



### **Commentary**

# Drones in War: *The Controversies Surrounding the United States' Expanded Use of Drones*

### by Emanuel Gregory Boussios



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#### **Abstract**

The Obama administration, during his presidency, had embarked on a mission to redefine the guidelines for the development and deployment of unmanned aerial vehicles (UAVs), also known as drones. There are a number of debates surrounding the use of drones, the most contentious of which have been as to whether governments have legal authorization to do so, and of how combatant status is defined under current international law. The most salient issue today regarding the deployment of drones has been the "culture of secrecy." In Obama's first second term, his administration promised significant improvements on openness and scrutiny for U.S. drones strikes in a major speech in May 2013. Although the US has presented a public move to distill the US drone policy more out of the shadows, the actual mechanism by which the US is actually, in practice, employing armed drones and executing targeted killings still presents serious international legal questions. Recently, the White House had proposed that the Pentagon would take over much of the drone operations from the CIA, whereby making drone strikes more transparent. Yet, during this same period, the Obama administration has not shifted key aspects of the drone program to that of being unclassified in form. Given the alarming increase in the use of drones and the sophistication and ease by which such weapons can be used in violent situations, the time is now for the Trump administration to take action on critical alterations of the current policy in the use of drones.

#### Introduction<sup>1</sup>

he Trump administration has embarked on a mission to redefine the guidelines for the deployment of unmanned aerial vehicles (UAVs), also known as drones, thereby altering significantly the policy set by his predecessor. Yet, early in his presidency, the Trump administration has failed to delineate a clear doctrine on the use of drones for military use. By creating such a doctrine, the United States (US) as a military leviathan, would have the opportunity to set the terms of the debate and to create the necessary international attention and cooperation on establishing universal guidelines on drone warfare. There are a number of debates surrounding the use of drones, the most contentious of which have been as to whether governments have *legal authorization* to do so, and of how *combatant status* is defined under current international law. The most salient issue today regarding the deployment of drones has been the "culture of secrecy." In Obama's second term, his administration promised significant improvements on openness and scrutiny for U.S. drones strikes in a major speech in May 2013. The Trump administration has since reversed

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the policy of the Obama administration thereby reopening a turf war between the CIA and the Pentagon. This policy shift is problematic in a number of ways, in particular since this loosens the rules of engagement on targeted killing outside conventional war zones.

The US is the unquestionable leader in drone technology; it is a leader on the UAV market, and expands its experience in the use of drones for military purposes. However, as the use of armed drones remains largely unregulated, as advances in technology push the price of armed drones down, thereby making them available to an increasing number of state and non-state actors, it is imperative that an armed drones' regime is established. The objective of this paper is to address this issue. The argument is structured as follows. First, a few points on the features and the evolution of the drone market are made. By means of outlining what is at stake, in the next section, the intricacies and contentious issues related to armed drones' use are discussed. Finally, the prospect of a US-led effort at devising an armed drones' regime is outlined. Conclusions and recommendations follow.

#### 1. Features and evolution of the drones' market

Drones generally fall into two categories: those that are used for reconnaissance and surveillance purposes, and those that are armed with weapons for military purposes. The use of drones has grown enormously in recent years, in part, because unlike manned aircraft they can fly long missions. In addition, drones can be armed which suits its use for military operations. For example, a British drone, Zephyr, can fly non-stop for nearly 340 hours ("Zephyr, the High Altitude," 2016), are less costly, and have no (immediate) military casualties. Although the cost per flight hour varies by drone type, Predator and Reaper drones cost about \$2,500-3,500 per flight hour, while larger armed systems such as the Global Hawk drone cost about 10 times as much (Southworth, 2013). As of November 2013, 87 nations possess some form of drones and conduct various kinds of surveillance either over their own territories or beyond (Taylor, 2013), and at least ten countries have armed drones (Dillow, 2016). Given the extraordinary demand for UAVs, hundreds of companies are currently developing small and large scale drone technology. Teal Group's 2015 market study estimates that UAV production will soar from current worldwide UAV production of \$4 billion annually to \$14 billion, totaling \$93 billion in the next ten years (Finnegan, 2015). This raises a serious question: What happens when an overwhelming majority of nations have drones? Several experts (Tucker, 2014) foresee that virtually every country will be able to build or acquire drones capable of firing missiles within the next ten years. Experts question whether (Tucker, 2014), it is too late for the United States to do anything about it? Armed aerial drones will be used for targeted killings, terrorism and the government suppression of civil unrest. The United States, in conjunction with the international community, may benefit from recognizing this dangerous trend and helping reconstruct international laws to more effectively deal with the use of drones. There are still no internationally agreed rules on targeted killing outside conventional war zones. Restricting the use of drones worldwide will likely reduce future conflicts. For instance, in February 2016, a Nigerian military crew used a Chinese-built Rainbow drone against Boko Haram, an extremist militia allied with Islamic State, in northeastern Nigeria's remote Sambisa Forest. Although the news did little to alter the regional balance of power, Nigeria thus joined the small but fast-growing club of countries that have been utilizing armed drones for targeted killing. While some countries, including Russia and Iran, designed and built their own missile-firing drone fleets, India and Jordan, reportedly bought theirs from Israel (Hennigan, 2016). "It is a good illustration of how this technology has gone global, what was recently considered abnormal is the new normal of technology and war" (Hennigan, 2016). Over time, such developments could





