

Committee: Disarmament and International Security Committee (GA1)

Issue: Increasing accountability, transparency and oversight with regard to armed drones

Student Officer: Stefania Vassiliadou

Position: Co-Chair

PERSONAL INTRODUCTION

Dear Delegates,

My name is Stefania Vassiliadou, and I am a 1st year International Baccalaureate student at Psychico College – Hellenic American Educational Foundation. I am immensely honored to be serving as a Co-Chair in ACGMUN 2022 and truly delighted to be participating in a committee whose topics I find unswervingly relevant. Some would argue that MUN is merely an extracurricular activity, yet to me, it has grown to be far more beyond that. Not only has it helped me upgrade my academic skillset, but also evolve into a more conscientious and aware individual.

Through this study guide, I hope to provide you with knowledge that will incite your intellectual spirit and allow us to have a fruitful debate. Nonetheless, it is no secret that the Disarmament and International Security Committee requires strong argumentative and reasoning skill as well as thorough preparation which you are expected to do leading up to the conference. While this study guide will provide you with a lot of knowledge on the specific topic, you will also have to do a lot of independent research on your countries' policies and perspectives on the issue as well as their relations with other nations.

The 8th among the 17 UN Sustainable Development Goals – this session's theme – advocates for the resolution of a very timely issue that we will be called upon to address. This stands as an excellent chance for everyone to demonstrate young leadership capabilities. Therefore, I encourage every delegate to acquire a thorough understanding of the topic and be ready to exit their comfort zone.

As the expert Chair on the present topic, I strongly motivate you to contact me via email for any questions that may arise. I wish for all to utilize their diplomatic abilities to the uttermost and cannot wait to meet you in April!

Yours truly,

Stefania Vassiliadou

svasileiadou@athenscollege.edu.com

TOPIC INTRODUCTION

With recreational drones experiencing rapid growth in popularity in 2015, the military capabilities of Unmanned Aerial Vehicles (UAVs) are no longer spawned up to mind as frequently. However, the precariousness of diplomatic relations between countries persists and calls for the taking of premeditated military measures. Armed drones offer a potent mix of intelligence gathering, reconnaissance, and strike capability and can hence be rendered decisive in conflicts.

Armed drones resembling their contemporary form have existed since World War I yet have greatly evolved alongside the advancement of technology ever since. The integration of Artificial Intelligence (AI) mechanisms has totally upgraded their capabilities but has also attributed them a terrifying facet. No longer dependent on human piloting via the transmission of radio signals, drones can now identify targets on their own using machine vision. However, the precision of machine learning systems is not to be trusted entirely, especially if the system is high variance, meaning that it has not learnt the input-output mapping properly. This raises a series of human rights concerns that continuously grow in amount as governments refuse to remain transparent. In spite of that, the maintenance of national security in the face of international terrorism remains non-ambiguous and commonly prevails over the safeguard of human rights. The possession of armed drones is very successful in hindering terrorist attack efforts and training operations as well as protecting a nation's sovereignty.

Increasing market competition in the armed drone industry is indicative of the accelerating popularity of swarm intelligence technology. Even countries that lack the capability of independently developing combat UAVs domestically have sought supplies from the major occupiers of the industry. The increasingly widespread equipment of armed drones is likely going to revolutionize modern warfare, handing an immense positional advantage to the countries that can afford the new technologies.

DEFINITION OF KEY TERMS

Aerial Reconnaissance

Aerial Reconnaissance refers to the exploratory accumulation of information of enemy territories for military purposes via the use of an aircraft. ¹

¹ "Reconnaissance Definition & Meaning." *Merriam-Webster*, Merriam-Webster, www.merriam-webster.com/dictionary/reconnaissance

Battlefield Surveillance

“Systematic observation of the battle area for the purpose of providing timely information and combat intelligence”²

Corruption

“Active or passive misuse of the powers of public officials (appointed or elected) for private financial or other benefits”³

