

IN THE MATTER

of the Resource Management Act 1991

AND

IN THE MATTER

of hearings on the Proposed Waimakariri District Council District Plan Stream 5 Noise

Submission from:

New Zealand Agricultural Aviation Association (NZAAA)

To:

Hearing Commissioners, Waimakariri District Council Plan

Date:

04/08/2023

1. Introduction

1.1 I am Tony Michelle, Executive Officer of the New Zealand Agricultural Aviation Association.

1.2 I recently retired after 38 years as an agricultural helicopter pilot and CEO of my own helicopter company in North Canterbury that included operations in the Waimakariri District.

1.3 The New Zealand Agricultural Aviation Association (NZAAA), a division of Aviation New Zealand (AvNZ), represents fixed-wing and helicopter operators engaged in applying fertilisers, agrichemicals, and vertebrate toxic agents (VTA's) for the purposes of:

- Rural production
- Forestry production
- Crop protection and disease control
- Weed and pest control
- Biosecurity threats
- Biodiversity and conservation values

The industry is made up of circa 109 Civil Aviation Authority (CAA) certificated organisations operating circa 76 fixed-wing aircraft and 248 helicopters. Services provided by our industry add an estimated \$2.75BN annually to primary production for the NZ economy alone.

Agricultural aircraft are crucial in maintaining and enhancing primary production, responding to biosecurity threats, and protecting biodiversity values including farming, plantation forestry, public land, and conservation land.

Restrictive district plan requirements can adversely affect the ability of aerial operators to undertake and respond to farmer/grower pests and diseases, and biosecurity and biosecurity threats, so the industry seeks to ensure that the use of airstrips and helicopter

landing areas for agricultural aviation activities on an intermittent basis are adequately provided for in plans.

It is recognised that the Waimakariri district includes a diverse range of farmer and grower primary production activities along with extensive areas of production forestry and large areas of conservation land with high biodiversity values.

2. NZAAA's submissions

2.1 NZAAA is concerned that the provisions for noise in the Proposed District Plan do not adequately provide for the use of aircraft, particularly helicopters, undertaking agricultural aviation activities in the Rural Zone, the General Rural Zone, The Rural Lifestyle Zone, the Natural Open Space Zone and Open Space Zone.

2.2 Agricultural aviation activities can be defined as: the intermittent operation of an aircraft from a rural airstrip or helicopter landing area for primary production activities, and; conservation activities for biosecurity, or biodiversity purposes; including stock management, and the application of fertiliser, agrichemicals, or vertebrate toxic agents (VTA's). For clarity, aircraft includes fixed-wing aeroplanes, helicopters, and unmanned aerial vehicles (UAV's).

2.3 The Plan has Noise-R7 Temporary, mobile or intermittent agriculture activities emitting noise for cultivation, application of fertiliser, planting, harvesting, use of agricultural vehicles or equipment, and movement, handling and transport of livestock as a permitted activity.

It would appear that some agricultural aviation activities are provided for by NOISE-R7 and NZAAA sought the addition of 'and aircraft' to ensure that there was clarity that the rule did include aircraft.

2.4 The Plan also has Noise -R4 Helicopter movements which sets limitations on helicopter movements that would apply to agricultural aviation activities using helicopters – even though they would appear to be provided for in Noise -R7 for some activities. It is not clear if NOISE-R4 overrides NOISE-R7 in respect to some helicopter activities.

2.5 Both Noise -R7 and Noise-R4 present limitations for undertaking agricultural aviation activities in the district.

2.6 Noise -R7 is limited to the to the listed activities, which do not include all agricultural aviation activities ,and the use of aircraft is not explicit in the rule, although implied as 'temporary, mobile or intermittent agricultural activities emitting noise'.

2.7 NOISE-R4 is not appropriate for agricultural aviation movement for helicopters because:

- The time limitations of 8am – 6pm are not practical and do not reflect the nature of the activity
- The distance of 450m from any residential unit or minor residential unit is likely to be unworkable
- The number of helicopter movements of 24 in any 12 month period, maximum of 10 in any month or 6 in any week is unworkable and does not reflect the nature of use of helicopters for agricultural aviation

Essentially, a significant amount of helicopter operations for agricultural aviation in Waimakariri would require a restricted discretionary consent.

