



24 November 2023

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Tēnā koe

## Request for information

Thank you for your Official Information Act 1982 request dated 2 November 2023. Your questions are listed below, followed by an answer for each.

I request the following information to be provided through a formal response regarding the recent drone/RPAS training exercise conducted by the New Zealand Police for identifying cannabis crops, as reported in the media.

1. Training Exercise Details:

1a. Please provide the date, location, and specific objectives of the training exercise or exercises.

The exercise happened at a South Island farm on 23 August 2023.

The exercise consisted of two phases. The specific objective of Phase 1 was to assess if the multispectral camera can detect indoor cannabis plants. The specific objective of Phase 2 was to obtain a sample of baseline multispectral images of the soil and general plants where the cannabis plants will be planted in the coming months.

1b. Were there any other agencies or organisations involved in this exercise?

No.

1c. Is the project currently in the testing phase, and if so, what are the specific objectives and expected outcomes of this phase?

Yes, the project is currently in the testing phase. The objectives and expected outcomes are as described in response to part 1a of your request.



## 2. Equipment and Technology:

2a. Could you provide details on the make, model, and technical specifications of the drones and camera systems used?

DJI Mavic 3 Multispectral. The technical specifications and capabilities of this device are publicly available online<sup>1</sup>.

2b. What artificial intelligence software was utilised, and what are its capabilities in terms of object recognition, tracking, and obstacle avoidance?

See response to part 6b of your request.

3. Authority & Permission:

3a. Please confirm whether all necessary permissions were obtained from the Civil Aviation Authority for conducting this exercise.

Police operate Remotely Piloted Aircraft Systems (RPAS) in accordance with Civil Aviation Rules.

3b. Was a flight plan submitted for conducting this exercise

Yes.

3c. Were there any specific safety measures or risk assessments conducted to ensure safe operation of the drones?

Yes.

3d. Did the "South Island cannabis farm" provide explicit consent for the use of their premises and crops for the drone training exercise? If so, how was this consent obtained and documented?

Yes, by email.

3e. What is the legal justification for using drones in this manner, and how does the New Zealand Police ensure compliance with relevant laws and regulations?

Police operate RPAS in accordance with its Part 102 Unmanned Aircraft Operations Specifications (UAOC).

In some instances, where privileges are provided to Police under Part 102, Police must ensure any additional legislative requirements are met, for example, additional requirements under the Search and Surveillance Act 2012.



<sup>&</sup>lt;sup>1</sup> https://ag.dji.com/mavic-3-m

3f. What policies or guidelines does the New Zealand Police have in place regarding the use of Al-equipped drones for cannabis detection or any other uses?

Police has an RPAS Policy, and an RPAS Operations Manual. These documents guide all Police use of RPAS.

- 4. Cost and Funding:
- 4a. What was the total cost of conducting this drone training exercise?
- 4b. Could you provide a breakdown of the costs involved.

The total cost is \$673.72 which was spent on staff travel to attend this training exercise. This consisted of \$163 for accommodation, \$319.62 for flights, and \$191.10 for travel incidentals.

4c. What was the source of funding for these operations?

Police's Aviation, Maritime & Border Group.

4d. How does the New Zealand Police justify the expenditure of taxpayer dollars on AI drones for cannabis detection, especially in the context of other pressing public safety issues?

The Ombudsman's guidelines state: "If a requester seeks information by asking a question, there is a distinction between: questions which can be answered by providing information already known to and held by the agency (official information); and questions which require the agency to form an opinion or provide an explanation and so create new information to answer the request (not official information)." As this question asks Police to form an opinion, it is not considered official information.

4e. Has a cost-benefit analysis been conducted to evaluate the effectiveness and efficiency of using AI drones for cannabis detection compared to other law enforcement strategies?

No, Police is currently scoping the benefits of the technology and once this has been assessed, a cost-benefit analysis will be conducted.

- 4f. What other law enforcement priorities might have been addressed with the resources allocated to this project, and how was the decision made to prioritise cannabis detection?
- 4g. How does the New Zealand Police respond to the perception that this initiative is a waste of resources and a misallocation of law enforcement priorities?

See response to part 4d of your request.



- 5. Plans and Policies:
- 5a. What are the plans for rolling out this initiative more broadly?

There are currently no such plans, therefore, this part of your request is refused under section 18(e) of the OIA as the information requested does not exist.

5c. Which police districts will be using these Al-equipped drones, and why were these particular districts chosen?

All Police Districts have RPAS, which contain some form of AI, such as obstacle detection.

5d. Will these drones operate autonomously, and if so, what protocols will be place to ensure safe and responsible operation?

Only some RPAS have autonomous flight capability. These flights are required to be within visual line of sight (VLOS) or extended visual line of sight (EVLOS) to ensure air and ground risks are mitigated.

5e. How often will these drones be used, and will they cover all areas of bushland each year?

As no specific plans are currently in place, this part of your request is also refused under section 18(e) of the OIA as the information requested does not exist.

5f. Has the technology been deployed elsewhere?

Yes, the Mavic Multispectral RPAS has been used on two operations looking for missing persons.

- 6. Impact and Evaluation:
- 6a. Were there any results or findings from this training exercise that could be shared?

Disclosing this information would be likely to prejudice the maintenance of the law, including the prevention, investigation, and detection of offences and is therefore withheld under section 6(c) of the OIA.

6b. How is the New Zealand Police evaluating the effectiveness of using Alequipped drones for such purposes?

Other than the exercise discussed in this response, no other such evaluation is currently underway.

Please note, Artificial Intelligence (AI) can range from less advanced AI such as blind spot detection (for example, obstacle detection on cars and RPAS) through to advanced AI such as machine-learning where a machine will alter its behaviour based on previous experiences.

RPAS could be described as using only the less advanced AI. For example, the Mavic 3 Multispectral has obstacle detection to stop it from crashing into objects. It can use the



sensors to move around an object, but when flown again on the same path, it will not remember its previous flight, therefore it is not learning from its previous flight.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or freephone 0800 802 602.

Please note that as part of its commitment to openness and transparency, Police proactively releases some information and documents that may be of interest to the public. An anonymised version of this response may be publicly released on the New Zealand Police website.

Ngā mihi

**Superintendent Penelope Gifford**Director Tactical Operations

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