

Media use of drones – ethics, law and the emerging ‘two-tier’ system of regulation

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Drones — also known as ‘Unmanned Aerial Vehicles’ (UAVs), ‘Unmanned Aircraft Systems’ (UASs) or ‘Remotely Piloted Aircraft’ (RPA) – have been scrutinised for their military use, but are also emerging as a civilian commercial industry with numerous applications. Their use by the news media has prompted a host of ethical, legal and regulatory dilemmas internationally. While they have clear utility as newsgathering devices, their operation triggers ethical dilemmas of public safety and privacy, legal issues of trespass, nuisance, privacy and confidentiality, and regulatory challenges for aviation authorities tasked with defining and policing their safe use in civil airspace. This article defines and explains the basic principles of drones; reviews literature on selected international developments in media use of drones; and categorises the key ethical, legal and regulatory considerations before applying them to the Australian legal and regulatory context and considering the prospects for news media use of drones in Australia. It details some case studies which raise the prospect of the emergence of a ‘two-tier’ regulatory system whereby hobbyists and citizen journalists can effectively fly their drones ‘under the regulatory radar’ and gather footage during unfolding news events in situations where regulations preclude media outlets and other commercial operators from drone operation.

New technologies inevitably prompt important questions about the ethical and legal implications of their functionality. Such a debate now centres on the civilian use of the ‘drone’, also known as the ‘Unmanned Aerial Vehicle’ (UAV), ‘Unmanned Aircraft System’ (UAS) and ‘Remotely Piloted Aircraft’ (RPA). Although most commonly referred to by the public as ‘drones’, the controversial use of weaponised UAVs for military purposes in recent years has deterred many advocates and researchers from using the term (Culver, 2014, p. 55).

UAVs are a range of remote controllable devices that have the potential to enhance news media reporting by taking a camera to where it is either impractical or expensive for reporters, photographers and camera crews to go. In certain situations drones can dispense with the need for an expensive helicopter or crew, with the footage gathered with a drone equipped with a camera, controlled by an operator with a laptop, smartphone or tablet device from the safety and

perhaps secrecy of a remote location. However, as many drones are capable of long-range flight - and even the smallest and cheapest models can inflict damage and injury - their use has prompted concerns internationally about aviation safety, while the fitting of cameras has triggered debates over privacy intrusion, surveillance and data gathering. The drone regulation debate follows serious criminal allegations of telephone tapping and corruption in the Leveson inquiry (2012). Although the *News of the World* saga did not involve media use of UAVs, it highlighted how new and discreet technologies have permitted media outlets to willingly infringe upon others' privacy for the sake of breaking a story. The advent of media use of drones with surveillance capabilities already raises a host of competing rights and interests. Such devices can be used to expose wrongdoing or issues of safety and security in the public interest and allow outlets to obtain footage which might have otherwise endangered the lives of journalists and camera operators. Countering this are important issues of the privacy of those whose images might be obtained, the safety of people and property in the path of a remotely controlled aircraft, and the security of air space for the safety of pilots and passengers.

In the midst of this debate, examples of the use of unmanned aerial vehicles in media reporting are fast emerging throughout the world (Chapa, 2013). This article defines and explains the basic principles of drones; reviews literature on selected international developments in media use of drones; and categorises the key ethical, legal and regulatory considerations before applying them to the Australian context and considering the current state of, and prospects for, news media use of drones in Australia. It details some case studies which might foreshadow the emergence of a 'two-tier' regulatory system whereby hobbyists and citizen journalists can effectively fly their drones 'under the regulatory radar' and gather footage during unfolding news events in situations where regulations preclude media outlets and other commercial operators from drone operation.

Media drone basics

UAVs are considered a practical and promising reporting tool for media outlets for a number of reasons. Although their use may differ between media organizations, Corcoran (2014a, p. 1) highlighted three scenarios where the use of UAVs would be considered beneficial and justifiable: warzones, scenes of civil unrest and the coverage of man-made and natural disasters including floods, fires and earthquakes. In all three cases, there would be a risk to the personal

safety of a journalist if they undertook traditional reporting instead of implementing drone use. This would be in addition to cases where a drone might serve as a resource to complement traditional reporting and coverage of events. The drone offers journalists the capacity to provide up-to-date information in a safe, potentially more comprehensive and inexpensive manner.

Simple reporting could plausibly be done with a small drone and camera package priced at less than \$2,000 AUD, which could be considered 'disposable' depending on the situation (Corcoran, 2014a, p. 16). Larger drones featuring enhanced controls, higher quality video, a significantly larger operating radius and other features do come at a higher price tag (Corcoran, 2014a, p. 11). Most urban journalism could be performed with multi-rotor devices between 2kg and 7kg (Corcoran, 2014a, p. 21), with provided benefits including a 2km working radius and broadcast capabilities (Corcoran, 2014a, p. 11). With mainstream media outlets including the ABC facing budget cuts (Metherell, 2014), this could prove to be a noteworthy money-saving venture.

