



Position: Senior Electrical/Avionics Engineer
Reports To: Design Manager
Status: Exempt

POSITION RESPONSIBILITIES

This person will work in the Engineering department Design Group performing avionics integration, electrical and electronic design and integration, and installation design for electrical components and systems for the aircraft. He/she will be responsible for coordinating efforts on electrical design projects as well as supporting vendor projects, various certification programs, and current production. Candidate will report to the Design Manager and work with the other Engineering groups. He/she will be encouraged to apply for FAA Systems DER if they do not already have the qualification.

Duties include but are not limited to the following:

- **Avionics/Electrical Integration:**
Investigate Sales and Marketing requests for avionics installations and integrations. Coordinate and integrate avionics installations and other electrical installations according to the Customer Sales Build Order. These changes must be coordinated through the Engineering system for proper release to the FAA, as required. The integration may include working with other engineering departments to generate the necessary Type Design information, including technical manuals (e.g.: electrical/avionics material within the maintenance manuals and flight manuals).
- **Product Changes:**
Make minor changes (including E.O.'s or drawing revisions, if necessary) as required to correct design issues raised by vendors, Production, Test, or the Production Liaisons. These changes must be coordinated through the Engineering system for proper release to the FAA, as required. Coordinate and support the certification efforts of major changes through the Engineering system for proper release to the FAA, as required.
- **Component/System Design:**
Design components, systems, and subsystems for the helicopter. This includes electrical design and electro-mechanical design and installation of the components and systems. The electrical/avionics engineer may be expected to create all of his/her own drawings and participate in drawing check/review; or coordinate such activities with the electrical draftsman when available.
- **DCR Incorporation:**
Research and incorporate DCR's (Drawing Change Requests) as appropriate. These changes must be coordinated through the Engineering system for proper release to the FAA, as required.
- **Engineering Liaison Support**
Research of electrically-related production issues (including purchased items) or field related service issues, as required. Investigate issues, develop solutions, and determine impacts on short-term and long-term production and field support needs. Incorporate changes into designs when needed. Work with vendors on purchased items to resolve similar issues.
- **Electrical Analyses**
Conduct, review, and support FAA submittals of Electrical Load Analyses, Functional Hazard Assessments, and System Safety Assessments. Review and assess impact of vendor supplied software documentation. Prepare customer-specific optional schematics and Electrical Load Analyses; supplied with each aircraft.

REQUIRED KNOWLEDGE, SKILLS AND ABILITIES

- A basic or advanced understanding of general aviation avionics, and rotorcraft or general aircraft systems.
- A basic or advanced understanding of FAA rules, regulations, and certification processes.
- CAD skills required.
- Basic or advanced computer skills (MS Word, Excel, and PowerPoint at a minimum).
- Basic or advanced electrical analyses experience.
- Superior problem solving and electrical troubleshooting skills.
- Superior communication skills (verbal and written).
- An ability to work with people.
- An ability to work multiple projects and multi-task.
- A Degree in Aerospace or Electrical Engineering.
- FAA Designated Engineering Representative (DER) is desirable.