

Senate Foreign Affairs, Defence and Trade References Committee

Inquiry into the potential use by the ADF of unmanned air, maritime and land platforms

SUBMISSION

Armed unmanned aircraft and military ethics

Christian Enemark*
Aberystwyth University, UK

SUMMARY

- Some of Australia's military allies already use armed unmanned aircraft ('drones') to launch missile strikes.
- The operators of armed drones are able to kill without experiencing *any* physical risk, which is distinct from killing in circumstances of *reduced* risk.
- Principles of military ethics, codified in international law, are applicable to the reasons for resorting to force and to the ways in which force is actually used.
- An open, ongoing ethical debate is required within Australia to inform government decisions about whether or how the ADF should use armed drones.

Recommendations

The ADF should use armed drones:

- ✓ strategically, for national self-defence purposes only
- ✓ tactically, for force-protection purposes only
- ✓ with the full knowledge and consent of the Australian people's elected representatives
- ✓ with due regard for the principles of discrimination and proportionality

The ADF should *not* use armed drones:

- ✗ to carry out missile strikes in the territory of a country with which Australia is not at war
- ✗ in ways that involve ADF drone operators using force for purposes other than saving the life of a person (civilian, or friendly combatant) in immediate danger
- ✗ to execute an individual identified as a terrorist by a civilian intelligence agency
- ✗ that are designed to engage targets autonomously

Introduction

In this submission, the focus is on unmanned aircraft (commonly known as 'drones') that carry weapons and on their use by a military organization (i.e. the Australian Defence Force) as distinct from a non-military organization (e.g. the US Central Intelligence Agency). When used for military purposes, drones come in a range of sizes—from the 8-inch-long Wasp Micro UAV with a range of five nautical miles, to the 44-foot-long Global Hawk with a range

* Dr Christian Enemark is a Reader in the Department of International Politics at Aberystwyth University, UK. He was previously Associate Professor of National Security Policy in the Crawford School of Public Policy, Australian National University, and in 2007-8 he was a member of the National Consultative Committee on International Security Issues (appointed by the Minister for Foreign Affairs). He is the author of a 2014 book entitled *Armed Drones and the Ethics of War: Military Virtue in a Post-Heroic Age* and of numerous other works addressing issues of national security and military ethics.

of 5,400 nautical miles¹—and most are not equipped with weapons. Rather, they are primarily a surveillance tool, and for this reason unarmed drones are also operated by civilians for a variety of non-military purposes.

The critical feature of a drone is that it is equipped with a satellite-linked video camera that enables real-time, remote observation of people and events on the ground below. When combined with the capacity to launch an air-to-surface missile,² this feature facilitates the transcendence of physical limits of time and space in a way that has become highly attractive to some military planners. The airplane already exists, but it is controlled by an on-board pilot. The long-range missile already exists, but travel time from launch to impact is measured in minutes. Unlike a pilot or the launcher of a missile, the operator of a drone—a platform that combines aircraft and missile technology—is able instantaneously to kill another person as far away as on the other side of the world. The country that has exercised this powerful capability most extensively and most conspicuously is also Australia's most important military ally: the United States.

US drones

The US Government has used armed drones since 2002, targeting individuals inside territories where the United States engages openly in armed conflict (Afghanistan, Iraq and Libya) as well as in territories where it does not (Pakistan, Somalia and Yemen). Correspondingly, US drones are used in two different ways. The US military predominantly employs them for surveillance and air support purposes to assist American troops conducting various ground-based missions in combat zones. The Central Intelligence Agency (CIA), by contrast, uses drones to strike individuals deemed to be terrorists in areas far removed from what would traditionally be perceived as a battlefield.

The US Government's already heavy reliance on drones looks set to increase in the future, and the point has been reached where the US military's next manned combat aircraft (the F-35 Joint Strike Fighter) is predicted to be its last.³ Thereafter, drone operators will be expected to take on every type of mission currently flown by the pilots of manned aircraft. The trend towards greater reliance on drones faces some resistance within the US Air Force (USAF), not least because combat pilots continue to dominate that service's leadership. Nevertheless, the momentum has already shifted, and since 2009 the USAF has been training more drone operators than fighter pilots.⁴ A report produced for Congress indicates that the drone inventory of the US Defense Department as a whole has grown rapidly, from 167 in 2002 to nearly 7,500 in 2010, and manned aircraft made up only 69 per cent of all US military aircraft at the end of 2011 (compared to 95 per cent in 2005).⁵ The number of drones is expected to increase by a further 35 per cent in the decade to 2020, and the bulk of planned spending is for drones designed to attack ground targets. Around 730 drones of this type will be purchased, and money will also be spent improving drones already in service. All told, the US Congressional Budget Office has estimated the cost at around US\$36.9 billion over ten years.⁶