International Law

“The body of legal rules, norms, and standards that apply between sovereign states and other entities that are legally recognized as international actors”⁴

International Terrorism

“Violent, criminal acts committed by individuals and/or groups who are inspired by, or associated with, designated foreign terrorist organizations or nations (state-sponsored)”⁵

Loitering Munition (Kamikaze Drone)

Loitering Munitions constitute an emerging type of UAVs equipped with explosive material that is designed to perform attacks on targets even beyond the striker’s line of sight.⁶

Machine Learning (ML)

Machine Learning (ML) is a field of Artificial Intelligence (AI) which algorithmically imitates human learning patterns enabling computerized decision making which requires very little human intervention.⁷

Rule of Law

“The mechanism, process, institution, practice, or norm that supports the equality of all citizens before the law, secures a non-arbitrary form of government, and more

² “Battlefield Surveillance.” *Oxford Reference*, Oxford Dictionaries, www.oxfordreference.com/view/10.1093/oi/authority.20110803095451837

³ “Corruption.” *OECD Glossary of Statistical Terms - Corruption Definition*, 6 Aug. 2002, www.stats.oecd.org/glossary/detail.asp?ID=4773

⁴ Shaw, Malcolm. “International Law.” *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., www.britannica.com/topic/international-law

⁵ “Terrorism.” *FBI*, FBI, 3 May 2016, www.fbi.gov/investigate/terrorism

⁶ Atherton, Kelsey. “Loitering Munitions Preview the Autonomous Future of Warfare.” *Brookings*, 4 Aug. 2021, www.brookings.edu/techstream/loitering-munitions-preview-the-autonomous-future-of-warfare/

⁷ By: IBM Cloud Education. “What Is Machine Learning?” *IBM*, 15 July 2020, www.ibm.com/cloud/learn/machine-learning

generally prevents the arbitrary use of power”⁸. In essence, the political philosophy of the rule of law recognizes the equality of every citizen before the law. It rejects any form of arbitration which refers to the allowance of personal discretion within legal grounds.

Transparency

The quality or state of being done in an open manner and with minimized secrecy.

Oversight

The act or duty of guarding a particular activity and making sure that it is being executed correctly.

Unmanned Aerial Vehicle (UAV)

“Military aircraft that is guided autonomously, by remote control, or both and that carries sensors, target designators, offensive ordnance, or electronic transmitters designed to interfere with or destroy enemy targets”⁹

BACKGROUND INFORMATION

Historical Background

Stunned by the international conflict that spawned up the First World War, every nation involved craved a military advantage and persistently worked on developing innovative technologies. Eventually, the two major allied powers of the United States and the United Kingdom managed to gain the upper hand by developing armed drones. For example, the US started integrating autopilot systems in unused warplanes to increase its military’s strength. Through the measuring of pressure and propeller speed, the altitude and covered distance of the aircraft could be monitored. Even though the constructed aircrafts were proven functional in a series of testing procedures, their use in the battlefield was aborted. Nonetheless, these technologies incontestably contributed to the shaping of modern warfare since they are still being integrated into contemporary drones.

The introduction of more efficient camera systems as the commencement of World War II was nearing advanced the capacity for targeted attacks. It was not until the official start of the Second World War, however, for drones to have larger ranges

⁸ Choi, Naomi. “Rule of Law.” *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 27 Apr. 2017, www.britannica.com/topic/rule-of-law

⁹ Guilmartin, John. “Unmanned Aerial Vehicle.” *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., 29 May 2009, www.britannica.com/technology/unmanned-aerial-vehicle

and be more precise. WWII drones have been referred to as “optionally unmanned” since the intervention of humans was necessary for the aircraft to reach the destination of the target. During periods of augmented fighting in WWII, the US would supply its European allies with arms. One of its strongest unmanned technologies developed at that time was TDR-1, an aircraft that could hold a bomb weighing up to half a ton, equipped with a camera at its nose, which allowed for an overhead view of the battlefield.

