

Reach for the Sky Challenge Fund 2024/25 Recipients

4Ward Futures –

The Merseyside Aerospace and Aviation (MWAA) project is designed to inspire primary school students about careers in the aviation and aerospace sectors. Following the successful 4wardFutures delivery model, MWAA will bring professionals into classrooms, both virtually and in-person, to spark curiosity about flight and the diverse career opportunities in the sectors. The project will target three primary schools in socioeconomically disadvantaged areas of Merseyside, engaging approximately 90 students aged 8-11.

Aerobility -

The Equal Skies Charter works to ensure that people with disabilities have equal access to opportunities in the aviation and aerospace industries. We work to bring together government, industry and the disability community to remove barriers to employment. This ensures that the sectors workforce is truly representative of wider society and gives people with disabilities the opportunity to shape policy and design which will benefit all consumers. In short, the project aims to improve accessibility by changing the industry from within.

Over the next 12 months, The Equal Skies Charter will also be building a support framework to enable organisations to attract, employ and retain disabled talent. This framework will also include advice on how to use lived disability experience to improve the goods and services offered by the organisation.

ARPAS-UK -

Project Overview:

ARPAS-UK's project under the Reach for the Sky Challenge Fund aims to **inspire and engage the next generation of aviation professionals**, with a strong focus on **under-represented groups**, including women, ethnic minorities, and individuals from lower socio-economic backgrounds.

Our initiative revolves around two core pillars.

1. Workshops & Career Fairs:

- o Delivered at key educational institutions, focusing on 14–18-year-olds.
- Providing students with practical insights into drone-related careers through hands-on experiences and expert talks.

2. Mentoring Program:

 Partnering with Brightside to offer 1:1 mentoring, connecting young persons with professionals from the aviation and drone sectors via an online platform.

Production Methods & Outreach:

Our outreach strategy combines in-person engagement with digital platforms, leveraging partnerships with social media to ensure maximum reach. We will produce informative video content and career resources to make aviation opportunities more accessible to young people.

We look forward to collaborating with fellow recipients to collectively enhance diversity and inclusion in the aviation sector.

Based in Space -

Based in Space will inspire the next generation of aviation and aerospace professionals through an interactive digital platform that connects young people with knowledge about career pathways, real life stories and industry specialists. This project will offer a tailored, age-segmented approach to career guidance, covering fields such as space medicine, advanced air mobility, and satellite applications.

Digital Platform for Career Engagement- At the heart of the project is an interactive website, users will select their age group, leading to a tailored experience. The platform will feature sections such as "Your Place in Aerospace," "What Do You Need to Know," "Ask a Specialist,"," Stories" and "Encyclopaedia". Each section will provide age-appropriate information, progressing from general career guidance to specific career pathways

Online & In-Person Sessions with Aerospace Leaders - In addition to the platform, we will offer online and inperson sessions with aerospace leaders and specialists, featuring live Q&As, career path discussions, and networking opportunities. Our proven expertise in outreach includes Kids2Space programme, which connected over 100 children from 50 countries with aerospace specialists, including NASA leaders and analogue astronauts. These sessions will offer valuable, practical insights, enhancing our ability to engage a wide range of young people, particularly those from diverse cultural and ethnic backgrounds.

Childrens Radio UK -

Fun Kids, the UK's radio station for children and their families, is creating a series of 8 programmes for broadcast and podcast, exploring a wide range of aviation topics from Designing 21st century planes and sustainable materials and fuel, to the use of drones and AI, as well as meeting some of the less known careers around the airport. One of our underlying objectives is to highlight that there is a huge range of opportunities across the sector and that "whatever your background or talents, there's a role for you". We will host also three fun and inspiring events across the UK, giving children an opportunity to undertake interactive aeronautic-themed activities and ask questions of our aviation guests, and will record three of the programmes in front of a live audience.

