

OPERATING A DRONE IN WA: SOME LEGAL HIGHS AND LOWS

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Drones – clearly an extremely useful new technology for mankind. The scope of their current applications is already large:

Aerial surveillance of:

- Crops
- Bushfires
- Sharks
- Firebreaks
- Town planning compliance
- Traffic congestion etc.

Delivery of:

- Pharmaceuticals
- Organs for transplants
- Food etc.

Clearly a long list.

The scope of their potential future viable applications seems huge with limits unknown.

While many of the benefits of drones are obvious, the detriments, and the available legal remedies and restraints dealing with those detriments, are not so clear.

I propose to look at two problem areas for drone operators:

Firstly, liability for breaches of personal privacy and amenity;

Secondly, liability for injury to persons/animals and damage to/destruction of property.

PRIVACY AND AMENITY

The problems of robotic surveillance of the person have long been predicted; as this extract from a 1946 novel demonstrates:

"It seemed that he was no longer alone. Something had joined him. He became aware of something floating beside him, at the height of his shoulders. It was a sphere, no bigger than the clenched fist of a child. Suddenly, there it was again, hovering above him. At first Titus had been more amazed than frightened by the mobile globe which had appeared out of nowhere and followed, or seemed to follow, every movement he made; but then fear began to make his legs feel weak, for he realised that he was being watched not by the globe itself, for the globe was only an agent, but by some remote informer who was at this very moment receiving messages."

Titus Alone by Mervyn Peake, first published 1946.

What are the legal limits in Western Australia of intrusion on private property and personal privacy and amenity by an unmanned aerial vehicle (UAV) i.e. a drone? What protectable rights of the populace, if any, might be infringed and what sanctions will the drone operator/their employer or the drone owner be exposed to?

To answer those questions we must look to:

- The torts of trespass and nuisance
- The Criminal Code - Stalking
- The Privacy Acts
- The Surveillance Devices Act
- Noise regulations
- Breach of Confidence

Trespass, in relation to land / buildings, is the entry onto the property of another by someone without permission or other lawful excuse.

So, is entering the air space above private property an intrusion on that property? i.e. is the airspace above the land or building the property of the landowner and if so to what height?

The original common law concept was that your aerial rights extended indefinitely above your land.

"(the plaintiff) relies on the old Latin maxim "*Cujus est solum ejus est usque ad coelum*" - a colourful phrase often on the lips of lawyers since it was first coined by Accursius in Bologna in the 13th century...if applied literally it is a fanciful notion leading to the absurdity of a trespass at common law being committed by a satellite every time it passes over a suburban garden".

The case of *United States v. Causby* [1946] is a graphic example of loss of amenity from intrusion into airspace above private land. The plaintiff operated a poultry farm beneath the glide path to an airport. The planes "come close enough at times to appear barely to miss the

tops of the trees and at times so close to the tops of the trees as to blow the old leaves off. The noise is startling. And at night the glare from the planes brightly lights up the place. As a result of the noise, respondents had to give up their chicken business. As many as six to ten of their chickens were killed in one day by flying into the walls from fright. The result was the destruction of the use of the property as a commercial chicken farm".

"The path of glide for airplanes might reduce a valuable factory site to grazing land, an orchard to a vegetable patch, a residential section to a wheat field. Some value would remain. But the use of the airspace immediately above the land would limit the utility of the land and cause a diminution in its value."

"We have said that the airspace is a public highway. Yet it is obvious that if the landowner is to have full enjoyment of the land, he must have exclusive control of the immediate reaches of the enveloping atmosphere."

"The landowner owns at least as much of the space above the ground as they can occupy or use in connection with the land."

"While the owner does not in any physical manner occupy that stratum of airspace, or make use of it in the conventional sense, he does use it in somewhat the same sense that space left between buildings for the purpose of light and air is used. The superadjacent airspace at this low altitude is so close to the land that continuous invasions of it affect the use of the surface of the land itself. We think that the landowner, as an incident to their ownership, has a claim to it and that invasions of it are in the same category as invasions of the surface."

