

## CPC469 - Lead Systems Engineer – Aviation Sustainability

Location	Milton Keynes or London
Reporting to	Director of Air Mobility
Working hours	Full Time
Contract type/duration	Permanent
Equal Opportunities	CPC is committed to ensuring it recognises equal opportunities
Date written	October 2021
Closing date	26 <sup>th</sup> October 2021

Come fly with the Connected Places Catapult to transform the aviation transport system.

### Purpose of the role

The Wright Brothers gave us flight, the jet engine got us across oceans, autonomous systems and batteries will offer new modes of flight. Welcome to Aviation's third revolution. The Connected Places Catapult, in direct response to this transformation in air transport, has established the Future Air Mobility Directorate. Air Mobility is concerned with aviation the system of airspace, airline, airports and air passengers (or freight). The Directorate is overseeing an ambitious and extensive Future Air Mobility delivery programme to answer questions of how these systems will integrate into society, how society will use them, how such systems will complement other modes of transport. Also for key consideration is netzero and the opportunities regarding how the infrastructure in our airports and airfields needs to adapt to meet the UK's 2050 netzero targets. The Directorate has its own programmes and is also at the heart of transport innovation working with central and local government, industry, large and small and the vast network of universities.

To support this transformation opportunity Connected Places Catapult has a delivery programme which is underpinned by significant investments and therefore we are expanding our team. We need people who can think about systems of systems, who can work both in the strategy and in the detail to see the opportunity for collaboration, innovation and transformation. Working closely with industry, regulators, academia and government we are identifying the roadmap and activities required to realise the exploitation opportunities of this new paradigm. We need a system of systems thinker with a proven track record of programme delivery to realise the potential of aviation's 3<sup>rd</sup> revolution.

### Key Responsibilities

We are looking for creative and energetic individuals, with a passion for making a difference and the ability to contribute to, and accelerate, the development of new air mobility technologies, specifically in our Airport infrastructure. Our Lead Systems Engineers will work across the Catapult as well as with stakeholders in Government, industry and academia. We are looking for someone who can see the pieces of the bigger picture and are equipped to shape and deliver collaborative R&D projects to transform the aviation system as a result of technology transformation in air vehicles and as green fuels come online. These new air mobility vehicles

and fuels need to be embedded into a mature sector as part of an aviation decarbonisation effort to deliver economic and social impact for the UK.

This means you will play a key role in delivering work packages or entire projects, working with colleagues and stakeholders understanding the interfaces across a wider aviation system. Project demands and types will vary, it's the nature of what we do. You will be required to organise and run workshops to explore the challenges of this exciting emerging market, gather requirements to overcome them all whilst delivering Air Mobility Programmes. You will be one of the voices from within the Catapult at external meetings and events communicating project findings to both specialists and wider stakeholders.

### **Specific responsibilities within this role are expected to include:**

- Provide expert technical insights for projects relating primarily to the application of new fuel types – primarily related to the required ground infrastructure (and not the design and manufacture of the vehicle itself).
- Work closely with key and strategic clients, project partners and other industry / government / academic / aviation user stakeholders.
- Lead and deliver impactful analysis and reports to stakeholders across a range of themes such as airport infrastructure for zero emission flight, airport ground operations, repurposing of GA airfields for commercial sub-regional travel and integration of new modes of air vehicles into the existing ecosystem.
- Deliver high quality activities that will attract industry to build the required capabilities for growth and innovation in order to address market barriers and create UK opportunity
- Provide coaching and mentoring to more junior technical staff
- Contribute to our business development activities by identifying opportunities and assisting in bidding activity such as writing proposals
- Represent the Catapult at relevant industry events, conferences and meetings

### **Required skills and experience**

#### **Essential:**

- A degree or equivalent substantive experience in a relevant engineering or technical subject
- Significant experience in an industry or regulatory role combining aviation and innovation
- Experience of working in a project-focused environment
- Able to solve complex problems or problems where a precedent may not exist
- Proven ability to establish strategic relationships and work with a wide range of external stakeholders (e.g. industry, government, academia, airspace users)
- Effective communicator, adept at distilling complex technical concepts into easy-to-understand language for internal and external stakeholders
- Proven ability to influencing project partners and other key stakeholders acting as a functional expert
- Able to teach, guide and coach others in technical tasks on a range of projects and delegate appropriately

### Desirable:

- Further, relevant postgraduate (MSc/PhD) qualification
- Chartered in a relevant institution, or working towards chartership
- Experience in business development and defining value propositions using technical specialist knowledge
- Knowledge of other related technical disciplines

### Personal Characteristics

- Highly effective communicator with a high standard of written English and ability to communicate complex concepts to expert and non-expert audiences
- Proven ability to establish relationships and work with a wide range of external stakeholders (e.g. industrial, government, academic)
- A self-starter, able to work with minimal supervision and make decisions at a task level whilst collaborating with a wide range of stakeholders internally and externally
- Flexible, with ability to contribute to multiple projects at the same time and pick up new skills/capabilities as required for different projects
- Comfortable with ambiguity, and ability to turn into focused outputs
- A passion for delivering a cleaner, greener transport system which ensures clean air in our cities and contributes to the UK's 2050 'net zero' carbon target

To apply for this role please email us on [jobs@cp.catapult.org.uk](mailto:jobs@cp.catapult.org.uk) with your CV and covering letter attached quoting the ref: **CPC469**