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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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Submission by the Hackett Community Association
to the
ACT Legislative Assembly
Standing Committee on Economic Development and Tourism

Inquiry into drone delivery systems in the ACT

21 February 2019

Dear Members

The Hackett Community Association (HCA) welcomes your inquiry into the drone delivery systems in the ACT and would like to provide this submission for your consideration. The main focus of this submission is on how frequent intrusions of large commercial drones could impact on the suburb of Hackett, its residents, its wildlife and the adjacent Mount Majura/Mount Ainslie Nature Reserve, should the delivery system expand to north Canberra.

Background about the HCA

The HCA, established in 2002, is the official representative organisation for the suburb of Hackett for dealing with the ACT Government. Its mission is "Promoting the well-being of the Hackett community by protecting and enhancing the social, cultural and physical environment of Hackett." It is affiliated with the North Canberra Community Council and is registered under the *Associations Incorporation Act 1991*, association number a03925.

As at the end of 2018 it had around 220 registrations (each registration represents a free standing dwelling or unit and may include individuals or couple). With around 1,144 dwellings in Hackett, this represents approximately 20% of dwellings.

The HCA is aware of the trial that was undertaken in Bonython in 2018 and has noted that the majority of residents in that suburb have had negative experiences with this. The HCA is also aware that the same company is planning to start an operation in Mitchell to provide deliveries to several suburbs in Gungahlin by mid 2019.

The HCA notes that the current drones can travel up to 10kms on a round trip. It is possible that the Mitchell operation could be expanded in future years to the suburbs of north Canberra, including Hackett which is under 5kms from Mitchell. It is within this context that the HCA would like to make the following comments against some of the Terms of Reference.

TOR 3. the extent of regulatory oversight of drone technology at various levels of government including but not limited to:

Safety of residents and property

One of the key concerns is the safety of these large drones when they fail and crash. The chances of such incidents occurring must surely correspondingly rise with increased usage. In rural and open areas, the impact on people and infrastructure would be limited. However, in an urban environment the risks must be significant. A large drone crashing into pedestrians, people in their gardens, or cyclists could be fatal; a drone crashing onto a car could also be fatal.

What happens when a drone crashes into power lines – for suburbs in Gungahlin this may not be an issue as power lines are mostly underground. For Hackett and other north Canberra suburbs, power lines are mostly above ground and as such there would be greater risk for residents in such an event. And what would happen if a drone crashes onto the power lines for the new light rail which passes Mitchell as well as Gungahlin?

The inner north suburbs like Hackett also have well established, dense tree cover along most streets and in many gardens. Combined with the presence of power lines, such features must surely make the operation of drones in these areas much more difficult and therefore increase the likelihood of crashes occurring.

A drone crashing into a house may pose a lower risk to people, but depending on the features of the house, there is potential for significant disruption to the residents. For example, a drone crashing into solar hot water panels and PV panels could lead to major inconvenience while residents wait for repairs or replacements. Potentially several thousands of dollars of inconvenience for the convenience of a \$4.00 coffee latte delivered to a neighbour!

One of the participants in the Bonython trial was a chemist. Many pharmaceutical products can only be obtained on a prescription – at the time of collection in a chemist, the receiver (either the patient or a representative) must sign the form. In the case of the drone delivery in Bonython, did the drones deliver prescription drugs and were these signed by the patient or agent? If such a requirement was not done, then how does such a delivery service ensure the drugs are delivered to the correct person? Furthermore, in the event of a drone crashing, what would happen if such prescription drugs were picked up by children?

Potential conflict with commercial flights

Hackett and Watson sometimes have low flying small planes and helicopters going overhead, either departing from or arriving at the Canberra Airport. The operation of commercial drones in these suburbs would increase the risk of an air incident. As such, strict controls should be put in place for the operation of drones in these areas.

Hacking

Hacking of computers is almost a daily occurrence be it on individual computers, private companies, or governments as all levels. As hackers develop their skills, it is highly likely that they will soon attempt to hack drone systems for mischief or terrorism. The risk of the above incidents must surely increase through the hacking of the equipment.

Regulation by CASA and Air Services Australia

The above examples highlight the need for commercial drones to be controlled not only at a local level but more importantly, at a national level. CASA and Air Services Australia must be engaged well before drone deliveries are expanded to other suburbs in Canberra. This will ensure a nationally consistent approach to managing these systems should there be interest in using them elsewhere in Australia. Please refer to the comments under TOR.6 National approach to management of drones.

TOR 4. the extent of any environmental impact as a result of trialling drone delivery technology:

Impact on residents

One of the most enjoyable features about Hackett is the generally low level of noise. This is largely due to the close proximity to Mount Majura/Mount Ainslie and the long distance from major roadways like Northbourne Avenue.

