

CARE BY AIR

— DRONE PROJECT —

Incorporating Drone Delivery into the Nuclear Isotope Supply Chain



The COVID-19 pandemic highlighted the need for innovation in urgent healthcare transportation. The Care by Air project demonstrates the value of implementing drone delivery into the healthcare supply chain by using drones to transport critical medical supplies, including nuclear isotopes to Oakville Trafalgar Memorial Hospital in Oakville, Ontario.

Challenges and Objectives

The post-pandemic era has highlighted the need to find innovations in healthcare transportation. Drones are a potentially transformative technology for solving transportation and logistics challenges associated with short-lived medical isotope products.

Medical isotopes are radioactive materials used in the diagnosis and treatment of cancer and other diseases. These isotopes have a short shelf life, and the transportation is a critical process that requires strict adherence to safety regulations and timelines.

The Care by Air project aims to demonstrate the benefit and value of a drone delivery system in healthcare compared to more traditional transportation methods.

Solution

Drone Delivery Canada ("DDC") collaborated with partners including DSV Air & Sea Inc. Canada ("DSV"), Air Canada Cargo, EllisDon, McMaster University and Halton Healthcare to deploy DDC's patented drone delivery solution to establish a route between Milton, Ontario (DSV head office) and Oakville Trafalgar Memorial Hospital.



Global Transport and Logistics





DDC's Sparrow RPA is used for delivering small parcels at a max range of 20km and payload of approximately 4kg.

Using DDC's Sparrow remotely piloted aircraft (RPA), DroneSpot™ takeoff and landing zones and proprietary FLYTE software, healthcare goods including medical isotopes were transported to Halton Healthcare's Oakville Trafalgar Memorial Hospital for on-site patient diagnosis and treatment.

Phase 1 involved a series of tests and trials to ensure the safety and efficiency of the delivery process.

Results

The Care by Air project is an excellent example of how drone technology can be used to address critical challenges in healthcare logistics. The success of the project has paved the way for further developments in the use of drones in healthcare transportation to improve patient outcomes. The pilot project is the first step to realizing the partners' vision of using drone technology to connect hospitals across the Halton region.

"...we are committed to how we deliver care, which includes finding new and efficient ways to use technology. Being at the forefront of an innovative delivery system with the Care by Air drone delivery project is the ideal way to contribute to the advancement of healthcare, while continuing to evolve along with the care needs of our patients, families and communities."

- Hilary Rodrigues, Senior Vice President, Corporate Services, Performance & Chief Financial Officer, Halton Healthcare.

Visit dronedeliverycanada.com or contact sales@dronedeliverycanada.com for more information on how DDC can help elevate your business.

6-6221 Highway 7
Vaughan ON L4H 0K8
647-476-2662

