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## THE REPLACEMENT OF SOLDIERS BY UAVs: IS REMOTE KILLING ETHICAL?

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*Exercise Solo Flight*

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## **THE REPLACEMENT OF SOLDIERS BY UAVs: IS REMOTE KILLING ETHICAL?**

### **INTRODUCTION**

Formerly the stuff of science fiction, military unmanned systems are currently in use and/or development in several countries today, including Canada. At the Canadian Armed Forces Small Arms Concentration (CAFSAC) in 2017, two unmanned sentry guns fired paintballs at military competitors during a trial match. In the Royal Canadian Navy (RCN), the Phalanx Close-In Weapon System (CIWS) can automatically engage Anti-Submarine Missiles (ASMs) that penetrate a ship's primary defense systems.<sup>1</sup> And the Royal Canadian Air Force (RCAF) uses Expendable Mobile ASW Training Targets (EMATTs) – unmanned underwater vehicles that simulate the acoustic and magnetic signatures of submarines for the purposes of anti-submarine warfare (ASW) training.<sup>2</sup>

Although the technology is impressive, a key question that needs to be asked is whether or not the use of unmanned systems – particularly Uninhabited Aerial Vehicles (UAVs), or drones – is ethically justified. This essay seeks to address this issue through the study of military ethos as it relates to UAVs; the asymmetric nature of UAV warfare; the effects of UAVs on military personnel; and the thorny issue of remote killing.

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<sup>1</sup>HIS Jane's Defence Weekly, "MK 15 Close-In Weapon System (Phalanx)", [www.Janes.com](http://www.Janes.com), accessed 02 May 2018.

<sup>2</sup>Naval Drones, "MK 39 EMATT", <http://www.navalUAVs.com/MK39-EMATT.html>, accessed 28 May 2018.

## CANADIAN MILITARY ETHOS

Firstly, we will examine the issue of military ethos as it relates to UAVs. Military ethos is the centre of gravity for the military and acts as the ethical framework for the professional conduct of military operations. The Canadian military ethos includes the values duty, loyalty, integrity and courage. Duty entails service to Canada and acceptance of the primacy of military operations; loyalty means that military comrades are faithful to each other; integrity calls for an adherence to high ethical standards; and courage means that military members conduct themselves both physically and morally without regard of physical difficulty, risk, advancement or popularity.<sup>3</sup> We will now measure the use of UAVs against the four pillars of the Canadian military ethos.

One of the components of military ethos is courage. Courage, in the military sense, means that you are willing to risk your life and your enemies are willing to risk theirs; there is a mutual risk that either of you could lose your life to the other side. It is generally accepted that the difference between military members and civilians is that military members are willing to risk their lives (i.e. the acceptance of unlimited liability – a fundamental expectation of the Canadian military ethos<sup>4</sup>) but civilians are not. Risk of injury for UAV operators has essentially been eliminated, whereas the risk of injury for the enemy is high. Normally, warlike killings are ones for which the killer has a license, but the soldier accepts that he or she is also exposed to physical risk. It is a give-and-take relationship: the soldier has a license to kill in exchange for a preparedness to die.<sup>5</sup> According to the Canadian military ethos, military members must renounce

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<sup>3</sup>National Defence, *Duty with Honour: The Profession of Arms in Canada* (Kingston: Canadian Defence Academy – Canadian Forces Leadership Institute, 2003), 25, 30-31.

<sup>4</sup>*Ibid.*, 26.

<sup>5</sup>Christian Enemark, *Armed UAVs and the Ethics of War: Military Virtue in a Post-Heroic Age* (Oxon, UK: Routledge, 2014), 79-81.

fear, usually many times throughout war.<sup>6</sup> Thus, UAV operators on the opposite side of the world from their targets do not experience risk, and therefore have no feelings of fear. Without fear, UAV operators cannot display courage.<sup>7</sup>

On the other hand, perhaps the idea of physical courage has decreased over time as the soldier has been further removed from his or her enemy. The increasingly advanced technology used in inhabited planes, and the increased heights at which they fly, has increased the safety of the pilot. However, pilots still experience some risk in that the plane might be shot down or crash due to mechanical error. UAV operators safe on American soil do not experience any risk.<sup>8</sup>

In accordance with the Canadian military ethos, military members have a duty to accept primacy of operations.<sup>9</sup> In fact, a UAV operator is dutiful in that s/he must strive for a flawless performance in the execution of his/her duties; s/he must strive for a minimum of collateral damage. A UAV operator likely feels remorse when s/he accidentally kills small children or elderly people that wander into the path of the target in the lull between when the shot is fired and when the shot hits the target.

