

Senior Reliability Engineer

Washington DC/ Remote

Email Job

Company Description: At Integrated Solutions for Systems, Inc. (IS4S), our mission is to solve important technical challenges of national importance across a wide range of engineering and management solutions for our government, military, and commercial customers. We believe in delivering excellence in all that we do. We operate in an environment where doing the right thing is more important than profit, and our company is fully owned and operated by ethical, motivated employees. If this is an environment that interest you, then we welcome you to join our team.

Job Description:

Our Washington DC location is seeking to hire an experienced Senior Reliability Engineer (RE) to support a variety of large government-funded projects primarily related to military aircraft and aircraft parts. The initial job deals with specific Reliability issues connected aircraft subsystems, air worthiness, navigation, communications, and mechanical aspects of weapon systems in a fleet of large military aircraft. We are looking for a candidate who is a self-starter, a collaborative leader and open to finding new ways to solve challenging technical problems. The work is to be performed inside a larger digital engineering environment focused on developing modular open systems that enable rapid prototyping and deployment of real-world systems.

Work Scope:

- Lead Reliability Engineer for the assigned major acquisition program and report to the lead program Systems Engineer
- Perform Reliability Analysis for aircraft carriage and release equipment including avionics systems and produce substantiation products against program requirements as defined below as Key Responsibilities.
- Represent IS4S to the US government customer and be the Subject Matter Expert on all matters regarding Reliability of the delivered products.

Key Responsibilities:

- Develop and execute Reliability and Maintainability Program Plans to establish and track reliability objectives throughout the product lifecycle.
- Create and maintain Reliability and Maintainability Cases to support system design, development, and testing.
- Develop Built-In-Test Demonstration plans to ensure effective testing and diagnosing of system components.
- Conduct Failure Modes Effects and Criticality Analysis (FMECA) to identify potential failure modes, their effects, and criticality.
- Generate Reliability Critical Items Lists (RCIL) to prioritize and manage critical components for reliability improvement.
- Lead Failure Reporting, Analysis, and Corrective Action System (FRACAS) activities to identify, analyze, and resolve failures in a timely manner.
- Collaborate with engineering teams to implement Design for Reliability (DFR) principles into product development processes.

- Perform Reliability, Availability, and Maintainability (RAM) analyses to evaluate system performance under different operational conditions.
- Participate in root cause analysis investigations and provide recommendations for corrective actions.
- Drive continuous improvement initiatives to enhance product reliability and reduce maintenance requirements.
- Stay up-to-date with industry best practices and emerging trends in reliability engineering.

Basic Qualifications:

Working Knowledge expectation -

- DoD Logistics and relevant Mil-STD-217 knowledge
- Master's degree with >2 years of experience in developing and executing product support strategies; OR Bachelor's degree and at least 5 years of experience in developing and executing product support strategies (Degree: Mechanical Eng, Computer Eng, Reliability Eng, Mathematics/OR/Stats, Electrical Eng)
- 2 years of experience in reliability engineering within the defense industry.
- Proficiency in developing and executing Reliability and Maintainability Program Plans.
- Strong understanding of reliability engineering concepts, methodologies, and tools (e.g. MIL-HDBK-217x)
- Experience in conducting Failure Modes Effects and Criticality Analysis (FMECA) (e.g. MIL-STD-810 for temp, humidity, and vibration)
- Familiarity with Built-In-Test (BIT) and diagnostics concepts (e.g. MIL-STD-2175 & 883 standards and BIT de facto standards)
- Knowledge of Reliability Critical Items Lists (RCIL) and Failure Reporting, Analysis, and Corrective Action System (FRACAS) processes.
- Experience in Reliability testing
- Excellent problem-solving skills and ability to conduct root cause analysis.
- Ability to work closely with a small, agile development team.
- Full Office Suite competency, Strong communication and teamwork abilities to collaborate effectively across departments.
- U.S. citizenship and eligibility for security clearance required.

Desired Experience:

- Advanced RE forecasting to include CBM+, RCM, Pareto analysis and other methods.
- 8 years of experience developing and executing product support modeling strategies for aviation acquisition programs
- Experience in DoD weapons development or integration
- Experience in the intersection of ILS, Reliability and Maintainability (e.g. LORA, LPD, MIL-STD-472)
- Development of Depot level, I-level, and Organic Technical Orders
- Aviation and DAL A, B, C familiarity
- Experience employing life cycle management and supply chain modeling software and tools
- Prior military service
- Active SECRET security clearance