



## Principal/Senior Design Engineer – Rotor Hub & Controls

Sora Aviation

Job Title: Principal/Senior Design Engineer - Rotor Hub & Controls

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 rotor designer who will lead the design of the rotor hub assembly including pitch control mechanisms, linkages, bearings, hinges, actuation and supporting components.

This role is advertised at multiple experience levels.

### Key responsibilities

- Lead conceptual and preliminary design of overall rotor hub assembly including modelling of assembly in 3DX/CATIA V6
- Lead trade studies to assess cyclic pitch controls, flapping hinges and elastomeric bearings
- Lead the design and selection of control mechanisms, hinges, bearings, actuation and instrumentation for hub assembly
- Lead the integration of the rotor hub with the electric drivetrain
- Support definition of rotor blade root design, blade grips and hub retention assemblies
- Support definition of overall vehicle architecture including aircraft control schemes

### Requirements

#### Essential

- Degree in Mechanical/Aerospace Engineering or other relevant field
- Experience in designing propeller or rotor hubs, or other dynamic systems
- Experience in working on helicopter/tilt-rotor systems
- Proficient in CAD (preferably CATIA) including sketching, surfacing, 2D drawing and 3D modelling with appropriate GD&T
- An innovative mindset and approach to problem solving focused on generating new ideas

#### Desirable

- Experience in working on electric aircraft (preferably eVTOLs)



- Knowledge of gearbox design and integration
- Knowledge of rotor dynamics, stress and fatigue analysis

#### 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](mailto: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.