Codes4Drones -

Code4Drones is launching a 'Drone Coding Experience Fund' for primary and secondary school students across England and Wales to have access to a new and exciting STEM opportunity to code and fly educational indoor drones. Code4Drones is offering fully funded in-school 'Drone Coding STEM Days' where students will learn about fundamental computer science principles, including computational thinking, mathematical logic and algorithm development, and will then design, write and debug their own codes, which they will then use to control drones along specific paths. Moreover, students will learn the science behind the basic principles of flight and what enables a drone to take off, as well as learn about the laws and safety considerations required when flying a drone (UAVs). All this aims to champion interest in STEM career pathways across the unmanned aviation industry. More information can be found at www.code4drones.co.uk.'

Education & Employers –

Inspiring Aviation, delivered by charity Education and Employers via their Inspiring the Future programme, will inspire and propel even more primary and secondary pupils across England towards the exciting career opportunities that exist in the aviation industry - by giving them the chance to positively engage with a diverse range of inspiring role models currently working in the sector. Our 2024 Inspiring Aviation project has had exceptional reach and impact for young people, with over 60,000 young people engaged from schools across England. Working with employees and employers from across the aviation sector, our 2025 project will deliver virtual and in-person school events; expert training to challenge teacher misconceptions and new teaching and volunteer resources.

ELATT -

Project Elevate will increase awareness of aviation, and future aviation careers, to underserved young people in Hackney, Tower Hamlets and East London. Using our established free monthly sci-fi film club, the project uses positive films about aviation to engage young people; community projects about aviation and aviation careers; and activities co-designed with and led by expert partners, scientists and employers in the aviation industry. We will reach 50 young people studying at ELATT, 30 young people from local community, 100 members of the wider community.

Through projects and activities, they will produce presentations (film and creative arts) to be shared in events, exhibitions and social media channels with peers. Working with Odd Eyes Theatre, young people will produce:

- Vox pop of community members' perceptions of flying and aviation careers and what they know about future careers to gather the voice of young people about this topic.
- Mixed media, creative films or animations about flying-
- Workshops with employers/mentors to talk about aviation/STEM-related careers
- Work experience and visits to employers involved in aviation-related industries.

Get With The Program –

Get with the Program's 2025 Reach for the Sky project is focused on inspiring the next generation of aerospace professionals! To do this, we are expanding the reach of our popular 'Moon Landing Coding Adventure' package to engage even more primary school-aged children across the UK – 12,000 in fact! This coding adventure is a remotely delivered theatre-in-education event for 5-9 year olds, during which they learn to design, write, test, and debug algorithms. The adventure consists of an exciting interactive video and fun follow-on activities. By working with our tried and tested teaching duo of 'Professor' Trice and AL the (female) Robot, the children's mission is to program AL to get her safely onto a Saturn V rocket, ready to launch her to the moon! As with all of our coding adventures, 'Moon Landing' has been designed with the support of teachers, is fully aligned with the computing curriculum, and focuses on diversity and inclusivity to smash stereotypes around gender and ethnicity. Through this project, we aim to reach schools and youth groups with children who may not otherwise be aware of career opportunities within the aerospace sector, and give them the fantastic opportunity to see aerospace role models they can relate to! Indeed, we aim for at least 50% of our participants to be from schools in Priority Education Investment Areas.

For more information about Get with the Program, please do go to www.getwiththeprogram.org.uk. We look forward to connecting with you all over the coming months!

Kings Academy Lord Wilson –

Our aviation project is designed to engage and inspire boys aged 11-16 from disadvantaged backgrounds in Gosport, Fareham, Portsmouth, and Winchester. These students, who have identified special educational needs

of SEMH (social, emotional, and mental health needs) and other disabilities including visual impairments, hearing impairments, and trauma, will benefit greatly from the project's focus on aviation. The project will provide students with hands-on experiences in aviation, such as designing model aircraft, programming drones, and visiting local airports and aviation businesses. These activities will not only foster interest in STEM subjects but also offer opportunities for personal growth and development. Additionally, the project will connect students with aviation professionals, providing them with mentors and role models. This will expose them to a variety of career paths within the aviation industry, opening up new possibilities for their future. By creating a safe and supportive space where students feel valued and empowered, we hope to inspire them to reach their full potential and pursue careers in aviation.