significantly alter the balance of power in certain regions. Therefore, undertaking initiatives to control drone usage now could hedge against this worrisome trend in the future.

The United States has been a leader in driving the UAV revolution and its use in the field. According to 2015 unclassified report, the US Department of Defense now has well over 7,000 aerial drones (Keck, 2015), compared with just 50 a decade ago. In the 2017 budget proposal alone, the US military has allocated approximately \$4.61 billion for drone-related spending, including drone research and development ("Drone Spending," 2016). In 2012, the U.S. Air Force trained more UAV pilots than jet pilots for the first time in history. This increase in expenditure has played itself out in the battlefield. President Bush ordered about 50 drone strikes, but under Obama's watch, there had been roughly 500 strikes. In addition, while Bush had used armed drones mostly in Pakistan, Obama deployed them in Yemen, Libya, and Somalia (Luce, 2016). By at least one measure at this point in his presidency, Trump has been more interventionist than Obama (Zenko, 2017): in authorizing drone strikes and special operations raids in non-battlefield settings (namely, in Pakistan, Yemen, and Somalia). During President Obama's two terms in office, he approved 542 such targeted strikes in 2,920 days—one every 5.4 days. From his inauguration through today, President Trump had approved at least 36 drone strikes or raids in 45 days—one every 1.25 days. These include three drone strikes in Yemen on January 20, 21, and 22; the January 28 Navy SEAL raid in Yemen; one reported strike in Pakistan on March 1; more than thirty strikes in Yemen on March 2 and 3; and at least one more on March 6 (Zenko, 2017).

#### 2. Armed Drone Operations: contentious issues

As the use of armed drones intensifies and the debate on a prospective armed drones' regime is only about to start, several questions regarding their use and implications are raised. These questions revolve around the following issues: secrecy and transparency related to the use of armed drones; legality of their use and accountability of the implications of their use; control over unauthorized use of armed drones and access to drone technology by non-state actors; mental health issues of the military personnel operating armed drones; ethical dimensions of the evolving nature of combat; extraterritoriality (Pejic, 2014) and collaboration (Pejic, 2016) with the host countries' authorities; the issue of 'blowbacks', and finally international armed drones' regime. In the following sections, a few of these highly contentious and complex issues will be discussed briefly.

#### **Covert Drone Operations**

On 23 May 2013, United States President Obama, for the very first time, comprehensively addressed the use of drones in a speech, which The New York Times' Editorial called 'the most important statement on counterterrorism policy since the 2001 attacks, a momentous turning point in post-9/11 America' ("The End of...", 2013) According to Paulussen and Dorsey (2015), the substance of the speech was significant:

"In short, the US sees itself in a just armed conflict against al-Qaida, the Taliban, and their associated forces, which legally justifies the strikes, and these strikes, outside of a 'hot battlefield' (but still within the US armed conflict paradigm), will be targeted, as a matter of policy, against al-Qaida and its associated forces when capture is not feasible, whenever they 'pose a continuing and imminent threat to the American people and when there are no other governments capable of effectively addressing the threat', and when there is 'near certainty that no civilians will be killed or injured'."