Selected international approaches to media use of drones

The media and general use of UAVs in non-wartime contexts is not only an issue in Australia, with other countries including the United States and United Kingdom also having to adapt laws in response to the proliferation of UAVs.

At the time of writing, rules set by the Federal Aviation Administration (2014b) in the United States allowed the flight of 'model aircraft' for personal enjoyment provided they: weighed less than 55lbs ($\approx 25\text{kg}$) unless certified by an aeromodelling community-based organization, did not fly near manned aircraft and were within the operator's line-of-sight. However the use of UAVs for payment or commercial use was prohibited. Only two UAV models have been approved for commercial usage, with both authorised to fly over the Arctic (Federal Aviation Administration, 2014a). This may change however, with the US House of Representatives (2012, pp. 63-64) setting a September 30, 2015 deadline for the safe integration of civil unmanned aircraft systems into the national airspace. The Federal Aviation Administration (2014a) expected the integration to be incremental, and planned to publish proposed rules of UAVs under 55lbs in coming months which would likely cover commercial operations.

American news organization CNN received clearance for a 2015 research program in drone journalism which allowed them to conduct authorised trials at set sites alongside academic

partner Georgia Tech Research Institute (CNN, 2015). As highlighted by Uberti (2015), CNN were still locked into set control sites with footage that could not be used on television.

In January 2015, a UAV controlled by a non-commercial user crashed onto White House grounds, causing renewed calls for further regulation and the manufacturer of the drone to implement a firmware update barring flights in that region (Morrison, 2015). In an interview with Morrison (2015) on the topic, University of Washington law Professor Ryan Calo highlighted the government lacked expertise in robotics to be able to effectively deal with issues such as UAVs, and that disallowing or limiting such a device could potentially limit the “prospects of innovation”.

In the UK, the British Broadcasting Corporation (BBC) first unveiled their Hexacopter for news coverage in October 2013, which they at the time claimed would allow them to film locations and angles that would otherwise not be possible (BBC News, 2013). Acknowledging that some may consider this to be a “little bit sinister”, they confirmed they would not only use it in accordance with guidelines set by the UK Civil Aviation Authority (CAA) but also provided publicly available filming rules (Westcott, 2013). These rules included proper maintenance checks before each session, requirement of suppliers and the pilot (Typically a Basic National UAS Certificate [BNUC] holder) to have proper qualifications, adherence to no-fly zones listed in aviation maps and at least a team of two on location (BBC Academy, 2013). This was in addition to other safety features including a flight plan log before take-off and a GPS system which will ensure the UAV flew back to its start point should radio communication breakdown (Westcott, 2013).

Regulations outlined in S. 166-167 of the Air Navigation: The Order and Regulations (Civil Aviation Authority, 2015, pp. 177-178) require UAVs under 20kg and with a surveillance capacity to not be flown over or within 150m of any congested area or organised open-air assembly of more than 1,000 people and not within 50m of any vessel, vehicle, structure or person. Other requirements included not being within 30m of anyone other than the operator during take-off/landing, maintaining direct and unaided visual contact with the UAV and the assurance of reasonable safety during the flight. Additional requirements such as a 400 feet height limit and zone restrictions were set for UAVs over 7kg.

Irrespective of the UAV weight, any commercial aerial work required permission granted by Civil Aviation Authority (2015, p. 177). Any commercial work also required a BNUC qualification for the UAVs respective weight limit (Civil Aviation Authority, n.d.).

Other countries have varied in their use and regulation of drones. In the latter months of 2014, there was a drawn-out protest on the streets of Hong Kong over reforms to the country's electoral system. At its peak, tens of thousands of demonstrators took to the streets (J.C., 2014). One civilian/citizen journalist managed to display the scope of this protest to the world by using a UAV to fly over the large number of demonstrators and post the vision to Facebook, clearly displaying the number of people rallying (Chan, 2014). The footage was re-used internationally by mainstream media outlets including the *Guardian*, the *Washington Post* and the *Wall Street Journal*.

A large international community of hobbyists and professionals have legally and appropriately used UAVs to capture footage of brilliant vistas and events in general. One example of this is the AR Drone Academy (Parrot SA, 2015), a cloud service which compiles flight data and footage from over 391,000 users in 202 countries. By early 2015 their community had amassed almost four million flights with a total flight time between them of almost 14 years. With only a small number of reported incidents by hobbyists and professional UAV users, this implies that drone users can be responsible in at least the safe maneuvering and use of drones for the capture of entertaining vision.

