



Process Engineering Program Support: Corpus Christi Army Depot (CCAD)

TCAT worked hand in hand with the CCAD Lean Office developing work measurement studies, recommending method improvements, applying lean manufacturing techniques and six sigma philosophy while providing process engineering program support to repair, maintenance, and overhaul operations for rotary wing aircraft.

TCAT was also involved in the strategic planning and deployment of the Lean Manufacturing and Six Sigma Methodologies across CCAD and was instrumental in demonstrating its ROI and documenting its impact not only to the military but the community.

Manufacturing and Industrial Engineering tools were applied to identify areas for improvement along with Lean Manufacturing and Six Sigma methodologies which are widely utilized to identify waste in business processes and optimize resources and facility utilization by eliminating / reducing it.

TCAT performed numerous time and motion studies required to develop reliable time standards which provide the capability for accurate cost determination in advance of production, help to establish baseline for bidding work, and predict accurate cycle times. TCAT produced over 9,800 accepted standard hours for CCAD. TCAT developed over 100 method improvement presentations (MIPs) and presented them to CCAD personnel showing areas of opportunity for increasing productivity such as improved equipment, tooling, and fixtures; eliminating safety issues; and reducing ergonomic concerns. Method improvements are beneficial developments in process, tools, equipment, or ergonomics to reduce turnaround time, cycle time and cost, improve quality, and eliminate injuries or illness resulting from work. MIPs produced by TCAT include a ROI analysis which quantifies the time savings of recommendations and illustrates the time needed to recover the purchasing cost of the equipment.

TCAT engineers also provided CCAD with assistance in facilitating depot-wide Lean Six Sigma events. By embracing Lean Six Sigma, CCAD decreased turnaround time on its HH-60 Pavehawk Program by 45%, reduced man hours per unit by 47%, and reduced assembly process space utilization by approximately 10,500 square feet.



TEXAS CENTER FOR APPLIED TECHNOLOGY

There are many problems that require the careful and proper integration of applied technologies to find solutions. The Texas Center for Applied Technology (TCAT) was created to focus on these specific problems and to develop effective and efficient solutions. TCAT's core competency is the innovative application of existing technologies and advanced research to solve complex real-world problems.

TCAT's primary objective is to apply and test technologies to address targeted problems and engage basic research as required. TCAT has employees in a variety of locations with the ability to perform research that cuts across multiple technologies, disciplines, and cultures. The Center's employees are knowledgeable regarding customers' requirements and are ready to respond effectively to provide the best value for the customers' needs including expertise in technology insertion, technology assessments, and test and evaluation.

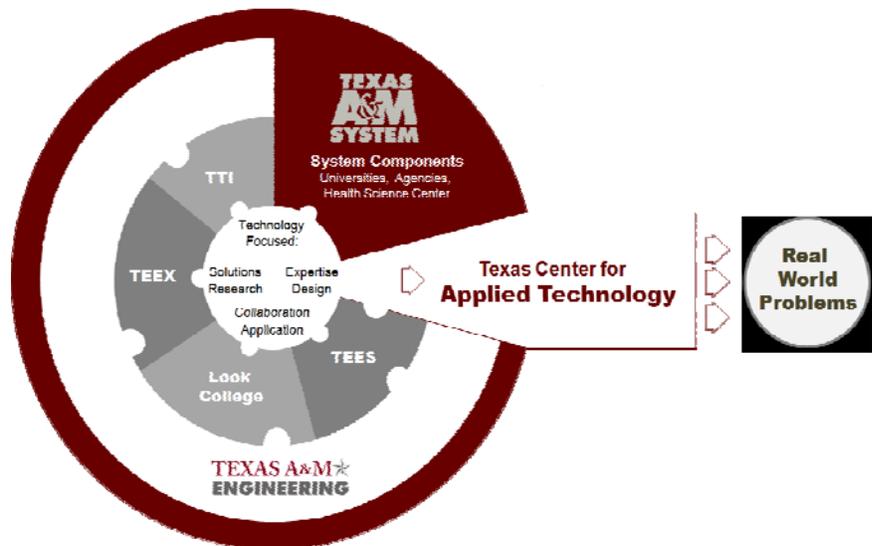
TCAT is part of the Texas A&M Engineering Experiment Station (TEES), a member of The Texas A&M University System. The A&M System is one of the largest and most comprehensive systems of higher education in the United States. Through a statewide network of eleven university campuses, seven state agencies, and a comprehensive health science center, the A&M System educates more than 120,000 students on its university campuses, conducts more than \$780 million in research, and reaches another 22 million people through service each year. TEES is an engineering research agency for the state of Texas and conducts over \$147 million in research annually. Because of the Center's position within the Texas A&M Engineering program, TCAT's expertise can easily be extended by rounding out its team with world class faculty researchers, as appropriate. TCAT is in an excellent position for collaboration not only with The Texas A&M University System components and their customers but with other universities, institutions, centers, and industry.

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.



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