

RETHINKING THE PANORAMA OF DRONE ATTACKS FROM THE PERSPECTIVE OF INTERNATIONAL HUMANITARIAN LAW

Azizur Rahman

Department of Law, University of Dhaka

Drone means a pilotless aircraft controlled autonomously or from a remote place. At present, the use of drones in battlefield has increased significantly raising legal, humanitarian and other concerns. In many parts of the world, the use of drone in armed conflicts has resulted in mentionable casualties to innocent civilian population and civilian object as well. These practical instances urge the nature of drone to be dissected and have rendered it necessary to examine whether the principles and rules developed under International Humanitarian Law with a view to limiting the adverse effects of war can be complied with properly during drone attack. Besides, the question as regards accountability for commission of crimes during drone attack deserves utmost consideration. It is pertinent to note, drones are useful to accomplish certain civilian purposes and under existing instruments of International Humanitarian Law, these are not defined as weapons. Besides, these are considered ideal for '3D missions'-actions that are too 'dull, dirty or dangerous' for manned aircraft. Thus, arguments can be presented both in favour of and against drone system. The instances of civilian casualties establish the fact that in ensuring protection of rights of innocent civilians, issues pertaining to the periphery of ethics and morality have a vital role to play along with existing legal instruments.

Introduction

Drones, or Unmanned Aerial Vehicles can be used for both civilian and military purposes¹. They can be used to detect fire, to help relief personnel in collecting information regarding people affected by natural disaster. They are used by military personnel in collecting and transmitting information in the form of photos, thermal images, videos etc. on the location and identification of military objectives. Besides, they are used to carry weapon, lethal, less-lethal projectiles, or crowd control measures. To ensure protection of civilians and to limit adverse effects of war, International Humanitarian Law has developed certain rules and principles, i.e. distinction between civilians and combatants, prohibition against indiscriminate attack, etc. It is alleged, in carrying out attacks by drone, these principles and obligations under International Humanitarian Law cannot be complied with properly. Besides, there are certain pivotal questions regarding drone attack such as whether drones are themselves weapons; whether the rules of International Humanitarian Law are being complied with in case of drone attack and who will be liable for crimes committed during drone attack. This article will be directed to find out answer to all these questions.

Origin of the Expression "Drone"

¹ Medea Benjamin, *Drone Warfare: Killing by Remote Control* (The US: OR Books, 2012), 15.

It is argued by a military lore, the expression drone has been derived from a use of robotic aircraft as training targets for World War II gun crews². During the war, the United States at a plant in southern California manufactured 15000 small drones for anti-aircraft practice. Most of these drones were marked with black stripes along with the tail part of the fuselage, giving them the appearances of drones (the bees)³. According to other military lore, the expression drone originates from the constant buzzing noise made by some machines in flight⁴.

Definition of the term “Drone”

Generally, drone means an aerial vehicle which is controlled autonomously. According to Scientific American Blogs⁵, ‘a drone is an unmanned aircraft that can fly autonomously—that is, without a human in control’. In military usage, drone means, a pilotless aircraft used for reconnaissance and, more recently, for launching aerial attacks⁶. S.I (A) of the Model Drone Legislation drafted by the Bill of Rights Defense Committee, ‘Drone means a powered aerial vehicle controlled autonomously or remotely that does not carry a human operator.

Are Drones Weapons by Themselves?

Drones are themselves not weapons. They are merely used by the military personnel to carry weapons or fire lethal or less-lethal projectiles on the target area. Different weapon treaties or other instruments of International Humanitarian Law neither define drones as weapons nor prohibit their use. In order to establish drones are not weapons themselves, the following paragraphs will present distinct features of different types of drone.

Classification on the basis of weight and their features

On the basis of weight, UAVs can be classified into the following categories-

- i. Super heavy weight UAVs which weigh more than 2 tones. Generally, such UAVs use turbo jets or turbo fan engines. This type includes the Predator B, Dark star, Global Hawk and the X-45⁷.
- ii. Heavy weight UAVs which weigh between 200 and 2000 kg and this type covers all UAVs between the Outrider and the Fire Scout.