Regulation of UAVs in Australia

UAV use in Australia is regulated by the Civil Aviation Safety Authority of Australia (CASA), which has had regulations in place for the operation of small aircraft devices such as UAVs for more than a decade. As highlighted by Corcoran (2014a, p. 21), a majority of UAV models used by media outlets in urban areas will likely be large multi-rotor drones which weigh less than 7kg. According to s. 101.F of the *Civil Aviation Safety Regulations 1998* (Cth), any UAV weighing more than 100g and less than 100kg is considered a 'Small UAV', which comes with less stringent requirements than large UAVs. While exemptions and licences can be sought from CASA, operators are required to adhere to a series of safety recommendations in addition to respecting any relevant local regulations or state laws.

According to s. 101.F of the *Civil Aviation Safety Regulations 1998* (Cth), a UAV must be flown clear of any populous area such as beaches and parks and not within 30 metres of a person other than operating personnel, mitigating the risk of any collision. UAVs must also be flown below 400 feet (121.92m) AGL. In addition, S. 101.C of the *Civil Aviation Safety Regulations 1998* (Cth) requires that UAVs are well clear of controlled airspace or aerodromes (>3 nautical miles).

CASA refers to UAVs used for any non-recreational (Commercial, Governmental or Research) purpose as Remotely Piloted Aircraft (RPA), while any UAVs used for a recreational purpose are referred to as 'Model Aircraft'. Model aircraft users are not required to be licensed by CASA, however they do have additional flight and usage restrictions. One of these is that any footage collected for commercial gain is prohibited (CASA, 2014c), restricting the ability of media outlets to avoid licensing and training costs by enlisting paid 'hobbyists' to collect footage for them. This is significant as footage-capturing UAVs have a low entry point. As of February 2015, the Parrot AR.Drone 2.0 Quadricopter featuring a 720p camera, photo/video recording capabilities and other features could be purchased for just \$348.00 AUD (EB Games Australia, 2015).

CASA have flagged the likelihood that they will be introducing the "toughest rules" on the use of UAVs in Australian airspace (Johnston, 2014). This is in addition to recently launching a "Flying with Control" public awareness campaign, using a pamphlet to outline current regulations in an easily digestible format (CASA, 2014a). CASA (2013a) have noted that their ability to regulate Australian skies for UAVs is limited due to the decreasing cost of purchase and increased proliferation of drones amongst professionals and hobbyists alike. CASA (n.d.) have confirmed that they will be amending their documents and regulations over two phases. The first phase will include a set of advisory circulars and amendments to the original regulations (*Civil Aviation Safety Regulations 1998* 'CASR' Part 101) which they claim will deliver industry guidance on a number of matters including training and licensing, operations, manufacturing and safety management. One of the main factors being considered in this phase is the introduction of a "low risk" class of UAV operation, which would not require an operator's certificate to commercially use a device under 2kg in gross weight within standard operating conditions (CASA, 2014b pp. 8-9). Although this may not meet the requirements for some journalists who require the advanced features associated with more expensive UAVs, it would allow an AR.Drone 2.0

Quadricopter which weighs between 380g and 420g (Parrot SA, 2013) to be flown commercially without some of the regulatory impediments faced by UAVs over 2kg in weight. It is also set to simplify and remove redundant training and certificate requirements, allowing an applicant to complete a manufacturer-conducted training course for a particular UAV and be eligible for a remote pilot certificate (CASA 2014b p. 9).

The second phase will involve a rewrite of current regulations, to take into consideration the changes that have been made to technology since the first document was written. Overwriting previous regulations and guidance, CASR Part 102 is expected to be completed by 2016 (CASA, n.d.).

Media registration and training to use UAVs

In early 2015, Australia had two different certificates/licenses that a media outlet might need to acquire before taking to the skies with an operating drone.

The first required any company using UAVs for commercial purpose to acquire a UAV Operator's Certificate (UOC). There is a fairly rigorous and costly process (initial approval estimated at \$4,000 AUD) associated with acquiring a UOC (CASA, 2013e). It required controllers to obtain either a Remote Pilot Certificate or UAV Controllers Certificate for the type of UAV that is planned to be operated, both of which are acquired through competency/theory based programs run by a CASA-approved training organization (CASA 2013c). This process may also require the development of an Operations Manual with risk assessment, flight manual, maintenance manual, a practical assessment and a standard application form (CASA, 2013d). One training program on offer by Australian Unmanned Systems Academy (2015) was the CASA approved 'Basic RPAS Pilot Training', a two week course for those with minimal experience using UAVs, which cost \$5,250 AUD in early 2015.

The second approval required was for anyone (commercial or hobbyist) who wished to use a UAV outside of the legal areas for drone use. Approval was required for any use of drones higher than 400 feet above ground level, inside controlled airspace or within a populous area or aerodrome. This granted CASA the ability to grant an operator rights to use UAV devices in a particular area for a single, semi-permanent or permanent operation. Issues such as the threat to air navigation and risk to the populace were considered in the process, with any operation

potentially subject to stringent limitations. Approval did not indemnify the pilot from any other local, state or federal laws that might be broken through the use of UAVs (CASA, 2002, pp. 16-19).