In present times, with most contemporary international conflict being contained within diplomatic grounds, the possession of armed drones is frequently complementary. However, the number of countries that have deployed UAV attacks has exceeded ten, augmenting the concern of future global motivation and consequent deadly implications of a war. Newly developed computer systems are so advanced that all older armed drone technologies can confidently be deemed obsolete. Machine Learning has attributed capabilities to combat drones that near the recognition patterns of human neurological systems. For instance, recently developed kamikaze drones reach such high speeds when flying that the human eye is incapable of tracking them. In a recent testing procedure carried out by the US military in Utah, a kamikaze drone was able to track a target moving inside an automobile, sailing through its window and carrying out the attack successfully. These developments have increased multilateral rivalry over the extensiveness of arms collections as well as the costliness of military security. Countries are rushing to borrow and purchase armed drones to be prepared in case unprecedented conflict breaks out. This is a tactic successful in handing them a positional advantage, yet very burdensome for their economy since it requires major monetary investments.

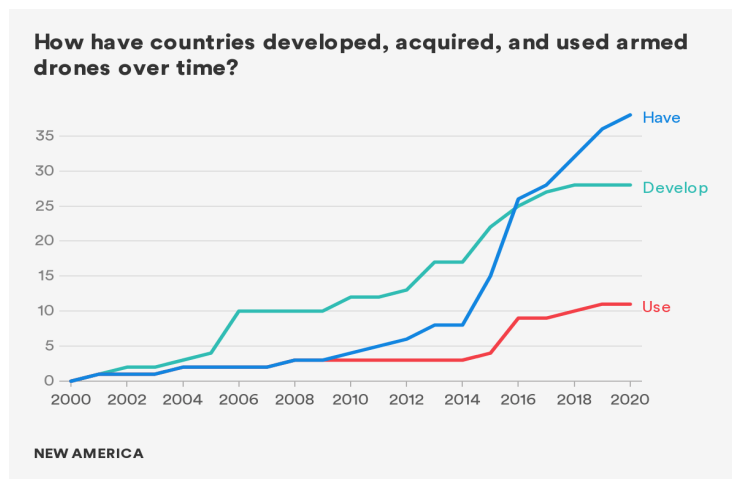


Figure 1: Graph Depicting the Change in the Number of Countries that Have Developed, Acquired and Used Drones Over Time ¹⁰

¹⁰ “World of Drones.” *New America*, www.newamerica.org/international-security/reports/world-drones/introduction-how-we-became-a-world-of-drones/

Armed Drones and Terrorism

On 11 September 2001, 19 members of the Islamic extremist group al Qaeda carried out a series of airline hijackings and suicide attacks. Three out of four airplanes hijacked crashed into significant US sites, namely the World Trade Center and the Pentagon, resulting in the killing of an approximate 3000 people. These attacks were catalytic in commencing the everlasting conflict between the US and the Middle East. Civilian casualties resulting from the US drone attacks that followed on the grounds of Pakistan, Afghanistan, Yemen and Somalia since January 2004 are estimated at 910-2,200 ¹¹. With the US Patriot Act having scrutinized every possible counterterrorism tactic there is, every US president succeeding and including George Bush has deployed drone strikes which have resulted in the killing of hundreds of people, including children. For example, on 23 January 2009, just three days into his presidency, former US president Barack Obama fired two drone strikes on Pakistani grounds executed just three hours apart that resulted in the killing of 20 innocent civilians. About 4 years later, sometime during 2013, Obama promised that every drone strike he would carry out would be preceded by a thorough check that would ensure no civilians would be found dead or injured. However, reports have seriously doubted the eventual honesty of that claim, even though media disclosure did not allow for absolute certainty.

Technical Background

Military drones can be classified into four broad categories based on their dimensions: micro- and nano- drones, small tactical drones, medium sized reconnaissance drones and large combat and surveillance drones. Microdrones are small scale UAVs which usually carry cameras and sensors and are used for environmental monitoring, surveillance or disaster management. Small tactical drones have applications that include military research and the gathering of intelligence at borders and on battlefields to ultimately execute combat missions beyond enemy lines. Medium sized drones are used for applications such as intelligence, surveillance and reconnaissance but can also provide strike capabilities. Lastly, large drones carry out large scale attacks, usually at a range over 10,000 miles, and are usually armed with various air-to-surface missiles or laser-guided bombs.