In addition to this vertical proliferation of armed drones within the United States, and perhaps in response to it, there is likely also to be horizontal (international) proliferation of drone technology as its putative operational advantages become more widely attractive. Besides the United States, the only countries known to have used armed drones are Britain

(in Afghanistan) and Israel (against Hezbollah in Lebanon and against Hamas in Gaza),⁷ but now several other countries (including Australia) appear to be moving in that direction.

Drones for Australia?

In 2012 the then-chief of the ADF, General David Hurley, testified at a Senate Estimates Committee hearing that a force structure review might soon result in Australia acquiring armed drones.⁸ Such a capability would be attractive to military planners because of the perceived need for Australia to have the capacity for long-range power projection. This capacity is arguably required within the Asia-Pacific region for geostrategic reasons, as well as further afield (e.g. Central Asia and the Middle East) for alliance reasons. Already, the Australian Government appears to be quite deeply involved in assisting military allies in the development and deployment of drones. For example, the testing of a British stealth 'Taranis' drone reportedly took place in the Australian outback in 2013,⁹ and there are reports of a plan to develop the Cocos Islands in the Indian Ocean as a base for Australian and US drones.¹⁰

Currently, the ADF uses only unarmed drones, but it would arguably not be a large step—from a technical and operational perspective—to acquire the capacity to use drones as a platform for carrying out missile strikes. In Afghanistan, although the Royal Australian Air Force (RAAF) has used Herons (Predator-sized drones) leased from an Israeli company for surveillance purposes only,¹¹ it has also been reported that some members of the ADF have participated directly in drone-based killings there.¹² Moreover, the ADF already has available Hellfire missiles (as used on some US drones) with which it currently equips Tiger attack helicopters.¹³ From an ethical perspective, however, the risk in taking the step to arm Australian drones is that this could open the door to unjust uses of force by Australian governments and/or by Australian military personnel.

Whether or not Australia decides to acquire armed drones in the near future, it will probably not be long before the numerical and technical superiority of its allies' armed drones comes to be challenged by other actors. For this reason, some decision-makers within Britain and the United States have already expressed concern about the need to champion normative limitations on the use of drones. In 2011 a British Ministry of Defence doctrine note warned: "It is essential that, before unmanned systems become ubiquitous (if it is not already too late), we ... ensure that, by removing some of the horror, or at least keeping it at a distance, we do not risk losing our controlling humanity and make war more likely."¹⁴ And in 2012 the White House's counterterrorism adviser, John Brennan (now the CIA Director), described his colleagues within the Obama Administration as "very mindful that, as our nation uses this technology, we are establishing precedents that other nations may follow". Brennan's underlying concern was that "not all of those nations ... share our interests or the premium we put on protecting human life, including innocent civilians."¹⁵ Such remarks are of a kind to invite ethical consideration of the use of armed drones, and specifically of whether such use could generate an unjust increase in the incidence and/or lethality of armed conflict.

Military ethics

Politicians and military leaders thinking about war and weapons in ethical terms is, contrary to popular belief, not an innovation. 'Military ethics' is not a contradiction in terms unless, of course, the issue of violence is approached from a strictly pacifist perspective.¹⁶ For

centuries, through what is known as the Just War tradition, normative questions about political violence have been debated by reference to principles governing the ‘why’ and ‘how’ of war. War is a state of affairs, but ‘war’ is also a political term of art with a connotation that bestows a higher status upon violence as decision-makers attempt to legitimize it. Thus *ethics* can be regarded as constitutive of the practice of war as a form of violence that is (or is widely believed to be) morally distinguishable from other forms (for example, violence carried out for law enforcement or murderous purposes).

As a theoretical framework for legitimizing politically-motivated violence, the Just War tradition has two strands: *jus ad bellum* (the justice of going to war) and *jus in bello* (the just conduct of war). *Jus ad bellum* requires that the use of force has a just and proportionate cause, that it is properly authorised and motivated by a genuine intention to do good, that there is a reasonable prospect of success, and that resorting to war is a last resort. *Jus in bello* requires that force is applied in a way that is militarily necessary, that discriminates between combatants and non-combatants, and that anticipates the generation of a level of harm that is proportional to the expected value of achieving a legitimate military objective. Developed over many centuries, these principles are now influential components of international law, manifesting in the 1949 Geneva Conventions (*jus in bello*) and in certain provisions of the 1945 United Nations Charter (*jus ad bellum*). Successive Australian government, by championing these laws, have perpetuated the Just War tradition.

