

# **Flight Test Engineer**

Job Description:

Martin UAV is looking for a driven and adaptable candidate to flight test and develop our game-changing VTOL UAV. Responsibilities include:

## <u>Aircraft Management</u>

- Track aircraft system status including avionics, propulsion, structures, and software versioning
- Establish flightworthiness through inspection and ground testing
- Organize flight testing equipment

## **Test Documentation**

- Safety reviews
- Flight readiness
- Checklists
- Flight reports and vehicle records
- Flight planning
- Balance the testing progression risk/reward based on program goals and in collaboration with subsystem experts

# Flight Data Analysis

- System health
- Other areas of analysis will depend on the candidate's background and may include:
  - Controller performance
  - Aerodynamic performance
  - Communications
- Diagnosing errant vehicle behavior and bugs through telemetry and logs

#### Piloting

- Through various levels of autonomy from pure RC to "hands-off"
  - Stick to surface (rarely necessary, nice to have)
  - Assisted
  - o Fully autonomous with ground station mission planning

### Additional Responsibilities

- Virtual flight test through Hardware and Software simulation
- Providing insightful feedback to controls, software, and aero performance engineers
- Learning and diagnosing avionics and propulsion subsystem behavior
- Training new operators, including the development of training packages for customers



The ideal candidate will have been intimately involved with the development and flight testing of UAV(s) which may include military drones, research vehicles, hobby projects, or even 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. Some travel will be required for flight testing, demonstrations, and customer support. As such, the ideal candidate must be capable of communicating with customers and potential customers in a manner that represents the best interests of the company. Other skills include:

#### Skills

- Matlab (a robust familiarity is required)
- Code repositories such as git, mercurial, or SVN (preferred but may be learned)
- MS Office Suite (required)
- Simulink (preferred)
- Project management tools (desirable)
- RC experience with fixed wing and rotorcraft (basic experience required)
  - Fully aerobatic flying (desirable)
- Small tools, UAV and RC sized COTS components, and building and prototyping small aircraft (preferred)

Several formal educational backgrounds will be considered, including aeronautical and aerospace engineering, computer science, electrical engineering, and mechanical engineering. A bachelor's degree in those or related fields is required. Specific applicability of skills, previous projects and roles will be considered more heavily than years of experience alone.