



# UAV Traffic Management



27/09/2021

# AIRSPACE INTELLIGENCE & MANAGEMENT FOR UNMANNED TRAFFIC

## About AirShare

Airways New Zealand has developed AirShare, a UAV traffic management (UTM) system to help air navigation service providers and regulators safely and efficiently integrate UAVs into their airspace and aviation system.

AirShare provides real-time display and management of UAV activity, integration with UAV detection systems in and around aerodrome control zones, and a one-stop shop for drone pilots to plan flights, gain approvals, and operate safely.

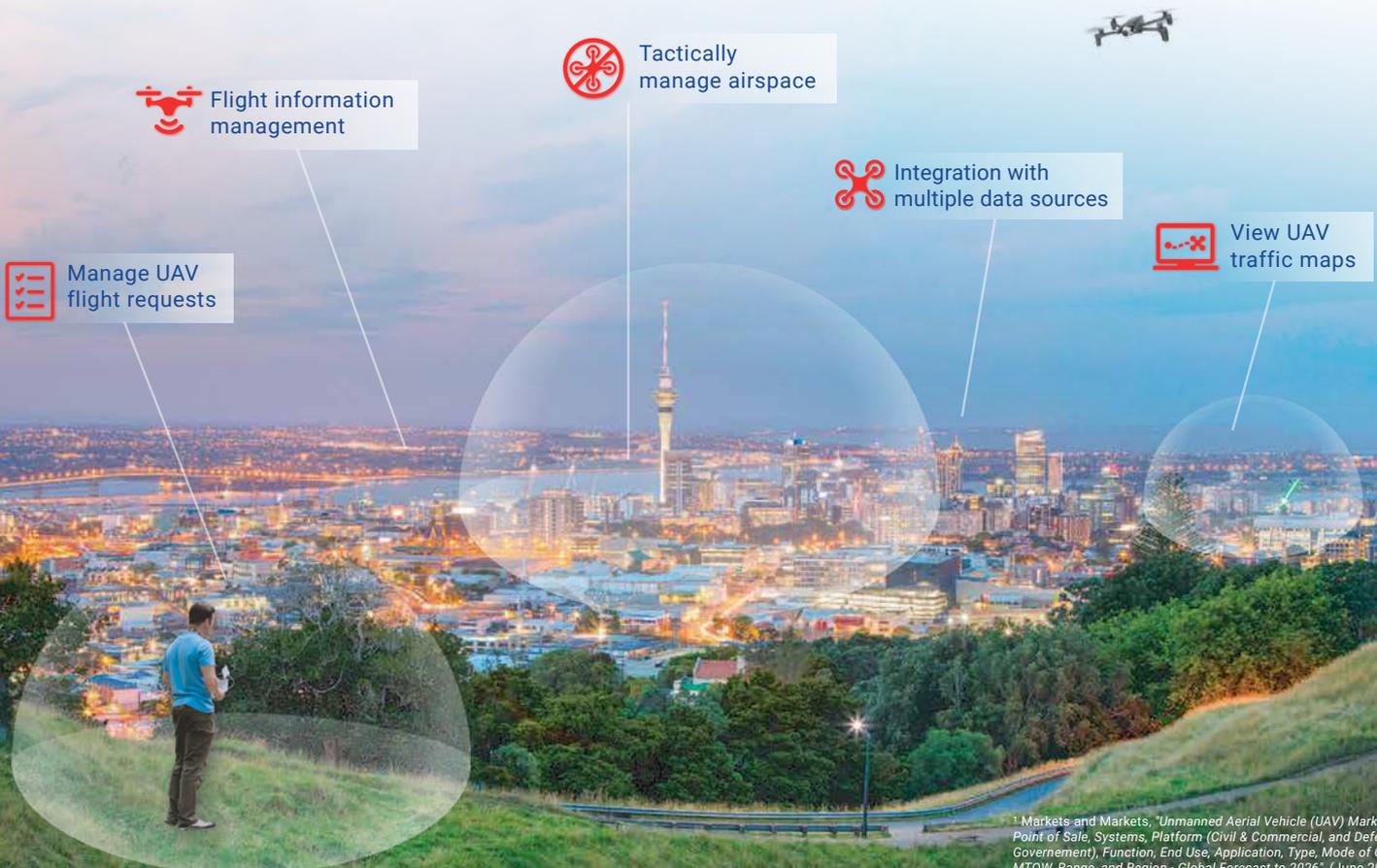
**The global market for UAVs is expected to grow to USD \$58.4 billion by 2026 - increasing the threat of UAV incursions at airports and other sensitive areas.<sup>1</sup>**

## Why invest in UTM?

As commercial and recreational drone use continues to grow at an exponential pace, the need to ensure the safe integration of drones into our global airspace requires careful planning and strong cooperation. With the ever-growing changes in airspace, ANSPs need to ensure they have the right tools to support safe, controlled skies. AirShare offers airspace intelligence & management for unmanned traffic through automated information flows and improved situational airspace awareness.

With AirShare on board, ANSPs can:

- ▶ Manage UAV flight requests
- ▶ Increase ATC situational awareness
- ▶ Reduce ATC workload
- ▶ Reduce risk and increase compliance.



<sup>1</sup>Markets and Markets, "Unmanned Aerial Vehicle (UAV) Market by Point of Sale, Systems, Platform (Civil & Commercial, and Defense & Government), Function, End Use, Application, Type, Mode of Operation, MTOW, Range, and Region - Global Forecast to 2026", (June 2021).

# SAFER SKIES WITH AIRSHARE UTM



AirShare Airspace Manager



**7 years**

operating in live airspace



**200,000**

flights logged



**90%**

of flights auto-approved



## Flight information management

The Airspace Manager module provides real-time display and management of nationwide UAV activity.

- ▶ Manage flight requests from a single operational console
- ▶ Integration options for Remote ID and live display of UAVs with automated alerts
- ▶ Communications with pilots to ensure flight operations are adhered to
- ▶ Dashboards for airspace managers



## Integration with multiple data sources

AirShare aggregates data from various sources to provide an operational picture to reduce risk from drones.

Options include:

- ▶ UAV detection systems,
- ▶ Pilot and drone registry systems
- ▶ UAV flight positional data
- ▶ Digitised airspace charts



Airways has been using AirShare in our tower operations since 2014.

AirShare helps us to reduce UAV-related risk by enabling UAV operators to file their flight plan through the system, so that the air traffic controller in the tower gets a request via a dedicated app. Through AirShare we can see submitted UAV flights which increases situational awareness.

The AirShare team have been flexible and adaptive in ensuring the software works for our needs as well as UAV operators. This has included providing auto-approvals for certain areas, to help reduce controller workload associated with UAV operations.

**Sophia Healey**

Head of Service Delivery Towers, Airways

# SAFETY AT THE HEART

AirShare is New Zealand's UAV traffic management (UTM) system, and was first launched as an online hub for New Zealand drone users in 2014, with the aim to "share the air" by developing a safe, transparent and efficient UAV traffic management system.

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“The AirShare team have been fantastic to work with. Exceptionally flexible and demonstrating a great level of knowledge regarding UTM/ATM integration. We have worked with the team at AirShare in a highly agile and dynamic way, which provided us with a great outcome.”

Low Level Airspace, Program Manager, ANSP