The King's Trust –

Since The Prince's Trust was founded in 1976, we've helped more than one million young people from disadvantaged backgrounds and communities to connect into education, training, and employment. Our "Get Ready" one week programme supports young people aged 16-30 years to develop new skills and increase their confidence and motivation to move forward in their lives. Focused on raising awareness of the aviation sector amongst the next generation of future professionals, the programme immerses young people in experiences which combine personal insights from sector leaders, interactive and practical STEM-focused activities to engage and motivate, and support to navigate the range of career opportunities on offer within the sector. Developed with expert advice from the Civil Aviation Authority, our programme offers inspirational sector-led sessions from leaders and volunteers linked to STEM-based career opportunities. These programmes will be delivered in Southampton, Liverpool, Newcastle, Birmingham, and Manchester in 2025.

London Luton Airport -

LLA's project is an enhancement of the airport's delivery of local Skills, Education and Outreach Programme. The project provides a series of interventions throughout individual students' school journeys, equipping them with skills, opportunities, and career insights that they need to take interest in and thrive in the aviation sector. The programme will deliver a series of age-appropriate interventions in the shape of workshops and insight days delivered between Key Stage 2 and Key Stage 5, including:

Key Stage 2 -Workshops giving insight into LLA and the aviation industry.

Key Stage 3 - Workshops modelled on the KS2 programme made age-appropriate and will include the introduction of essential transferable skills needed in the aviation industry.

Key Stage 4 - Includes an Insight Day delivered at LLA, accompanied by classroom-based workshops meeting the Skills Builder Impact Level 3 accreditation. Up to 10 insight days will be held at Percival House in our Excellence Training Academy across 9 months, and will include guest speakers from LLA and other airport businesses with the possibility of an airport tour. This aims to give real-world insight and experience into the airport's operations.

Key Stage 5- Provision of 5 days' work experience delivered at LLA, accompanied by classroom-based workshops meeting Skills Builder Impact Level 4 accreditation. Up to 30 students across the week will have onsite tours to different departments and businesses within the airport i.e. easyJet and Tui, as external delivery partners. One school class will be facilitated for the 5-day period, with additional classroom based learning with Skills Builder.

The overall purpose is to provide students with greater knowledge of the opportunities within the aviation industry than they would otherwise gain in line with the Government's Skills Agenda, which has a critical role in the delivery of economic growth.

London MET University –

'Our project "CLOUD: Connecting Learners to Opportunities in Uniform and Diverse Aviation' will inspire the next generation, focusing on under-represented groups.

The project, to be delivered by the Aviation Management team at London Metropolitan University will target 16–18-year-olds in colleges in different parts of England (initially for this call, Birmingham, Coventry, Crawley and North London) via hybrid methods. Our target group is those attending post-school colleges/technical colleges, many of which offer a variety of increasingly work-related courses. We will deliver the programme through working with these Further Education Colleges with face-to-face delivery in a college local to our aviation staff. Access to the colleges and our target audience will come through personal contacts or by request. These will generally be people of the age of 16 -18 years old, but this is not to exclude anyone attending a relevant institution who is of a different age. We believe this will be highly effective eligibility criteria as these students are going to be closest to choosing a career and raising awareness of aviation.'

Manchester Airports Group -

The MAG Aviation Careers Festival is a pioneering event designed to inspire the next generation of aviation professionals and reach individuals who may be unaware of the opportunities within the sector. This groundbreaking festival aims to transform the traditional school careers fair by bringing the dynamic aviation industry to life through interactive experiences, hands-on activities, and engaging demonstrations from a variety of businesses that operate on our sites. The event will be held across the three MAG airports: Manchester, East Midlands, and Stansted Airport. The festival will focus on supporting social mobility by targeting deprived and underprivileged areas, ensuring that individuals from these communities have access to future career opportunities within the aviation industry.

SaxonAir Charter-

Our INSPIRE Outreach programme aims to provide activities to stimulate interest in the aviation industry from age 5 upwards covering all age groups, abilities and backgrounds in the Norfolk area. The programme is divided by age group and offers multiple standalone and/or connecting activities, linked as appropriate to the curriculum, that can build into a programme of support from early years to adulthood. This innovative programme is a complete introduction to the world of aviation and its various career paths.