² Rod Powers, *Military word/phrase origins*, United States Military Information.

³ Benjamin, *Drone Warfare*, 13.

⁴ Ibid.

⁵ John Villasenor, “What is a Drone, Anyway?” *Scientific American Blogs*, April 12, 2012, accessed September 14, 2016, <http://blogs.scientificamerican.com/guest-blog/what-is-a-drone-anyway/>

⁶ drone. Dictionary.com. *The American Heritage® New Dictionary of Cultural Literacy, Third Edition*. Houghton Mifflin Company, 2005, (accessed: September 04, 2016), <http://dictionary.reference.com/browse/drone>

⁷ Ibid.

- iii. Medium weight UAVs which weigh between 50 and 200 kg and this type covers the Raven up to the Phoenix.
- iv. Light weight UAVs which weigh between 5 and 50 kg. Generally, such UAVs use electric motors.
- v. Micro UAVs which weigh less than 5 kg. This type covers the Dragon Eye, Silent Eyes, and Pointer etc.

Classification on the basis of endurance and range and their features

Classification of UAVs on these features is as follows-

- i. The long endurance UAVs: These UAVs can stay airborne for 24 hours or more. The range for these UAVs is between 1500 km and 22000 km⁸.
- ii. The medium endurance UAVs: These UAVs have endurance between 5 and 24 hours. The shadow 600 and the Predator are examples of such UAVs.
- iii. The low endurance UAVs: These are UAVs with less than 5 hours endurance. Such UAVs are generally used for short missions.

Classification on the basis of maximum altitude and their features

UAVs can be classified into the following categories on the basis of these factors-

- i. UAVs with low altitude: This type includes UAVs that can fly up to 1000m. The FPASS, Pointer and Dragon Eye are examples of such UAVs⁹.
- ii. UAVs with medium altitude: This type covers UAVs having altitude between 1000m and 10000m and this type covers the majority of UAVs.
- iii. UAVs with high altitude: This type covers all UAVs having altitude over 10000m. The Global Hawk, Dark star, predator B are examples of such UAVs. These UAVs are alleged to have a risk of causing collision with commercial and military aircraft.

Classification on the basis of wing loading and their features

On the basis of wing loading, UAVs can be classified into the following categories-

- i. UAVs with high wing loading: This type covers UAVs that have a wing loading above 100kg/m².
- ii. UAVs with medium wing loading: UAVs having a wing loading less than 100kg/m² but greater than 50kg/m², will be regarded as UAVs with medium wing loading.

⁸ Ibid.

⁹ Ibid.

- iii. UAVs with low wing loading: This type covers UAVs with a wing loading of less than 50kg/m².

Classification on the basis of engine type and their features

Different UAVs use different engines depending on the nature of missions in which these are used. Piston, Electric motors, Turbofans, Turboprop, Rotary, and Propeller are some of the engine types which are used in various UAVs¹⁰. It has already been mentioned that, electric motors are generally used in the lighter and smaller UAVs while the Heavier UAVs UAV use piston engines generally.

Thus, features of different types of drones mentioned above unequivocally present that drones are not themselves weapons. They are used as a means for carrying weapons to the target area. There is no drone with the capacity to explode. It is to be noted, though drones are not prohibited under International Humanitarian Law, but, their use must be subject to the rules and principles developed by it.

Arguments in favour of Drone System

In favour of drone system, the following arguments are presented-

- (i) Drone proponents argue in comparison with long-range artillery or high aerial bombing drones are more precise and they can save lives not only of pilots but also of civilians in conflict zones by making attacks with precision bombs¹¹. It is argued by drone proponents, drones can linger for hours over the target and it provides for an opportunity to assess collateral damage thoroughly¹². Besides, they argue, drones can guide weapons to designated targets with pinpoint accuracy which can ensure protection of civilians effectively¹³.
- (ii) Drone proponents argue, in order to avoid greater risks to soldiers, deploying drones rather than traditional forces becomes obligatory, in some cases¹⁴. Generally in hazardous mountain or jungle area, deploying a drone instead of military forces is preferred. In such a case, drone proponents present arguments on the basis of the principle of avoiding unnecessary risks and hold that, in cases where there are justified goals measures must be taken in order to achieve those goals by minimizing risks to soldiers¹⁵. In a case of this nature, deploying a drone instead of military force can be helpful in avoiding greater risks. Besides, drones being unmanned, there is no pilot at risk of being killed or maimed in a conflict. 'No pilot to be taken captive by enemy

¹⁰ Ibid.