UAV operators also exhibit loyalty to their comrades on the ground. They feel helpless when they cannot protect them or cannot assist them as quickly as they would like.<sup>10</sup>

Furthermore, UAV operators must show integrity in choosing their targets and reporting any mistakes. In April 2011, the first reported incident of blue-on-blue by UAV occurred: two

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<sup>6</sup>National Defence, *Duty with Honour: The Profession of Arms in Canada* (Kingston: Canadian Defence Academy – Canadian Forces Leadership Institute, 2003), 25, 31.

<sup>7</sup>Christian Enemark, *Armed UAVs and the Ethics of War: Military Virtue in a Post-Heroic Age* (Oxon, UK: Routledge, 2014), 86.

<sup>8</sup>*Ibid.*, 83.

<sup>9</sup>National Defence, *Duty with Honour: The Profession of Arms in Canada* (Kingston: Canadian Defence Academy – Canadian Forces Leadership Institute, 2003), 30

<sup>10</sup>Christian Enemark, *Armed UAVs and the Ethics of War: Military Virtue in a Post-Heroic Age* (Oxon, UK: Routledge, 2014), 92.

Americans, a marine and a navy medic, were killed by a Predator-launched missile after apparently being mistaken for insurgents.<sup>11</sup> The UAV operator would have had to display integrity to report the mistake and face the consequences.

Thus, we see that UAV operators may not have the opportunity to display physical courage, but they certainly show duty, integrity and loyalty. Hence, they meet three of the four tenets of the Canadian military ethos.

### **ASYMMETRIC WARFARE**

An ethical objection to the use of UAVs is that they create an asymmetric threshold: the side with the UAV technology outstrips the side without it, creating an unfair fight. In addition, the UAV operators take no life-or-death risks, whereas the opposing side takes all the lethal risks of combat.<sup>12</sup>

There is no question that UAV warfare – whereby Western UAV technology is vastly superior to the weaponry of the enemy – is an asymmetrical fight. In fact, asymmetrical warfare goes as far back as the nineteenth century, when British and French colonial soldiers used machine guns against spear-carrying Africans, ensuring that the Africans died in an unfair fight, and in vastly greater numbers than the colonial soldiers. Perhaps unsurprisingly, UAV strikes are perceived as cowardly in the Middle East. To be sure, UAVs could not be used against an evenly

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<sup>11</sup>Christian Enemark, *Armed UAVs and the Ethics of War: Military Virtue in a Post-Heroic Age* (Oxon, UK: Routledge, 2014), 93.

<sup>12</sup>Bradley J. Strawser, “Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles” in *Military Ethics and Emerging Technologies* (Oxon, UK: Routledge, 2014), 118-119.

matched opponent such as the Russians or Chinese, who could easily shoot a Predator out of the sky.<sup>13</sup>

The spatial relationship between weapon, operator, and target – formerly co-located on the same plane – has been disarticulated. This increase in distance has occurred through time as well (eg. landmines, IEDs). In the past, if a plane was shot down, the pilot died or was taken prisoner. Now, if a UAV gets shot down, the pilot simply goes home to his/her spouse. This respatialization is asymmetrical. The operator can be global (in that he or she is in a free-moving space anywhere in the world), but the target is trapped in one location.<sup>14</sup>

Time and speed are asymmetrical in UAV warfare as well: the targeting process is slow in that it takes hours or days to track the target, but death for the target is fast. The target reportedly hears a whooshing sound in the short time before the missile reaches them. The UAV operators tend to experience the moment almost in slow motion, as time seems to have slowed down after tracking the target for hours or days. Because the UAV can remain in the sky for a long time, targeting can be slowed down and conducted more deliberately than was done in the past.<sup>15</sup>

Thus, we see that UAV warfare is asymmetrical in that the side that has UAVs has a distinct advantage over their adversary. Space, time, and speed are disarticulated in drone warfare as well. However, the asymmetrical warfare threshold was passed long ago with successive advances in technology. It is reasonable and ethical to expect that warring sides should fight to the best of their ability, by whatever advantage, as long as they fight justly. For

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<sup>13</sup>Hugh Gusterson, *UAV: Remote Control Warfare* (Cambridge, Massachusetts: Massachusetts Institute of Technology, 2016), 57.

<sup>14</sup>Hugh Gusterson, *UAV: Remote Control Warfare* (Cambridge, Massachusetts: Massachusetts Institute of Technology, 2016), 45.