The present law in Australia is, subject to any challenge to the correctness of the 1991 decision in **Bendal Pty Ltd v Mirvac Project Pty Ltd** [1991] 23 NSWLR 414 – 470 and **Perilya Broken Hill Limited v Valuer General** [2015] NSWLEC 43 both of which applied the English 1978 decision in **Bernstein v Skyview & General Ltd** [1978], that a surface owner's rights in the airspace above should be restricted "to such height as is necessary for the ordinary use and enjoyment of his land and the structures upon it".

"Such height as is necessary for the ordinary use and enjoyment of the land and buildings."

Well then, how high is that? The answer is: it is not clear, in Australia, what that limit is. One expert commentator has suggested that the right is unlikely to extend much more than 200 metres above roof level: Gray "Property in Thin Air" [1991] CLJ 252-254.

It is not necessary for the intrusion to interfere with the actual use of the land - it is sufficient if it is of a nature and at a height that could so interfere with any ordinary use.

It seems safe to conclude that hovering a drone at, say, 30 metres or so above a private property, is, unless otherwise authorised by law, the commission of the tort of trespass. Of course, if the drone is hovering above public land, even if observing adjacent private land,

there is no trespass – but it may involve other breaches of the law: e.g. Surveillance Devices Act, Breach of Confidence, Stalking, which I will deal with later,.

Assuming it would otherwise amount to trespass, is the intrusion lawful? I.e. is the drone being operated by or on behalf of the police or local government or some other government authority under a law which permits such an intrusion? Or is the intrusion, even if by a private individual, otherwise permitted such as by The Damage by Aircraft Act 1964 (WA).

What does The Damage by Aircraft Act have to do with it? Well section 4 provides:

4. Limitation of liability in respect of trespass or nuisance by flying over property

“No action lies in respect of trespass, or in respect of nuisance, by reason only of –

- (a) The flight of an aircraft over any property at a height above the ground that, having regard to the wind, the weather, and all the circumstances, is reasonable; or
- (b) The ordinary incidents of such a flight,

so long as the Air Navigation Regulations are complied with.”

So a certain immunity to trespass is available under section 4 but note that if the flight height is unreasonable in the circumstances or there is any non-compliance with air navigation rules, or there is some other trespass or nuisance aspect, such as hovering and/or filming, the section 4 immunity will not apply.

Surveillance in our society is now a fact of life. CCTV cameras record our movements in public places – street, train stations etc. You have no such **general** right to privacy as would entitle you to demand that you not be observed or recorded in a public space – but see the Surveillance Devices Act.

Also, the owners / operators of private properties and buildings can be entitled to observe and record your movements as a condition of permission for you to enter those places.

In Australia, there has not, as far as I am aware, yet been any legislation passed permitting law enforcement or other agencies to operate, without a warrant or in an emergency, surveillance drones over private property at a height low enough to intrude on the airspace considered to be “owned” by the property owner. But such laws may not be far away. It is easy to imagine the convenience for local governments of being able to conduct low-level property inspections remotely by using a drone. In rural and semi-rural areas, they could check whether fire breaks have been cut, whether the obligatory annual clearing of combustible material from around houses and outbuildings has been performed, whether prohibited weeds are present in pastures etc.

In suburban and urban areas, they could check whether fences and gates around pools are intact, whether planning laws and building permits have been complied with etc.

In the USA the question whether aerial surveillance by police without a warrant, using a helicopter hovering 400 feet above private property infringes the Fourth Amendment to their Federal Constitution (which prohibits unreasonable searches), arose in the case of **Florida v Riley** 488 US 445. A majority of the judges of the Supreme Court ruled that the intrusion was lawful because the Federal Aviation Authority (their equivalent of our Civil Aviation Safety Authority – CASA) regulations did not require helicopters to maintain a height of not less than 500 feet – which was the rule applied to fixed wing aircraft. The court reasoned that if any member of the public could legally fly a helicopter at that height over someone's land, the police officer's observations were conducted from "a public vantage point" and therefore did not constitute a search under the Fourth Amendment.