¹¹ Benjamin, *Drone Warfare*, 147.

¹² Ibid.,20.

¹³ Ibid.

¹⁴ Bradley Strawser, "The morality of drone warfare revisited," *The Guardian*, August 6, 2012, accessed August 27, 2016, <http://www.theguardian.com/commentisfree/2012/aug/06/morality-drone-warfare-revisited>.

¹⁵ Ibid.

forces. No pilot to cause a diplomatic crisis if shot down in a friendly country while bombing or spying without permission¹⁶.

- (iii) Drone proponents argue drones are significantly cheaper to purchase, fuel, and maintain than the manned aircraft¹⁷. For instance, Lockheed Martins's F-22 fighter jets cost around \$ 150 million and the price of F-35s clock was around \$90 million. On the other hand, in 2011 the Predator was sold at around \$5 million. In the same year, the cost of the Reaper was \$28.4 million¹⁸.
- (iv) In comparison with regular aircrafts, drones can be deployed easily¹⁹. They can fly to remote and dangerous areas which is not easy for regular military troops²⁰. Drones have the capacity to weave and dive and perform high-speed aerobatics and by dint of these capacities they can share data immediately with troops on the ground²¹. Drones have been proven useful to ensure effective surveillance and reconnaissance.
- (v) Drones can be deployed for considerable time in operation without any human pilot in control²². The Reaper has the capability to linger in the air for a continuous period of 18 hours. Hybrid air vehicles can linger in the air even for weeks²³. Besides, control of a drone can be handed off without any operational down time²⁴.
- (vi) 'Drones are considered ideal for '3D missions'-actions that are too 'dull, dirty, or dangerous' for manned aircraft²⁵. Drones have the capacity to fly low and slow over target area for long time. By using their astonishing sensors, they can effectively track the movement of an enemy soldier from a long distance²⁶. The heat signature of a human body can be identified from 10000 feet in the air by using infrared camera of the Predator's²⁷.

Arguments against Drone System

The following arguments are presented against drone system-

- (i) In most of the cases, before making any drone attack as is alleged, it becomes quite impossible to distinguish between civilians and combatants. Therefore, it is alleged

¹⁶ Benjamin, *Drone Warfare*, 18.

¹⁷ 'The pros and cons of drones,' *the Phil for Humanity*, accessed July 04, 2016, <http://www.philforhumanity.com/Drones.html>.

¹⁸ Benjamin, *Drone Warfare*, 20.

¹⁹ Ibid.

²⁰ Ibid,19.

²¹ Ibid.

²² "The pros and cons of drones," *The Phil for Humanity*.

²³ Benjamin, *Drone Warfare*, 19.

²⁴ Ibid.

²⁵ Ibid.

²⁶ Ibid.

²⁷ Ibid.

that, the obligation to distinguish between civilians and combatants which is a cardinal principle of IHL is not complied with.

