

## The Air League – Innovators Challenge

The Air League provides a sector leading programme of scholarships and youth outreach, ranging from PPL flying scholarships to work placements with leading UK businesses. Each year we have a great response and select some fantastic candidates to participate in our programmes. This year we are launching our Innovators Challenge which is a competition for 17-26 year olds who have a passion for aviation and aerospace and a desire to overcome some of the long term challenges facing the sector.

The information set out in this pack will provide you with all the details you need to confidently and successfully conduct the Innovators Design Challenge. **To enter this challenge, you must be 17-18 years of age.**

## The Design Challenge – The Air Taxi

Urban Air Mobility is an exciting concept which has captured the imagine of entrepreneurs and engineers for decades. It has only been in recent years that significant progress has been made by very large and some very small companies, a number of which are certainly not traditional aerospace businesses.

We'd like you to design your own air taxi and tell us what would be the key characteristics of it in order to fulfil the following simple requirements below:

- 100-mile range that could be achieved in one hour or less
- Six people on board and a total payload of 750kgs
- Low noise – less that 100Db at take off
- Vertical take-off and landing and an aircraft footprint of less than 8m x 8m
- Carbon neutral fuelling – 15-minute refuel turnaround time

### The Format

We love original thinking and want to see new and innovative ideas from you. You will no doubt draw upon many sources of publicly available information, but please do compile a list of references that you have used. Exactly how you present your submission is up to you, but please base it on a minimum of a 2000-word entry and a maximum of 3500. This can be in a word document format with illustrations, or on PowerPoint with accompanying speaker's notes. A video often provides a useful mechanism for imaginatively communicating ideas and concepts, so do feel free to accompany your entry with original video content and CGIs.

Shortlisted candidates will be invited to present their submission in front of a panel of industry experts who are members and partners of the Air League. If you are shortlisted for the event, we will ask you to prepare a presentation and a short executive summary of key points for the panel.

### The Submission

- All entries must be submitted electronically to [info@airleague.co.uk](mailto:info@airleague.co.uk) . If you have built a model, you can submit pictures or video footage of your model for shortlisting purposes.
- If you are sending through a large file, think about using external websites like WeTransfer.com, Dropbox, a YouTube or Vimeo link to get your entry across to us. If you are having any issues, please contact the team on [info@airleague.co.uk](mailto:info@airleague.co.uk) .



- If you have used specialist software for your project, ensure that it is usable for PC users and doesn't require us to have any specialist software to open the files. We may ask you to change the format your submission in this instance.
- Please remember to include the name of your project and all your contact information (name, address, email, DoB) with your submission.
- If your project is shortlisted for the finals, we will ask you to present your ideas on PowerPoint as well asking you to submit a 1-page executive summary to the panel in advance of the finals.
- Entries need to be submitted by the **1<sup>st</sup> July 2020**.

### **Prize**

5-day residential engineering scholarship course at Cranfield University sponsored by Aston Martin and British Airways.