

Attack on the drones: the creeping privatisation of our urban airspace

Who owns the air above our cities? The public and the media are in danger of losing access to a valuable common resource, with corporations given priority



'We own the air, mate' ... flying a drone by the South Bank Tower. Photograph: Bradley L Garrett

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About this content

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Monday 12 December 2016 06.28 EST

We woke up before dawn and caught the first train to Waterloo, so we could capture some aerial footage in the early morning London light with no one around. We were interested in using a drone to get a vantage point that no rooftop could offer, looking down on the under-renovation South Bank Tower.

Lifting off from a grassy, flat expanse next to the river Thames, we quickly vaulted to the height of a 30-storey building and began capturing slow, sweeping images from a bird's-eye

view. But then a security guard emerged from the building and ran towards us. “You can’t fly that here,” he yelled.

We were keeping the drone within our line of sight, as per Civil Aviation Authority (CAA) regulations, and my co-flyer Adam Fish responded: “Sorry but we can. We checked the regs and we are 50 metres from the building, and this isn’t a congested area.”

Adam showed him a map. Then the security guard looked up at the drone hovering over the building, and said: “Yeah, but we own it.”

“You own what?” Adam replied.

“The air, mate. We own the air.”

Urban airspace is being radically reshaped by the proliferation of drones - a process which is quickly slicing the air into private strips. Urban citizens are at risk of losing access to a valuable public resource as corporations are given prioritisation in the skies above our heads.

And while the grounding of personal drones might be a nuisance for hobbyists, it becomes a threat to democracy when journalists cannot use these tools to document and report on the activities of the elite.

British cities are a leading testbed for professional drone delivery services. Until recently, UK “drone code” was simple - pilots had to see their drone, keep their aircraft 50 metres away from people and property, and stay clear of airports. Most pilots heed the code and breaches are few and far between.

However, these rules are being bent to allow Amazon, as part of their launch of PrimeAir, to engage in extended semi-autonomous flights where the pilot cannot see the drone. A 2015 email chain between Amazon and CAA employees, released through a Freedom of Information Act request, reveals a cosy relationship between the two.

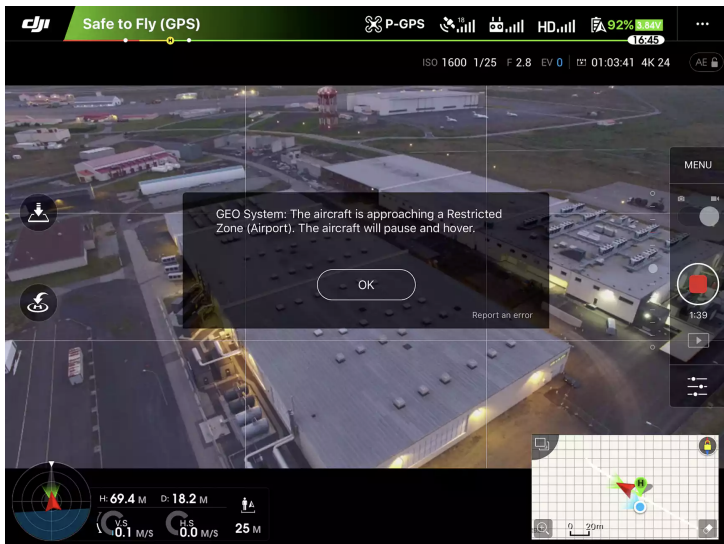
More recently, it was announced that drones will be allowed to make deliveries to residents of Spire London, an £800m Chinese-owned skyscraper currently under construction near Canary Wharf. This would require an exemption to the CAA rules about flying in congested areas. Just as skyscrapers have become a visible marker of social inequality in the UK, the ability to fly will also be granted according to privilege, further solidifying the relationship between height and power in the capital.

Cities around the world are experimenting with different approaches to incorporating drones into airspace. Australia was the first to deregulate commercial drones, granting the firm Flirtey the rights to deliver goods in Sydney in 2013. Canada has virtually deregulated airspaces by creating a flexible permit process for commercial operators, and a blanket exemption for small drones even in busy cities like Toronto.

In Stockholm, however, in the interest of protecting citizen privacy, piloting drones has been made all but impossible by the implementation of a laborious licensing process. In Lagos, Nigeria concerns over terrorism have grounded commercial drones. They are banned entirely in Nairobi, Kenya.