- (ii) Drones are alleged to make the act of killing much easier. It is argued, in case of drone attack, there remains a vast physical distance between the target and the operators of a drone and such physical distance as human psychology asserts may induce psychological distancing and this fact may lead to unjust killing²⁸.
- (iii) Drone attack is alleged to create instability rather than security which is clearly contrary to the objective of military action. In the words of Kurt Volker, the former US Permanent Representative to NATO, *“Drone strikes allow our opponents to cast our country as a distant, high-tech, amoral purveyor of death. It builds resentment, facilitates terrorist recruitment and alienates those we should seek to inspire. Drone strikes may decapitate terrorist organizations, but they do not solve our terrorist problem. In fact, drone use may prolong it. Even though there is no immediate retaliation, in the long run the contributions to radicalization through drone use may put more lives at risk.”*²⁹
- (iv) Drone is alleged to make it easier for politicians to engage in war. In this modern time, people generally do not support military intervention or war having no direct and defined aims. Families and relatives of soldiers do not expect to see them deplored in unnecessary hazardous actions. Therefore, political cost of this nature can play vital role in restraining politicians from taking resort to military actions and in solving conflicts and differences through dialogue, diplomatic and political means. But, drones make it easier for political leaders to opt for war since in making attack by it soldiers are not placed under any risk³⁰.
- (v) Drone proponents argue, drone can ensure precision airstrikes by ensuring control and clear observation over the chaos of war through technology. But, Professor Maja Zehfuss of Manchester University contends, “Faith in precision bombing... requires an under-examination of the actual practicalities of precision bombing and the ways in which ‘precision’ has been defined.”³¹ On account of physical distance between the operator of a drone and its target, demand of emergency and necessity of immediate attack, absence of advanced technology, bad weather it is not possible to ensure precision airstrikes in all cases.

²⁸ Chris Cole, “What’s wrong with drones?” *Drone Wars UK*, March 20, 2014, accessed September 20, 2016, <http://dronewars.net/2014/03/20/whats-wrong-with-drones/>.

²⁹ Kurt Volker, “What the U.S. risks by relying on drones,” *The Washington Post*, October 26, 2012, accessed September 22, 2016.

³⁰ Sing, *Introduction to Jurisprudence*, 47.

³¹ *Ibid.*

- (vi) In order to convert the tactical strike to strategic advantage, critical intelligence is required. A drone attack destroys the critical intelligence³². In a high-tech tracking of enemy networks, military personnel are required to conduct sensitive site exploitation, to vacuum up clues, seize laptops and cell phones³³. But, drones cannot perform these vital tasks.
- (vii) In order to secure detailed intelligence, it is essential to establish direct communication with civilians. But, drones cannot establish such communication³⁴. Drone can only kill the enemy and cannot capture surrendering military personnel, abandoned hardware, or military bases³⁵.
- (viii) Drone attack is alleged to have the effect of lowering the political or psychological cost of military attack, which leads to military attack, resulting in greater harm eventually³⁶.
- (ix) The kind of asymmetric warfare which is waged generally with drones is unfair. In a drone strike, opponents are treated as vermin and not as human being. They are treated as mere pawns in some geopolitical chess game³⁷.
- (x) In comparison with traditional aircrafts, in order to operate drone significantly more people are required. To keep one Predator aloft only for twenty-four hours 168 persons are required. On the other hand, in each mission, an F-16 fighter aircraft needs fewer than one hundred people³⁸.
- (xi) In order to operate drones effectively, constant control and uninterrupted attention of ground-based pilots and crews, technicians and mechanics are required³⁹. To analyze surveillance feeds and collected data intelligence analysts are required. By 2010, about nineteen analysts were required to analyze data collected by each drone⁴⁰.
- (xii) Drone proponents argue these are cheaper than in comparison with usual aircrafts. But, the reality presents different scenario. In 2011, the Congressional Budget Office contended, the advanced sensors and infrared cameras used by drones are very expensive⁴¹. Such a camera costs several times than a drone itself.
- (xiii) Drone can, as is argued by drone proponents, ensure accuracy and reliability. But, clouds, rain, smoke and fog render suspicion as regards such accuracy and reliability

³² Linda Robinson, "The Downside of Drones," *World Report: Informative Analysis on Foreign Affairs*, October 31, 2013, accessed August 1, 2016, <http://www.usnews.com/opinion/blogs/world-report/2013/10/31/drone-strikes-arent-always-the-most-effective-counterterrorism-measure>.

³³ Ibid.

³⁴ "The pros and cons of drones," *The Phil for Humanity*.

³⁵ Ibid.

³⁶ Ryan Jenkins, "The ethics of drone strikes," *1000-Word Philosophy*, accessed August 28, 2016, <https://1000wordphilosophy.wordpress.com/2014/03/27/the-ethics-of-drone-strikes/>.

³⁷ Ibid.