- 2.8 To address these concerns NZAAA sought relief from the notified plan by:
- amending NOISE-R7 by the addition of 'aircraft'
 - amending NOISE-R4 by adding an exclusion:

Except that NOISE-R4 will not apply to intermittent helicopter movements for primary production activities such as application of fertilisers, spray or frost protection.

3. Section 42A report and NZAAA response

- 3.1 The s42A Report (Para 225) states that Mr Camp recommends rejecting the submission point from the NZAAA on NOISE-R4. He states that, except for frost protection, helicopter use as part of primary production would generally be a daytime activity, and he anticipates these activities would comply with the notified version of NOISE-R4. In his view, using a helicopter for frost protection purposes means that the helicopter is a "frost fan". Allowing the requested exemption would therefore provide a means to circumvent NOISE-R20 which aims to control the adverse effects of noise from frost fans.
- 3.2 The Officers report (Para 228) recommends that the submission points from NZAAA [310.1, 310.2] be rejected.
- 3.3 NZAAA accepts that frost protection could be dealt with separately, however helicopter use for primary production should not be limited to "*the hours between 8:00am and 6:00pm, unless further than 450m from any residential unit or minor residential unit*" as notified in NOISE R-7 PER: 1.
- 3.4 I disagree with Mr Camp's assertion that helicopters used for frost protection means that the helicopter is a 'frost fan'. Frost fans have been defined in numerous plans and by the Environment Court and are fixed to the ground and rules in plans for frost fans do not apply to helicopters.
- 3.5 Mr Camp assumes that helicopter use as part of primary production should generally be a daytime activity. However the times in NOISE-R4 are 8am – 6pm. 'Daytime' starts well before 8am and past 6pm through much of the year so the times do not reflect what is required for 'daytime' activity, especially from an agricultural aviation perspective.
- 3.6 In terms of agricultural aviation a day is generally conducted between the beginning of civil morning twilight (MCT) and the end of civil evening twilight (ECT).
- 3.7 A day is defined in the Civil Aviation rules as the hours between:
(1) the beginning of morning civil twilight, which is when the centre of the rising sun's disc is 6 degrees below the horizon; and
(2) the end of evening civil twilight, which is when the centre of the setting sun's disc is 6 degrees below the horizon.
- 3.8 Obviously daytime would commence before 8am and end after 6pm much of the year.

- 3.9 Generally, helicopter agricultural operations are undertaken early morning (MCT) and in the late evening (up to ECT) when wind and weather conditions are “settled” to minimise the flight risks to pilots, health risks to persons and the environmental risks to adjoining sensitive areas.
- 3.10 The label conditions for applying insecticides to crops usually stipulate that they must be applied at times of the day when “*bees are not foraging*” therefore these applications are taken in the late evening just prior to ECT.
- 3.11 There is no discussion in the s42A Report as to the setback distances and the appropriateness of those. It is unclear how a distance of 450m was determined for the rule. Nor is there any discussion on the number of helicopter movements permitted and how these relate to agricultural aviation activities.
- 3.12 NOISE R4 3: as notified limits the number of helicopter movements “*between 25m and 450m from a residential unit or minor residential unit not located on the same site as the activity, the number of helicopter movements on a site shall not exceed 24 in any 12 month period within which there may be a maximum of 10 in any month, or six in any week, unless that residential unit or minor residential unit is on the site on which the landing or take-off occurs*”
- 3.13 This could result in farmer/growers being unable to effectively control pests/diseases and optimise yields in specialist crops referenced below.
- 3.14 The council can only impose limitations on helicopters using helicopter landing areas for the purposes of take-off and landing – once the aircraft is airborne the Civil Aviation (CAA) rules apply.
- 3.15 The CAA rules do NOT prohibit a helicopter operating next to a residential property other than the aircraft “*must not to cause undue risk to persons or property*” therefore, a helicopter can conduct inflight agricultural operations near to a residential unit.
- 3.16 The noise effects of a helicopter inflight are very similar to those during take-off and landing.
- 3.17 Helicopters are used to apply fertilisers and agrichemicals to a wide range of farmer/grower enterprises including cereal, small seed, winter feed, vegetable, and specialist crops to control pests/diseases and optimise yields. These crops are often grown on smaller rural holdings that have residential units in close proximity to the helicopter landing area – less than 450m.
- 3.18 Generally, the area (hectares) of crop being grown are relatively small areas, seasonal, and requiring an intermittent, short duration of helicopter activity.
- 3.19 Vegetable crops (such as potatoes), specialised small seed crops (such as oil seed rape) and green feed crops (such as fodder beet) require multiple applications of fertiliser and agrichemicals to protect them from pests/diseases and optimise yields. This is more often undertaken by helicopter to minimise crop damage therefore, production loss.

