

## **Job Description for Aerospace / Mechanical Engineer**

**Job Title:** Aerospace / Mechanical Engineer

**Department:**

**Reports To:** HW Lead

**FLSA Status:** Exempt

### **Summary**

Conduct general engineering and design of aircraft structures and aero-mechanical system on small UAS.

### **Essential Duties and Responsibilities**

- Engineering and design of aerodynamic structures and mechanical systems for small UAS and payload systems
- SolidWorks modeling of components and designs
- Analysis and material selection of designed components
- Designs targeting highly constrained size, weight, and power environments
- Attend and present design reviews
- Transition from SolidWorks models to tooling or rapid prototyping
- Facilitate rapid creation of initial parts, learn in-house processes
- Work closely with other engineers, technicians, manufacturers, and suppliers supporting current designs
- Develop manufacturing procedures for designed components
- Support flight test operations, and develop bench and flight test procedures
- Some travel may be required
- Use industry standards for drawings and drawing control systems

### **Required Skills**

- A MS or BS degree in Aerospace or Mechanical Engineering, or equivalent
- Practical experience in Aerodynamics, Mechanical Systems, Materials
- Experience with SolidWorks
- Experience with air foil modeling (e.g., XFOIL)
- Experience with MATLAB and Simulink based modeling

### **Recommended Skills**

- Hands on design experience
- Strong interpersonal skills in a multidisciplinary environment
- UAV experience
- Autopilot development or tuning experience
- Gimbaled and/or mechanized camera systems experience
- Composite layup experience, autoclave, tooling creation experience
- Experience with remote controlled aircraft and helicopters
- Waterproof / water-resistant enclosure design experience
- Mechanical repair skills, including composites construction and fabrication
- Electrical repair skills, including soldering and familiarity with a multimeter
- Able to maintain a security clearance