

POSITION TITLE:
Intermediate Electrical Engineer

LOCATION:
Calgary, Alberta, Canada

SUMMARY OF POSITION:

Airdyne Aerospace has an immediate opening for an Electrical Engineer to provide sustainment support, liaison, design, and integration to both its developed core product line and new products.

As the Electrical Engineer you will be required to support sustainment of developed Airdyne products, and integrate systems into these designs to meet customer and airworthiness requirements. This position includes shop floor liaison support, drafting, creation and execution of bench test plans, creation of reports, installation support, training, and on-site flight test support.

This position requires a “Team-Player” with excellent communication skills and abilities to be able to communicate and interchange ideas and knowledge effectively with all Team members at Airdyne as well as customers.

This position will require travel to support company or customer requirements which may include installation, training and testing.

DUTIES AND RESPONSIBILITIES:

- Perform electrical designs to integrate multiple components/systems into our SABIR core product(s). From conceptual to final design of aircraft electrical systems. Detailed system design documentation skills including wire routing, shielding, harness diagrams, block diagrams and schematics are required.
- Create and check Electrical wiring interconnect, schematic and harness drawings
- Create and check Mechanical and Electrical assembly and subassembly drawings.
- Design, analysis, and component selection to meet airworthiness standards.
- Use AutoCAD for design electrical interconnects, schematics and wire harnesses drawings for electrical component integrations and aircraft interfaces.
- Analyze Electrical, Electronic, and Electromechanical Systems for integration into existing aircraft, electrical loads, failure modes, criticality, reliability and control.
- Generate Electric Load Analysis using Airdyne format and appropriate reference(s).
- Technical report writing, component/part sourcing vendor validation and associated specification generation and airworthiness compliance skills are also required. Assures product and process quality by designing testing methods; testing finished product and process capabilities; establishing standards; confirming manufacturing processes.
- Adhere to company policies and procedures.
- Interact with engineering team, inspectors, shop mechanics, technicians, and management team as required.
- Supports all Material Review Board (MRB) processes as required.

REQUIRED QUALIFICATIONS AND EXPERIENCE:

- Minimum of a Bachelor's Degree in Electrical Engineering, or equivalent credentials.
- Minimum 10 to Maximum 15 years of aerospace electrical equipment and system integration experience, involving detailed design work starting at the conceptual level, maturing into production and installation.
- 10 years of experience creating aerospace wiring interconnects, wiring schematics, wiring harness drawings using drafting standards and approved CAD Software.
- 7 years' of electrical design experience with CAD Software (e.g. AutoCAD).
- Experience with Aerospace Wiring and Installation requirements, environmental standards, EMI/EMC, and aerospace connectors (and associated strain reliefs).
- Detailed design of a variety of aerospace systems, equipment and installations, including sensors (e.g. optical/RF/Radar), avionics, and other complex electrical system integrations.
- Experience generating Electric Load Analysis, Test Plans, and failure modes effects & criticality analysis.
- Experience in technical report writing. Must have excellent communication skills, be fluent in English (spoken and written) and proficient in MS Word, MS Excel, MS Teams.
- Knowledge of regulatory issues related to aircraft design and analysis (i.e., certification).
- Experience using test instrumentation and control components (e.g. meters, oscilloscopes, DAQ, etc.) Providing test input/instrumentation data to personnel and collaborating with engineering personnel to interpret/correlate test results.

DESIRED QUALIFICATIONS AND EXPERIENCE:

- Practical experience and understanding of drafting standards (e.g. ASME Y14.44, ASME Y14-24, ASME Y14.5 and ASME Y14.100). Reading and interpreting drawings in a fabrication, test, or maintenance facility.
- Design experience with aerospace connectors (e.g. MIL-DTL-38999, MIL-DTL-5015 and MIL-DTL-23308).
- Familiar with testing and design requirements (e.g. MIL-STD-810, MIL-STD-461, MIL-STD-464 and DO-160).
- Familiar with Electrical Load Analysis standards (e.g. MIL-E-7016, ASTM F2490-05, or AC 21-38).
- Experience designing and/or installing wiring in accordance with aerospace design standards and standard installation practices (e.g. AC 43.13-1C, SAE AS50881, Mil-STD-704, FAA EWIS).
- Experience with RF systems and Antenna Installation, design, analysis, and Co-Site Performance Analysis, EMI/EMC/HERP/HERF Analysis and/or testing.
- Design/integration experience with discrete wiring and system interface standards (e.g. RS-232, RS-422, Ethernet, MIL-STD-1553).
- Detailed knowledge of FAA and/or military regulatory issues concerning the certification of aircraft system designs, including conformity and compliance of articles under test.



ELIGIBILITY OF APPLICANTS:

All candidates for this position must have nothing in their background that precludes international travel and/or access to any military installation. Candidate must be a Canadian citizen, lawful permanent resident of Canada. Candidate for this position must conform to Canadian Controlled Goods Regulations.

JOB TYPE: Full time

SALARY: Based on qualifications

BENEFITS: Health, dental, vision care

TRAVEL: Less than 10%; international between US and Canada, etc.

REMOTE OR ONSITE: Onsite

RELOCATION: Yes

INTERVIEW TYPE: Telephone and Company Site

All applicants must include a cover letter and salary requirements to be considered.

Cover letter must provide the following:

1. Introduction
2. Reason that individual would be the best fit for the position
3. Questions about the position.
4. Salary Requirements

Airdyne Aerospace participates in E-Verify employment authorization.

Airdyne Aerospace is compliant with 52.222-35, Equal Opportunity for Veterans; and 52.222-36, Equal Opportunity for Workers with Disabilities. All qualified applicants will receive consideration for employment without regard to race, color, religion, sex, pregnancy, sexual orientation, gender identity, national origin, disability, age, genetic information, or protected veteran status.