The dissenting judge, and this was 27 years ago, before modern drones, made some prescient observations:

*"imagine a helicopter capable of hovering just above an enclosed courtyard or patio without generating any noise, wind or dust at all...suppose the police employed **this miraculous tool** to discover not only what crops people were growing in their greenhouses, but also what books they were reading and who their dinner guests were."* (emphasis added) Florida v Riley 488 US 455

Well that "miraculous tool" now exists: the drone.

Assuming that a drone hovering intrusively over a backyard, disturbing the occupants and affecting their "amenity", i.e. their use and enjoyment of their property, is not being operated as permitted by law; by or on behalf of local government, the CSIRO, the State or Federal Police or some other authority, or by a statutory provision such as Section 4 of The Damage by Aircraft Act:

1. What rights, if any, of the property owner / occupier or their guests are being infringed? and
2. What sanctions is the drone operator exposed to in order to stop or otherwise remedy the infringement?

In answer to the first question we have already looked at trespass.

Other rights might also be infringed:

- The right to not be subjected to nuisance,

PRIVATE NUISANCE

"The present action is not founded in nuisance for no court would regard the taking of a single photograph as an actionable nuisance. **But if the circumstances were such that a plaintiff was subjected to the harassment of constant surveillance of his house from the air, accompanied by the photographing of his every activity, I am far from saying that the court would not regard such a monstrous invasion of his privacy as an actionable nuisance for which they would give relief**" (emphasis added). Per Griffiths J., in **Bernstein v Skyview**.

- A single incursion into airspace above land would not be likely to constitute the tort of nuisance.
- Only those with possession may sue for trespass and only those with possession or an immediate right to possession may sue for nuisance – which excludes visitors.
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The right to not be stalked.

STALKING

Section 338E of the *Criminal Code Act* (WA) prohibits pursuing a person with intent to intimidate or in a manner that could reasonably be expected to intimidate, and that does in fact intimidate, except with lawful authority.

- *Pursue in relation to a person includes to repeatedly follow the person or to watch or beset the place where the person lives or works or happens to be, or the approaches of such a place.*
- *Intimidated in relation to a person includes to cause physical or mental harm to the person; to cause apprehension or fear in the person.*

A drone clearly has the capacity to watch or beset a place where someone is and to intimidate that person. Allegations of stalking by drone are likely to arise. Here is one example



Note that the anti-stalking laws provide for criminal offences only and give the victim/s no civil remedy rights.

Given that the drone, or its operator, is committing trespass or private nuisance, what can be done about it? Theoretically, plenty. Practically, probably not much as things currently stand.

Assuming that the identity of the operator is known, then an injunction granted by a court to restrain that operator from repeating the trespass or nuisance is one potential remedy. But can the operator be readily identified? The landowner may have no idea, and no practical way of establishing, who was operating the drone.

Therefore, a suggestion: every drone made available for sale in Australia could be required to be equipped with a device that emits an identifying signal that can be read by an app downloadable to any mobile phone. The signal must be embodied in the drone's operating system like a car immobiliser so that it cannot be disconnected or bypassed. The identifier must be linked to the registered owner / operator. In other words, an electronic number plate for drones.

This was a suggestion I posted last year. And guess what? It now exists.



PRIVACY

Does the drone activity also involve an actionable breach of an individual's right to privacy? – particularly if it is equipped with a camera and is observing / recording persons or activities on the land below?

Australia has recognised privacy as a human right, including through signing the *International Convention on Civil and Political Rights* (1966), under which Article 17 provides:

"No-one shall be subjected to arbitrary or unlawful interference with his privacy, family, home or correspondence, nor to unlawful attacks on his honour and reputation,"

and this is reflected in the preamble to the *Privacy Act 1988*.