Media and hobbyist use of drones in Australian skies

Media outlets across Australia have begun to adopt UAVs during the coverage of news and events across the country on an irregular basis. The Nine network's *60 Minutes* program was among the first when it used a drone-mounted camera to obtain footage of the Christmas Island immigration detention centre in 2011 (Sacre and Townsend, 2011). Reporter Liam Bartlett stated:

Clearly they're not going to let us anywhere near this place so let's go and find another way of having a look. We'd tried the front door without success, so this was the only way to show how and where asylum seekers are detained – a bird's eye view from an unmanned camera drone. It's unconventional but I think it's the only chance we've got of being able to see inside. At least this way we could see over those high fences. It's a big wide area isn't it? (Sacre and Townsend, 2011).

The Australian Broadcasting Corporation (ABC) developed their use of UAVs to complement other on-ground and attached cameras during events such as the 2014 Australia Day Flag Raising Ceremony, as detailed by Corcoran (2014a, p. 6). This event was deemed to be a successful “proof of concept”, and has been a precursor to subsequent use during major events. More recently, the ABC collaborated with the Sydney-based company Rotor Works to capture footage of the New Year's Eve fireworks display in Sydney. This involved a UAV soaring 1,000 feet above the Sydney Harbour to capture footage that was broadcast on television and through various other channels across the world (Strydom, 2014). This event saw the capabilities of UAVs presented to more than 1.5 million Australians on television alone (OzTAM Pty Limited, 2014).

Australian media outlets have also implemented drone use successfully in other jurisdictions as part of foreign correspondence. As Corcoran (2014a, p. 7) noted, the Seven Network's Tim Noonan won the *Sunday Night* program's first Walkley Award for his footage in the television

story “Shipbreakers” which used drone footage of the Bangladeshi beach ship breaking industry to expose the dangers to workers (Russell, 2013). As this article went to press, sources advised the ABC had flown operationally in 2015 in post cyclone Vanuatu, post earthquake Nepal and at the Gallipoli commemorations (confidential personal communication, 2015).

Some incidents involving hobbyists have, however, highlighted loopholes in regulation and the challenges facing authorities in enforcement as the devices become cheaper and more popular. In one case on the Gold Coast, it was found that there had been a rise of “cowboy cameramen”, who, without proper training or permits, had launched drones within strict no-fly zones around airports and/or crashed into and at times damaged the property of others (Bedo & Johnson, 2014). There was another instance in July 2014 where a non-commercial user by the pseudonym “BigPete” flew a DJI Phantom 2 over the Q1 Building in Surfers Paradise while holidaying on the Gold Coast (BigPete, 2014). With the Q1 standing 1,058ft from ground to spire (The Skyscraper Center, n.d.), the controller guided their UAV over a populous area at more than 2.5x the maximum height permitted by CASA. When posting the recorded footage online, BigPete (2014) stated that police officers had questioned him about his UAV usage and subsequently “walked away”.

Public safety is an issue, with is a risk of UAVs causing considerable damage to people should they collide with someone mid-flight. ABC News (2014a) has highlighted an incident where a drone film and photography firm was hired to cover a triathlon. A competitor taking part in the event was reportedly struck by the drone, causing head injuries. According to the device’s owner, this incident was caused by “channel hopping” – electrical interference or hijacking which caused the operators to lose all control of the device. Such interference on the normal operation of a UAV could be a major security issue, a catalyst for further regulation and a safety consideration for media users. The Commonwealth Director of Public Prosecutions (CDPP) opted to not proceed with reckless operation charges in the Australian triathlon case, concluding that this event was caused by radio interference (Taillier, 2014b). However, it was later reported the operator was fined \$1,700 AUD by CASA for flying too close to others (Taillier, 2014a). CASA’s action provides some indication of current penalties associated with the misuse of UAVs in a commercial sense. The ‘cowboy’ activities detailed earlier and these incidents

involving injuries stand to add to public alarm about drone use and to diminish media claims for special privileges for news reporting.

Evidence from the IT community has shown that drones can be prone to malicious hijacking through common technology such as radio signals. In June 2012 for example, a research team from the University of Texas managed to hijack a standard civilian drone by deceiving its GPS tracker from one kilometre away. This allowed them to change the device's coordinates and send it hurtling towards the ground (Franceschi-Bicchierai, 2012). In a 2013 incident, it was discovered that a security researcher named Samy Kamkar managed to modify an off the shelf "Parrot AR.Drone 2" and convert it to a malicious drone using software he dubbed "SkyJack" (Kamkar, 2013). With a few hardware alterations, it was successfully set up so that it would detect and subsequently disconnect nearby drones through 'raw packet injection'. This allows the software to deauthenticate the controller and in turn grant control rights to the hijacker (Fincher, 2014).

