

NHS makes history with drone delivery of Laboratory Specimens in unique project

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In a groundbreaking development for healthcare in Scotland, NHS laboratory specimens have been successfully transported by drone for the first time. The Project CAELUS initiative, led by AGS Airports in partnership with NHS Scotland and the University of Strathclyde, conducted a successful three-week flight trial between NHS Lothian and NHS Borders.

The drone flights took place between the Edinburgh BioQuarter and Borders General Hospital, demonstrating the potential of drone technology to significantly reduce delivery times for critical medical samples. Traditionally, these samples are transported by road, which can take up to five hours between the two NHS boards.

The University of Strathclyde's principal investigator for the project, Dr Marco Fossati, said: "The latest live flight trials mark an important milestone in the journey to developing a national medical transport drone network."

Fiona Smith, Project Director for Project CAELUS said: "Our consortium has been working extremely hard to get to this stage and we are delighted we have been able to test this important use case for the NHS.

"Transporting laboratory specimens by drone could speed up the clinical decision making, allowing for same day diagnosis and treatment.

"It is also one of the first times in the UK that there has been a demonstration of beyond the visual line of sight medical drone operations transiting between controlled and uncontrolled airspace.

"This is an important milestone for our project and we now look forward to testing more potential use cases by drone across Scotland in the coming months."

Hazel Dempsey, the CAELUS NHS Scotland programme lead, said: "The NHS is reliant on van logistics that have provided valuable service for decades, however these can take time, travelling hundreds of road miles each day. In some parts of Scotland, patients who live in remote and rural locations are dependent

on ferry or airline availability.

“This project will enable the NHS to consider if drone technology is viable and able to contribute to improving the health and wellbeing of our population.”

Project CAELUS, a national drone network initiative, is working with 16 consortium partners to explore various use cases for drone technology in healthcare. The project is part-funded by the UK Research and Innovation (UKRI) Future Flight Challenge.

The consortium has been working to develop a national drone network that can connect hospitals, pathology laboratories, distribution centers, and GP surgeries across Scotland. In addition to transporting laboratory specimens, the network could also be used to deliver essential medicines and blood products.