Although the US had presented a public move to bring the US drone policy more out of the shadows, the US is actually, in practice, still employing armed drones and executing targeted killings which presents serious international legal questions. The Obama administration had proposed, and had taken steps towards, the Pentagon taking over much of the drone operations from the CIA, whereby making drone strikes more transparent. The day after President Trump took office, his administration returned this authority to the CIA. President Trump had made accelerating the fight against the Islamic State group and other terrorist organizations a key component of his campaign, and he has made this his administrations' current policy. Under the drone policy of the Obama administration, the CIA could locate a suspect, but the armed forces would execute the actual strike. Unlike the Pentagon, the CIA does not need to divulge drone strikes — or any resulting civilian casualties. The authorities Trump has granted to the CIA restore much of the power it once had, in essence unravelling all of the 2013 presidential policy guidance of President Obama, and returning the former level of secrecy to drone operations.

#### Legality, extraterritoriality, international collaboration and blowbacks

While armed drones were first used in the Balkans war, the utilization of such weaponry has dramatically increased since that time. More specifically drones have been used regularly in Afghanistan, Iraq and Libya; President Obama had also built up a network of about a dozen drone bases abroad, from Niger to Kuwait. In October 2016, the Pentagon announced that Specially Designated Global Terrorist (SDGT) Farouq al-Qahtani (also known as Nayf Salam Muhammad Ujaym al Hababi), a senior al Qaeda leader in Afghanistan, had been killed in a drone strike in Kunar, Afghanistan. In February 2017, a high-level al-Qaeda leader in Syria, Abu al-Khayr al-Masri was killed in Syria (Algerholm, 2017). This has been part of a greater international response in the sub-Sahara region. The deployment of French surveillance drones in Mali was reported in October (2012) (Cole, 2013). [In the military intervention in Libya—US drone strikes were credited for ending the exile of former Libyan President Muammar Gaddafi.] The UN reported in August 2015 that most US strikes in Afghanistan were by unmanned aerial vehicles (Fielding-Smith and Serle, 2015). In a 21-page report, the UN special rapporteur on human rights, Ben Emmerson, records a dramatic reduction in drone strikes in 2013 in Pakistan (in response to Pakistani government pressure) but increases in Afghanistan and, towards the end of the year, in Yemen (Ross and Sterle, 2014).

There is also a substantial debate taking place over the issue of *combatant status*, of which targeted assassinations of suspected 'combatants' test the legal limits of Trump administration's power. While the U.S. government maintains that drone strikes have undermined the Al-Qaeda leadership, critics have argued whether or not the strikes are compatible with the principle of distinction under international law. According to Article 48 of the Protocol Additional to the Geneva Convention (AP I, 1977), "In order to ensure respect for an protection of the civilian population and civilian objects, the Parties to the conflict shall at all times distinguish between the civilian population and combatants and between civilian objects and military objectives and accordingly shall direct their operations only against military objectives" (Henckaerts and Doswald-Beck, 2005). The UN Charter, and numerous international treaties, prohibits carrying out the targeted killing of individuals on foreign soil outside of armed conflict, except in extraordinary circumstances. Generally such extraordinary circumstances are understood to involve imminent threats of physical violence, where no other alternative exists but to employ lethal force. The controversy stems from whether the Yemeni government (Yemen is a critical U.S. ally) had officially supported this action *or* did the U.S. in fact violate its airspace to kill a suspected *combatant*. Of further importance is this critical question:





what is more dangerous, al Qaeda's vows to retaliate or the reaction of the Yemeni people to the US's violation of their country's airspace and to the murder of a man many of them considered their own (despite his US citizenship)? Although drone strikes give the appearance of toughness and have enormous short-term benefits, the damage done to political alliances over the *long term* is of great concern.

Whether drone use is *legally authorized* is dependent on location and purpose. In specific 'declared' combat zones (i.e. Afghanistan) drone use has clear rules of engagement. According to the UN Charter, countries can use force for self-defense. Since the U.S. had solid international legal footing for attacking Afghanistan after 9/11 in self-defense, critics have argued that in areas where the US is not involved in armed conflict, it cannot lawfully resort to military force. [The US Congress authorized the use of military force after 9/11, which allowed the president to target those who "planned, authorised, committed, or aided the terrorist attacks" of 9/11—which interpreted to mean Al-Qaeda—but some have questioned whether drone strikes are justified under the post-9/11 authorization and therefore would require additional congressional authorization.] In less clear cases, such as undeclared combat zones (i.e. U.S. drone use in Pakistan, Yemen) the US is expected to work with the government of the country in which it is operates drones abiding by a key exception to the Article 2(4) of the UN Charter prohibition on the use of force. The Pakistani government has, at times, reacted angrily to what they view as unilateral actions there, which is a significant lapse in meeting the requirement of the use of force being carried out with the consent of the 'host' state. Such long term damage to alliances and to U.S. national interest in this case is known as 'blowback' – incidents that arise in later years as a latent result of actions taken today. Whereas the CIA in the 1980's was 'secretly' arming the mujahedeen fighters (led by Osama Bin Laden) against the USSR's war in Afghanistan, it is well-known that these socalled freedom fighters crafted the deadly bombings of 9/11. Today, this 'blowback' could later appear in Libya, Somalia, Pakistan and Yemen whose residents will internalise the distress and hatred that resulted from the hundreds of drone strikes that have taken place in their country over the last decade. According to Thompson (2016), while the (Obama) administration estimated in July (2016) that ill-aimed drones had killed as many as 116 civilians in Libya, Somalia, Pakistan, and Yemen between 2009 and 2015, independent analysts suggested the toll was three times as high. Critics of the targeted drone program question whether this "collateral damage," create more militants than they kill. Could the spread of jihadist organisations and militant attacks throughout the world serve as evidence that targeted killings may be exacerbating the problem?