Corcoran (2014b) has studied the efforts of UAV manufacturer DJI Innovations in implementing no-fly zones across Australia and possibly other countries. This plan saw the 'Phantom' line of drones barred, using GPS technology, from flying within 8km of ten major Australian airports and within a smaller zone for two smaller off-shore airports. This was a voluntary decision by the company and not requested by CASA, and presents both benefits and issues. While highlighting the benefit of reducing the potential impacts caused by a drone and aircraft colliding mid-air, with only ten of the hundreds of Australian airports/aerodromes currently supported, this could cause complacency within the lay community who could become dependent on built-in settings rather than meeting CASA requirements. While it may not have any plausible implications in Australia at this point in time, DJI Innovations sets a precedent in which such no-fly systems may require certain exclusion zones coded into it before it can be sold in a designated country. Buried in the firmware update notes acquired by Corcoran (2014b) was a new "feature" restricting the use of the UAV model within 15km of Tiananmen Square in Beijing, China. Although it would not currently be effective unless there was a way to force an update onto a UAV, journalists could be hypothetically be barred from certain zones as a mean of censorship rather than for privacy or security.

In Australia, CASA has issued fines on hobbyists for drone misuse. In one instance, a Victorian man was fined \$850 AUD for flying a UAV in the Melbourne suburb of Altona within 30m of an individual after his recreational drone hit a power line and almost struck a police officer (Creedy, 2015). In another case, a Queensland-based non-commercial operator found himself issued with a similar fine over footage posted online. The pilot was fined for “multiple breaches”, with a single \$850 AUD fine rather than one for each infraction (Long, 2015). This incident highlights that being caught in the act of illegally flying a drone may not be required for prosecution - footage posted online (whether recreational or commercial) or through traditional news formats could incur penalties if identified by CASA. However, as highlighted by Goldberg, Corcoran & Picard (2013, p.26), it might still fall within the law for media outlets to use footage captured during these events and made public by others.

A major concern stems from the impact that UAVs can have on fire and rescue services. CASA (2013b) has issued a notice stating that people operating “unapproved ‘drones’ ” during summer season bush fires are putting the response of fire services and the lives of those affected at risk. They have claimed there is a risk that the UAV could impact firefighting aircraft, potentially causing damage to the tail rotor which could cause loss of control by the pilot and possibly impacting rescue and preservation efforts. There was also the issue of materials and lithium batteries in some drone models being highly flammable. Undeclared drone batteries were blamed for causing a fire onboard a Fiji Airways flight at Melbourne Airport in 2014 (ABC News, 2014b).

In fire and rescue situations, official operations could be interrupted and aircraft grounded as a result of unauthorised drone use. This call was repeated in 2014, with New South Wales Rural Fire Service’s State Air Desk superintendent Anthony Ferguson submitting a request to amend the law to set a three to five nautical mile exclusion zone around any bushfire site, with CASA claiming the request was under consideration (Ford & Sturmer, 2014). Given the newsworthy nature of fires, this would pose a serious limitation on media use of the technology for newsgathering.

Goldberg, Corcoran & Picard (2013, p. 23) have acknowledged the ethical risk associated with emergency scenarios, highlighting two particular issues dependent on the scenario. The first is not hindering emergency aircraft used by police, medical and fire-fighting services, with a need

for a service similar to what on-land journalists have now, by being able to coordinate with these services to ensure the best outcome for both parties. The second concern related to the police-journalist relationship, with UAVs possibly being capable of circumventing requests for journalists to leave an area. These requests are often issued for a safety reason or to maintain the integrity of a police operation.

Ethical Considerations of Media use of Drones

Such issues of safety and security feed into the ethical dimensions of journalistic use of drones. Culver (2014) has proposed four ethical considerations regarding a media outlet's use of UAVs.

The first is the need to consider the safe operation of a device and the potential risk of a unit malfunctioning and possibly injuring someone. An operator needs to question whether the risk to safety can be ethically justified and mitigated (Culver, 2014, p. 58). Although this may simply mean complying with the regulations and requirements set by CASA or the local government agency managing UAVs, additional precautions such as training and proper protocols may be required for heavier devices and the aforementioned risk of device hijacking.

The second issue involved context and accuracy, and whether aerial views of a particular event could offer enough context to ever realistically replace on-the-ground reporting through a reporter's own observations. Can someone accurately depict news events from hundreds of feet in the sky (Culver, 2014, pp. 58-59)? An example provided by Culver (2014, p. 59) highlighted that an aerial photo taken during a protest may provide no context about the demonstrators - simply highlighting the number of people in attendance at a rally. Through the use of a UAV alone to collect footage and data for a report, there is a risk of inaccurate presumptions misinforming audiences.

