When McTurbine constructed a new facility in Corpus Christi, Texas, they sought an organization that could provide industrial engineering support on aircraft platforms. McTurbine provides complete T53/T55 turbine engine repairs and overhaul including all components and accessories. The move was scheduled within six weeks and McTurbine needed assistance in planning for the parts warehouse move representing over 12,000 different part numbers. TCAT was asked to provide engineering assistance in planning for the relocation of inventory and establishing a layout for their new shipping and receiving area.

TCAT’s systems engineering process was used to provide a base for conducting the assessment and recommendations; whereby, best industry practices were researched and employed. TCAT identified and recommended method improvements and lean implementation strategies to improve the manufacturing processes. Method improvements for specific warehouse operations were presented to McTurbine management for evaluation and implementation. TCAT combined these methods with lean manufacturing and six sigma philosophies resulting in cost reduction, improved productivity, and elimination of non-value added operations, and identification of other problem areas. Ultimately, TCAT provided layouts for storing McTurbine’s commercial, military, and yard warehouse operations. We also provided an inventory scheme for A,B,C-classification of parts and a layout for shipping and receiving was developed to improve the work flow and to provide ergonomic workstations.

According to Tom Kwiathowski, Director of Materials Logistics at McTurbine, “it used to take one and a half to two days to kit up a job in the old facility and now it takes about two-hours in the new warehouse.” He went on to remark that in their most recent FFA audit, the auditor viewed the warehouse operation as being outstanding.
TCAT’S CORE COMPETENCIES

Energy Sustainability ★ Environmental Sustainability
Manufacturing & Systems Engineering ★ Information Technology ★ Modeling & Simulation
Technology Insertion ★ Test & Evaluation

TEXAS A&M ENGINEERING

Texas A&M Engineering consists of the Dwight Look College of Engineering, and three engineering agencies, including TEES: Texas A&M Transportation Institute (TTI) conducts research and professional education in all modes of transportation. The Texas A&M Engineering Extension Service (TEEX) works to develop a highly skilled and educated workforce and enhances public safety through training, continuing education, and technical assistance.