#### Health issues

While the British and US Reaper and Predator drones are physically in Afghanistan, control is via satellite from a US Air Force base outside Las Vegas, Nevada. This is likely to be a game changer. The use of this type of weaponry and technology allows the point of critical human decision making to move physically off the battlefield and also, increasingly, chronologically away from the time of kinetic action. Absent the risk of casualties or prisoners of war, the U.S. government can engage in military operations with a lower political price. Indeed, of critical concern is the extent to which operators become 'trigger happy' with remote controlled armaments, situated as they are in complete safety, distant from the conflict zone. Perhaps as warmaking becomes safer (with the removal of soldiers from the actual horrors of war) and mobilization less difficult, there is a very real danger of losing the deterrent that such horrors provide. Several critics (Chow, 2013), however, have indicated that perhaps this danger is indeed overblown. A 2010 study of Air Force personnel found that 17 percent of Predator or Reaper drone operators, and 25 percent of Global Hawk





operators, show signs of what the Air Force terms "clinical distress," which includes depression, anxiety and other symptoms that interfere with job performance or disrupt family life. For comparison, approximately 28 percent of U.S. soldiers returning from Iraq are diagnosed with clinical distress, according to the Air Force (Chow, 2013). Although a repeat survey administered in 2012 showed lower levels of "clinical distress" (Chappelle et al, 2014), the implications are the same. The rapidly evolving technology comprising weapondeploying drone operations along with shifting conflicts across the globe may result in a continuously changing operational environment leading to fluctuations in the sources and rates of distress relevant to the provision of mental health care (Chappelle et al, 2014). Advocates for manned aircraft systems argue that the human element enhances the operator's situational awareness, instinct and ability to make a judgment based on one's senses and intellect. For drone operators their reality is that the precision and accuracy of these drone attacks are as good as the intelligence on the ground. Many drone operators have seen close-up video of what the military calls "collateral damage," casualties involving women, children or other civilians that is unnerving and unsettling to them contributing to this combat stress (Khan, 2011). As one drone operator had put it, "We always wonder if we killed the right people, if we endangered the wrong people, if we destroyed an innocent civilian's life all because of a bad image or angle (Linebaugh, 2013)." Even if the end result appears to be a success, it leaves a hint of doubt as to how accurate their confirmation of weapons and hostile individuals were.

#### 3. Towards a Trump Drone Doctrine

This is a critical time for the Trump administration to initiate conversation that can lead to an international doctrine regarding the use of drones and related technologies. The US is certainly not the only power using drones. China is a growing power in military technologies, including drones. France is the leader in drone production in Europe. The point is that the spread of the drone technology makes it accessible to a growing number of countries and non-state actors. In this context, the really serious questions include: what happens when an overwhelming majority of countries use armed drones? Which principles to apply to devise an effective international armed drones' regime? How to effectively limit unauthorized use of armed drones? Several experts foresee that virtually every country will be able to build or acquire drones capable of firing missiles within the next ten years (Tucker, 2014). It is feasible therefore that armed drones will be used for targeted killings, terrorism and the government suppression of civil unrest. Efforts to establish multilateral agreements to limit armed drone sales have been weak. The United States and more than 40 other countries signed a declaration establishing five guiding principles for the export and use of armed drones, but signatories have been reluctant to ratify it ("The Unstoppable Spread...", 2016). Several countries with significant military industries, including Russia, China, France, Israel and Brazil, failed to sign the declaration. It is worth noting that several of the signatory countries are currently developing their own armed drone capabilities and will likely try to reach the status of exporters at some stage ("The Unstoppable Spread...", 2016). Simply put, if no effective armed drones' regime is put in place, the scenarios related to armed drones' use can get ever more dramatic.

