Executive Summary

The purpose of this project was to assist the Bombardier Biggin Hill service center in London, UK with planning the relocation of their maintenance operations from their current facility to a new, larger facility which is about 1 mile away. We were tasked with recommending a moving plan which encompassed all the hangar floor assets present in one of the two hangars operated by Bombardier at the Biggin Hill airport. The primary objective was to propose a solution that causes minimal disruptions on Bombardier's operations. Three possible solutions were presented after extensively considering and analyzing all the factors affecting the move. This includes the short timeframe for the move to accommodate for additional time needed for hangar certification and setting up of supporting departments, the time and cost associated with moving the required tools and equipment, the availability of adequate tools to ensure continuity of operations, the time and cost of the preferred transportation route and its impact on the operational losses, and most importantly studying the bay schedule to understand the trends in operations which proved critical in devising a moving plan to minimize losses. The solutions were – incremental move in which the bays are moved as soon as the job/check is completed during the preferred moving time window in June, moving all bays at once and a two-phase move which is a hybrid alternative separating the moving of light-input and heavy-input bays. Finally, these solutions were compared, and the feasibility of the solutions was discussed with the Project Manager. Ultimately, our team has been asked to assist Bombardier in March 2022 when the uncertainty regarding the operational schedule will be minimized and an optimal solution can be finalized and implemented.