ED. 1 | August 2021

UK URBAN AIR MOBILITY CONSORTIUM

Let's fly across the city

What is Urban Air Mobility?

EVE NATS Heathrow LONDON CITY AIRPORT Skyports VERTICAL VOLOCOPTER atech GRUPO EMBRAER

What is
Urban Air Mobility?

UKAirMobility.com

Most people have never flown across the city, but that will soon change. In the next 5 years, electric air taxis will start flying people and cargo across town on trips that are quiet, quick, and clean. A trip from Heathrow Airport to the City of London could take just 10 minutes, saving almost an hour of travel time when compared to a train.

Electric air taxis have zero emissions and are designed to operate quietly. These flights are expected to be as safe as commercial aviation, and offer a sustainable and alternative mode of transport for urban and inter-city travel. As these aircraft don't use aviation fuel, Urban Air Mobility (UAM) flights will be cheaper to operate (making them more affordable) and better for the environment.

Given how important the aviation industry is to how we live, decarbonising aviation is a challenge that must be overcome. Progress is already being made by the industry, and successes today in designing small electric aircraft, such as those used for UAM flights, will be another crucial step toward a clean future for aviation.

Electric air taxis, also called electric vertical take-off and landing vehicles (eVTOLs), will carry 2-7 passengers between vertiports, which are passenger ports that will be strategically located at points across the city. These aircraft are also designed with quiet operations in mind. You may only need to walk a few minutes to a vertiport to board your flight. After taking off, you would arrive at another vertiport across town just a few minutes later.

However, the story doesn't end there. As the number of electric air taxi operations grow, our communities can benefit too. We'll find that commuting to work and connections to local services will become easier and more accessible. The growth of electric UAM will also create new types of jobs and open opportunities for exciting career paths that don't exist yet. We're going to need electric aircraft technicians, vertiport passenger agents, ground support teams, and many other new types of jobs.

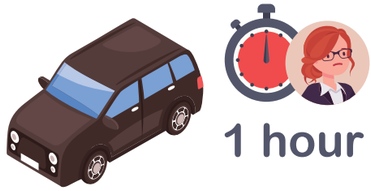
This is the first in a series of posts that will examine UAM more closely and explain what it will mean to passengers and their communities. We're going to discuss what passengers can expect when they take a flight across the city. We'll also take a closer look at electric air taxis and explore how a vertiport would work. Most importantly, we'll discuss how UAM can support local communities.

Julia takes an ***electric urban flight.***

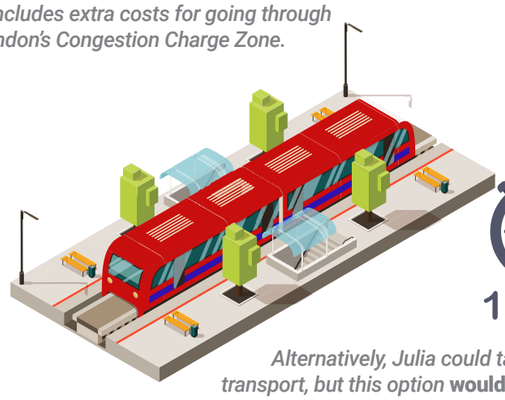
Would you take an electric air taxi across town if it was faster, cleaner, and safer than a car? Take a look at how a typical trip may work.

Let's follow Julia as she makes her way home from a work trip abroad.

Julia lives in Shepherd's Bush in London and owns a small consulting business. She went to Frankfurt to meet an important client and is coming home through London City Airport on a busy Tuesday afternoon.



Julia has made this trip before. In a rush-hour journey home, this 15-mile trip can easily **take over an hour by car**, *and it includes extra costs for going through London's Congestion Charge Zone.*



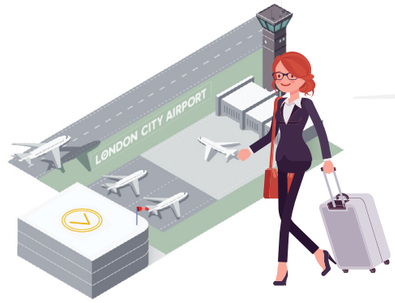
Alternatively, Julia could take public transport, but this option **would also take over an hour.** *From London City Airport, she would need to take a 25-minute DLR trip to Bank, a trip that has 10 stops.*

At Bank, Julia would need to transfer to the tube to take the Central line for a 20-minute trip with 12 stops before finally arriving at Shepherd's Bush.

