



## **Electrical Engineer (Hardware Design and Payload Integration)**

### **Job Description**

Martin UAV is actively building a team of world-class engineers to develop revolutionary unmanned aircraft systems technologies.

We are currently seeking a driven and adaptable candidate to develop electrical components for our game changing VTOL UAV. The successful candidate will lead design of avionics components and integration of new payloads and sensors for our UAVs.

### **Responsibilities**

#### Electronics Design and Prototyping

- Design, prototype, test, and document analog and digital circuits for flight vehicles and ground station electrical components.
- Perform broad range of engineering tasks including schematic capture, analysis, prototyping, fabrication, testing, and final design documentation.
- Circuit design for DC power distribution, AC/DC conversion, avionics sensors, and embedded controllers.
- Provide design documentation and technical communication for PCB and wiring harness fabrication facilities.

#### Sensors and Payload Integration

- Work with 3<sup>rd</sup> party sensor and payload vendors to document electrical interface requirements including power and digital/analog data.
- Design electronics and wiring harnesses to interface with sensors and payloads.
- Learn and use vendor provided software/hardware to bench test and demo sensors and payloads.
- Create test plans for performance evaluation and acceptance testing of 3<sup>rd</sup> party sensors and payloads.

#### Additional Responsibilities

- Troubleshoot and diagnose anomalies discovered during benchtop, qualification, and flight testing.
- Provide insights to support development of avionics systems needed to efficiently diagnose/discover anomalies and component failures.
- Support flight testing of electrical components including custom electronics, sensors and, payloads.
- Identify and evaluate 3<sup>rd</sup> party sensor/payload vendors. Initiate and actively maintain technical communication with 3<sup>rd</sup> party vendors.
- Communicate with customers and company leadership to define design requirements.
- Various tasks as needed by supervisor or manager within reason.

The ideal candidate will have been intimately involved with the development and flight testing of aircraft which may include military drones, research vehicles, hobby projects, or general aviation. The candidate must have exceptional organizational and self-management skills, be comfortable with a high pace startup environment, and be capable of adapting to new roles and areas of expertise.



## **Skills and Experience**

- Required
  - Basic soldering, crimping, splicing, and electronic prototyping experience
  - Small hand tools such as drills, saws, Dremmel, and heat guns
  - Proficiency with bench top power supplies, DMMs, signal generators
  - Circuit and wiring harness schematic capture tools
  - MS Office
- Desired
  - ESD, EMI and RFI shielding strategies
  - Heat management for power electronics
  - Conformal coatings/potting compounds for moisture protection and reliability in harsh environments
  - Proficiency with logic analyzers, spectrum analyzers, and oscilloscopes
  - SPICE simulation tools
  - PCB layout tools
  - Code repositories such as Git, Mercurial, or SVN
  - Project management tools
  - RC experience with fixed wing or rotorcraft
  - UAV and RC COTS components and building and prototyping small aircraft

## **Qualifications**

- BS or MS in Electrical Engineering or related field is required
- 3-7 years of relevant aerospace industry experience
- Specific applicability of skills, previous projects, and roles will be considered more heavily than years of experience alone

## **Compensation**

We are located in Prosper, TX and offer a comprehensive benefits package including medical, dental, vision and life insurance, 20 PTO days, and a 401(k) plan with company matching.

Contact our Careers Team at [Careers@MartinUAV.com](mailto:Careers@MartinUAV.com) to submit a resume and a statement regarding your suitability for this position.