

2025 / CASE STUDY

TRANFORMING AIRSPACE: DRONE DELIVERY AND THE FUTURE OF CARGO TRANSPORT

INTRODUCTION

In a groundbreaking advancement for autonomous aviation, Drone Delivery Canada ("DDC") a Volatus Aerospace ("Volatus") company launched Phase 2 of its drone delivery initiative at Edmonton International Airport ("YEG"). This second phase expands the drone flight path to include deliveries to a medical clinic in Leduc, Alberta, owned by Montana First Nation—making history as Canada's first drone operation to safely intersect an active runway glide path.

CHALLENGES & OBJECTIVES

Courier and logistics companies face increasing pressure to manage timesensitive deliveries. Surface roadway congestion continues to rise, making traditional delivery methods slower and less predictable, especially for lightweight, high-value cargo. Airports and logistics organizations must also align with Environmental, Social, and Governance (ESG) mandates, particularly in reducing CO₂ emissions across operations.

To address these challenges and meet these sustainability goals, YEG sought to incorporate the low-emission technology of drone delivery into their operations.



Phase 1 of the project introduced regular drone deliveries from YEG to an offairport DroneSpot™ in Leduc County, creating a successful blueprint for autonomous cargo transportation. Building on that foundation, Phase 2 adds a crucial healthcare delivery route, extending the operational footprint and showcasing the scalability of Volatus' logistics network.



SOLUTION

DDC/Volatus expanded the existing route at YEG to service a medical clinic in Leduc, owned by Montana First Nation enhancing access to vital health services. The project utilizes the Canary RPA ("Remotely Piloted Aircraft") bringing advanced payload and operational capabilities to the network. All flights are remotely piloted by DDC from its centralized Operations Control Centre in Vaughan, Ontario, highlighting the power of long-range, autonomous drone control.





RESULTS

Phase 2 marks Canada's first-ever drone delivery operation to cross within the glide path of an active airport runway, a complex achievement enabled through collaboration with Transport Canada and Edmonton International Airport authorities.

Through this expanded route, the project directly supports healthcare delivery for the Montana First Nation and surrounding communities. This initiative not only improves logistics and reduces delivery times for critical supplies but also reinforces the use of emerging technologies in advancing reconciliation and inclusive innovation.

For more information, visit https://flyeia.com/business/aatc/drone-operations/