- 3.20 In respect to submissions on Noise -R7 the Officers Report (Para 226) notes: “*He (Mr Camp) also recommends rejecting the submission point from the submitter on NOISE-R7. He considers the words “including aircraft” would result in a greater number of loopholes which could lead to unintended consequences. For example, fertiliser application could be undertaken using aircraft within the notified wording of NOISE-R7 without any need to add additional words. I accept this advice.*”
- 3.21 This response would indicate that both Mr Camp and the s42A Report writer consider that aircraft are provided for in Noise-R7.
- 3.22 The addition of the words including agricultural aircraft into Noise-R7 would remove the uncertainty.
- 3.23 The inclusion of a definition for “*agricultural aircraft activities*” would also assist by clarifying the activities that agricultural aircraft would undertake, including fertiliser and agrichemical application activities and weed and pest control for conservation activities as agricultural aviation activities are important tools for protecting and enhancing biodiversity and biosecurity values in the NOSZ.
- 3.24 Once in flight, agricultural aviation aircraft can operate in close proximity to residential units under the provisions of the CAA rules with the same effects as taking-off and landing.
- 3.25 Restricting operating to the hours between 0800 and 1800 increases flight, personal health and environmental risks for areas.
- 3.26 Where farmer/growers are unable to effectively control pests/diseases primary production will be impacted and some areas may need to pivot to alternative lower yield activities.
- 3.27 RURZ-O1 has the purpose for the Rural Zone and notes in 1.:

An environment with a predominant land use character comprising primary production activities and natural environment values, where rural openness dominates over built form, while recognising:

- 1. the east of the District has a predominant character of small rural sites with a pattern of built form of residential units and structures at more regular intervals at a low density compared to urban environments*

- 3.28 RURZ-O2 has the purpose for the Rural Zone:

Rural Zones support primary production activities, activities which directly support primary production, and activities with a functional need to be located within Rural Zones.

- 3.29 Helicopter agricultural activities are an important part of primary production activities for supporting farmers/growers particularly for crop protection and production on smaller rural sites. NZAAA seeks appropriate changes to ensure that this is adequately provided for to ensure that the objectives of the plan can be achieved.

4. Decisions sought

4.1 NZAAA concerns could be addressed by:

1. Amendments to the provisions of NOISE-R4 by adding:
Except that NOISE-R4 will not apply to intermittent helicopter movements for agricultural aviation activities
2. Amendments to exemptions in NOISE-R7 by adding:
Including agricultural aircraft
3. Making a consequential amendment by adding a definition for agricultural aviation activities:
the intermittent operation of an aircraft from a rural airstrip or helicopter landing area for primary production activities, and; conservation activities for biosecurity, or biodiversity purposes; including stock management, and the application of fertiliser, agrichemicals, or vertebrate toxic agents (VTA's). For clarity, aircraft includes fixed-wing aeroplanes, helicopters, and unmanned aerial vehicles (UAV's).

4.2 Such an approach would achieve the objectives and policies in the Plan and ensure that primary production activities and conservation activities can be appropriately undertaken within Waimakariri District.

Thank you for the opportunity to present this statement in support of the NZAAA's submissions and further submissions.



Tony Michelle
Executive Officer
NZ Agricultural Aviation Association