Nevertheless, Australia has:

- no statutory or common law tort of invasion of privacy;
- no enshrined right of privacy; and
- no single statute, body of common law, or principles of equity that spell out the full extent of privacy rights and obligations.

Most drone operators, particularly recreational users, will not fall under the obligations imposed by the statutory privacy scheme, because:

- *Privacy Act 1988 (Cth)*, only applies to government agencies or organisations with turnover of more than 3 million; and
- State Acts only apply to state government agencies, although they will apply to businesses of less than 3 million turnover when supplying services to government agencies.
- The *Privacy Act* only applies to the **collection, use and dissemination of personal information**.

Almost any recorded information that is associated with a natural person can be personal information and photographs and sound of an individual will generally be personal information where the person's identity is clear or can reasonably be worked out from that image.

The Act deals with information collected. Therefore, if the drone has no capacity to photograph or record images or sound then the *Privacy Act 1988* is of no concern to the drone operator, even if it could otherwise apply.

The thirteen Australian Privacy Principles (APPs), which regulate the manner in which organisations can collect, retain and use personal information, will be interpreted on the basis that privacy is a human right, and privacy legislation is considered remedial legislation.

Overall "an examination of pre-existing laws shows them to be ill-fitted to the need, and capable of providing relief in only rare circumstances" (Roger Clarke: "The Regulation of the Impact of Civilian Drones on Behavioural Privacy" 2014). As Gleeson CJ observed in *ABC v Lenah Game Meats* 185 ALR1 at [42]:

"The law should be more astute than in the past to identify and protect interests of a kind which fall within the concept of privacy."

SURVEILLANCE DEVICES ACT (WA)

The *Surveillance Devices Act (WA)* does not appear to be well equipped to deal with drones scrutinising activity outside a building. The definition in the Act of an "optical surveillance device" covers any device capable of being used to record visually or observe a private activity. This definition would capture drones equipped with cameras. However, the definition of "private activity" is an odd one and leaves a lot of room for argument as to whether it would now, in the time of aerial photographic surveys and drones as the norm, extend to any activities out of doors. This is because the definition of "private activity" is:

Private activity means “any activity carried on in circumstances that may reasonably be taken to indicate that any of the parties to the activity desires it to be observed only by themselves, but does not include an activity carried out **in any circumstance in which the parties to the activity ought reasonably to expect that the activity may be observed**”.

I can see defence lawyers pressing the argument that in this day and age, the era of the drone and constant aerial and satellite photography, anyone thinking reasonably must expect that their backyard or patio activity might be observed. They would be assisted by these observations by the High Court decision in *ABC v Lenah Game Meats* 185 ALR1 at [42] per Gleeson CJ.

