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THE ETHICS AND MORALITY OF ARMED UAV STRIKES BY ARMED FORCES

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Exercise Solo Flight

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INTRODUCTION

Throughout history warfare has evolved, from simple sticks, to swords to firearms, aircraft and nuclear weapons, mankind has continually found newer, better, more efficient ways of killing while reducing risk. Some of the advancements have represented evolutions in weapons; the introduction of the breach loaded cartridge to the rifle was an evolution in technology, whereas the introduction of nuclear weapons was a revolution the concept of how future wars could be fought was completely changed. A combination of precision navigation technology, miniaturized high speed computing equipment, satellite communication technology, high definition imagery systems and lightweight materials have given rise to the widespread use of both armed and un-armed Unmanned Aerial Vehicles (UAVs) in the modern battlespace in a plethora of sizes and capabilities. Their introduction and use in the Global War on Terror (GWOT) has been a significant evolution in how warfighting effects can be delivered. Their introduction, employment and unique characteristics may also represent a revolution in the ethics and morality of how wars are fought.

The use of UAVs, commonly referred to as Drones¹, in the place of manned aircraft has become both politically and publically contentious in many countries since the start of the GWOT. Primarily drawing on the American employment of military UAVs in the Middle East theatres², this paper will demonstrate that there is no moral or ethical difference in the use of a

¹ Throughout this paper, unmanned aircraft will be referred to as UAVs unless part of a quote or other citation. It is understood that there are a number of complimentary terms in use for unmanned aircraft and their associated systems. Unless specifically referring to the aircraft itself, the term UAV encompasses the aircraft, the ground control station(s) (GCS) as well as the command and control and imagery links between the aircraft and GCS

² In addition to the US military employment of UAVs, the CIA has also conducted an offensive UAV campaign, primarily in Pakistan. Although this is part of the overall UAV contention, this paper will focus on operations by state sponsored uniformed forces that are governed by the Geneva Conventions, the Law of Armed Conflict as well as UN, NATO and Nationally accepted targeting standards.

UAV as compared to a conventional combat aircraft or other forms of combat; furthermore this paper will also demonstrate that the persistent Intelligence, Surveillance and Reconnaissance (ISR) that an armed UAV can provide actually enhances the targeting cycle thereby reducing the risk or likelihood of civilian casualties and collateral damage.

History

Historically speaking, it is debatable when the first UAVs appeared in the skies over the battlefield. In World War II, some battle-worn bombers were laden with explosives and remotely piloted to targets in Germany. In Vietnam, the automated Lightning Bug UAV conducted surveillance deep into Vietnam and was relied upon heavily for bomb damage assessments. In 1994, the unarmed Predator UAV first appeared in the skies over the Balkans to gather battlefield intelligence.³ It was not until the opening days of the war in Afghanistan (2001) that the technologies were successfully mature enough to successfully combine remote, satellite based aircraft operation, reliable ‘real-time’ ISR and a weapons delivery capability, that a viable armed UAV capability was realized. “The first known use of weaponized drones occurred in November 2001 when a US Predator aircraft fired a Hellfire missile... in Afghanistan.”⁴ Since then, the use of UAVs for surveillance as well as strike missions has increased at a significant pace. By 2014, there were 65 USAF operated Combat Air Patrols or CAPs of armed UAVs over Afghanistan and Iraq. Each CAP consisted of four aircraft.⁵ These 260 combat capable UAVs represent a force three times larger than the current RCAF CF-18 fighter fleet. Considering the number of operators and support personnel that are required to fly,

³ Thomas P. Ehrhard, *Air Force UAVs The Secret History* (Arlington: Mitchell Institute Press, 2010), 2.

⁴ David Cortright and Rachel Fairhurst, “Assessing the Debate on Drone Warfare”, in *Drones and the Future of Armed Conflict : Ethical, Legal, and Strategic Implications*, ed. Kristen Wall, Rachel Fairhurst, and David Cortright (Chicago: University of Chicago Press, 2015), 2.

⁵ Avery Plaw, Matthew S. Fricker and Carlos R. Colon, *The Drone Debate A Primer on the U.S. Use of Unmanned Aircraft Outside Conventional Battlefields* (Lanham: Rowman & Littlefield, 2016), 25.

service and interpret the information stream just from these armed UAVs, the process is anything but unmanned.

