# P T E R O d y n a mic s

# JOB DESCRIPTION

careers@pterodynamics.com

Position Title / Department	Location	Reports to
Sr. GNC Engineer / Engineering	Colorado Springs, CO, USA (on-site)	VP of Engineering
Employment Status	FLSA Status	Effective Date
□ Temporary ⊠ Full-Time □ Part-Time	□ Non-Exempt ⊠ Exempt	Immediately

## **Company Description**

PteroDynamics is an aircraft design and manufacturing company. We founded PteroDynamics to bring to the world our patented Transwing VTOL aircraft design that folds its wings during flight to transition between rotorcraft and fixed-wing configurations. Our Transwing aircraft design has key advantages over other VTOL designs that are critical for certain missions, especially carrying heavier payloads over longer distances, which is necessary to unlock the full potential of advanced air mobility. We believe that Transwing aircraft can benefit humankind and the planet by serving as a superior transport platform, saving us all time and money and reducing the amount of carbon emitted into the atmosphere. Our mission is to build the safest and most efficient vertical takeoff and landing aircraft possible.

### **Position Summary**

PteroDynamics is searching for a talented senior GNC engineer to join a growing team developing control systems for the transwing platform. The role spans optimisation, simulation and flight test of existing transwing platforms as well as development of new variants.

#### **Essential Duties and Responsibilities**

The essential functions include, but are not limited to the following:

- Participate in and lead GNC related design requirements development
- Analyze, test, and troubleshoot control system hardware and software subsystems
- Analyze systems and flight test data to support model improvements and root cause investigation of failures and anomalies
- Aircraft controls system modeling and parameter identification from flight data
- Software development, test and verification.
- Up to 20% travel within southern Colorado to support flight test operations

#### **Minimum Qualifications**

- BS/MS in Aerospace Engineering or related engineering field and a minimum of 10 years of prior relevant experience in GNC, flight testing and systems engineering
- Experience developing control laws for unmanned aircraft or similar with a high degree of autonomy.
- Understanding of traditional fixed wing, helicopter and multirotor flight dynamics
- Familiarity with inertial navigation systems concepts and techniques
- Experience with hardware in the loop (HWIL) testing

- Proficient in MATLAB
- Capable of identifying and solving complex problems with little to no supervision or direction
- US Citizenship/Permanent Resident Status

## Highly Regarded Qualifications

- BS/MS in Aerospace Engineering with controls, dynamics or simulation focus
- Monte Carlo and/or 6DOF simulation
- UAS design, built and test experience
- Avionics and embedded systems design experience
- Knowledge of satellite guidance and control
- Operational experience with any commercial or government/military UAS platform
- Python
- FAA Part 107 Remote Pilot Certificate
- FAA Private/Commercial/Instrument/CFI/CFII or equivalent

# Compensation

Salary Range: \$130,000-\$170,000 annually DOE

At PteroDynamics, we believe a solid work-life balance creates a healthy lifestyle and inspires creativity and innovation. The company offers a comprehensive compensation package, which includes a competitive salary, stock options, company-sponsored medical insurance, dental, vision, term life insurance with an AD&D rider, 401 (k) plan with up to 3% dollar-for-dollar matching by the company, long-term disability, paid time off, paid holidays, paid sick time, and a collaborative working environment in a growing startup company

## Note

This job description in no way states or implies that these are the only duties to be performed by the employee(s) incumbent in this position. Employees will be required to follow any other job-related instructions and to perform any other job-related duties requested by any person authorized to give instructions or assignments. All duties and responsibilities are essential functions and requirements and are subject to possible modification to reasonably accommodate individuals with disabilities. To perform this job successfully, the incumbents will possess the skills, aptitudes, and abilities to perform each duty proficiently. Some requirements may exclude individuals who pose a direct threat or significant risk to the health or safety of themselves or others. The requirements listed in this document are the minimum levels of knowledge, skills, or abilities. This document does not create an employment contract, implied or otherwise, other than an "at will" relationship.

PteroDynamics is an Equal Opportunity Employer, drug free workplace, and complies with ADA regulations as applicable.

# How to Apply

Submit resume to careers@pterodynamics.com