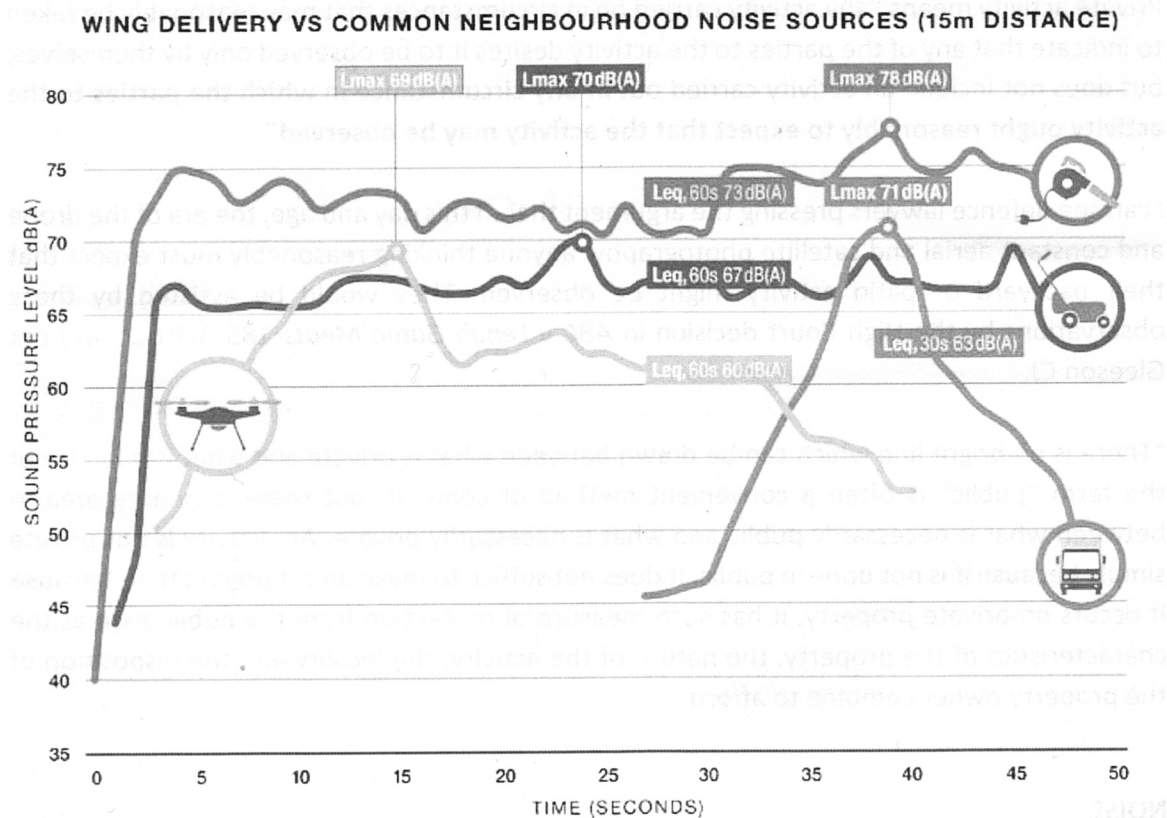
“There is no bright line which can be drawn between what is private and what is not. Use of the term “public” is often a convenient method of contrast, but there is a large area in between what is necessarily public and what is necessarily private. An activity is not private simply because it is not done in public. It does not suffice to make an act private that, because it occurs on private property, it has such measure of protection from the public gaze as the characteristics of the property, the nature of the activity, the locality and the disposition of the property owner combine to afford.”

NOISE

Another aspect of amenity is exposure to noise. The prospect of the high pitched engine noise of drones adversely affecting amenity is obvious.

In 2018 a Google company, WING, was permitted to conduct a drone goods delivery trial in a Canberra suburb. It averaged 22 flights per day delivering for chemists, food and coffee suppliers.

Average flight time was 3 minutes. The trial generated noise complaints from residents and a Federal review is underway.



The Air Navigation (Aircraft Noise) Regulations 2018 (Cth) were developed to deal with noise from traditional aircraft. The Department of Transport, Cities and Regional Development administers those regulations as well as the Civil Aviation Act and the CASR.

The Department has recently concluded that Section 17 of the Aircraft Noise Regulations does apply to drones. Section 17 provides that aircraft to which no noise standards apply can obtain approval to operate despite not having, and not being able to obtain, a noise certificate.

In September 2019, as part of the Federal Drone Noise Review, the Department released an issues paper: *Review of the Aircraft Noise Regulations re Remotely Piloted Aircraft*.

- NB: (1) The Department doesn't consider the Noise Regulations apply to model aircraft – which includes all drones used for sport or recreation.
- (2) The Noise Regulations apply to trading corporations but not to intrastate commercial activity, involving air navigation, by individuals.

The issues paper recommended that drone noise should be regulated by State and Local Government. WING submitted that this would be an error – because of drone industry difficulties that will be caused if there is a patchwork of different drone noise regulations across the country.

BREACH OF CONFIDENCE

If a drone is used to capture images/sound in circumstances that are private, the capture of that information may involve breach of confidence – because the information is confidential to the person or other entity involved (e.g. a corporation).