Risk to Combatants

One of the arguments against the use of UAVs is the geographic isolation from the battlefield that they provide their operators. Depending on the particular UAV in use, operators may be hundreds of miles away to the extreme of half a world away. A significant portion of the armed UAV operations over Afghanistan are conducted from Creech Air Force Base (AFB) in Southern Nevada. It has been suggested that the remoteness of the crew from the battlefield provides a dehumanizing element that desensitizes the operator from the conflict. Since the dawn of humanity and conflict, mankind has continually sought ways to distance himself from harm while maintaining the ability to inflict it. Significant research and development over the course of human history has been directed to this goal. “Throughout the history of war, weapon technology has evolved to enable killing from ever-increasing distances. From stones to pole weapons to bows and arrows to cannon to aerial bombing to jet propelled missiles, killing has become easier.”⁶ The UAV can be considered a further step in technology making the war fighter safer in the confines of a defended base or far removed from the battlefield and insulated from harm by satellite links.

The advancements in technology through the twentieth century and into the twenty-first century have allowed the war fighter to be further removed from the battlefield and his foe. The allied bomber crews in World War II were vertically separated from their targets by thousands of feet. Although they never saw their enemy face to face, they were not free from harm while

⁶ Marouf Arif Hasian, *Drone Warfare and Lawfare in a Post-heroic Age*. (Tuscaloosa: University Alabama Press, 2016), 22.

conducting the mission. In this decade, a B2 Stealth bomber can depart from Whiteman AFB, fly a mission, undetected, over Iraq or Afghanistan, and return without landing in theatre and experience little combat risk. Surface ships as well as submarines can fire cruise missiles from hundreds of miles away, in international waters, and be free from direct reprisal. How different is the UAV operator from the B2 bomber pilot in uncontested airspace or the shipborne combat officer? Western society has generally accepted the use the B2 bomber and cruise missiles, whose crews and operators never set foot on the battlefield, yet the image of the UAV operator in a climate controlled control station, far away from the battlefield seems to be a significant psychological leap. If the concern is about killing somebody from thousands of miles away, the question becomes, what distance is acceptable?⁷

Technology and the Law

While the complete removal of risk to UAV operators is unprecedented in warfare, save for possibly an ICBM crew, this could also be seen as the next step in both technological advances and the responsibility that a nation has to protect its armed forces. In the decades since World War II, there have been a variety of methods employed to provide better protection to a nation's armed forces. From the widespread use of body armour, to specialized vehicles to protect against roadside bomb attacks, there are countless ways that armed forces are protected from harm in a combat zone. The use of UAVs to insulate operators is an extension of this.

“Taking advantage of technical dominance is not an unwise strategy for any state.”⁸ The use of

⁷ Jennifer M. Welsh, “The Morality of Drone Warfare”, in *Drones and the Future of Armed Conflict : Ethical, Legal, and Strategic Implications*, ed. Kristen Wall, Rachel Fairhurst, and David Cortright (Chicago: University of Chicago Press, 2015), 25.

⁸ Matthew Crosston, "Pandora's Presumption: Drones and the Problematic Ethics of Techno-War." *Journal of Strategic Security* 7, no. 4 (Winter, 2014): 17, <http://search.proquest.com/docview/1645344815?accountid=9867>.

technology to the advantage of the state is not only wise, it is a necessary moral and ethical obligation of the state.

In addition to the legal obligations that a state has to the rules of warfare such as the Geneva Convention, states have a moral and ethical obligation to protect their own soldiers. “For any just action taken by a given military, if it is possible for the military to use UAV platforms . . . , then the military has an ethical obligation to do so.”⁹ A nation possessing a technological advantage like armed UAVs and choosing to employ manned aircraft or more ground forces assumes the risk of having those in-theatre combatants wounded, killed, or captured. Given the current social climate of limiting boots on the ground, a decision not to use an armed UAV could be politically disastrous.

Just-War and Self Defence

The removal of risk while conducting UAV operations in war is also an argument against their use. While UAVs offer the luxury of significant pre-strike surveillance, as well as zero risk to the operator, the opposing force is left without direct defensive recourse to the operator conducting the actual attack. Armed UAVs make it possible to conduct strike missions without any combat forces in the opposing state. Without forces in the opposing state, is there really a war? As an extension to this question, if there are no forces to oppose, does this violate the right of self-defence? “Depriving a state and people of the ability to exercise an inherent right of self-defence is to circumvent the *jus ad bellum* of principle of just cause.”¹⁰

⁹ John Kaag and Sarah Kreps, *Drone Warfare* (Cambridge: Polity Press, 2014), 128.

