



Principal/Senior Electrical Engineer – Motors & Inverters

Sora Aviation

Job Title: Principal/Senior Electrical Engineer - Motors & Inverters

Location: Bristol, UK

Term: Permanent, full time

About us

Sora is an aerospace technology start-up based in Bristol, UK focused on delivering sustainable and scalable Advanced Air Mobility. Sora is currently developing the S1, a 30 seat electric Vertical Take-Off and Landing aircraft (eVTOL) and rapidly growing its engineering team.

We believe in an open and honest culture that espouses freedom of expression and creativity from all of our employees. If you would like to be a part of an agile team at the cutting edge of zero emissions aviation, see below.

Role summary

The S1 is a battery electric tilt-rotor aircraft with multiple tilting “proprotors” (combination propellers and rotors). We are looking for an experienced electrical machines designer who will lead the design of the electric motors and inverters for the S1.

This role is advertised at multiple experience levels.

Key responsibilities

- Lead conceptual and preliminary design of electric motors and inverters including cooling schemes, installation and integration
- Lead trade studies to assess different motor and inverter configurations including size, weight and efficiency estimation
- Write technical specifications to assess suitability of existing/modified off the shelf motor and inverters whilst working with external suppliers
- Lead the integration of the motor and inverters with the rest of the drive train
- Support definition of the overall electrical architecture and power distribution network including any supporting equipment (e.g DC-DC converters)
- Support definition of overall vehicle and electric propulsion architecture

Requirements

Essential

- Degree in Electrical Engineering or other relevant field
- Experience in designing electric motors and inverters
- Proficient in modelling and simulation of electrical machines and their cooling systems
- In-depth understanding of motor torque, RPM, power and sizing relationships
- An innovative mindset and approach to problem solving focused on generating new ideas

Desirable

- Experience in working on electric aircraft (preferably eVTOLs)



- Experience in working on helicopter/tilt-rotor systems
- Knowledge of gearbox design and integration

Diversity and Inclusion

Sora is an equal-opportunity employer and we encourage you to apply even if you may not have all the experience listed above. We recognise that talent comes in many different forms and we are committed to providing opportunities that create an environment of growth, diversity, and inclusion for everyone. We proudly reject discrimination in all forms.

Apply

You will need the right to work in the UK to be considered for this role.

To apply, please email your CV and a cover letter to careers@soraaviation.com. Your data will only be used for the purposes of this application and will be used fairly and lawfully as required by the Data Protection Act 2018.