Informing arguments regarding the content and application of just war principles are three forms of reasoning that exist within contemporary moral philosophy more generally: deontological reasoning, consequentialism and virtue ethics. The first form emphasises the importance of intentions and establishing consistent criteria for judging actions, the second appraises the moral worth of behaviour by its consequences, and the third is concerned with human character traits—virtues (loyalty, honesty, prudence, etc.)—which contribute to good societies and good lives. All three forms of reasoning can be applied to the question of whether or how the ADF should use armed drones.

Ethical questions about drones

Given the novelty of drone technology and the secrecy that has surrounded much of its use, there is no vast record of empirical data to which ethical analysis can be directed. Nevertheless, it is not only possible but also important to offer ethical assessments—albeit ones that are sometimes necessarily speculative—*before* particular military technologies have been used or are used extensively. The present Inquiry is important and timely because political and ethical debate in Australia is being outpaced by the scientific progress and global proliferation of drone technology. As Australia stands on the threshold of acquiring and using armed drones, as its US and British allies have done, promoting ethical consideration of drone warfare could provide a critical opportunity to prepare rules in advance of drones being used. Alternatively, the ultimate outcome of such consideration could be a political decision by the Australian Government to eschew drone warfare altogether.

Broadly speaking, the ethical questions that need to be addressed fall into three interrelated categories. The first category, focused on *jus ad bellum* principles, are questions about the effect that the availability of drone technology has on political decisions to use force. One

hypothesis worth testing is that the availability of remotely-controlled drones (as distinct from manned aircraft) lowers the threshold for deciding to go to war. The job of drone operators does not, unlike a combat infantryman, involve experiencing physical risk. Thus political leaders, having less cause to contemplate the prospect of deaths, injuries and grieving families, might accordingly feel less anxious about using force to solve political problems. And citizens, if not called upon to spill their own blood for a cause, might feel less inclined to “dissuade leaders from foreign misadventures and ill-planned aggression”.¹⁷

The second category of questions, focused on *jus in bello* principles, concern the moral permissibility of armed drones as a particular mode of conducting warfare. Here, a hypothesis worth testing is that drone technology, incorporating powerful target-identification capabilities, has the capacity to enable a degree of discrimination in the use of force that is greater than what is achievable using other (manned) platforms. A critical point, though, is the extent to which the consequences of individual drone strikes (including civilian deaths) match the intended outcomes of drone operators and their commanders.

In the third category are questions that focus on military virtues (such as courage, honour, loyalty and sacrifice), and here the matter for judgment is the moral status of a drone operator as a person who kills for his or her country. At issue is whether a drone operator’s purpose and actions are genuinely warlike and thus whether they are consistent with the warrior ethos that traditionally sustains the military profession. If the peculiar characteristic of war is that it is a potentially lethal contest in which one combatant using force against another does so in a relationship of mutual risk, the risk-free use of armed drones as a mode of killing might challenge traditional notions of what it means to be a warrior. Weighing against this challenge is the possibility that there are psychological/emotional risks associated with conducting drone strikes,¹⁸ even though physical risk might not be a realistic prospect for the ground-based operator of a drone flying thousands of kilometres away.

In summary, three core questions to be addressed are:

1. *Resorting to war*—does the availability of armed drones unjustly increase the frequency of political decisions to use force?
2. *The conduct of war*—does drone technology increase or reduce the amount of unjust human suffering and damage in war?
3. *The warrior ethos*—in terms of the virtues traditionally associated with the military profession, what are the advantages and disadvantages of using a drone to kill an enemy?

Each question is closely related to the others. For example, the way a conflict is fought (*jus in bello*) can affect the likelihood of strategic success (*jus ad bellum*) to the extent that moral perceptions of violence are important. Also, military professionals’ sense of virtue can be connected to their sense of overall purpose (*jus ad bellum*) and their personal commitment to restraint in the application of violence (*jus in bello*).

From an ADF perspective, challenges requiring ethical guidance are likely to include, for example:

- Will armed drones enable future Australian governments to resort to force more easily? That is, will they cause politicians to give too little consideration to non-violent means of political problem-solving?
- What measures, if any, can and should be put in place to prevent Australian drone strikes causing civilian casualties?
- How would the Australian operators of armed drones be perceived by a civilian society and a military profession that traditionally admires and promotes the virtue of courage in the face of risk?