¹¹ "Drone Warfare." *The Bureau of Investigative Journalism* (En-GB), www.thebureauinvestigates.com/projects/drone-war

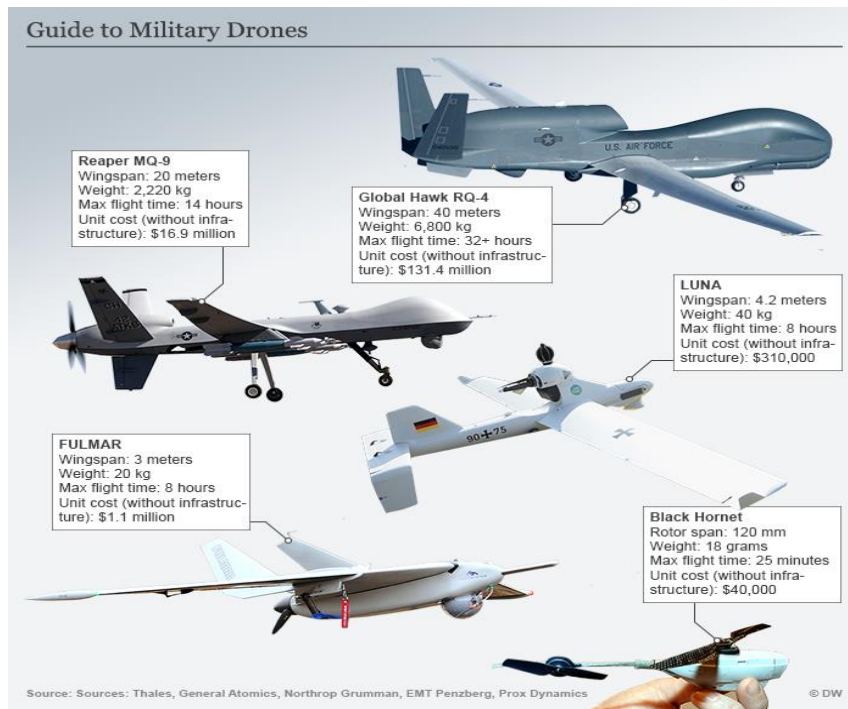


Figure 2: Picture Showcasing the Different types of Military UAVs ¹²

Counter-drone Technologies

Drone attacks can be hindered using counter-drone technologies capable of both preventing and halting targeted missions. Drone monitoring equipment can perform functions such as detecting, classifying or identifying, locating and tracking, and alerting the arrival of drones. This can be achieved with the use of Radio Frequency (RF) analyzers, microphones, cameras, and radars. Combined, these technologies are able to detect communication between the drone and whoever is piloting it, to calculate its direction, and to provide demonstrative evidence of an attack. This can provide a viable time period for the deliberation of a defense tactic which may include the usage of counterdrone measures.

On the other hand, counterdrone measures are able to physically destroy the drone, neutralize it, or even hijack it. Such technologies include radio frequency jammers, GPS spoofers, High Power Microwave (HPM) devices, nets and guns, and high-energy lasers. Radio frequency jammers emit electromagnetic disturbances on a band at a specific intensity which disrupts the reception of the receiver. GPS spoofers replace the connection the drone has established with a GPS satellite, tricking it into thinking it is in another location. Then, the so called “spoofer” can then control the drone and lead it to a safe location faraway. HPM devices emit an Electromagnetic Pulse (EMP)

¹² Knight, Ben. “A Guide to Military Drones: DW: 30.06.2017.” *DW.COM*, 30 June 2020, www.dw.com/en/a-guide-to-military-drones/a-39441185

that interferes with radio links and can raise the drone's internal voltages so high that its circuitry is destroyed. Nets can be used to tangle up the drone's rotor blades and disrupt its passage, while guns can be used to shoot down the drones. Lastly, high-energy lasers can destroy the structure and the electronics of the drone by producing an extremely focused beam of light.

