

Job Description Communications Engineer

Key Responsibilities

Design and develop communication systems hardware and software for future space plane. Operation of communications system during test flights. Candidate will be responsible for but not limited to the following tasks:

- Develop communication systems hardware and software required for long range telecommunications (video and data, digital and analog)

- Conduct RF propagation analyses
- Integrate, test and validate telecommunications system with space plane system and ground control system
- Determine and select suitable components for telecommunications system
- Provide technical support in legal aspects/homologation of telecommunications system
- Operate communications systems during flight tests
- Collect and analyze data from flight tests
- Assist in systems integration and space plane assembly

Required/Essential Skills

- RF engineering experience
- Experience in designing transmitter or receiver circuits and antennas
- RF analysis skill (propagation, patterns, link budgets etc.)
- Able to create and modify customized circuit boards (soldering proficiency)
- Extensive knowledge in communication buses and protocols
- Japanese RF operator's license (or possibility to acquire one)
- Able to draw and read wiring diagrams and schematics
- Bachelor's degree from an accredited institution, with concentration in Aeronautical, Astronautical, Aerospace, Automation, Electronics, Telecommunication, or Electrical Engineering

General Skills and Competencies

- Able to find, analyze and solve problems independently
- Proactive and have flexibility to move and/or support other teams
- Capable of working under pressure and for extended hours when necessary
- Capable of working in fast paced dynamic environment
- Capable of making of and adapting to quick design changes.

Preferred Skills and Experience

- English proficiency (equal or above TOEIC 550, TOEFL iBT 57 points)
- Master's degree from an accredited institution, with concentration in Aeronautical, Astronautical, Aerospace,
- Automation, Electronics, Telecommunication, or Electrical Engineering
- Understanding and experience of embedded software development (C++ etc.)
- Knowledgeable in basics of flight dynamics, mechanism and avionics of airplane and rocket
- General knowledge in FEA, CAD, materials engineering, and thermodynamics
- Able to craft and build test parts and equipment by hand
- Familiar with various fabrication methods (CNC lathe, milling, 3D printing, composite material layup, etc)
- Knowledge of Japanese is not required but useful

Location

Hekinan city, Aichi prefecture, Japan. Occasional trip and short term stay may be required.

Intake process

Download required application documents on the link below Fill documents and send to careers@pdas.co.jp https://pdas.co.jp/documents/PDAS_member_documents-set.zip

Candidate that pass document screening will be contacted to schedule interview.

Please address any question to careers@pdas.co.jp

About PD Aerospace

PD Aerospace is a space start-up company that was founded in 2007. PD Aerospace is developing a fully reusable space plane equipped with original technology engine (technology successfully tested in 2017). PD Aerospace is currently developing unmanned space plane to cultivate core technology and planned to start commercial manned spaceflight.