



# Technical Support and Depot Modernization Study for the Cryptologic Systems Group



The Cryptologic Systems Group (CPSG) provides a wide range of acquisition and sustainment services to the Warfighter. This operation manages the life-cycle of the full spectrum of cryptologic products and services for the U.S. Air Force. Products are received, inventoried, warehoused, and shipped to anywhere in the world. A partnership between Innové, Karta, Kelly's Logistics Support Systems and TCAT was established to investigate, determine, and report on the general requirements to modernize CPSG depot operations located in separate buildings between Lackland Air Force Base and Kelly City Base (formerly Kelly Air Force Base). The project was to evaluate CPSG operations in five locations and make recommendations that would improve efficiency of operations, make recommendations for applications of technology, and to provide time saving solutions.



The engineering team engaged in direct dialog with the CPSG workforce (all levels) and analyzed historical data to gain a better understanding of the current and future processes and requirements. The team also used questionnaires and held iterative meetings with key personnel to gain access to relevant information. As a result, the engineering team identified areas of inefficiencies, highlighted requirements for modernization, and provided interim recommendations.



Next the team performed market research that identified alternative technology/process solutions. In several cases the recommended solutions were not readily available off-the-shelf and the team designed and developed engineering solutions and presented to the customer, including estimates of cost and schedule. Additionally each technology/designed solution was justified in terms of their durability, efficiency, space requirements, mission, ease of use, and safety. The alternatives ranged from low tech to high tech depending on its application and location. The team developed a consolidated approach into a Master Plan including a prioritized roadmap defining the path to modernize CPSG facilities implement the recommended solutions and future plans to continue enhancing the CPSG services, facilities, and processes.

## 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.

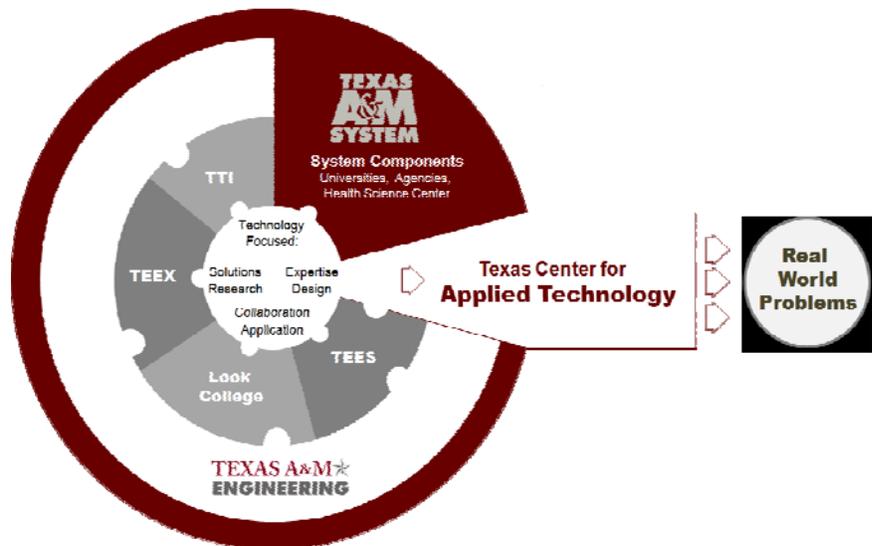
TCAT is part of the Texas A&M Engineering Experiment Station (TEES), a member of The Texas A&M University System. The A&M System is one of the largest and most comprehensive systems of higher education in the United States. Through a statewide network of eleven university campuses, seven state agencies, 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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