Strict regulation makes sense in some cases as drones can be dangerous if flown recklessly. A few people have done worrisome things like strapping guns to them, landing them on the Japanese prime minister’s office filled with irradiated sand, and crashing them into the White

House lawn. Yet regulations are often passed without public discussion, in reaction to isolated and anecdotal incidents.



Geofences are meant to prevent drones approaching prisons or power stations. Photograph: Bradley L Garrett

One response to these incidents has been for governments to encourage manufacturers to self-regulate. Software limitations such as geofences around prisons and power stations seem to be little deterrent to those determined to use drones inappropriately. In 2015, for instance, Nottingham resident Nigel Wilson was convicted of nine breaches of an Air Navigation Order after flying over numerous football grounds and tourist attractions.

Security guards around the world attempting to stifle activities like Wilson's urban piloting are going to struggle, though. The air is becoming saturated with flying things carrying all sorts of payloads. More than one million drones were sold in 2015, with the global market expected to reach \$1bn (£800m) by 2018. Like many new technologies, drones, and the ways that they are being deployed, are triggering debates about who has the right to fly - and where.

The ability of journalists to use drones has been critical to the changing nature of news gathering. According to the National Union of Journalists, in 2011 "Australia's Channel Nine was barred from visiting a remote immigration detention centre - so flew a drone over the site to get footage". In 2016, the BBC flew over a Met training facility in Gravesend on the Thames Estuary, locating two water cannons that Boris Johnson, as Mayor of London, had purchased to repress future protests.

Even more concerning is the Temporary Flight Restriction (TFR) put in place above the protest against an oil pipeline across the Standing Rock Sioux reservation, by authorities and the US FAA to stop demonstrators from documenting police abuses. Police admitted firing sponge rounds, bean bag rounds, stinger rounds, tear gas grenades, pepper spray, Mace, Tasers and a sound weapon.

A similar situation unfolded in Ferguson, Missouri in 2015 during the unrest after the shooting of Michael Brown. Audio transcripts obtained by the Associated Press made it clear the TFR had been set up specifically to prevent "media" from flying over places where police were clashing with citizens. Legal experts say these restrictions were a blatant violation of the First Amendment of the US Constitution, protecting freedom of the press.

Many of these pilots may not be paid journalists, but as Jason Koebler argued in Motherboard: "By any definition of the word, the drone pilots documenting the Dakota Access Pipeline protests are conducting journalism. The videos, live streamed to Facebook and later posted on

YouTube, have shown human rights abuses, caught police in lies, and – in the case of the numerous videos that show their drones being shot at by police – have documented law enforcement committing federal crimes.”

Is it in the public interest to create exclusive air lanes for Amazon but deny them to photographers recording events, hospitals delivering blood, researchers collecting data or activists making their voices heard? Leigh Raymond, professor of political science at Purdue University, Indiana, advances the wonky but useful concept of an “atmospheric commons” to describe our shared rights to the air. Perhaps it is time to imagine the atmospheric commons as a space for public rambling and exploration with drones, balloons, satellites and as-yet-unforeseen flying objects.

Geographer Jeremy Crampton suggests that not doing so could lead to dire consequences: “It has been long established that the sky is public – otherwise each airplane would have to get permission to fly over your property. This is akin to the concept of international waters on the ocean. But as with international waters, this public space is becoming increasingly and deliberately enclosed, in what might constitute a modern ‘enclosure of the commons’.”

Commons, whether on the ground or in the air, will continue to be contested, since they are, by their very nature, shared. If you look up, in any city in the world, what you see is a common: a space where our work lives and personal lives can and should intermingle.

Flying around cities, as we found when ascending over the South Bank Tower, reveals a system of invisible power – including regulations and geofences – that are governing our aerial endeavours. What comes into focus is the vertical enclosure of commons; an air grab rather than a land grab.

Thus it is all the more vital that we become pilots and take to the skies before they become parcelled into another domain for the rich and the powerful. Becoming urban pilots is not about novelty or showmanship, it’s about exercising our rights.

This research was funded by the Centre For Mobilities Research (Cemore) at Lancaster University, where Dr Bradley L Garrett was a visiting research fellow and Dr Adam Fish is an associate and senior lecturer in the sociology department.

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