QuEST helps Aero-Engine Manufacturer ensure early release of 1st Compliance Engine

Using QuEST Global to manage its Supply Chain Readiness activities helped this aero-engine manufacturer ensure 100% On-Time Delivery of parts for Final Assembly.

Joe Gomes
QuEST Global
QuEST helps Aero-Engine Manufacturer ensure early release of 1st Compliance Engine

Using QuEST Global to manage its Supply Chain Readiness activities helped this aero-engine manufacturer ensure 100% On-Time Delivery of parts for Final Assembly.

Executive Overview

Client Profile:
QuEST Global’s client is a leader in the design, manufacture and service of civil and military aircraft engines. Their commercial engines power more than 25% of the world’s passenger aircraft fleet and serve customers across the world. They are supporting military jets, single-aisle commercial aircrafts and wide-body and long-range jetliners.

Client Strategy & Background
Our client made considerable R&D investment in developing a breakthrough technology which would provide a ‘greener’ flight with greater fuel efficiency, reduced noise, less environmental emissions and lower operating costs.

The engine was selected as an option on the new derivative of a highly successful narrow-body airframe family and had now had the opportunity to prove its claims of a ‘greener’ flight and reduced fuel burn to ensure further orders. Our client was in the unique position where the airframe was already in production and ahead of the engine compliance schedule.

Our client had to accelerate the Production of the first set of compliance engines to meet their end-customer requirements. This required majority of the components required for build to be delivered 4 months before the planned ship date. Supply Chain Readiness was a critical activity to achieving this aggressive timeline.

Our client needed a solution to:

- **Accelerate Procurement Lifecycle** – a integrated project team that will execute efficiently so there are no missed milestones
- **Drive Program Management Rigor** – ensure thorough planning and tracking of parts, proactively identify and eliminate constraints
Business Value Outcomes

Over a 9 month period, QuEST completed Part Qualification of 1450 part numbers at 46 suppliers, and delivered parts 2 weeks ahead of a demanding schedule.

Testimonial

“QuEST has demonstrated responsiveness, flexibility and innovation in its approach to adapt to our global product needs. We value their partnership in executing our business objectives”
– Senior Vice President, Engineering & Operations

Deeper Insight

By handing QuEST ownership of Supply Chain Readiness, the Client was able to focus their efforts on the certification and compliance processes. Our Client was able to meet all compliance requirements for the engine within 47 months, the shortest period for engine certification since the 1980’s.

QuEST managed the supply chain readiness value stream for the new engine including:

QuEST acted as an integrator between the various departments involved. QuEST used a mirrored team structure that kept the data exchanges simple and removed unnecessary touch points and interactions between the various customer teams.
QuEST leveraged its extensive footprint across the US to manage suppliers efficiently and effectively whilst minimizing travel costs. QuEST Supplier Development Engineers visited suppliers to implement process improvements, run quality clinics, handle supplier queries, expedite parts, perform part qualification, FAIR and PPAP requirements as applicable.
QuEST created and managed a war room within the client’s facility to program manage the entire NPI Transition. QuEST used an in-house built tool, Master Tracker, which captured all contacts, schedule requirements and technical requirements like FAIR, LAIR, ESA. ‘Burndown’ charts were created which highlighted any delays which may create a problem later on. Department leaders from various customer came to the War Room periodically for status updates and pending actions.

Each of the 1400+ parts were monitored in the War Room with abilities to track the location of hardware at any time. In addition to hardware tracking, the entire configuration management and design change processes were managed by QuEST.

Through QuEST’s deep knowledge of aero-engine industry design change recommendations were made to accelerate delivery and reduce costs significantly. One suggestion which was implemented was to convert certain development parts to production parts. Another suggestion was to make a design change to fan sheets which helped reduce the part complexity. These design improvements were possible due to QuEST’s experienced multi-skilled teams and extensive product knowledge.

**Author Background**

**Joe Gomes**

Joe has over 25 years Operations experience in various industries including Aerospace, Pulp and Paper, and Manufacturing. He is an international Leader with proven expertise in establishing goals, measuring results, and energizing personnel. Passionate about management and the technology levers for achieving success, he promotes a discipline, data driven approach to improve business processes with efficient results. With his extensive background in supply chain, program leadership & engineering environments he is as a change champion to drive customer focus.
**About QuEST**

QuEST Global is a focused global engineering solutions provider with a proven track record of over 17 years serving the product development & production engineering needs of high technology companies. A pioneer in global engineering services, QuEST is a trusted, strategic and long term partner for many Fortune 500 companies in the Aero Engines, Aerospace & Defense, Transportation, Oil & Gas, Power, Healthcare and other high tech industries. The company offers mechanical, electrical, electronics, embedded, engineering software, engineering analytics, manufacturing and supply chain engineering transformative solutions across the complete engineering product lifecycle.

QuEST partners with customers to continuously create value through customer-centric culture, continuous improvement mind-set, as well as domain specific engineering capability. Through its local-global model, QuEST provides maximum value engineering interactions locally, along with high quality deliveries at optimal cost from global locations. The company comprises of more than 7,000 passionate engineers of nine different nationalities intent on making a positive impact to the business of world class customers, transforming the way they do engineering.

http://engineering.quest-global.com