



SENIOR ELECTRICAL SYSTEMS ENGINEER

Job Responsibilities

- The Senior Electrical Engineer performs technical planning, electrical systems design, electrical systems interface definition, electrical system integration, and system verification and validation test support, cost and risk analyses, and supportability and effectiveness analyses for total systems.
- Performs electrical loads testing and analysis, circuit design and test, designs power protection and safety interlock features, trade studies, electrical system requirements allocation and electrical interface definition studies to translate customer requirements into electrical hardware and software specifications.
- Works with existing aircraft AC and DC power sources and converts into useful power for programs by the most efficient and safe means.
- Perform technical planning associated with the design and development of electrical and electronic systems.
- Interpret electrical Interface Control Documentation to assist with system integration, verification, and validation.
- Supports program proposals with cost and schedule estimates, creates and manages program plans.
- Leads programs in electrical systems design and testing including electrical systems design, aircraft platform power distribution to systems, circuit protection, and safety interlocks during design phase.
- Interfaces with customers, program personnel including management, integration and test, and system design engineers, and systems architects.
- Previous experience following an avionic systems from conceptual design, manufacturing, development, integration and test, through production.
- Position requires the desire and ability to work in a fast paced, fluid environment and adapt to frequently changing needs of programs and customers on a weekly or sometimes daily basis.
- Must be familiar with CAD, ability to create wiring diagrams, cable drawings, system interconnect and schematics.
- Experience in FAA and DoD alterations to aircraft systems.
- Experience with printed circuit board design (schematic capture and board layout).
- Create electrical technical data to include drawings, electrical loads reports, test plans, and system safety analysis.

Physical Requirements

- Ability to lift and carry up to 50lbs.
- May be necessary to stand for long periods of time

Give me a lever long enough, and a fulcrum on which to place it, and I shall move the world - Archimedes



804.785.1017
804.785.1081 (fax)



FulcrumConceptsLLC.com
info@FulcrumConceptsLLC.com



1776 Patriot Way
Mattaponi VA 23110

- Ability to sit, stand, crawl, climb ladders, and work in tight spaces as required
- Ability to work safely in and around aircraft
- Ability to work with small components and tools in confined spaces
- Ability to work for extended periods at computer workstation
- Ability to travel domestically and overseas if needed

Knowledge and Experience

- Self-starter, highly motivated, exceptional work ethic.
- Superior attention to detail, focused, quick learner.
- Exceptional character and integrity.
- Proactive problem solver.
- Leadership attributes a must.
- Enjoys challenges, a fast-paced environment, creating technical drawings and models, and working on a diverse problem set.
- Knowledge of aircraft systems primarily aircraft avionics, electrical power, communications, military systems, and aircraft modifications.
- Knowledge/familiarity with MIL-SPECS and FAA requirements - MIL-STD-704/461, SAE AS50881, and 14 CFR Parts 23, 25, 27, and 29.
- Experience with aerospace\mil-spec connectors, wire and cable specifications (M22759, M27500), accessories and parts suppliers\vendors.
- Experience creating electrical system installation, wire routing, and harness schematic designs and drawings.
- Familiarity with Solidworks.
- Familiarity with C/C++ programming.
- Familiarity/Experience with FPGA design.
- Ability to obtain and maintain a SECRET clearance.

Additional skills that are not required but beneficial include:

- Proficient in Microsoft Office applications (e.g., Word, PowerPoint, Excel, Access, and Outlook).
- Must be able to perform inspections, services, troubleshooting and tow aircraft.
- Trained and licensed to operate pertinent Aviation Ground Support Equipment (AGSE) and Material Handling Equipment (MHE).

Security Clearance Requirement

- Subject to a security investigation and may need to meet eligibility requirements for access to classified information and a SECRET, TS, or TS/SCI clearance may be required as well.



Education

- Bachelor's degree in Electrical or Systems Engineering from an accredited college, or equivalent experience/combined education
- 7 + years of professional experience in aircraft electrical engineering with a BS degree. 5+ years with M.S. degree.
- 10+ years applicable field experience in lieu of degree

Benefits include:

- 401(k) Safe Harbor Savings Plan
- Medical, Dental, and Vision Insurance Plans
- Short and Long Term and Disability
- Vacation and Sick Leave Packages
- 12 Paid Holidays each year
- 9/80 Work Schedule

The assigned personnel are responsible for the listed duties and responsibilities plus any other direction and responsibilities assigned by the Managing Members.

Fulcrum Concepts, LLC is a service disabled, veteran-owned, small business that provides innovative services and products to solve requirements for its customers. Fulcrum Concepts, LLC specializes in solutions for tactical aviation organizations and is structured to provide comprehensive solutions that begin with an initial requirement and end with fielded products. At Fulcrum Concepts, the unique combination of operational experience and a robust aerospace engineering capability enable the company to provide elegant, lightweight, enduring solutions for its customers.

Fulcrum Concepts, LLC provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, sex, national origin, age, disability, or genetics. In addition to federal law requirements, Fulcrum Concepts, LLC complies with applicable state and local laws governing nondiscrimination in employment. This policy applies to all terms and conditions of employment, including recruiting, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation, and training.

