

TFE731 CZI Support Solution

50% Reduction in TFE731 MRO Turn Times Reduces Business Aviation Operating Costs

Ducker Worldwide, a marketing intelligence and strategic consultancy serving the transportation industry, conducts ongoing Voice of the Customer (VOC) interviews of Global Maintenance, Repair and Overhaul (MRO) customers. The purpose of this research is to provide VOC data that is actionable by StandardAero to improve MRO processes, services and standards in order to contribute positively to business aviation customers' success.

284 global MRO customers with Honeywell TFE731 engines in their fleets were interviewed – half of them had either a Major Periodic Inspection (MPI) or Compressor Zone Inspection (CZI) conducted on their engines within the past two years.

According to MRO customers, TFE731 MPI industry average turnaround times were 13 days, against expectations of 9 days.

MRO customers indicated that TFE731 CZI industry average turnaround times were 30 days, against expectations of 25 days.

TFE731 Customers' Challenge: Slow Turn Times

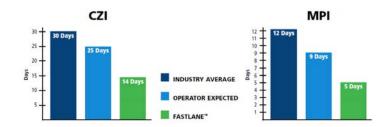
MRO Industry-standard turn around times for CZI and MPI take too long, resulting in extra operating costs that could be saved by meeting their expected turnaround times.

Solution: FASTLANE™

StandardAero has reduced turnaround time for TFE731 CZI from 30 to 14 days and MPI from 12 to 5 days – exceeding TFE731 customers' expectations, but without compromising quality.

FASTLANE Powers Cost Savings

FASTLANE is a strategic approach to engine MRO that correlates maintenance turnaround times with comprehensive fleet operating costs. FASTLANE CZI customers have reported that cutting shop time by 50% lowers operating costs for them. A combination of additional lease revenue earned, replacement engine rentals saved and added efficiencies of getting the service completed in a single visit resulted in savings of up to \$50,000 in their operating budgets. For example, the speed of FASTLANE enables a CZI to be combined with an airframe inspection, to avoid costs such as extra engine removal and reinstallation. Saving the cost of removal and reinstallation of one engine for a Hawker 800XP represents savings of \$8,088 plus \$625 in materials per engine.







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Why FASTLANE Works

For almost 40 years, StandardAero has performed more TFE731 heavy maintenance than any other company. This unique experience results in engine MRO best practices that maximize MRO factory performance and optimize engine reliability. FASTLANE is the result of total focus and total buy-in from all areas of StandardAero's engine MRO factories. To maximize "hands on" time to expedite work-scope completion, StandardAero works three shifts, 24 hours a day, and uses advanced tools for optimal results. Innovative critical process changes in product velocity through the factory have dramatically reduced shop time without compromising product quality. The FASTLANE system assesses critical hardware exchange processes and incorporates exceptionally efficient parts procurement to ensure all the components, including critical long-lead items, needed for rapid turnaround are on hand.

Continuous improvement projects tied to the FASTLANE system are being run concurrently to analyze the process to identify risks and risk abatements, and to fine tune the process.

FASTLANE Product Quality

The product quality of FASTLANE is as good as or better than that of industry-standard turnaround time CZI services; based on outgoing engine performance margins. This conclusion is the result of a study spanning two years worth of data from 31 CZI FASTLANE engines ran on an OEM-calibrated TFE731 test

cell at a Honeywell Authorized Major Service Center in Houston, Texas. The site's test cell measures First Test Pass Rate (FTPR) percentages that readily demonstrate consistency and quality of maintenance.

Conclusion

FASTLANE operating cost savings advantages are well defined, but the system's implications for operational success in business aviation are far broader. Fleet managers who take advantage of FASTLANE will enjoy higher aircraft and propulsion system availability rates that allow them to offer more reliable and efficient services to their passengers. MRO-driven operational cost savings can improve profitability and also may give operators a significant edge that sustains and grows their business in the face of stiff competition.

Why StandardAero?

StandardAero's culture involves more than MRO service delivery with comparable attention to strategic issues that are shaping the future of MRO services as well as industry-wide fleet management practices to improve safety, reliability and efficiency. The company's employees are thoroughly skilled, trained and motivated to provide MRO services that consistently deliver outcomes just like TFE731 FASTLANE – quick turnaround and high quality to improve operational performance, reduce costs and contribute positively to business aviation customers' success.

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