The third ethical issue was privacy (Culver, 2014, p. 59), as UAVs have an extraordinary capacity to intrude upon the lives of others that has never before been possible. We also address this as a legal issue in the section below. Drone operators and journalists need to ensure that their use of drones is for newsworthy stories that satisfy more than mere curiosity. Goldberg, Corcoran & Picard (2013, p. 24) have noted that any fines or confiscation of a UAV would likely not be a disincentive for paparazzi if the pictures were worth a significant sum of money. Even if not used in a traditional paparazzi sense, there is still the potential for drones to be used to follow

a target individual secretly. This provides many opportunities for investigative journalism which would otherwise be impossible to do, however it also poses legal and ethical challenges given its ability to covertly stalk targets.

The final issue presented by Culver (2014) is “Conflict of Interest” – the ethics of ensuring all content gathered is exclusively for the purpose of news gathering and not a result of external pressures or interests. One issue raised in America is that some government agencies are prohibited from conducting their own aerial surveillance, with 35 states introducing legislation to prohibit drone surveillance without a warrant. Therefore, if Homeland Security were unable to obtain a proper warrant to conduct such surveillance, they (or a similar agency in any country) should not be able to simply gather the data from footage recorded by media outlets (Culver, 2014, pp. 59-60). If news media did not protect themselves from being used to circumvent such laws designed to protect the public, they would likely be performing an unethical and potentially illegal action.

Legal considerations beyond aviation regulation

Cho (2013) offered a detailed account of the policy and regulatory implications of UAVs internationally and in Australia as of 2013. He identified privacy as a key issue, along with laws and policies on the sharing of domestic airspace, air navigation rules, public safety and national security. He identified definitional issues needing immediate resolution, posed the regulatory challenge of the assurance of safe drone usage in the airspace, highlighted the different international approaches to privacy laws, and identified difficulties regulating a technology which has so many variations in size, design and capabilities (Cho, 2013).

Here we offer a short update to Cho’s (2013) account and offer some other considerations from a media perspective. The broadening use and availability of UAVs to media outlets, hobbyists and other sectors led the Australian Government to commission an inquiry into the use of drones, culminating in its release of the *Eyes in the Sky* report (Parliament of the Commonwealth of Australia: House of Representatives Standing Committee on Social Policy and Legal Affairs, 2014). The aim of this inquiry was to discuss the means of maintaining the integrity and safety of the Australian airspace, in addition to providing citizens with protection from unnecessary

invasions to their privacy, while also adapting current laws and regulations to cover such surveillance technologies.

It acknowledged that the use of UAVs by the media and public could greatly impact the privacy of others, as they are able to enter property discreetly and take photographs/video footage for use at a later time. This is noteworthy as aspects of the *Privacy Act 1988* (Cth) do not apply to private individuals or select organizations. There is not yet a comprehensive actionable right to privacy and there are gaps in current privacy protections from such technology. Safety of such machines in the air was also subjected to debate, with concerns raised about the build quality of such devices which sometimes fall short of the stringent standards of other air vehicles such as commercial aircraft.

After canvassing the views of experts in the field, the *Eyes in the Sky* report made six recommendations designed to protect rights and guaranteeing safety, while properly informing users of UAV devices about the laws surrounding their use (Parliament of the Commonwealth of Australia: House of Representatives Standing Committee on Social Policy and Legal Affairs, 2014, pp. 28-50):

1. That the Australian Government, through CASA, broaden the consultation it undertakes so that CASR Part 102 includes feedback from both industry and recreational users who may not have an aviation background such as those in real estate, photography, agriculture and media.
2. That CASA include information on Australia's privacy laws in the safety pamphlet they distribute to vendors of UAVs. In particular, the recommendation asks that these pamphlets highlight that it is the responsibility of the user to not monitor, record or disclose the private activities of an individual without their consent.
3. Propose legislation by July 2015 that provides protection against "privacy-invasive" technologies, particularly in regard to intrusions on a person's seclusion or private affairs. This complements the Australian Law Reform Commission's proposal for the creation of a 'tort of serious invasion of privacy' or a similar measure which achieves a similar outcome with regard to technology like UAVs (Australian Law Reform Commission,

2014). The commission argued that, while it would be challenging to regulate new technology, it would allow victims easier access to justice.