“I would regard images and sounds of private activities, recorded by the methods employed in the present case, as confidential. There would be an obligation of confidence upon the persons who obtained them, and upon those into whose possession they came, if they knew, or ought to have known, the manner in which they were obtained.” *ABC v Lenah Game Meats per Gleeson C.J.*

Monetary compensation for non-economic loss, e.g. emotional distress, caused by the release of confidential personal information can be ordered by a court exercising equitable jurisdiction:

- Wilson v Ferguson [2015] WAC 15
- Giller v Procopets (2008) 24 VR 1

LIABILITY FOR INJURY TO PERSONS/ANIMALS AND DAMAGES TO/DESTRUCTION OF PROPERTY

DAMAGE BY AIRCRAFT ACTS

Damage by Aircraft Act 1964 (WA)

Damage by Aircraft Act (Cth)

The Commonwealth Damage by Aircraft Act only applies within the scope of Commonwealth legislative powers. It therefore does not apply to intrastate operations by aircraft not owned by a corporation. It will not therefore apply to drones operated in WA by individuals.

“9 Application of Act

- (1) This Act extends to each external Territory.
- (2) This Act does not apply in relation to a Defence Force aircraft.
- (3) This Act applies to acts, omissions, matters and things within Australian territory.
- (4) Subject to subsection (2), this Act applies in relation to the following:

- (a) Commonwealth aircraft;
- (b) **Aircraft owned by** a foreign corporation or **a trading or financial corporation** (within the meaning of paragraph 51(xx) of the Constitution);
- (c) **Aircraft** (including foreign aircraft) **engaged in:**
 - (i) international air navigation; or
 - (ii) air navigation in relation to trade and commerce with other countries and among the States; or
 - (iii) **air navigation conducted by** a foreign corporation **or a trading or financial corporation** (within the meaning of paragraph 51(xx) of the Constitution); or
 - (iv) air navigation to or from, or within, the Territories; or
 - (v) landing at, or taking off from, a place acquired by the Commonwealth for public purposes.

"Aircraft" has the same meaning in the DBA Act (Cth) as in the *Civil Aviation Act* (1988) **but does not include model aircraft**. The Civil Aviation Act provides that:

"Aircraft" means any machine or craft that can derive support in the atmosphere from the reactions of the air, other than the reactions of the air against the earth's surface.

I note that the Air Navigation Act has the same definition except that the words "other than..." are not included. Why the definitions differ I do not know.

Clearly a drone qualifies under the Civil Aviation Act as an aircraft.

Unhelpfully, there is no definition of model aircraft in the DBA Act.

Does a drone fall within the meaning of a model aircraft? What is a model aircraft? Does it mean a small-scale unmanned aircraft remotely controlled? If yes, surely many drones will fit that description, in which case the Cth DBA Act will have no application to them.

[Part 101 of the Civil Aviation Safety Regulations 1998 (CASR) covers the operation of UAV's. The CASR defines a "model aircraft" as "an aircraft that is used for sport or recreation and cannot carry a person".

CASA Advisory Circular (AC 101-3(O)) places an aggregate weight restriction of 150 kilograms for aircraft to be classified as model aircraft.

A model aircraft flown for any purpose **other than** sport or recreation is classified as a "remotely piloted aircraft" (RPA) and another set of rules apply to its operation.

On the assumption that the CASR definition of model aircraft will be applied to the meaning of that term in the DBA Act (Cth), that Act will not apply to drones used for "sport or

recreation", which is defined in the CASR as a flight activity only for the pleasure, leisure or enjoyment of the remote pilot. But the WA DBA Act will apparently apply.

CASR are reportedly re-writing CASR 101 to better manage the risks associated with recreational UAV's. However, changes to the DBA Act (Cth) to ensure that all UAV's are caught by its provisions would also appear to be necessary.

The DBA Act (Cth) Section 10 states:

"10 Liability for injury, loss etc.

