

Senior Structure and Propulsion Engineer

Client company wants to strengthen its current position in the government funded GEO satellite development project with a pioneer Senior Structure and Propulsion Engineer who is willing to work in the forefront of satellite technology.

The Senior Structure and Propulsion Engineer, and the structure subsystem team, is responsible from the design, verification and testing of structural parts and mechanisms which satisfy all strength and stiffness requirements of the satellite and of its interface to the launcher.

The propulsion subsystem is responsible from the design, verification, integration and testing of the electrical/chemical or hybrid propulsion of the satellite.

Tasks:

As a Senior Structure and Propulsion Engineer, you would be involved in:

- Structural design and analysis of the satellite,
- Preparation of test plans and structural tests,
- Static and dynamic analysis, Shock and acoustic analysis, Thermoelastic analysis, Buckling analysis,
- Satisfaction of all strength and stiffness requirements of the satellite and of its interface to the launcher,
- Definition of spacecraft (platform and payload) layout and trade-offs,
- Design and reliable performance of mechanisms such as antenna deployment, solar array deployment mechanisms (BAPTA),
- Responsible for the design and analysis of entire chemical and/or electric (especially pulsed plasma thruster based) propulsion subsystem of geosynchronous communication satellites.
- Responsible for piping (pressure drop) analysis, plume effect analysis, water hammer effect analysis,
- Implementation of dynamics analysis to provide the necessary inputs to the attitude determination and control and fix the thruster locations,
- Preparation, co-ordination and release of design justification documents (DJD), interfaces control drawings (ICD) and interface data sheet (IDS) documents

Qualifications:

As a Senior Structure and Propulsion Engineer, you will possess:

Required:

- B.S. degree in Aerospace Engineering, Mechanical Engineering or related degree,
- Expert knowledge on Finite Element Analysis Softwares preferably Nastran, Patran as applied to aerospace structures,
- Working knowledge on composite materials and their FEM modeling,
- In-depth understanding of Electrical Thrusters,

- Fluency in both verbal and written English
- Interpersonal skills and team player

Desired:

- Familiarity with Catia
- MSc., Ph.D degrees