responsible for the procurement of new and responsive maintenance works at RAF Marham
- Carillion / Amey JV The DIO's framework partner and advisor, delivering a £2.8 billion programme to improve Army and RAF bases across the UK
- Turner FM Incumbent (until early 2015) Facilities Manager at the Marham site
- Dodd Group M&E supplier working on behalf of Turner FM (latterly reporting direct to Carillion/Amey JV)
- PTSG Specialist subcontract supplier of LPS



### PTSG and Dodd Group: Flying High at RAF Marham

During initial surveys of the existing systems with a requirement to issue test certification, PTSG recognised the need for upgrade and replacement works to conform to current legislation. PTSG quickly embraced the role of technical advisor and compliance manager to ensure the delivery of the project achieved its strategic objectives, reporting recommendations and requirements direct to Dodd Group.

The team was required to plan and deliver works in a number of areas, from office accommodation and mess halls, through to controlled, secure areas such as ammunition dumps and operational aircraft hangers. This presented unique challenges including the presence of multiple parties in some locations and restrictions to the cumulative number of contractors allowed in certain areas, requiring PTSG and Dodd Group to identify optimum delivery mechanisms with smaller engineering crews.

Prior to any work taking place on site, PTSG held several meetings with Dodd Group, liaising with its Operations Manager, Tim Pattinson, throughout. The pre-start meetings addressed a number of factors including:

- Work phase planning
- Access requirements and windows of opportunity
- Staffing levels appropriate to the work packages and access restrictions, utilising a fluid team of 2-10 engineers dependant upon scale, access opportunities and mobilisation restrictions
- Installation and certification methods in line with extensive operating procedures in the controlled environment
- Certification and compliance with BS EN and DIO standards
- Potential delays and sudden cancellations of work packages at the request of the DIO

Working closely with Dodd Group, Turner FM, Carillion/Amey, the DIO and the individual groups at each remote work site, PTSG overcame a number of challenges. Access to all parts of the site needed to be planned meticulously to allow the teams to complete the shutdown and isolation of electrical circuits with absolute zero impact upon the 24/7 critical operation of the site.

Furthermore, there was widespread recognition among the project team that, despite thorough planning, they could not foresee all operational requirements of the site accurately. The site at Marham is one of the most active RAF facilities in the country and frequently mobilises operations with little or no notice to react to DIO demands in the UK and overseas. Sensitive, planned operations were treated in complete confidence by the DIO and, as such, the project team was often unaware of upcoming events, which may have impacted their work.





#### PTSG and Dodd Group: Flying High at RAF Marham



Despite rigorous planning and project management, both organisations demonstrated continued agility throughout the project, with phases of work regularly cancelled by the RAF.

at the last minute due to operational requirements. Collaboratively planning for the unplanned was a unique requirement of this project throughout.

Innovation on this contract was achieved in a number of key areas:

- Scheme Compliance Revisiting all LPS on the site and conducting an audit of requirements to ensure current compliance
- Alternative ways of working Identifying solutions in accordance with access restrictions, compliance and safe systems of work
- Working hours Adapting to the needs of the end-user by working around the varied and often unpredictable nature of the site operations
- Resourcing to meet constraints Deploying an adaptable team who can easily expand and contract to work around given restrictions (physical, time and compliance)
- Communication The establishment of a routine, structured and all-encompassing stakeholder planning system

The locality of PTSG's engineering teams facilitated the adaptability required for the delivery of the project. It also helped to meet the objectives of the DIO to source a significant proportion of its resources from within close proximity of the site.

Despite the unique delivery challenges, the locality mitigated the need for engineers to lodge locally, reduced the number of miles travelled and managed significant costs out of the supply chain for the benefit of the DIO.

Feedback from the DIO and Turner FM (latterly Carillion) was extremely positive with all initial works now complete.