<sup>15</sup>*Ibid.*, 46.

example, a police officer should not have to give up his/her bulletproof vest when facing criminals.<sup>16</sup>

### UAVs AND MILITARY PERSONNEL

It can be argued that unmanned systems are ethical because they save lives. UAVs certainly save American lives as the UAV operators are safe on home soil; the result of this is that the “kill chain”<sup>17</sup> normally involved in soldiers fighting and dying on the battlefield is reduced. In fact, the purpose of UAVs is to save American lives in asymmetrical counterinsurgency operations (COIN) – what some refer to as “small wars”.<sup>18</sup> Furthermore, UAVs are able to access remote areas, a distinct advantage over inhabited aircraft.<sup>19</sup> Pilots would put their lives in unnecessary danger if they attempted to access these areas themselves.

Not only do UAVs save American lives, but they also save the lives of civilians on the opposing side, as UAV operators may wait days or weeks for a clean shot at their primary target.<sup>20</sup>

Although UAVs physically protect military members, there is concern that they cause negative psychological effects on their operators. In fact, UAV operators are essentially “disembodied warriors” as they fight the war during the day, and then return home at night. They are disassociated from the war both in terms of physical distance, and mentally when they return

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<sup>16</sup>Bradley J. Strawser, “Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles” in *Military Ethics and Emerging Technologies* (Oxon, UK: Routledge, 2014), 119-120.

<sup>17</sup>Randolph Kent, Dr., “The future of warfare: Are we ready?” in *International Review of the Red Cross* (Cambridge, UK: December 2015), 1356.

<sup>18</sup>Hugh Gusterson, *UAV: Remote Control Warfare* (Cambridge, Massachusetts: Massachusetts Institute of Technology, 2016), 57.

<sup>19</sup>Bradley J. Strawser, “Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles” in *Military Ethics and Emerging Technologies* (Oxon, UK: Routledge, 2014), 118.

<sup>20</sup>*Ibid.*, 105.

to their families on a daily basis.<sup>21</sup> Due to the real distance to the fight, the United Nations (UN) has expressed concern that UAV operators may develop a “playstation” mentality to killing. This may be a valid fear as some UAV systems are designed similarly to PlayStation and Gameboy consoles to take advantage of young people’s familiarity with those games. It is possible that UAV operators raised on video games might not grasp the reality of what they are doing, have no concept of the value of life, and act in an unjust manner.<sup>22</sup>

On the other hand, it can be argued that the chance of the operator committing unjust actions is reduced due to the fact that s/he can take more time evaluating a target before firing (to ensure the target is an enemy combatant) than s/he would be able to do on the ground. In the worst case scenario, a UAV is lost, and not a pilot’s life. A UAV operator is likely less nervous than a soldier on the ground, and has the time to make judicious decisions about who to kill.<sup>23</sup>

In addition, it is feasible that UAV operators feel psychological effects from killing deliberately at a distance and without the justification of self-preservation. In his book *On Killing*, Grossman wrote that “the act of killing an armed enemy who is trying to kill you . . . is not atrocity at all, but serves as a standard against which other kinds of killing can be measured”.<sup>24</sup> This resonates with the idea that it is morally acceptable to kill in war if there is mutual physical risk. Clearly this is not the case for UAV killings. A UAV operator kills due to external motivation. Killing at close range (via camera, satellite and screen) precludes the UAV operator from one, attempting to deny humanity to the target, and two, denying personal

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<sup>21</sup>Christian Enemark, *Armed UAVs and the Ethics of War: Military Virtue in a Post-Heroic Age* (Oxon, UK: Routledge, 2014), 85.

<sup>22</sup>Ibid., 86.

<sup>23</sup>Bradley J. Strawser, “Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles” in *Military Ethics and Emerging Technologies* (Oxon, UK: Routledge, 2014), 116.

<sup>24</sup>Dave Grossman, *On Killing: The Psychological Cost of Learning to Kill in War and Society*. (Boston: Little, Brown and Company, 1995), 195.

responsibility for the kill.<sup>25</sup> Ironically, UAV operators are physically far from the scene of the kill, but yet close-up by means of satellite.

However, if the distance to the real fight is a concern for cognitive dissonance, UAV operators could deploy with their fellow fighting troops, live and work in the same conditions, and thus have the ability to talk to their peers about their joint experiences.<sup>26</sup>

Furthermore, the UAV operator sees human bodies being blown apart during a strike at “close range” and has to count the dead by mentally piecing body parts back together afterwards. These grim sights might have a negative effect on a UAV operator’s mental well-being as well. Prior to the actual killing, the UAV operator usually watches the target for days or weeks, conducting ordinary life tasks that the UAV operator has likely experienced him/herself.<sup>27</sup> The psychological effects of this grim experience may be mitigated by verbalizing shared experiences with other UAV operators.