Caveat: are drone strikes ‘war’?

The discussion of drones and military ethics thus far presupposes that drone strikes are a truly warlike, *military* phenomenon. However, it might be that Just War principles are not readily available as a framework for justifying the use or non-use of armed unmanned aircraft. This is because those principles govern war only, it being a putatively unique form of violence, and the problem is compounded when non-military professionals (e.g. civilian intelligence officers) are directly involved. If one accepts that war is by nature a contest, it is possible to argue that drone strikes (as a radically asymmetric mode of violence) are not war. Rather, drone technology, precisely because it enables killing in a way that does not expose the killer to physical risk, poses a fundamental challenge to the traditional notion of war as something morally distinguishable from other forms of violence. A non-war cannot be a just war. Moral permission is sometimes granted for violence applied when enforcing the law, but this alternative conceptualization of drone strikes is also difficult to sustain. Although killing can be a final result or an emergency response in a criminal justice process, it cannot be the sole objective thereof. This is because the human rights norms applicable to state-sanctioned violence in peacetime require a presumption in favor of arrest and an intention to conduct a trial. It follows that, with war and law enforcement so excluded at the conceptual level, the potential users and victims of armed drones face a predicament in which violence is effectively unregulated because it cannot be made subject to familiar mechanisms of accountability. Such violence is liable to be perceived as illegitimate by default.¹⁹

Epilogue: the spectre of autonomy

For the purposes of the present Inquiry, there is plenty of scope for debating the ethics of using armed aircraft that are remote-controlled by a ground-based operator. However, no discussion of this topic would be complete without also considering the notion of an unmanned air platform that is, to a greater or lesser extent, beyond human control. Some members of the ADF would be aware that, in the United States, there is considerable military interest in the operational advantages seemingly afforded by ‘autonomous’ weapon systems. Elsewhere, and among international human rights lawyers especially, there is deep concern over the prospect of machines (land-, sea- or air-based) that can decide to kill humans.

From an ethical perspective, an argument in favour of machine autonomy might be that, given the poor historical record of human adherence to Just War principles, an armed drone could be programmed to do a better job. An alternative would be to hold fast to the notion that both war and ethics are necessarily and inescapably a human affair. Thus, when contemplating autonomous drones as a ‘post-human’ approach to war, the critical issue is

whether or how technology can overcome ethical shortcomings in the use of force while preserving the moral influence of human responsibility. At present, there is little scope for optimism that robotics engineers could program autonomous drones to exercise better ethical judgement than on-board pilots or ground-based operators, and a more serious concern is that these machines might be deployed before achieving even a roughly equal standard. The latter prospect, involving an increased risk of death or injury to non-combatants during armed conflict, led Human Rights Watch to recommend in 2012 that governments urgently pursue a “preemptive prohibition on [the] development and use” of autonomous weapons.²⁰

Conclusion

Based on the above discussion, and with the objective of stimulating ethical debate among Senators, this submission concludes with the following policy recommendations:

The ADF should use armed drones:

- strategically, for national self-defence purposes only
- tactically, for force-protection purposes only
- with the full knowledge and consent of the Australian people’s elected representatives
- with due regard for the principles of discrimination and proportionality

The ADF should *not* use armed drones:

- to carry out missile strikes in the territory of a country with which Australia is not at war
- in ways that involve ADF drone operators using force for purposes other than saving the life of a person (civilian, or friendly combatant) in immediate danger
- to execute an individual identified as a terrorist by a civilian intelligence agency
- that are designed to engage targets autonomously

Notes

¹ Jeremiah Gertler, *U.S. Unmanned Aerial Systems*, Washington DC: Congressional Research Service, 3 January 2012, p. 7.

² The Predator drone, for example, is equipped with 100-pound Hellfire missiles.

³ AFP, ‘Future of Military Aviation Lies with Drones: US Admiral’, *Defence Talk*, 15 May 2009:

<http://www.defencetalk.com/future-of-military-aviation-lies-with-drones-18932/>

⁴ Statement of John F. Tierney, Chairman, Subcommittee on National Security and Foreign Affairs, Committee on Oversight and Government Reform, US House of Representatives Hearing on ‘Rise of the Drones: Unmanned Systems and the Future of War’, 23 March 2010:

http://democrats.oversight.house.gov/images/stories/subcommittees/NS_Subcommittee/3.23.10_Drones/3-23-10_JFT_Opening_Statement_FINAL_for_Delivery.pdf, p. 1.