4. That the Australian Government simplify Australia's privacy regime through harmonised Australia-wide surveillance laws covering listening devices, optical surveillance devices, data surveillance devices and tracking devices. This topic was recommended for discussion during the late-2014 meeting of the Council of Australian Governments (COAG) Law, Crime and Community Safety Council.
5. That the use of UAVs by law enforcement agencies for surveillance purposes be subject to a rigorous approval process. This is in addition to assessment of existing internal practices and the adequacy of provisions in the *Surveillance Devices Act 2004* (Cth) such as warrant provisions.
6. That the Australian Government, CASA and the Australian Privacy Commissioner review the adequacy of privacy and air safety programs with regard to UAVs. This review, to be publicly released by June 2016, should discuss any regulatory issues and future areas of action.

The implementation of these six recommendations would provide greater clarity for journalists who wish to undertake the legal operation of UAVs in Australia, and keep laws up-to-date with such new technology available on the market – but it might also result in new limitations on their use in newsgathering.

Beyond the strict aviation regulations, we identify these legal issues also impacting media use of UAVs:

- **Privacy:** Australia does not yet have a privacy tort or any form of common law right to it, although the Australian Law Reform Commission (2014, pp. 59-72) has recommended the introduction of a statutory tort of serious invasion of privacy. The Abbott Government appears resistant to such changes (Merritt 2014). That being said, various federal and state laws which afford rights in certain circumstances. For example, the *Privacy Act*

1988 (Cth) is based on 13 principles related to the collection and dissemination of personal information by government bodies and larger corporations. While it does provide some coverage, it has been acknowledged that this doesn't "provide overarching privacy protections for the individual" particularly with exemptions existing for media outlets (Parliament of the Commonwealth of Australia: House of Representatives Standing Committee on Social Policy and Legal Affairs 2014 p. 34-35). The call by the Australian Law Reform Commission (2014, p. 59-72) to introduce a tort of privacy was rejected by Attorney-General George Brandis, who was quoted as stating "The government has made it clear on numerous occasions that it does not support a tort of privacy" (Merritt 2014). This indicates that the Abbott Government may be slow to implement the *Eyes in the Sky* report recommendations and related proposals by the Australian Law Reform Commission (2014).

- **Trespass and Nuisance:** Australia does have a trespass to land tort which limits the ability of a journalist to enter someone's property and film without their explicit permission. According to Walker (2000, p. 878), a journalist would be liable for trespass should they enter a property without permission, remain once permission had been withdrawn and/or place any surveillance device on the property, a position reinforced in the case of *TCN Channel Nine Pty Ltd v Anning* (2002). An implied window of permission is open to a journalist entering someone's land seeking consent to film (Pearson & Polden, 2015, p. 429). The High Court has also ruled that media outlets are open to use footage obtained by others who have trespassed to acquire it. In *ABC v Lenah Game Meats* the national broadcaster was permitted to use footage that had been obtained by unidentified animal rights activists who had trespassed to place hidden cameras in an abattoir to record possum slaughtering processes and had then supplied it to the ABC for broadcast in a current affairs program. This appears to open the way for media outlets to use illegally obtained drone footage supplied by activists or hobbyists, at least on matters of legitimate public interest. Interestingly, the High Court in that same decision left the door open for the development of a new tort of privacy when particularly embarrassing footage of someone had been obtained. There is also the issue of continued, annoying and inappropriate use of the airspace above a citizen's property which might also fall under the law of nuisance (Walker, 2000, p. 881). Drones – being capable of recording footage

both while in the air and when stationary, represent a unique and confounding challenge to the intersection of these laws in a media context.

- **Surveillance:** Although UAVs may be less discreet than a hidden camera or video recorder, they still have the potential to perform optical surveillance without the knowledge of a target individual. The issue for journalists working throughout Australia is that surveillance laws are enacted at the state level, with notable inconsistencies between them. As highlighted by the Australian Law Reform Commission (2014, pp. 278-279), one of these inconsistencies concerns the types of surveillance covered by each law. For example, optical surveillance devices are not regulated by the Privacy Act 1971 (QLD), Listening Devices Act 1992 (ACT), Listening and Surveillance Devices Act 1972 (SA) or Listening Devices Act 1971 (TAS); while in Victoria, the Surveillance Devices Act 1999 only covers surveillance inside buildings. The Australian Law Reform Commission (2014, pp. 278-293) has made recommendations which would make surveillance less complicated for journalists reporting across Australian jurisdictions, in addition to providing more clarity about the use of technology such as UAVs and providing additional protections for the use of surveillance devices by journalists. These recommendations include:
 - That the Australian Government should replace individual state laws with a new Commonwealth surveillance legislation, which would provide much needed consistency no matter where a journalist is travelling in Australia (Recommendation 14-1).
 - That any new legislation should be technology neutral rather than technology specific, which would apply itself better to emerging technology such as UAVs (Recommendation 14-2).
 - A “responsible journalism” defence which would protect journalists using surveillance devices to cover matters of public interest. The proper implementation of this recommendation might help encourage the use of UAVs

by journalists whilst discouraging improper usage (Recommendation 14-5).