- (1) This section applies if a person or property on, in or under land or water suffers personal injury, loss of life, material loss, damage or destruction caused by:
 - (a) an **impact** with an aircraft that is in flight, or that was in flight immediately before the impact happened; or
 - (b) an **impact** with part of an aircraft that was damaged or destroyed while in flight; or
 - (c) an **impact** with a person, animal or thing that dropped or fell from an aircraft in flight; or
 - (d) something that is a result of an **impact** of a kind mentioned in paragraph (a), (b) or (c).

However, it does not cover mental injury unless associated with other personal injury, material loss, damage or destruction.

- (2) If section 10 applies, the following people are **jointly and severally liable** in respect of the injury, loss, damage or destruction:

- the **operator and owner** of the aircraft immediately before the impact happened;
- if the operator of the aircraft immediately before the impact was authorized to use but did not have the exclusive right to use it for a period of more than 14 consecutive days – **the person who so authorized the use of the aircraft**;
- if the operator of the aircraft immediately before the impact was using it without the authority of **the person entitled to control its navigation – the person entitled to control the navigation of the aircraft.**

However, the owner escapes liability under section 10 if they did not have an **active role in the operation** of the aircraft; and either:

- (i) there was a lease or other arrangement in force (whether or not with the owner) under which another person had the exclusive right to use the aircraft; or
- (ii) another person had the exclusive right to use the aircraft and there was an agreement in force under which the owner provided financial accommodation in connection with the aircraft.

The person entitled to control the navigation of the aircraft will also escape liability under section 10 if they have taken **all reasonable steps** to prevent the unauthorized use of the aircraft.

Note key words and phrases “in flight”, “operator” and “impact”. Operator is defined by section 6 to be the person using the aircraft unless somebody else, who authorizes its use, retains control of its navigation, in which case that person is taken to be the operator.

“In flight” is defined by Section 5(2) in relation to a power driven aircraft that is heavier than air (which would include a drone) as meaning from the moment when power is applied for the purpose of take-off until the moment when its “landing run ends”. Not sure that a drone, or for that matter a helicopter, can properly be described as having a landing run, but presumably its descent towards earth and power-off can be regarded as its landing run for the purposes of the Act.

Section 7 applies to use of an aircraft by employees:

“7 Use of an aircraft by employees

If an employee of a person (the **employer**) uses an aircraft in the course of his or her employment (whether or not the employee is authorized to do so), then for the purposes of this Act:

- (a) the employee is not taken to use the aircraft; and
- (b) the employer is taken to use the aircraft.”

Therefore, in the case of a person employed to operate drones commercially they may be treated by the Commonwealth Act as not the operator because their employer is taken to be the user of the drone and deemed by Section 6 to be the operator. An obvious conclusion to be drawn from this is that corporations running commercial drone operations, and hence caught by the Commonwealth DBA Act, could be best advised to avoid the use of employees and to insist upon using the services of contractors. They may also be able to limit their exposure to liability under the Commonwealth Act by paying attention to the differential in exposure if they avoid ownership or exclusive rights to use the UAV.

Note, however, that the Commonwealth DBA Act, by Section 9, will largely not apply to commercial drone operations that do not have an interstate or international trade or commerce feature unless operated by a company.

The Commonwealth DBA Act requires the occurrence of an “impact” before strict liability for injury, loss, damage or destruction will apply. The WA DBA Act has no such impact requirement.

Section 10 creates joint and several liability for the operator, the owner, persons who authorize the use and persons entitled to control – with certain exceptions.

Section 11 of the DBA Act (Cth) provides for recovery of damages **without proof of intention, negligence or other cause of action** as if those jointly and severally liable had caused the loss or harm by lawful act, negligence or default – and there are contributory negligence provisions.

The WA DBA Act:

- There is no definition of “Aircraft” and no carve-out for “model aircraft”.
- A drone would appear to be caught by the Act if it fits within the meaning to be given to “aircraft” in the Act – but does it?

