

Guidance for applying agrichemicals and Vertebrate Toxic Agents (VTA) using unmanned aircraft

Revision 1, 24 October 2025



Introduction

Unmanned aircraft agricultural operations are generally considered to be any operation conducted for the purpose of dispensing any substance that either promotes or inhibits plant or animal life.

These operations generally fall into one of the following three categories:

- aerial spraying (the dispersal of liquid agrichemicals)
- aerial topdressing (the dispersal of solid agrichemical products such as fertilisers)
- aerial application of VTA (poison baits etc).

Organisations conducting the above operations must hold a Part 102 Unmanned Aircraft Operator Certificate. This is often referred to as a Part 102 certificate.

The Part 102 certificate is not a 'pilot qualification'— it's an operational approval issued to organisations or sole traders. The Part 102 certificate is issued once the organisation successfully demonstrates to the CAA how they will mitigate the risks these operations pose and comply with relevant aviation and non-aviation regulations for dispensing agrichemicals by air.

Training

Training is a key risk mitigator for Unmanned Aircraft (UA) agricultural operations. In the absence of UA licences in New Zealand the CAA will accept the following as evidence that pilots are appropriately trained to conduct these operations:

- a UA pilot qualification issued by a Part 141-certificated training organisation to the Part 102 standard (you can safely fly a UA and know the relevant aviation rules),
- a Pilot Chemical Rating (you know the rules for safely handling and applying agrichemicals), and
- a UA Agricultural Rating (you can safely fly an agricultural UA, dispense agrichemicals correctly and have demonstrated acceptable real-world experience).

Pilot Chemical Ratings

Pilots must hold a Pilot Chemical Rating before they can apply agrichemicals.

This theory-based training teaches pilots about aerial agrichemical application principles, including equipment calibration, drift mitigation, nozzle selection, and managing weather conditions.

It also covers the New Zealand Standard 8409 for the management of agrichemicals, regulatory requirements, environmental impacts, and handling hazardous substances, along with on-site management, first aid, and personal health and safety procedures for pilots.

The qualification prepares pilots to apply agrichemicals, fertilisers, and VTA, ensuring they meet the standards set by the CAA and other regulatory bodies. Pilot chemical ratings remain valid for **five years**.

We suggest completing the Pilot Chemical Rating before starting the UA Agricultural Rating.

The following providers offer courses for a Pilot Chemical Rating:

- [Adroit Solutions Ltd](#)
- [Educhem Limited](#)

UA Agricultural Rating

Pilots must also hold a UA Agricultural Rating before they can lawfully dispense agrichemicals from a UA.

The training is comprehensive and will include both theory and practical assessments. This ensures pilots conducting agricultural operations are not only competent flying the UA, but also able to safely and correctly apply agrichemicals in compliance with the relevant aviation and non-aviation regulations (putting into practice the knowledge gained during the Pilot Chemical Rating). You'll also be expected to demonstrate you understand and can put into practice appropriate risk management processes to ensure safe and effective agricultural operations.

A separate UA Agricultural Rating is required for each discipline (aerial spraying, aerial topdressing and VTA).

Note: Pilots must have completed a UA Agricultural Rating in aerial topdressing before they can apply for a VTA rating.

Competency building experience

Building competency and gaining the real-world experience needed to conduct these operations safely takes time.

The UA Agricultural Rating involves a series of instructor-supervised flights conducted over the course of your training and will conclude with a practical flight test. Your instructor is responsible for determining when you have demonstrated the required level of competency before issuing your UA Agricultural Rating.

UA Agricultural Rating training providers

UA agricultural training can only be provided by Part 141-certificated training organisations specifically approved by the CAA to conduct this specialist training.

See [Training to fly unmanned aircraft](#) for a list of approved training providers.

UA Agricultural Rating training pathways

Depending on your previous experience, two pathways are available:



*Pilot training and a series of instructor-supervised flights through a Part 141-certificated training organisation in required discipline(s) on intended aircraft.

To maintain currency of your UA Agricultural Rating, you must undergo an annual Agricultural Operational Competency Assessment through a Part 141-certificated training organisation.

Vertebrate Toxic Agents (VTA)

The aerial dispersal of VTA is highly regulated and tightly controlled. Pilots must hold a UA Agricultural Rating in the VTA discipline to disperse these substances lawfully.

In New Zealand, multiple agencies have responsibility for specific aspects relating to the importation, storage and the use of VTA. In addition to holding a UA Agricultural Rating in the VTA discipline, pilots must also hold any other certificates, authorisations or approvals required by the agencies listed below.

- The Ministry for Primary Industries (MPI) is responsible for the registration and regulation of VTAs under the [Agricultural Compounds and Veterinary Medicines \(ACVM\) Act 1997](#);
- The Environmental Protection Authority (EPA) assesses the risks of hazardous substances, sets controls, and oversees permissions for their use under the [Hazardous Substances and New Organisms \(HSNO\) Act 1996](#);
- The Ministry of Health oversees public health aspects of VTA use;
- WorkSafe manages the certification, authorisation, approvals and licensing: [Vertebrate Toxic Agents \(VTAs\)](#).

Speak to your UA Agricultural Rating training provider for more information on obtaining a rating to disperse VTA.



Tying it all together

Working for a certificated Part 102 organisation

Pilots performing UA agricultural operations must hold a current Pilot Chemical Rating, UA Agricultural Rating and conduct that work for an organisation that holds a current Part 102 certificate approved for agricultural operations.

Employee or contractor

If you don't own the Part 102 certificated organisation you're working for, then you're likely either an employee or a contracted pilot.

As an employee or contracted pilot, you must be formally inducted into the organisation you will be working for, meet that organisation's training and experience requirements, and operate in accordance with the organisation's approved exposition.

Employing or contracting qualified UA agricultural pilots and crew

If you employ or contract qualified UA agricultural pilots, observers, or ground handlers, you must ensure they're formally inducted into your organisation as per your exposition's induction and training process.

You must also ensure they have the correct qualifications, maintain their skills, and abide by your organisation's operating procedures.

Becoming Part 102 certified

To obtain a Part 102 certificate for agricultural operations, an organisation or sole trader must submit an application to the CAA and provide an exposition document that explains how they will manage their operations and mitigate the associated risks.

There are several providers who can assist with the application process and preparing an exposition, or an applicant can write their own. If self-writing, you can use the CAA Sample Operations Manual as a starting point but will need to add additional procedures that cover how you intend to conduct your agricultural operations.

[CAA Part 102 sample operations manual \[DOCX 172 KB\]](#) and [Explanatory note \[PDF 482 KB\]](#).

See the section on [Applying for a Part 102 certificate](#) on the CAA website for further information.



Civil Aviation Authority of New Zealand

Level 15, Asteron Centre, 55 Featherston Street
PO Box 3555, Wellington 6140