- **Anti-Terror Laws:** The Australian Government introduced three anti-terrorism bills in 2014 (Griffiths, 2014). Although many of the elements of all three bills would not have any relation to the use of UAVs, there are some which could pose a liability to any journalist opting to use them. The major complication relates to the amendment inserting S. 35P in the *Australian Security Intelligence Organisation Act 1979* (Cth) (Parliament of the Commonwealth of Australia Senate, 2014, pp. 111-114), where journalists can be prosecuted for disclosing information about something which has been classed as a “special intelligence operation”, with penalties of between 5 and 10 years imprisonment should this occur. With there being no public interest defence and journalists not being informed of every operation, there is a genuine risk of action being taken against someone for reporting something without knowledge if it breaching the new legislation. It is hypothetically possible for footage to be captured of a “special intelligence operation” taking place at a distance, and a journalist reporting on it believing it to be of public interest and subsequently being charged over such a disclosure.

Conclusion

With UAVs becoming widespread and ubiquitous, fostered by a low-price entry point, there are potential benefits for this to become a new “smartphone” type of tool which can be adopted by independent and professional media outlets. The proof of concepts run by the ABC in Australia and the Walkley Award for camerawork for Tim Noonan (Russell, 2013) have shown that UAVs do hold at least some value when it comes to reporting major events and international news. These might need to be organised ahead of schedule in collaboration with other CASA-approved aerial partners or in-house operators and one-off approvals by CASA to relax regulations on activities like filming close to buildings or in populated areas. During events such as New Year’s Eve fireworks (Strydom, 2014) where aerial shots are key, this is clearly meeting a demand in the industry and providing a cost-effective means to capture footage. However editors and news executives would not welcome having to justify filing every new request with CASA for each news story or current affairs segment. As many breaking news stories would require the

journalist to be on the scene shortly after a news event, it becomes almost impractical to file a formal request for CASA approval. Given that many events take place in areas which cannot be filmed without authorization from CASA, the laws make it logistically impractical to use UAVs for news reporting in Australia, apart from events planned well in advance.

The legal landscape is still adapting to the general and commercial usage of UAVs by media outlets. Currently there is some benefit to be found in the deregulation of UAVs weighing less than 2kg proposed for upcoming CASR Part 101 amendments by the Civil Aviation Safety Authority (2014b, pp. 8-9), and recommendations made by both the Australian Law Reform Commission (2014, pp. 278-293) and the Parliament of the Commonwealth of Australia: House of Representatives Standing Committee on Social Policy and Legal Affairs (2014, pp. 28-50) should provide some much needed clarity for journalists on the field, adapting current laws to embrace new technology available.

Unless there is a system in place which reduces the impact of CASA's standard operating procedures or otherwise embraces UAVs being used to carry out journalistic reporting, the use of UAVs by media outlets risks becoming a niche used on a limited scale despite their potential for becoming a valuable additional source of information and footage gathering. The problem is exacerbated by the high price point for training and the requirement that journalists hold an operator's certificate which provides little benefit over a hobbyist other than being able to use gathered footage for a commercial purpose.

While UAVs offer potential for news gathering, the challenge journalists face is that the current laws on topics such as privacy, trespass and surveillance have yet to be tested for their application to UAVs, and operating procedures limit the scope of aerial use. Ethical implications such as the risk of unsafe operation and the potential invasion of privacy risk leaving the general public and legislators sceptical about the public benefit in affording a media exemption to the strict regulatory requirements.

Of special interest is the emerging "two-tier" system where hobbyists and non-commercial citizen journalists are able to gather footage with no training and minimal restrictions while news media outlets have a high price / time demanding entry point and are burdened with the commercial level of regulation (CASA, 2014c). Rather than incentivising trained journalists to

use such devices in a safe and controlled way, current restrictions may encourage editors to use footage captured by third-parties supplied at no charge (non-commercial) or appropriated under s. 42 of the *Copyright Act 1968* (Cth) (fair dealing). This selective footage may not give a journalist the ability to fully comprehend the context of a news event and might provide an incorrect or biased viewpoint. As highlighted by Goldberg, Corcoran & Picard (2013, p.26), it is also plausible for media outlets to use third-party footage gathered illegally, allowing them to bypass current restrictions with minimal to no reprimand. This view is reinforced by the High Court's decision in *ABC v Lenah Game Meats* (2001) where the ABC was permitted to broadcast surveillance footage obtained illegally by unknown animal liberation activists. The result is that it may be more beneficial for media outlets to use footage provided by hobbyists, citizen journalists or activists (even perhaps operating illegally) than going through the expense and bureaucratic protocols of training, approval and capturing their own footage. Such an approach raises key ethical questions over whether journalists should exploit such a loophole by appropriating – and taking commercial advantage of - the footage captured by others who are left to carry the financial and legal burdens of its acquisition.

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