Thermal Control of Stratospheric Launch System

Code: 20/51

Company: B2Space

Location: Newport / Remote

Company Description:

B2Space is a UK start-up, based in Wales, with the mission of making space affordable for more companies and organisations.

Our main goal is to be the first private company to launch small satellites to LEO from UK. For that, we are developing a high-altitude launching system based on the rockoon concept. Currently we are performing a proof of concept project, which will see B2Space launch a small version of its system that will reach 100km of altitude before the end of Q1 2021.

In parallel, making use of the stratospheric expertise acquired, B2Space has developed, in partnership with ESA BIC UK, a near space test bench, that gives companies and research institutions an unrivalled opportunity to test their technologies in conditions similar to the ones they will face in orbit.

Additionally, B2Space is also developing HAPS systems (High Altitude Pseudo Satellites) that will be used for several purposes (surveillance, Earth Observation).

Having received funding from the Welsh Government, ESA, UKSA, STFC, HIE , and having raised private investment, B2Space is quickly growing and looking forward to welcome new team members.

Project Description:

The project will consist on supporting the design of the thermal control system for B2Space launch system.
B2Space is developing a high altitude launch vehicle for small and micro-satellites, based on the “rockoon” concept where a stratospheric balloon lifts a self-operative platform to 35km of altitude, from where a rocket launcher is deployed delivering the satellites to LEO.
The work will consist on analysing the requirements to keep all systems (rocket engines, Electronics) within its operating range during the stratospheric flights and support the system design.

Applicant Specification:

We are looking for a candidate which is passionate and enthusiast about the space sector, pro-active, and with the ability to work both in highly agile teams, and independently and remotely when required.

Technically, an understanding of space or aerospace systems and missions, knowledge of electronics, fluid dynamics and heat transfer would be beneficial.

Minimum Requirements:

Last year student/ graduate of BSc in Aerospace Engineering / Electronics / Mathematics / Physics

Preferred Additional Requirements:

Last year student / graduate of MSc Aerospace Engineering / Electronics / Mathematics / Physics

Further details:

8 weeks minimum fixed term contract to be agreed with successful candidate. Virtual Induction Event to be held on 15 July 2020. Ideally to complete before the start of the next academic year. Salary is £1,400 per calendar month gross.

Closing Date for Applications: 5pm Monday 13 July

Applications should be made through the online form attaching a CV, before the closing date. Please note that elements of the form left incomplete will be deemed to render the application ineligible. They will be checked for eligibility and forwarded to the employer.