Covert Surveillance

Contrary to mutual expectation, governments mostly use military grade drones for intelligence purposes rather than the carrying out of attacks. It has been estimated that an approximate 80,000 surveillance drones will be purchased in the next 10 years, while only 2,000 attack drones are to be sold¹³. Aerial reconnaissance is critical for counterterrorism as it can track meditated terrorist operations or training sessions. Even though this may well be characterized as unethical since covert surveillance breaches the fundamental freedoms of speech and association and the right to a private life, it definitely spares the lives of dozens since surveillance deters the execution of armed attacks.

The Lack of Transparency, Accountability and Oversight

Competition over the possession of the greatest share of the UAV industry has resulted in government secrecy concerning the purchase, development and use of armed drones. Consequently, citizens are frequently entirely ignorant of their countries' military initiatives. This plays a leading role in the augmentation of corruption levels and the overall destabilization of security. Covert operations undermine government legitimacy and completely disregard the fundamental democratic values upon which they were likely established. This major lack of transparency has raised timely questions about whether the Western world pays due attention to the safeguard of the rule of law as well as international law. It is a well-known fact that innocent civilians have been hit in multiple strikes as targets are commonly misidentified. Much of that information, however, remains classified, and it is therefore very hard to establish precise figures. Yet the existence of select examples does not fail to provide us with some proof. For example, during September 2021, just before the US was about to end its 20 year operation in Afghanistan, US intelligence was following an aid worker's car around the roads of Kabul, thinking that he possessed a bomb and that he was linked to IS-K militants. Finally, they fired an

¹³ Sabbagh, Dan. "Killer Drones: How Many Are There and Who Do They Kill?" *The Guardian*, Guardian News and Media, 18 Nov. 2019, www.theguardian.com/news/2019/nov/18/killer-drones-how-many-uav-predator-reaper

armed drone at his car, which resulted in the killing of a total of 10 innocent people, including children. It later turned out that what the man had been seen loading into his trunk was water containers, and not explosives. The Pentagon classified this as a terrible mistake yet doubts on whether this will not be repeated have understandably surfaced.

Human rights organizations make continuous attempts to shed light on these tragic incidents, yet governments have become very good at masking the consequences of their attacks. This disables the redemption of the impacted families since they are not properly compensated and are left to suffer.

The Threat to Human Rights

The covert nature of many armed drone attacks has led to the killing of many innocent individuals, leading families to total despair and stripping people of the most fundamental of their rights. Even though technology is persistently accurate, it can be faulty at times. This creates credibility gaps for the attacking country, since it commonly fails to keep its promise of the attacks not resulting into any civilian casualties.

The killing of an individual off one's own volition which is sometimes carried out with the help of armed drones constitutes a breach of both international law and the rule of law. A relevant example can be the killing of Iran's Qassem Soleimani by Donald Trump during his duty in the Iranian military. This was criticized by many – even a UN expert – as beyond illegal since his assassination cannot be explained as an effort to extinguish an imminent threat. Besides, even guilty civilians have the right to enjoy a fair trial before prosecuted to death, as stated by the rule of law.

Countries also make extensive efforts to be involved in conflicts outside their own country to ultimately capitalize on their resources by intervening and providing them with arms. However, when the country is not officially at war, this does not fall under the law. Today, drones from many different suppliers are being used on battlefields in Armenia, Libya, Somalia and Syria.

Seeing as these instances are not commonly covered by the media, the involvement of the community is not present to a satisfactory degree. However, with the current spurring up of conflict in Europe with the Russo-Ukrainian war, more recognition will be brought to this timely issue since the people of the Western world will soon be enlightened.

