

History proves the most technically rigorous and carefully planned aerospace program will be undermined by supply chain failures.

Successful supply chain risk identification and mitigation are facilitated by industrial base analysis and support the DoD's mission by:

- 1. Improving program cost and schedule performance
- 2. Improving product performance
- 3. Strengthening industrial capabilities that support complementary and follow-on programs

QED Analytics deploys a focused, methodical Industrial Base analysis approach to identify two primary impacts to supply chain resiliency.

- 1. Supplier risk (companies cease being viable for providing needed products on time).
- 2. Supply chain vulnerability (characteristics of the supply chain structure that make is susceptible to amplified disruptions that propagate through the network).

QED's data-driven analysis uses existing information sources coupled with targeted data collection to support IB assessments that are *predictive* rather than reactive. The QED approach is:

- 1. Holistic: Assess the breadth and depth of a program supply chain (not just Tier 1). Assess a program's suppliers in the context of their broader customer base.
- 2. Multi-faceted: Assess the supply chain to identify supplier and program interdependencies and degree of commonality. Identify potential impacts derived from single point of failure (SPOF), foreign ownership, obsolescence, and capacity constraints.
- 3. Multi-disciplined: Assess industrial base risk based on analysis of supply chain management strategies, company financial and competitive factors, and technology requirements and capabilities.

QED provides its customers with timely, concise, data-rich findings supported by detailed and well-documented analysis. QED identifies not only risks, but their drivers. When requested, QED makes recommendations for mitigation strategies based on industry best practices, experience, scenario planning, and analysis of alternatives. Mitigation strategies may include, but are not limited to, rationalizing the supply chain, identifying alternate sources, implementing manufacturing technology enhancements, adopting manufacturing best practices (ISO, 6-Sigma), and identifying strategic partnering opportunities.

## **About QED Analytics, Inc:**

QED Analytics, Inc. provides strategic planning subject matter experts and related manufacturing technology experience including: application of the theories and practices of probabilistic risk analysis in the assessment the supply chain or industrial base; development of analytical and/or mathematical models, forecasts and visualizations for analyzing supply chain and industrial base capability and risk; and development of risk assessment tools, methods, or statistical analysis techniques to support risk-informed investment in manufacturing technologies.

Additionally, QED Analytics uses its subject matter expertise to develop approaches for evaluating supply chain risk and to develop mitigation plans. Its strengths include detailed aerospace technical knowledge, company financial analysis, strategic planning, and communications. Additionally, QED brings experience working for and with major aerospace prime contractors and has detailed knowledge of their manufacturing capabilities and constraints.

QED is a third-party certified Woman-Owned Small Business (WOSB)