Section 5. DBA Act (WA) - Liability for damage by aircraft or articles, etc., falling from an aircraft

- (1) Where material loss or damage is caused to any person or property on land or water by, or by a person in, or by an article, animal or person falling from, an aircraft while the aircraft is in flight, or is taking off, or is landing then, **unless the loss or damage was caused or contributed to by the negligence of the person by whom it was suffered**, damages in respect of the loss or damage are recoverable from the owner of the aircraft **without proof of negligence, or intention, or other cause of action**, as if the loss or damage had been caused by the wilful act, neglect or default of the owner.
- (2) Notwithstanding anything in subsection (1) where material loss or damage is caused as mentioned in that subsection in circumstances in which –
 - (a) damages in respect of that loss or damage are recoverable from the owner by virtue only of the provisions of that subsection; and
 - (b) a legal liability is created in some person other than the owner to pay damages in respect of that loss or damage,

the owner is entitled to be indemnified by that other person against any claim in respect of that loss or damage.

- (3) Where an aircraft has been demised, chartered, let, or hired out for a period exceeding 14 days to any other person by the owner thereof and no pilot, commander, navigator or operative member of the crew of the aircraft is in the employment of the owner, this section has effect as if all references to the owner there were substituted references to the person to whom the aircraft has been so demised, chartered, let or hired out.

The Commonwealth DBA Act imposes strict liability on both the owner and the operator of the UAV. The WA DBA Act imposes that liability on the owner of the UAV only – but the owner may be entitled to be indemnified by the operator (s. 5(2)).

Strict liability under the DBA Act WA does not apply if the plaintiff was contributorily negligent.

Assuming the application to UAV's of one or the other of the DBA Acts, the strict liability imposed on owners and operators of UAV's, used for other than recreational purposes, if the UAV, or its load, causes personal injury or property damage is going to be a major issue to be confronted by the emerging industry of commercial drone usage.

It will also be of great concern to volunteer organisations and their volunteers. For example, the prospect of a drone engaged in surf lifesaving surveillance crashing and causing injury is real.

Some protection for community volunteers from "civil liability of any kind" is provided by the *Volunteers and Food and Other Donors (Protection from Liability) Act 2002 WA*.

CIVIL AVIATION ACT

Section 20A provides that:

- (5) A person must not operate an aircraft being reckless as to whether the manner of operation could endanger the life of another person;
- (6) A person must not operate an aircraft being reckless as to whether the manner of operation could endanger the person or property of another person.

Section 29(3) – the owner, operator, hirer (not being the Crown) or pilot of an aircraft commits an offence if he or she operates the aircraft, permits the aircraft to be operated and the operation of the aircraft results in the contravention of sub-section A1, i.e. being reckless as

to whether the manner and operation would endanger the life of the person or property of another person. Strict liability applies and the penalty can be imprisonment for 5 years.

There is no carve out from the definition of aircraft in the **Civil Aviation Act** for a model aircraft.

The function of CASA is to conduct the safety regulation of, amongst other things, "civil air operations" in Australia. It is obliged under the Act to regard the safety of air navigation as the most important consideration. There is no definition of "air operations" but the operation of a UAV in flight seems to clearly fall within the scope of that phrase.

I cannot see any reason why the regulation of injury and damage to persons, animals and property dealt with in contradictory ways by the DBA Acts, with uncertainty around their application to UAV's, could not be resolved by amendments to the Civil Aviation Act and the CASR. It seems to fall within the scope of "safety regulation of civil air operations".

NEGLIGENCE

Breach of a statutory obligation can be relied upon as evidence of negligence: *O'Connor v S B Bray Ltd* (1937) 56 CLR 464 at 477 per Dixon J.

Therefore, a failure by UAV operator to comply with CASR by, e.g., flying over a populous area or within 30 metres of a person, is likely to be admitted as evidence of a failure to take reasonable care.

BREACH OF STATUTORY DUTY

Drone owners and operators may also face the tort of breach of statutory duty if CASR are not complied with – and strict liability applies.