MAJOR COUNTRIES AND ORGANIZATIONS INVOLVED

Federal Democratic Republic of Ethiopia

Ethiopia has been at war since November 2020, when Ethiopian Prime Minister Abiy Ahmed ordered a military offensive against regional forces in Tigray. Throughout the duration of the war, the federal government has managed to organize a major counteroffensive which helped it regain the upper hand. Analysts have exposed potential governmental contact with manufacturers of cheap and efficient armed drones, yet official confirmation is absent. Photographic evidence, however, has confirmed the presence of Chinese Wing Loong 2 UAVs at Ethiopian military bases.

United States of America (USA)

Until recent years, the US was capitalizing on the monopoly it had established in the combat drone technology industry. However, China, Turkey and Russia are progressively increasing their market share, fighting for the conquest of the first place. Hundreds of US drones have been tracking terrorists and providing US and coalition troops with early warnings. The Pentagon is planning to equip more advanced systems by replacing the MQ-9 Reaper with a newer model, the MQ-20 Reaper. The US has also been developing kamikaze drones with extremely advanced capabilities which are said to revolutionize warfare as much as machine guns did in the past.

Russian Federation

Russia is turning increasingly interested in equipping more drones as it has been seriously behind Western countries, especially considering the vastness of its grounds. It has been encountering difficulties in formulating the requirements and specifications required for the production of drones on its domestic grounds, while its efforts to improve the situation have only been relatively successful. Very recently, new Russian drone weapons have been threatening Ukraine's air defenses and tanks, climaxing the precariousness of their long-lasting unstable diplomatic relations.

Federal Republic of Germany

Germany's Social Democrats had announced that they don't support the acquisition of armed drones. While Germany's Military (Bundeswehr) and the German defense minister have been requesting their approval, the technologies are still banned. Germany will soon be equipped with intelligence UAVs, but ones that are not armed. The leader of the SPD has stated that "The line between defending the lives of our soldiers and killing with a joystick is extremely thin", so it can well be argued that Germany is making strong efforts to increase drone accountability.

Syrian Arab Republic

Idlib, a town located in northwestern Syria, is plagued by an ongoing humanitarian crisis caused by President Bashar al-Assad government's efforts to seize its control, since it is currently being helped by the opposition. On 1 March 2020, after suffering a loss of at least 36 soldiers in Syrian and Russian air and large-caliber gun strikes, Turkey announced that it was launching a counteroffensive against al-Assad's government. Ever since, Turkey has carried out dozens of air strikes using UAVs, even killing high-ranking commanders.



Figure 3: Map Depicting the Countries with Armed Drone Development Programs ¹⁴

North Atlantic Treaty Organization (NATO)

The North Atlantic Treaty Organization (NATO) is a military alliance established on 4 April 1949 by the North Atlantic Treaty. It currently counts 30 Member States from North America and Europe and was created for the purpose of counterweighing the Soviet armies installed in central and eastern Europe after World War II. NATO organized a counterdrone exercise that took place in the Netherlands from 2-12 November 2021. Its main purpose was to ensure that if conflict were to take place, commercial systems from different NATO countries would be able to work together and counter any drone attack attempts. The present exercise was especially important as it highlighted the use of AI and ML in NATO's operations ever since the approval of the alliance's first Artificial Intelligence Strategy.

¹⁴ Saylor, Kelley. "What Are Drones?" *Proliferated Drones*, drones.cnas.org/reports/what-are-drones/.

Human Rights Watch

The Human Rights Watch (HRW) is an international nongovernmental organization whose purpose is to investigate and document human rights violations taking place all over the world and to advocate for their annihilation. Ever since 9/11, the US has deployed numerous targeted killing missions in the Middle East which have resulted in the death and injury of countless innocent civilians. On 29 August 2021, the US launched a drone attack with the intention of killing a man believed to have participated in the Islamic terrorist group ISIS-K yet killed an innocent aid worker and his family instead.

