

## THE BOEING COMPANY – DELIVERY OPERATIONS

### Production System Stability through Structured Problem Solving

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**The Boeing Company** is the world’s largest aerospace company whose aircraft comprise more than 50% of the global fleet of active commercial jetliners. In recent years, Boeing’s ability to deliver airplanes has been unstable due to the global COVID-19 pandemic and quality defects found in their 737 MAX and 787 airplanes. During this period of lower production rates, One Boeing Production System (One BPS) was initiated in 2019 to stabilize, standardize, and continuously improve the production system by aligning to common practices, Lean principles, and systematic problem solving on the production line. The highest level of this problem-solving method is the Factory Support Collaboration Center (FSCC), which is an organization that solves Boeing’s toughest, most systemic problems through accelerated project management. To date, the FSCC has already generated hundreds of millions of dollars in savings annually for factory initiatives, however, the organization has not been used in delivery operations.

To bridge this gap, the Tauber team was asked to leverage the existing factory FSCC framework to lead the first three Delivery Center FSCC projects. First, the team facilitated a tooling redesign to eliminate a high safety crush hazard caused by the non-standard 767 wing stand insert design. This demonstrated to delivery center team members that the Boeing Problem Solving Model and flexible staffing effectively solved high-impact production system problems. Second, the team investigated the feasibility of weighing airplanes in the factory rather than later downstream at a bottleneck point of the build to balance the utilization of the production line. This particular effort helped reveal the need to prioritize Delivery Center FSCC projects by developing a “likelihood score” in the FSCC’s project prioritization tool. Third, the team led a root cause investigation in missing paint defects, the top driver of rework hours for 767 airplanes. This final pilot project not only revealed previously unknown defect root causes, but also ensured the Delivery Center FSCC was in a mature enough state to operate without the Tauber team’s leadership.

Through completion of the three pilot projects, the Tauber team prevented one severe injury per year, eliminated 20 hours of overtime per airplane, identified root causes for an average 100 hours of rework per airplane, and created the potential for a 4% throughput increase in directly attributable impact. Most importantly, the Tauber team paved the way for a functional FSCC in the delivery center to generate tens of millions of dollars in annual savings by efficiently solving the highest impact systemic issues faced on BCA delivery center production lines.