Case Study

Heathrow Airport – Failure Mode, Effects and Criticality Analysis (FMECA)

Customer Background :

Heathrow is one of the world busiest airports, with an automated baggage system spanning over 30 miles made up of over 100k maintainable assets. As part of developing an Asset Management Plan and enhancing the maintenance regime, there was a requirement to understand how each assets would fail and the associated risk this poses to the organisation.

Challenges :

SML was contracted to develop the FMECA's for the baggage system, this was to be in the form of a tool which can be applied to analyse every type of asset class in their portfolio, representing the risks each asset/asset system faced, with an output of risk profiles which are then tied to organisational risk.

Solution :

- SML facilitated various workshops at the client site with the most experienced asset managers and engineers to achieve the best input for each asset class
- Created a detailed report of critical high risk elements in the system which required additional focus, including their risk profile and options for mitigating actions

Business Impact :

- Helped the business to develop the asset life cycle plans and identified areas for preventive and predictive maintenance
- Identified areas to introduce projects to replace components nearing end of life
- Aligned asset risk profile with the business risk profile of the organisation

Customer Feedback:

"SML helped us to align our standard FMECA model with how the baggage system was run which simplified the understanding of the impact on operations. The process they developed also simplified our approach and reduced the amount of time required to analyse the inter-relationship between complex systems with ease."

Senior Asset Engineer

SML

Your Partner In Asset Management