True, there is the noise from planes taking off from Canberra Airport, and the usual sound associated with urban living such as motor mowers and small equipment. Residents accept this as part of living in cities and towns. However, this peaceful environment would be shattered with the noise from dozens of drones operating 12 hours a day, seven days a week. People's stress levels are likely to rise and in areas where regular deliveries were being made to a few houses, it is possible that neighbours could verbally or physically clash. Such consequences would not be conducive to maintaining a friendly and open community.

Impact on native wildlife

Given the close proximity of Hackett to the Mount Majura/Mount Ainslie Reserve, the suburb has a number of native species of wildlife that live in or visit the suburb:

Kangaroos – large numbers (50-80) of eastern grey kangaroos come down from the reserve to feed at the Hackett Oval, particular during dry periods when green grass is limited. Although this movement is mostly in the evening, some do remain until dawn before returning to the reserve. At times, some of the larger roos will simply stay in people's gardens close to the reserve.

While drones are being used in national parks and rural areas for research and monitoring purposes, in such an environment kangaroos are able to move freely away if they feel disturbed. Furthermore, the frequency of such drone use may be at a level that may not impact upon kangaroos.

However, in an urban setting, the frequent occurrence of low flying, noisy drones may frighten kangaroos causing them to move off in random directions, increasing the risk of collisions with motor vehicles. Overtime, they may reduce their visits to the suburb, placing increased grazing pressure on the reserves and taking away one of the great features of Hackett. Further studies are required to assess the impact of drones on kangaroos, particularly in an urban setting.

Birds of prey – Mount Majura/Mount Ainslie Reserve is home to eight species of birds of prey, ranging from the largest, the wedge-tailed eagle, to the smallest, the nankeen kestrel. Some of these are often seen soaring over Hackett, particularly in the areas closest to the reserve.

There are some You Tube clips showing large eagles attacking drones and knocking them out of the sky. Some of these drones appear small and would appear to have come off second-best. However, the drones used in the Bonython trial are very large and as such, a large eagle may be injured or killed should they attack such a drone. Smaller species are more likely to be injured or killed.

The numbers of birds-of-prey in the reserve are probably relatively low, particularly for the larger wedge-tail eagle. The loss of only one bird would impact significantly on abundance of this species in the reserve.

Given the potentially significant impact on these species, delivery drones should not be allowed to operate close to nature reserves, to avoid conflict with birds of prey.

Other birds - The HCA understands that drones can also impact on other birds species in a number of ways such as:

- the high pitched sound causing birds to abandon nests and eggs and chicks;
- interrupting feeding; and
- collisions with flocks.

On this last point, Hackett is home to, and visited by, many large flocks of parrot species including sulphur-crested cockatoos, galahs, little corellas, yellow-tailed black cockatoos, king parrots, rosellas, and smaller numbers of the critically endangered swift parrot. They are either permanent residents or move back and across the suburb, travelling from the reserve into Hackett and neighbouring suburbs to feed. Drones in the suburb may lead to collisions and may cause the birds to move to other areas of Canberra.

Domestic animals

Like most Canberra suburbs, the residents of Hackett have a range of household pets such as dogs, cats and birds. Frequent, noisy drones are likely to cause these animals to react in a variety of ways. Some may run away from their home, which will cause undue stress for their owners until they are found. In the case of dogs, some may begin barking as drones pass overhead. This not only causes stress for the animal but will increase tension among neighbours having to not only put up with the noise of drones, but barking dogs.

TOR 6. any other relevant matter

Privacy and domestic violence

Commercial airlines have clear, unique colour schemes and names that help identify them from a distance. Likewise, any commercial delivery drones should also have clearly displayed names and livery schemes to identify them from non-delivery drones. For example, drones could be used to watch people at their houses. In an extreme situation, an abusive partner may use a drone to spy on an ex-partner.

While a delivery service drone could be used for the same purpose, having a unique livery identification could assist police in tracking any suspect drone activities in an area.

In this locality there is a women's shelter and a crisis accommodation centre for men. The HCA is not aware of these facilities being targeted over the years by ex-partners, but the arrival of drones may provide a new means for such activity.

Such a situation highlights the need to have commercial drones registered, with clear identification and more importantly being managed at a national level. Appropriate legislation needs to be in place to prevent the occurrence of such illegal surveillance activities.

National approach to management of drones

In Federal Parliament on 12 February 2019, the Member for Canberra, Gai Brodtmann, made an important recommendation calling for "an independent review before the Gungahlin pilot -led by CASA and the Privacy Commission and involving the relevant federal and territory government agencies." Ms Brodtmann proposed that such a review would look at:

- the regulatory framework, particularly for commercial operators;
- privacy issues, particularly regarding where the data is being stored, what data is actually being captured, what happens to the data and at which location it is being stored;
- the economic benefits to the ACT, particularly for local small businesses.

The HCA supports the proposal for a national review as outlined by Ms Brodtmann and would like to see the inquiry make such a recommendation.

Chris Mobbs, Chair, Hackett Community Association