¹⁰ Christian Enemark, *Armed Drones and the Ethics of War : Military Virtue in a Post-heroic Age* (Oxon: Routledge, 2014), 73.

Considering the example of bomber crews in World War II, the German Army had no forces in England, and there were no allied forces in German occupied Europe until 1944. Applying the argument that the use of UAVs removes the inherent right of self defence to World War II Europe would have had the allies violating the ‘just war’ principles. One of the unfortunate results of the media reporting is the current lexicon associated with the use of UAVs, and the use of the word ‘Drone’. This conjures up the image and idea that unmanned aircraft are ‘autonomously’ roaming the skies over places like Iraq, Syria, and Afghanistan and firing on people without any human oversight. The reality is that armed UAV operations are extremely manpower intensive operations. In addition to the UAV operator, there is usually a payload operator and significant support staff. “It takes over 200 operations and intelligence personnel to sustain an RPA [i.e., Remotely Piloted Aircraft] like the Predator or Reaper in an orbit for 24 hours.”¹¹ While there is no one in the aircraft itself, UAV operations are anything but unmanned.

The arguments concerning the removal of combat risks to UAV operators do not seem to follow a logical path. Members of an armed force face different risks depending on their occupations and geographic locations in the battlespace. A fighter pilot operating in contested airspace has a certain level of risk that will differ from the risks faced by a foot soldier faced with an improvised explosive device (IED) threat. There is no way to balance their levels of risk to make them even, nor can the risks of harm to the opposing force be made to be equal across the spectrum of weapons and tactics that may be employed. Additionally the laws of warfare that discuss the right to self-defence do not specify that this right includes directly targeting the individual who last fired a weapon or dropped a bomb. The fact that a state may lack the

¹¹ Plaw, Fricker and Colon, *The Drone Debate ...*, 25.

capability to shoot down a strike fighter or armed UAV over its territory does not remove their right of self-defence, they are simply unable to fully exercise that right. In a comparable example the foot soldier in Afghanistan who is injured by a roadside bomb will also lack the ability to directly target his attacker.

Persistent Surveillance and the Reduction of Collateral Damage

The high level of manning that is required for an armed UAV has the ability to counter one of the arguments against their use, that they are indiscriminate killing machines. Compared to manned strike fighters and bombers, armed UAVs are extremely slow, but they have a much greater endurance, upwards of a day on station, depending on their configuration.¹² This long endurance allows the operators and their supporting intelligence personnel to study a potential target for a long time. Using multiple crews and successive replacement aircraft a persistent over-watch can, conceivably, be endless. This persistence allows for a very robust targeting cycle that can ensure that a potential target is properly identified. When the decision to strike is made, the UAV operator can maintain surveillance of the target up to the moment of impact and even conduct almost immediate post-strike target assessments.

While this robust ability to monitor a target, perhaps for days before carrying out a strike, contributes significantly to robust targeting and reducing collateral damage, it can have a negative effect on the operators and support staff, which has not been experienced in previous combat scenarios. A manned bomber crew employing 2000 pound JDAM in Afghanistan, for example, will likely drop their GPS or laser guided weapon from a large stand-off distance and may never visualize the target or their weapon's effects. In contrast the UAV crew(s) would

¹² Plaw, Fricker and Colon, *The Drone Debate ...*, 18.

have monitored their target throughout the targeting cycle up to the moment of impact. This has had a very negative effect on UAV operators as they can develop a familiarity with the human target. “Because drone pilots watch their targets sometimes for days and weeks before pulling the trigger – and they see them blow up on a high-resolution video screen – they are more susceptible to post-traumatic stress than pilots of manned aircraft.”¹³ While they may be physically removed from the battlespace by technology, they can be extremely familiar with the people that they kill. The irony is that the advance of technology through the ages allowed us to move further and further away from the killing; but a UAV operator, a continent away, is now virtually face to face with his foe, a result of the imagery technology.