⁵ Gertler, *U.S. Unmanned Aerial Systems*, pp. 2, 9.

⁶ Congressional Budget Office, *Policy Options for Unmanned Aircraft Systems*, Washington DC: Congress of the United States, June 2011, p. vii.

⁷ Fares Akram and Isabel Kershner, ‘Israeli Drone Strike Kills Militants in Gaza’, *New York Times*, 30 October 2011, p. A14; Anonymous, ‘RAF Reaper drone squadron stood up at RAF Waddington’, *BBC News*, 23 October 2012: <http://www.bbc.co.uk/news/uk-england-20039085>

⁸ Dylan Welch, ‘Australia inches closer to getting killer drones’, *Sydney Morning Herald*, 31 May 2012: <http://www.smh.com.au/technology/sci-tech/australia-inches-closer-to-getting-killer-drones-20120530-1zjei.html>

-
- ⁹ Richard Gray, 'British stealth drone to undergo first test flight', *The Telegraph*, 13 January 2013: <http://www.telegraph.co.uk/news/uknews/defence/9797738/British-stealth-drone-to-undergo-first-test-flight.html>
- ¹⁰ See, for example, Hamish McDonald, 'Militarising Cocos Islands will be betrayal, says former ambassador', *Sydney Morning Herald*, 17 May 2012: <http://www.smh.com.au/opinion/political-news/militarising-cocos-islands-will-be-betrayal-says-former-ambassador-20120516-1yr70.html>
- ¹¹ Australian Department of Defence, 'Afghanistan Fact Sheet': <http://www.defence.gov.au/op/afghanistan/info/factsheet.htm>; Mark Corcoran, 'The kill chain: Australia's drone war', *ABC News*, 27 June 2012: <http://www.abc.net.au/news/2012-06-08/australias-drone-war-in-afghanistan/4058058>; Israel Aerospace Industries, 'Heron Family': http://www.iai.co.il/18900-en/BusinessAreas_UnmannedAirSystems_HeronFamily.aspx; Raspal Khosa, *ASPI Australian Defence Almanac 2011-2012*, Canberra: Australian Strategic Policy Institute, 2011, p. 28; Nigel Pittaway, 'Unmanned aerial systems give troops a clearer picture', *The Weekend Australian, Defence Special Report*, 26-27 May 2012, p. 7.
- ¹² Rafael Epstein, 'Revealed: Australians at the console of Kill TV, when drone strikes take out Afghan targets', *Sydney Morning Herald*, 5 September 2011: <http://www.smh.com.au/technology/sci-tech/revealed-australians-at-the-console-of-kill-tv-when-drone-strikes-take-out-afghan-targets-20110904-1jslm.html>
- ¹³ Khosa, *ASPI Australian Defence Almanac 2011-2012*, p. 37.
- ¹⁴ UK United Kingdom (UK) Ministry of Defence, The UK Approach to Unmanned Aircraft Systems, Joint Doctrine Note 2/11, May 2011. Available HTTP: http://www.mod.uk/NR/rdonlyres/F9335CB2-73FC-4761-A428-DB7DF4BEC02C/0/20110505JDN_211_UAS_v2U.pdf, p. 5-9.
- ¹⁵ Adam Entous, 'U.S. Plans to Arm Italy's Drones', *Wall Street Journal*, 29 May 2012, p. A1
- ¹⁶ See, for example: Robert L. Holmes, *The Ethics of Nonviolence*, ed. Predrag Cicovacki, New York: Bloomsbury, 2013.
- ¹⁷ P. W. Singer, *Wired for War: The Robotics Revolution and Conflict in the 21st Century*, New York: Penguin, 2009, p. 317.
- ¹⁸ Elisabeth Bumiller, 'Air Force Drone Operators Report High Levels of Stress', *New York Times*, 19 December 2011, p. A8; Greg Miller, 'Drone Wars', *Science* 336, 18 May 2012, 842-3 at p. 843.
- ¹⁹ See: Christian Enemark, 'Drones, Risk, and Perpetual Force', *Ethics & International Affairs* 28, no. 3 (2014): 365-81.
- ²⁰ Human Rights Watch and Harvard Law School International Human Rights Clinic, *Losing Humanity: the Case against Killer Robots*, Human Rights Watch, 2012. Available HTTP: <http://www.hrw.org/reports/2012/11/19/losing-humanity-0>, p. 1.