United Nations Office on Drugs and Crime (UNODC)

The United Nations Office on Drugs and Crime (UNODC) is a UN subsidiary whose primary objective is to fight against illicit drugs and international crime. Within the scope of its responsibilities stands the accomplishment of the 16th UN Sustainable Development Goal, namely “Peace, Justice and Strong Institutions”, so one would expect that they have taken serious measures to control the absence of transparency, accountability and oversight in the armed drone industry. However, the UNODC is yet to even address the issue, ignoring its urgency and raising global concern about the UN’s intervention delay.

BLOCS EXPECTED

Bloc 1: FOR the Use of Armed Drones

Countries belonging in the present alliance support the proliferation of armed drones. This includes the major suppliers and customers of the industry who also support the annulment of any anti-drone or drone transparency policies. This is one among very few cases where the US and the Russian Federation are assigned to the same alliance since they both fund the production of armed drones immensely. Additional examples of countries belonging to this bloc include some occidental countries (e.g., France, UK, Mexico), major military powers of the East (e.g., China, Israel), as well as Eastern countries at conflict with the West (e.g., Iran, Pakistan).

Bloc 2: AGAINST the Use of Armed Drones

Countries entering this bloc are opposed to the equipment of armed drones and are aiming to promote transparency. This includes countries impacted by armed drone attacks, or others that simply criticize them for being unethical. Please note, however, that this does not mean that these countries have never purchased armed drone technologies, as it may have been necessary for national security reasons. Examples of countries expected to join this alliance include: Japan, Belgium, Germany, Norway, Finland, Ireland, Nigeria, Senegal.

TIMELINE OF EVENTS

Date	Description of event
March 1917	The Aerial Target, a radio-controlled aircraft created by the British to be used in WWI, was created.
13 June 1944	The V-1, a small, pilotless cruise missile, is used by the German Luftwaffe against non-military targets to regain power against the Allies in WWII.
6 August 1946	A remote-controlled drone prototype takes off from Hawaii to fly to California controlled by US Army Air Forces (USAAF) personnel nearby.
5 March 1966	Lockheed D-21, an unpowered aircraft used by the CIA and Air Force to surveil Russia during the Cold War, is launched.
7 October 2001	Commencement of the US Military operation “Enduring Freedom” in response to the 9/11 attacks. Aerial bombardment against al Qaeda and the Taliban is fired on Afghan grounds with the support of the UK.
3 November 2002	The US Central Intelligence Agency (CIA) launches a missile strike in Yemen that resulted in the killing of six people suspected of being associated with al Qaeda.
July 2008	The MQ-9 Reaper, a modern remotely piloted aircraft system equipped with precision weapons, flew its first operational mission in Iraq.
28 March 2014	The UNHRC votes to approve a resolution on drone transparency and accountability.
24 December 2014	The Arms Trade Treaty (ATT) is entered into force.
4 August 2018	Explosive drones are used in an assassination attempt against Venezuelan president Nicolás Maduro while he was delivering a speech at a military event.

17 January 2022	Saudi-led coalition drone strikes on Yemeni grounds targeting Houthi rebels take place resulting in civilian casualties.
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RELEVANT UN RESOLUTIONS, TREATIES AND EVENTS

UN Human Rights Council Resolution on Drone Transparency and Accountability

On the morning of 28 March 2014, the UN Human Rights Council voted to approve a Pakistan-sponsored resolution entitled “Ensuring use of remotely piloted aircraft or armed drones in counter-terrorism and military operations in accordance with international law, including international human rights and humanitarian law”. Amongst its provisions was one that encourages the transparency in States’ records on the use of armed drones and warns States of the independent and impartial investigations that will follow should international law be violated. On the day before the voting procedures, the HRW published an open letter enumerating reasons for States to vote in favor, whereas the US government issued a statement arguing the opposite.

Arms Trade Treaty (ATT)

The Arms Trade Treaty (ATT) establishes common standards for the international trade of conventional weapons and aims to reduce illicit arms trade. More specifically, it seeks the reduction of human suffering resulting from the use of illegal and irresponsible arms transfers and the improvement of regional security and stability and simultaneously pursues the objective of promoting accountability and transparency by State parties concerning transfers of conventional arms. It came into force on December 24th, 2014.