Although the US government has started to make efforts to establish policies and to engage in the growing debate over drone usage, more needs to be done. Most likely, it will require a focused effort on the part of President Trump. The ability to set the terms of the debate, and to create the necessary international attention and cooperation, would be enhanced if presented in a major presidential speech. This would initiate an important debate in Congress, and of course, internationally. There are several important issues





that President Trump needs to address: The first is that of revising the current international law to cover the development and use of these new technologies. — war acts vs. covert acts— (i.e. The UN Charter and "use of force"). A Trump administration could take the lead here by shifting the responsibilities regarding drone use back to the Pentagon. However, this is unlikely considering that President Trump has returned drone operations back to the CIA. Under this arrangement most drone attacks are covert, designed to kill enemy targets without leaving American fingerprints and carried out without consideration of public opinion or the approval of Congress. Greater transparency is appropriate as it would unshield drone attacks from public view, and would eliminate the secrecy of such actions. The second issue involves establishing clear delineations between the military vs. civilian intelligence agency use of such technologies, and the proper role for Congress and the President regarding drone use. The Trump administration could establish clear guidelines on the use of drones for military use, just as state governments have been doing with regard to civilian use of drones. Although this may be unpopular within certain military circles, this would raise the confidence of political leaders in other nations who have been hesitant to set such guidelines absent actions taken by the US government. The EU, a close US ally, has been largely silent (in public) on the legality of US policy regarding drone use, although there is some evidence, in private, of pushback because of the secrecy of US operations (Tayler, ,2014). Given that the EU has remained largely absent from these public discussions<sup>2</sup> it is ever the more critical for the US to take the lead now. The third issue, and perhaps the most important, involves the coordination of 'development and use' doctrines by the United States and its allies. The United Nations would be seem to be a natural choice as a venue for creating these guidelines, but enforcement is an issue and given President Trump's disdain for UN inclusion in military matters, it is unlikely that it will be the starting point. Perhaps NATO would be a logical and more reasonable means to initiate global conversation on a doctrine guiding the development and use of drones The United States has a preeminent position within NATO and a global military presence. By taking the initiative now, President Trump has the opportunity to provide the momentum necessary to motivate other leaders and nations to establish an effective doctrine.

#### References

Agerholm, Harriet. (March 14, 2017). Donald Trump gives CIA power to carry out its own drone strikes. Retrieved from: http://www.independent.co.uk/news/world/americas/donald-trump-cia-power-drone-strikes-military-a7628561.html

Chappelle, W. Goodman, T. Reardon, L. Thompson, W. An analysis of post-traumatic stress symptoms in United States Air Force drone operators. Retrieved from: http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=1045&context=usafresearch

Chow, Denise. (November 5, 2013). Drone Wars: Pilots Reveal Debilitating Stress Beyond Virtual Battlefield. Retrieved from: http://www.livescience.com/40959-military-drone-war-psychology.html

Cole, C. (February 2, 2013). American Drones Over Africa: New US Military Bases in West Africa. Retrieved from: http://www.globalresearch.ca/american-drones-over-africa-new-us-military-bases-in-west-africa/5321454

The EU has so far failed to set out any vision of its own about when the use of lethal force against designated individuals is legitimate. Nor is there any indication that European states have made a serious effort to influence the development of US policy or to begin discussions on formulating common standards for the kinds of military operations that UAVs facilitate (Martins, 2015)





Dillow, Clay. (February 12, 2016). All of These Countries Now Have Drones. Retrieved from: http://fortune.com/2016/02/12/these-countries-have-armed-drones/

Dorsey, J. and Paulussen, C. (April, 2015). Towards a European Position on Armed Drones and Targeting Killing: Surveying EU Counterterrorism Perspectives. Retrieved from: https://www.icct.nl/download/file/ICCT-Dorsey-Paulussen-Towards-A-European-Position-On-Armed-Drones-And-Targeted-Killing-Surveying-EU-Counterterrorism-Perspectives.pdf

Finnegan, Phil. (August 19, 2015). UAV Production Will Total \$93 Billion. Retrieved from: http://tealgroup.com/index.php/teal-group-news-media/item/press-release-uav-production-will-total-93-billion

Fielding-Smith, Abigail and Serle, Jack. (December 1, 2015). Monthly Updates on the Covert War US drone war, November 2015: American troops in Afghanistan and Somalia supported by new strikes https://www.thebureauinvestigates.com/2015/12/01/us-drone-war-november-2015-american-troops-in-afghanistan-and-somalia-supported-by-new-strikes/

Henckaerts, J. and Doswald-Beck, L. 2005. Customary International Humanitarian Law: Rules. Cambridge University Press.