The use of armed UAVs also facilitates a very large reduction in collateral damage. Compared to the extreme destructive power that half a ton of explosives from a Tomahawk missile, fired from hundreds of miles away, the small weapons employed by armed UAVs allow for a reduction, or even elimination, of collateral damage to infrastructure as well as minimizing civilian casualties. A 2009 Tomahawk missile strike by the United States in Yemen, directed against a known militant and al Qaeda trainer killed not only the primary target and 17 suspected militants, but it also killed 44 civilians.¹⁴ Cruise missiles, the first-strike, stand-off weapon of choice for the United States since the dawn of the first Gulf War, have caused significantly more death and destruction than a UAV strike would have and, today seems irresponsible and reckless.

It is impossible to make an assessment of every UAV strike that has been carried out and determine if there was a savings in property damage and fewer civilian unintentional deaths.

¹³ Mark Mazzetti, “Use of Drones for Killings Risks a War Without End, Panel Concludes in Report” *New York Times*, 26 June 2014. http://www.nytimes.com/2014/06/26/world/use-of-drones-for-killings-risks-a-war-without-end-panel-concludes-in-report.html?_r=1 last accessed 14 April 2016.

¹⁴ The Bureau of Investigative Journalism, “Drone Strikes in Yemen, The civilian massacre the US neither confirms nor denies,” last accessed 9 May 2016, <https://www.thebureauinvestigates.com/2012/03/29/the-civilian-massacre-the-us-will-neither-confirm-nor-deny/>

Certainly the extreme loss of life in the cruise missile strike in 2009 strike in Yemen would suggest that a UAV strike with a low-yield Hellfire missile would not have killed so many. An independent government investigation in the United States has determined that UAV strikes did reduce unintentional death. “There (is) strong evidence that civilian deaths from armed drone strikes are far fewer than from traditional combat aircraft.”¹⁵ Certainly the persistent surveillance and the use of smaller munitions on a UAV as compared to a 500 pound bomb dropped from a strike fighter strongly suggests that collateral damage will be reduced.

Prior to the introduction of armed UAVs, there were only three viable methods for a government to carry out an armed strike in another country; the use of bomber aircraft, the use of a cruise missile, or the insertion of a Special Forces team. Considering the 1986 attack by the United States on Libya, or the 2009 cruise missile strike in Yemen, these methods are politically sensitive and can result in severe casualties and collateral damage. With a high level of risk using these methods striking certain targets may be discounted, but with the relative surgical strike capability of an armed UAV, governments and armed forces may be more likely to conduct a strike.

CONCLUSION

The introduction of armed UAVs in Afghanistan heralded a new tool in the arsenal of modern warfare. Advances in technologies that remove pilots from an aircraft and have them operate, remotely, via radio or satellite links thousands of miles away from the battlefield has ignited many debates and concerns surrounding the ethics and morality of their use. The distancing of the war fighter from the battlefield is nothing new; from the bow and arrow, to

¹⁵ Mark Mazzetti, “Use of Drones for Killings”, 26 June 2014

artillery, to aircraft, advances in military hardware have sought to reduce the risk to the war fighter. The use of armed UAVs further protects the war fighter from harm.

When a government decides that it needs to resort to armed force it has a number of legal, ethical, and moral responsibilities to consider. Not only must a government respect and obey the laws of warfare, it has a moral and ethical obligation to protect its military forces to the best extent possible, while conducting operations. Taking advantage of advances in technology is one way that this aim has been achieved. While the opposing force may not have a commensurate level of technology, the rules of proportionality are not violated; it is merely an asymmetric advantage. So long as the advantage is not used contrary to the rules of war such as proportional response and limiting both collateral damage and civilian casualties, a technological advantage is moral and ethical. The same rules of warfare that exist for the foot soldier and the strike fighter pilot also exist for the armed UAV operator. Although the UAV operator may not experience any risk due to their geographic location, this does not violate the inherent rights of self-defence either.

The use of armed UAVs by a recognized state sponsored military force, in the battle space, in a just war, following the rules of warfare does not represent a moral or ethical departure from other forms of warfare. Armed UAVs are a technological advance that allow for better targeting cycles. The weapons that are commonly used are smaller than conventional bombs and are precision guided to targets that have often been monitored for significant periods of time with the desire to achieve only the mission effect and reduce or eliminate collateral damage and civilian casualties. Not only are armed UAV strikes moral and ethical, they represent a cleaner and less damaging method for warfare to be waged.

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