AT&T will explore with Uber how LTE, and eventually 5G connectivity, can enhance next-generation electric vertical take-off and landing vehicles (eVTOLs) and cargo drones.

This multi-phase collaboration plans to bring together AT&T’s outstanding 4G and industry-leading 5G expertise with Elevate, Uber’s air mobility business unit, to support advanced technologies that will eventually enable aerial ridesharing and cargo delivery applications. The companies aim to revolutionize short-range air travel and logistics by exploring next-generation operational systems communications networks that enhance safety and reliability.

The first phase of the collaboration will likely last a year or more. During this time, AT&T and the Elevate team at Uber will focus on assessing and enabling 4G and 5G connectivity for piloted aircraft and autonomous cargo drones operating in low-altitude airspace. The goal is to test the boundaries of viable new technologies for aerial connectivity. Future phases may include more advanced projects such as edge computing and network slicing. These technologies would help further enable dedicated and reliable connectivity for air taxis and drones.

The AT&T Foundry will lead the project on the AT&T side, and will marshal the company’s expertise in radio access networks, data analysis, drones, and hardware design and optimization.

Uber’s team will include Elevate experts in airspace management, ridesharing software, and flight operations and will use Uber Copter pilot operations in New York as well as AT&T and Uber’s existing collaboration testing drone delivery concepts in San Diego.

“We’re in the very earliest stages of seeing what 5G can do to augment next-generation air travel, but we’re excited for the possibilities,” said Andre Fuetsch, president, AT&T Labs, and chief technology officer. “Ridesharing services were one of the defining mobile applications of the 4G era. Air taxis and other new air vehicles could well eventually become a signature use case for 5G.”