- -For the Primary Years, we focus on "Discovering the Aviation Industry" and "Learning about the Aviation Industry" with our unique Alpha Programme.
- -Our Secondary Years programme focuses on "**Developing Your Interest & Knowledge**" through work experience, our Saturday morning 'STEM' club, INSPIRE: Innovate Studio along with visits to our site.
- -We support School Leavers in "**Growing Your Network**", inviting them to our INSPIRE: Innovate Studio, offering work experience and industry talks.
- -And in the Community, we focus on "**Starting Your Career in Aviation**" by attending careers and job fairs, community events and industry showcases.

TEC Women –

The Reach for the Sky 2025 Programme by TECgirls aims to inspire young women, particularly from underrepresented backgrounds, to explore careers in aviation, aerospace, and engineering. TECgirls is a Cornwall-based initiative dedicated to empowering girls through technology, engineering, and creativity, helping them discover new opportunities and build confidence in STEM fields. Building on the success of the 2024 Reach for the Sky Festival, which brought together over 650 participants at RNAS Culdrose last July, the 2025 programme will include a full-day festival engaging 500 girls and their families with hands-on activities, industry partner exhibits, and inspirational role models. It also features a one-day workshop at Spaceport Cornwall for 100 Year 9 students, focusing on drone design, programming, and teamwork. Additionally, a 10-week hybrid after-school programme will empower 100 girls across 10 schools with aviation-themed activities, technical skills, and leadership development, encouraging participants to become mentors within their communities.

We would love to connect with other partners on:

- 1. Invite other partners to attend and/or exhibit at our Reach for the Sky Festival on the 5th of July.
- 2. Any organisations with female role models who would like to be featured in our events and materials provided to students.
- 3. Open to other ways we can collaborate including looking to support projects outside of Cornwall.

Youth and Community Connections –

Participants will dive into **VR** and **flight simulation workshops**, stepping into the cockpit of a virtual aircraft to experience the thrill of piloting through realistic scenarios, while learning about navigation, aerodynamics, and flight mechanics. The program also includes **drone lessons**, where young people will operate drones, master control techniques, and explore practical aviation applications.

Adding a creative twist, participants will engage in **paper plane competitions**, designing and fine-tuning their planes to test for distance, flight time, and innovation in a fun, competitive environment. Furthermore, **aircraft-building workshops** will challenge them to construct mini models using principles of physics and engineering, culminating in the city-wide **London Aviation Challenge** to see whose creation flies the furthest.

To bridge theory and real-world inspiration, we'll host **talks and mentorship sessions** led by industry professionals, including pilots, engineers, and representatives from the Royal Air Force. These experts will demystify aviation careers and inspire participants to explore future pathways in the field.

Our aim is to make aviation accessible, interactive, and deeply educational for young people across London. Through this program, we hope to spark curiosity, creativity, and a passion for flight among participants.

If you need any additional information or have further questions, please don't hesitate to let me know.

University of Sussex –

Our project will design and develop a role-playing game (RPG) where players apply mathematics to solve an aviation mystery. In engineering education, mathematics is as a fundamental body of knowledge, yet many students struggle to engage with it on a deeper level. Due to its abstract nature, learners often find it difficult to relate mathematical concepts to real-world applications, which hinders their ability to move from repetition to practical use. This challenge is also evident in aviation engineering, where trainees would benefit from examples of practical applications of applied mathematics.

Game-based learning can provide these immersive learning experiences and has been shown to boost motivation, accessibility, and problem-solving skills. However, in the mathematics sector immersive games are noticeably absent. This RPG will take place in a virtual world, where the user will role-play an incident investigator.

Targeting Engineering students who may or may not be already considering a career in aviation, our aim is to support the development of skills and experience relevant for a career in aviation in an engaging and motivating way. Furthermore, the project aims to reach a larger group and inspire an audience who may not have previously considered aviation, by making the game available publicly online after the initial testing and development with HE students.

If you would like to get contact any of these groups or be part of their programmes, please email: skillschallengefundteam@caa.co.uk