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VOLATUS CASE STUDY

INCORPORATING DRONE DELIVERY INTO THE NUCLEAR ISOTOPE SUPPLY CHAIN

2022 / CASE STUDY

INCORPORATING DRONE DELIVERY INTO THE NUCLEAR ISOTOPE SUPPLY CHAIN

INTRODUCTION

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& OBJECTIVES

In the wake of the pandemic, there is a heightened emphasis on discovering innovative solutions for healthcare logistics. Drones have emerged as a promising technology to address the transportation challenges posed by medical isotopes – radioactive substances used in the diagnosis and treatment of cancer and other diseases.

These isotopes are time-sensitive, with a limited shelf life, making timely and secure transportation essential. Strict safety protocols and schedules must be adhered to when delivering such critical materials.

The Care by Air project seeks to demonstrate the benefits of using drone delivery for healthcare logistics, offering a more efficient alternative to conventional transportation methods.

CARE BY AIR
— DRONE PROJECT —

DSV
Global Transport and Logistics

DRONE DELIVERY CANADA.COM™

Halton Healthcare

AIR CANADA CARGO

McMaster University

EllisDon
FACILITIES SERVICES INC.

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SOLUTION

Drone Delivery Canada ("DDC"), a Volatus Aerospace (“Volatus”) company 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’s office) and Oakville Trafalgar Memorial Hospital.

Using DDC/Volatus' Sparrow remotely piloted aircraft (“RPA”), its DroneSpot™ takeoff and landing zones and its proprietary FLYTE software, the technology will transport healthcare goods, including medical isotopes 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.

Visit dronedeliverycanada.com/care-by-air for more details.

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