

Aircraft Manufacturing Service Center Case Study

Tactical Engineering Solutions (TES) provides practitioner-based consulting and training services that deliver measurable results for our clients. We work with our clients to understand their objectives, identify solutions that are capable of execution, and develop appropriate plans to achieve, validate, and sustain the intended benefits.

SERVICES:

**Operations
Performance
Lean
Six Sigma
Rapid Improvement
Logistics
Quality Management
Program Management
Change Management
Collaboration and Time
Data Management
Training &
Certification**



Opportunity: A manufacturer of small jet aircraft contracted TES to help them develop more efficient and accurate repair and refit procedures at one of their service centers. The aircraft manufacturer was familiar with TES through projects TES accomplished at their manufacturing facility.

Project Goal: The primary goal of the project was to develop a more accurate aircraft schedule to enable aircraft to be returned to service on time. This also included increasing accountability and quality output, as well as implementing an improved manpower schedule.

TES provided the Industrial Engineering support to develop an accurate aircraft repair and modification schedule, which accounted for all modifications and repairs. TES recognized a need and implemented a continuous review of these schedules for individual aircraft, based on engineering requirements. TES also recommended additional manpower required to increase productivity. An improved manpower schedule was implemented, with an enhanced shift pattern that increased productivity and decreased workmanship errors. The opportunities for productivity improvements were implemented, resulting in increased quality and safety. The project methodology was as follows:

- Developed accurate aircraft schedule.
- Identified constraints and bottleneck areas which prevented aircraft from being returned to service on schedule.
- Increased manual labor to increase productivity.
Created tracking folder for each aircraft, including schedule, "Yet-To-Go" Sheet and Job Delay Summary.
- Organized Variance Resolution Team which reviewed progress and delays on a daily basis, and performed root cause analysis to resolve recurring delays.
- Implemented improved manpower schedule and allocation.

TES provided MS Project-based schedules that were used to develop tracking folder for each aircraft. TES made additional recommendations of additional training for the manufacturer's current computer system to increase usefulness of the system. TES provided information using a Visual Factory to make newly provided tools accessible to all required personnel.

Benefits of Project:

Accurate aircraft scheduling
Development of tracking tools, resulting in increased accountability
Increased productivity
Resolution of delays in returning aircraft to service
Enhanced manpower shift patterns
Increased quality and safety

Tactical Engineering Solutions Overview

SOLUTIONS:

Continuous Monitoring
Process Flow Mapping
Workstation Layout
(5S)
Material Movement
Problem Solving
Workgroup Development
End User Training
Supplier Development
Value Stream Mapping
Standard Work
Workload Optimization
Simulation
Six Sigma
Facility Layout
Visual Factory (Andon)
Pull Systems
Enterprise Performance

For more information on any of our products or services please visit us on the Web at:
www.tacteng.com

TES is a Manufacturing Engineering services firm focused on helping our clients develop **and implement** sustainable operational improvements that deliver measurable results. We work in a collaborative manner with you and your team through the difficulties of the implementation phase and we can ensure that changes will deliver and sustain improvements for your customers and staff.

Our transformation work focuses on three elements:

- Developing new operating systems to improve productivity and flow using Lean Six Sigma techniques, with limited capital investments
- Creating the performance management system for leaders to monitor and improve performance
- Building realistic, practical capabilities and confidence that our clients will need to continuously improve

Our specialists in Lean Six Sigma can help clients deliver performance by:

- Developing transformation programs (e.g. labor and manufacturing efficiency improvements, process improvements)
- Supporting existing change initiative
- Conducting performance diagnostics
- On site facilitation for Value Stream Analysis and Kaizen events
- Creating performance management systems (e.g., tracking tools, accountability programs)
- Building organizational capabilities
- Executive leadership and coaching
- Zero cost productivity improvements

We bring best practices from leading manufacturers from around the world and a broad base of industries. We measure our success by the sustainability of our impact and the capability we transfer to clients.

About Us

Tactical Engineering Solutions is a veteran-owned/women owned disadvantaged small business, serving the business needs of both private and public sectors. Headquartered in Michigan, our roots originate in the manufacturing industry and as we have grown, our portfolio of resources continues to expand upon this foundation into other industries, to include Transportation, Electronics, Aviation, Aerospace, Healthcare, Power, Department of Defense, and more.

It is this rich heritage that allows Tactical Engineering Solutions to support our clients with a first-hand understanding of the challenges that businesses face.

Tactical Engineering Solutions is registered with Dunn & Bradstreet and the Federal Government's Central

VISION

TES executes programs that are on-time, on-budget and technically accurate to help our clients reduce overall cost and improve throughput while increasing customer satisfaction.



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