



LEGISLATIVE ASSEMBLY
FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON ECONOMIC DEVELOPMENT AND TOURISM
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Submission Cover Sheet

Inquiry into drone delivery systems in the ACT

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Personal submission to the Inquiry into drone delivery systems in the ACT – Karen Neill

Introduction

My submission seeks to make two major points about the use of drones to deliver food and small goods to residential areas of Canberra. The two major points I wish to make are that the use of drones has the potential to disturb both native and domesticated animals. In addition, drone delivery appears to involve increased packaging to preserve the integrity of the product. This seems contradictory to the increased emphasis on reducing waste.

I acknowledge that there may be a cohort who might feel they could benefit from the addition of drone delivery to the other ways of obtaining goods and services. However, I have not seen a compelling business case has been presented to date to allow increased noise and aerial activity in Canberra suburbs. It appears that novelty is the main reason for allowing drone deliveries and the examples given of the benefits of the service have relied on food or beverage deliveries, which appear to be well serviced by bicycle and car delivery services. I note a “special investigation” by the Canberra Times (10 DECEMBER 2018) notes a coffee was delivered without spilling the coffee

<https://www.canberratimes.com.au/national/act/drone-coffee-does-it-spill-is-it-hot-a-special-investigation-20181204-p50k1b.html>).

I also have concerns about the noise affecting people with disabilities or mental health concerns, who may be seen as users of this form of delivery. I would urge the Assembly to seek expert advice on the effects of noise pollution, particularly the frequencies of drones, on people who are housebound with physical or mental health issues. Another issue I see arising in the future are neighbour disputes over the use of these services, particularly during evenings and overnight. Given the delivery of one meal could involve several drone deliveries (see CT article) there will need to be some guidance for customers on what will be reasonable use of these types of services. I expect that the Assembly will seek expert advice on neighbourhood disputes over noise to inform their deliberations.

I expect that entrepreneurial dealers in illicit substances have been early adaptors of this technology. This may make enforcement of existing laws regarding banned substances more difficult to investigate when neighbours become inured to the noise of drones in their street.

The effect of noise on wildlife

I do not have expertise in this subject, but have noticed reports on social media concerning the effect of drone noise on wildlife. This story from June 2017 examined the issue:

<https://www.theverge.com/2018/11/5/18066082/baby-bear-mountain-climb-russia-drone-pilot-endangered>

A quick search found this article in “*Unmanned aircraft systems as a new source of disturbance for wildlife: A systematic review*”

(<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0178448>)

“(Conclusions and management implications)... *studies conducted on RC fields indicate that abundant flights may lead to territory abandonment and decreased productivity in sensitive bird species [56,66-68]...*”

National Geographic posited in 2015 that, in some cases, the use of drones might be worthwhile, even where it does cause distress.

(<https://news.nationalgeographic.com/2015/08/150825-drones-animals-wildlife-bears-science-technology/>). However, this is in the case of wildlife management, not the delivery of hot coffee.

Can we be sure that drones will not cause, for example, kangaroos to bolt into suburbs and potentially onto roads? Can we be confident that flying possums and birds won't be disrupted in their breeding cycles by drone noise and presence? I note that there have been no bird strikes in trials to date, which is promising. But physical contact is only one aspect of the effect of drone noise and presence for wildlife.

As a former dog and cat owner, I have concerns about how some pets will also adjust to the noise and presence of drones. My aunt had a dog that would howl and get distressed at the approach of airplanes. This happened a long time before the plane noise became evident to

the humans in the room, demonstrating how dogs have more acute hearing. My cats also displayed acute hearing, getting distressed at high pitched sounds, like neighbourhood lawn mowers.

I expect the committee will seek independent advice on this matter, and I thank the Assembly for its diligence in reviewing this matter.

Increased packaging

In the previously quoted Canberra Times article, it was noted that the coffee was delivered in takeaway cups, in a cardboard holder, within a cardboard box, which has a plastic handle. It may be that cardboard will give way to plastic in colder and wetter weather.



The article also states that, because of load limits, a meal for several people would mean several drones would be required. This would require multiple boxes and handles. At a time when the community is being urged to reduce unnecessary packaging, this seems retrograde.

Conclusion

Thank you for the opportunity to comment on this trial. I hope my comments raise matters that the Assembly committee members consider worthy of further consideration and advice, and that, if the trial expands, that the Assembly provides guidance for the mitigation of adverse impacts.

I look forward to reading the final report.

Karen Neill