UN First Committee Side Event Entitled “The Expanding Use of Armed UAVs and the Need for International Standards”

On October 24th, 2018, a side event of the UN first committee entitled “The Expanding Use of Armed UAVs and the Need for International Standards” was hosted by the UN Institute for Disarmament Research (UNIDR). The panel incited multilateral discussion on the transparency and proliferation of armed drones and served as a launch event for several publications on the topic.

PREVIOUS ATTEMPTS TO SOLVE THE ISSUE

The present issue seriously lacks international attempts to deal with its implications on the global society. Many reasons can be attributed to that, with the most

distinguishable one being the strong hold the US and other major military powers (e.g., Russia, UK) have on the evolution of the armed drone industry as a whole. The seek for transparency, accountability and oversight is primarily addressed to those countries, since their actions are the ones swarmed by secrecy and clandestineness. As sad as it may be, the impacted countries have not done much to urge the capitalizers of the industry to start acting ethically, since they will likely receive no genuine response.

Obama Administration Drone Reforms

The lead role in using lethal drones that is occupied by the US almost deems it complied to help develop and enforce global norms shaping their use. Not long before leaving office, Barack Obama established a set of policies that governs the use of lethal drones in non-battlefield settings (e.g., Yemen, Pakistan). These policies required US intelligence officials to publish the number of civilians killed in drone strikes outside of war zones, increasing both transparency and accountability. However, it did not take long for Donald Trump to revoke these policies upon becoming President.

European Forum on Armed Drones (EFAD)

The European Forum on Armed Drones (EFAD) is a civil society network formed to challenge the growing global use of armed drones and to address key concerns regarding their deployment and proliferation. Its primary objectives include the promotion of human rights, respect for the rule of law, disarmament, and conflict prevention. It has established a Call of Action that urges all European governments to abide by five principles on the communication of armed drone technologies which was unanimously adopted at a meeting of the EFAD held in Brussels on April 7th, 2016. It has since been ratified by a total of 26 civil society organizations, such as the European Center for Constitutional and Human Rights and Amnesty International.

POSSIBLE SOLUTIONS

Open Government Data (OGD)

Open Government Data (OGD) is an initiative of the Organization for Economic Cooperation and Development (OECD) that strives to attain the promotion of transparency, accountability and value creation by enabling the availability of government data to all. The mandatory prioritization of the publication of military initiatives would hinder any covert armed drone attacks and help keep conflict on foreign grounds within national limits.

Inter-parliamentary Learning Exchanges

The establishment of intergovernmental forums within nation complexes where the discussion on the increase of transparency and accountability would sprout would be ideal, especially considering the contribution of the least politically unrest nations. This could also increase mutual understanding of the security measures taken within military alliances, ensuring that all nations are wholly aware of their provisions.

Counter Unmanned Aerial Systems (C-UAS) Training

Less Economically Developed Countries (LEDCs), especially ones that score higher on the corruption index, such as many sub-Saharan African and central Asian countries (i.e., Libya, Afghanistan), are unable to both afford and entertain the deployment of armed drone military operations. However, with the help of large peacebuilding international Non-governmental Organizations (NGOs), they could be equipped with and trained to use drone countermeasure equipment disrupting the path of UAVs such as radio frequency jammers, GPS spoofers and High Power Microwave (HPM) devices.

Legislative Reform

With the pace of armed drone technology evolution having been increased, the need for amending current legislation on the trade and use of arms to make specific reference to UAVs continuously grows bigger. Occidental involuntariness to regulate armed drones for counterterrorism reasons requires international cooperation so that their compliance ultimately turns mandatory for the stake of healthy diplomatic relations. The creation of multilateral treaties regulating the production of armed drones can minimize the speed of their production or even the extent of their capabilities, consequently enabling the accountability of countries that breach international law.

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