This trip would be during the rush hour bustle while towing a small suitcase.

Julia couldn't help thinking that there must be an easier way. If only she didn't have to go through all the congestion and mayhem.

This time, it's different. ***Julia is flying home.***



Julia has purchased a connecting flight on an electric air taxi that will take her directly from London City Airport to the White City vertiport, which is less than a mile from her home.

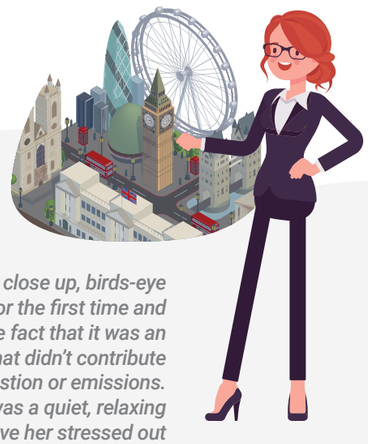
After disembarking from her Frankfurt flight, Julia walks over to the airport's vertiport where she boards an electric air taxi with 3 other passengers. They receive an on-board safety briefing, where Julia realises that flying home is not only quicker but also safer than driving.

A few minutes later, the flight descends, and Julia arrives at the White City vertiport, where her friend, Alex, will pick her up.

Once she is buckled in, she begins to hear the quiet humming of the engines, and a few minutes later, the aircraft vertically lifts off. Out the window, Julia is thrilled to see the spectacular cityscape and the Thames below her; she thinks she can even see her brother's house from the air.

Alex doesn't mind the short trip to the local vertiport to pick up his friend. As Julia hops in the car, she thinks about how, if it were a nice day, she could even walk home. Perhaps she will do that next time.

As Alex asks Julia about her trip, she realises that all she really wants to talk about is what she saw above the city on the 7-minute journey from London City Airport.



She finally got a close up, birds-eye view of London for the first time and felt great about the fact that it was an all-electric flight that didn't contribute to traffic congestion or emissions. What's more, it was a quiet, relaxing trip that didn't leave her stressed out and exhausted. As they pull up to her house, Julia can't help but comment that what used to be the dreaded part of her trip is now her favourite.

Community benefits ***from Urban Air Mobility***

The growth of sustainable urban air mobility will bring some major benefits to the community, as well as commuters. In this series of posts, we'll delve deeper into the community benefits. Meanwhile, here is a quick glimpse into how communities can expect to gain from this new technology.

Sustainability

Electric UAM flights will be a positive contribution not just to the sustainability goals of the aviation industry, but to the sustainable transport goals for all of the UK. The innovative engineering behind small electric aircraft will be a crucial step toward decarbonising the aviation industry. What's more, electric aircraft are surprisingly quiet. The result? Cleaner air, ***ZERO EMISSIONS***, faster commutes, and a sustainable means of transportation. A win-win for communities and commuters.

Connectivity

Building ground infrastructure for transportation systems is typically costly, slow to come to fruition, and requires a tremendous amount of space. UAM flights can connect communities that have historically been underserved without the tremendous investment cost or real estate footprint to connect them to the main transportation network. Vertiports could be placed in many areas, including car parks and the top of existing buildings. They only require enough space for landing pads. ***CONNECTING UNDERSERVED COMMUNITIES*** will be at the heart of UAM's mission.

Jobs & Careers

The UAM industry will bring ***TENS OF THOUSANDS OF NEW JOBS TO THE UK***. Investment in this new industry is already significant and in the next decades, demand for electric air taxis will stimulate further economic growth. According to the 2019 ICAO Benefits Report, "the air transport industry supported a total of ***65.5 MILLION JOBS GLOBALLY***[1]***.***" The UAM industry will open up a new segment of aviation to create even more jobs and services that don't exist yet, such as eVTOL engineers, vertiport services staff, and battery maintenance specialists.

[1] https://www.icao.int/sustainability/Documents/AVIATION-BENEFITS-2019-web.pdf

Learn More About Urban Air Mobility

In the next few months, we'll be sharing more about UAM and answering questions such as: "What's an electric air taxi?" and "What's a vertiport?".

Come back to **www.UKAirMobility.com** and visit us often to learn more about how urban mobility is about to open up the sky to more people.

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