Recent evidence suggests that soldiers who report killing in battle show more symptoms of post-traumatic stress disorder (PTSD) than those who do not, but it has also been suggested that soldiers who kill in self-defence seem to display better coping skills than those who kill without any personal threat to themselves. By that rationale, UAV operators may be at a higher level of risk of PTSD than their fighting comrades.<sup>28</sup> In fact, it was noted at a US congressional committee hearing in 2010 that some UAV operators are showing signs of equal or greater stress

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<sup>25</sup>Ibid., 201.

<sup>26</sup>Bradley J. Strawser, “Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles” in *Military Ethics and Emerging Technologies* (Oxon, UK: Routledge, 2014), 115.

<sup>27</sup>Christian Enemark, *Armed UAVs and the Ethics of War: Military Virtue in a Post-Heroic Age* (Oxon, UK: Routledge, 2014), 94.

<sup>28</sup>Ibid., 94.

than traditional pilots. Such signs include a breakdown of domestic relationships and chronic fatigue.<sup>29</sup>

Thus, we see that although UAVs save both the lives of soldiers and civilians, there is risk of negative psychological effects caused by the UAVs on their operators. These risks could be potentially mitigated by deploying the operators with the fighting troops so that operators could share their experiences with their comrades.

### **REMOTE KILLING**

Finally, we will examine the ethics of remote killing. There is no doubt that UAV warfare is remote killing: it is conducted by remote control, and it is spatially remote, culturally remote, and emotionally remote. Due to the technical nature of UAV warfare, UAV operators are essentially out of the fight. There is no courage in being out of range. But this is not a new concept. Throughout history, soldiers have sought ways to kill from a distance while at the same time remaining safe from being killed in retaliation. And the increasing distance between combatants has made killing more impersonal. A Greek warrior from ancient times looked into his enemy's eyes as he thrust a sword into his body, but today's UAV operators position a pointer on images of moving tiny figures, and press a button to fire.<sup>30</sup>

However, the remoteness of killing by UAV is partially offset by the remote intimacy of counting the dead after a UAV strike. UAV technology gives operators a feeling of "experiential

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<sup>29</sup>Ibid., 92.

<sup>30</sup>Hugh Gusterson, *UAV: Remote Control Warfare* (Cambridge, Massachusetts: Massachusetts Institute of Technology, 2016), 45.

immersion” in their targets’ deaths. UAV warfare simultaneously lengthens and shortens distances, and makes killing both easier and more difficult.<sup>31</sup>

In addition, another concern regarding UAV killings is that they are targeted killings that are conducted by non-military organizations such as the Central Intelligence Agency (CIA), and that such killings (called assassinations by some authorities) are unacceptable in a just war. Although it can be argued that a non-military organization should not be carrying out these operations in a foreign theatre of war, this activity is not limited to UAVs. It is the policy that should be the issue, not the use of UAVs themselves. The fact that UAVs are operating in countries that are not at war with the US is another potential policy concern.<sup>32</sup>

Thus, the perceived lack of ethics behind UAV remote killing is balanced somewhat by the remote intimacy of counting the dead after a drone strike. The US policy of targeted killings (or assassinations) should be reconsidered to test its ethical viability.

## CONCLUSION

In conclusion, UAV warfare raises some ethical concerns. On the positive side, UAV warfare meets three out of the four tenets of the Canadian military ethos; it has been proven to be a justified form of asymmetrical warfare; it saves both military and civilian lives; and the remote intimacy aspect of UAV warfare can be considered ethical. On the negative side, UAV warfare does not meet the physical courage standard of the Canadian military ethos; PTSD is a growing concern among UAV operators; UAV remote killings can be considered unethical; and the US policy of UAV targeted killings should be re-examined to address ethical questions. Essentially,

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<sup>31</sup>Ibid., 47.

<sup>32</sup>Bradley J. Strawser, “Moral Predators: The Duty to Employ Uninhabited Aerial Vehicles” in *Military Ethics and Emerging Technologies* (Oxon, UK: Routledge, 2014), 116-118.

we have four points supporting, and four points against UAV warfare as an ethical enterprise. As the number of UAVs continues to grow in future wars, we should further examine the ethics behind their use to make a final determination.

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