Hennigan, W.J., 'A fast growing club: Countries that use drones for killing by remote control', Los Angeles Times, February 23, 2016, http://www.latimes.com/world/africa/la-fg-drone-proliferation-2-20160222-story. html [2017-09-17].

Keck, Zachary. (May 10, 2015) China Is Building 42,000 Military Drones: Should America Worry? Retrieved from: http://nationalinterest.org/blog/the-buzz/china-building-42000-military-drones-should-america-worry-12856

Khan, Azmat. (December 19, 2011). As Drone Use Surges, Pilots Report High Stress Levels. Retrieved from: http://www.pbs.org/wgbh/pages/frontline/afghanistan-pakistan/kill-capture/as-drone-use-surges-pilots-report-high-stress-levels/

Linebaugh, Heather. (December 29, 2013). I worked on the US drone program. The public should know what really goes on. Retrieved from: http://www.theguardian.com/commentisfree/2013/dec/29/drones-us-military

Luce, Dan De. (February 23, 2016). Obama's Drone Policy Gets an 'F'. Retrieved from: http://foreignpolicy.com/2016/02/23/obamas-drone-policy-gets-an-f/

Martins, B. The European Union and armed drones: framing the debate. Vol. 1, 3, 2015

Pejic, C.F. J. (2014) 'Extraterritorial targeting by means of armed drones: Some legal implications', International Review of the Red Cross (2014), 96 (893), 67–106.

Pejic, Cf. (February 22, 2016) 'Italy to allow US drones to fly out of Sicily air base for attacks on Isis, 'The Guardian Retrieved from: https://www.theguardian.com/us-news/2016/feb/22/italy-us-military-drones-isis-libya-sicily-base.

Ross, A. and Sterle, J. (January 6, 2014) A changing drone campaign: US covert actions in 2013. Retrieved from: http://www.thebureauinvestigates.com/2014/01/06/a-changing-drone-campaign-us-covert-actions-in-2013/

Southworth, M. What are Drones? Retrieved November 23, 2013 from: http://fcnl.org/images/issues/afghanistan/Drones\_Questions\_and\_Answers.pdf





Taylor, G. (November 10, 2013) U.S. intelligence warily watches for threats to U.S. now that 87 nations possess drones. Retrieved from http://www.washingtontimes.com/news/2013/nov/10/skys-the-limit-for-wide-wild-world-of-drones/?page=all

Tayler, L. (March 27, 2014) EU should press Obama on drone secrecy. Retrieved from www.hrw.org/news/2014/03/27/eu-should-press-obama-drone-secrecy. Accessed 13 July 2015)

Thompson, M. (2016). The Commander in Chief. Time-Special Edition, 42.

Tucker, Patrick. (May 6, 2014) Every Country Will Have Armed Drones Within 10 Years. Retrieved from http://www.defenseone.com/technology/2014/05/every-country-will-have-armed-drones-within-ten-years/83878/

Zenco, Micah. (March 7, 2017). The (Not-So) Peaceful Transition of Power: Trump's Drone Strikes Outpace Obama. Retrieved from https://www.cfr.org/blog-post/not-so-peaceful-transition-power-trumps-drone-strikes-outpace-obama

#### Websites:

Drone Spending in the FY17 Defense Budget. (February 15, 2016). Retrieved from: http://dronecenter.bard. edu/drone-spending-in-the-fy17-defense-budget/

The End of the Perpetual War. (May 23, 2013). Retrieved from: www.nytimes. com/2013/05/24/opinion/obama-vows-to-end-of-the-perpetual-war.html?pagewanted=all&\_r=0. Accessed September 15 2016.

The Unstoppable Spread of Armed Drones. (October 25, 2016). Retrieved from: http://www.realcleardefense. com/articles/2016/10/25/the\_unstoppable\_spread\_of\_armed\_drones\_110257.html. Accessed December 15 2016.

Zephyr, the High Altitude Pseudo-Satellite. (2016) Retrieved from https://airbusdefenceandspace.com/our-portfolio/military-aircraft/uav/zephyr/. Accessed December 15 2016.