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19 July 2018

To: Graeme Harris – Chief Executive and Director of Civil Aviation

Cc: CAA Official Information & Privacy Advisor (oia@caa.govt.nz)

HON Phil Twyford – Minister of Transport

Selected members of parliament and interested parties.

RE: High altitude aerosol spraying from aircraft in New Zealand

#### Kia ora Mr Harris

Further to correspondence I received from the CAA of 27 February 2017 (17/OIR/146) concerning Occurrence Report CA005 submitted 5 October 2016 (for Incident of 9 July 2016 Flight ANZ674). The occurrence report concerned the unexplained emission of a voluminous 'aerosol' trail from an A320 aircraft. Advice I received from the CAA was that "no investigation of this occurrence report was undertaken as careful review of the material in your occurrence report confirms the absence of unsafe aviation activity."

However, since 2016 new evidence has emerged that may pertain to this occurrence report concerning modifications to Air New Zealand A320 aircraft – the after factory retro-fitting of discharge pipes to the A320 engine pylons. Since no investigation of Flight ANZ674 (9 July 2016) was undertaken by the CAA, it is unknown whether this aircraft had pylon discharge pipes that could explain the voluminous trail photographed by several members of the public over a distance of hundreds of kilometres.



Air New Zealand A320 at a domestic airport; pylon pipes visible.<sup>2</sup>



The A320: pylon tarnishing & surface condition indicates recent retro-fit.<sup>3</sup>



Distinctive 'three-trail' emission (from pylon?)

<sup>&</sup>lt;sup>1</sup> From Airbus (August 2014): The A320 not manufactured with triple pylon discharge pipes (geoengineeringwatch.com).

<sup>&</sup>lt;sup>2</sup> Queenstown Airport, December 2017 (photo supplied by an Air New Zealand traveller).

<sup>&</sup>lt;sup>3</sup> Tonga, August 2017 (close-up photo supplied by an Air New Zealand traveller).

The frequent occurrences/sightings of alleged high-altitude aerosol spraying from aircraft has been raised with successive Ministers of the Environment since 2010. Given CAA regulatory responsibilities this is also be a matter for attention of the Minister of Transport. Since 2010 there has been more than a 1000% increase (over the previous five year period 2005-2009), in frequency of public enquiries or reporting about this to the CAA<sup>4</sup>. I have evaluated a selection of this CAA correspondence and there are numerous misleading or unsubstantiated assertions made by CAA information staff to the public, which should be a matter for your attention (17/OIR/34)<sup>5</sup>.

## Flight ANZ674 (9 July 2016)

The CAA's explanation for the voluminous trail from ANZ674 as being caused by 'atmospheric conditions' is simply not creditable in the absence of any investigation. This kind of explanation is typical of CAA correspondence to other reports/enquiries about alleged aerosol spraying operations that the CAA also failed to investigate.



## Photo: 9 July 2016 from Lake Ellesmere.

<u>Flight ANZ674</u> at 37,000ft visible by a voluminous trail extending up to 100 kilometres that persisted for an extended period, and was later photographed over Christchurch (the full extent of this trail was over 100's of kilometres).

<u>Flight ANZ1205</u> (another A320 aircraft) at 36,000ft visible by a short contrail that evaporated within seconds.

The CAA did not consider the ANZ674 'trail' to be abnormal (?) but with no investigation of ANZ674, fluid or chemical emission from pylon discharge pipes cannot be ruled out.

Prior to 2010 reports by the public of voluminous and persistent trails from aircraft in New Zealand were rare occurrences (CAA and Ministry for the Environment data substantiates this), which coincides with the alleged escalation of aerosol spraying operations in late 2009. Thousands of New Zealanders are now aware of this<sup>6</sup>, and seemingly can tell the difference between a regular 'contrail' (e.g. ANZ1205), and voluminous irregular 'persistent trails' that began appearing on a daily basis from 2010 (and are allegedly 'chemically laden'<sup>7</sup>), but strangely CAA staff show no interest or inclination in investigating.

How can the public have confidence in the competence and credibility of the CAA?

<sup>&</sup>lt;sup>4</sup> Civil Aviation Authority data released under the Official Information Act: 2005-2009; 2010-2016.

<sup>&</sup>lt;sup>5</sup> See my e-mail reply to 17/OIR/34 of 10 October 2016 (further details available on request).

<sup>&</sup>lt;sup>6</sup> A 2018 NZ on-line petition about atmospheric spraying operations has over 4,000 signatures to date (change.org).

<sup>&</sup>lt;sup>7</sup> The CAA, Ministry for the Environment, EPA, NZDF, NIWA, have all received correspondence from the public about this. A July 2012 survey (Taranaki Daily News, n=1035); 62% of respondents indicated awareness of a chemical spraying operation.

#### **Information Request**

Given the CAA's lack of initiative and apparent reluctance to investigate, and recent reported evidence concerning modifications to Air New Zealand A320 aircraft, I request the following information:

- 1. Relevant sections of CAA regulations requiring commercial operators to inform the CAA of modifications to their aircraft.
- 2. Documents provided by Air New Zealand to the CAA about modifications to its A320 fleet of retro-fitted discharge pipes to the engine pylons; the number of aircraft with these modifications; their registration number and date of retro-fit; and the purpose and functioning of these modifications. Please specify the date(s) CAA received this information.
- 3. Documents held by the CAA certifying that the Air New Zealand A320 modifications (pylon discharge pipes) comply with Airbus Corporation A320 engineering, systems, and operating standards for certification of safety and airworthiness of aircraft following these modifications.

Thank you for your assistance and I will await your advice.

Kind regards,

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