³⁸ Benjamin, *Drone Warfare*, 21.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Ibid., 22.

well grounded⁴². Besides, the probability of equipment errors and design defects cannot be negated. ‘Double tap’ technique i.e. firing two hellfire missiles at each target which is intended to overcome these deficiencies has increased the risk of civilian death. As a result of applying this technique, innocent civilians who come forward to help the victims of first strike are themselves blown up with the subsequent strike⁴³. In a study it was found, around fifty civilians were killed as a result of follow-up strike made under double tap technique⁴⁴.

(xiv) In case of drone system, the probability of security flaws cannot be negated. Besides, due to accidental press on spacebar, certain drones start to cause self-destruction⁴⁵.

Drone System and its Compliance with Principles Developed by International Humanitarian Law

Principle of Distinction between Civilian and Combatant and Drone System

Article 48 of Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) provides, in order to ensure respect for and 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. Article 51 (1) of Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) as regards protection of the civilian population provides, the civilian population and individual civilians shall enjoy protection against dangers arising from military operations. Article 51(2) of this Protocol provides, the civilian population as well as individual civilians, shall not be the object of attack. Article 57 (1) of this Protocol lays down, in the conduct of each military operations, each state party is required to take constant care to spare the civilian population, civilians and civilian objects. Thus, as per all these Articles, in any armed conflict, attack must be launched only against the military objective and not against the civilians.

It is contended that, in case of drone attacks, the duty to distinguish between civilians and combatants cannot be fulfilled strictly on account of the grounds like faulty intelligence, ignorance as regards local customs and usages prevailing in the target area, bad weather conditions including clouds, rain, fog and smoke etc⁴⁶. Besides, since drones are controlled from a remote place and operators on the ground are required to analyze lots of images,

⁴² Ibid., 26.

⁴³ Ibid.

⁴⁴ Chris Woods and Christina Lamb, “Obama Terror Drones: CIA Tactics in Pakistan Include Targeting Rescuers and Funerals,” *Bureau of Investigative Journalism*, February 4, 2012, accessed September 15, 2016, <http://original.antiwar.com/christina-lamb/2012/02/04/obama-terror-drones-cia-tactics-in-pakistan-include-targeting-rescuers-and-funerals/>.

⁴⁵ Benjamin, *Drone Warfare*, 24.

⁴⁶ Benjamin, *Drone Warfare*, 26-27.

videos and data within very limited time, therefore, it becomes nearly impossible to ascertain in each and every case whether the targeted person is a combatant or a civilian.

For instance, in Afghanistan, the US Army launched 169 drone strikes in 2015 where 44-103 civilians and 3-21 children were killed⁴⁷. During the CIA's 10-year campaign in the tribal regions of northern Pakistan, at least 222 civilians were killed on account of drone strikes⁴⁸. In Yemen, 20-21 drone strikes were launched in 2015 that killed 1-7 civilians and 1-2 children⁴⁹.

Prohibition against Indiscriminate Attack and Drone System

Art 51(4) of Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) prohibits indiscriminate attacks. Under this Article the following attacks have been defined as indiscriminate-

- (a) Attacks which are not directed at a specific military objective; or
- (b) Attacks in which such methods or means of combat have been employed which cannot be directed at a defined military objective; or
- (c) Attacks in which such methods or means of combat have been employed the effects of which cannot be restricted as required by this Protocol; and which are of a nature to strike military objectives and civilians or civilian objects without distinction.

It has already been presented, on account of factors like faulty intelligence, ignorance as regards local customs and usages, bad weather conditions it becomes nearly impossible to determine before launching any attack by drone whether the target is a military object or a civilian or a civilian object. On account of above-mentioned factors, it cannot be determined before making any attack by drone whether the attack will cause excessive loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof and will be regarded as an indiscriminate attack.

Principle of Proportionality and Drone System

⁴⁷ Jack Serle and Payenda Sargand, "Get the data: A list of US air and drone strikes, Afghanistan 2015," *Covert Drone War, Get the data: Drone wars*, February 12, 2015, accessed August 15, 2016, <https://www.thebureauinvestigates.com/2015/02/12/us-drone-war-afghanistan-list-american-air-strikes-2015/>

⁴⁸ Alice K Ross and Jack Serle, "Most US drone strikes in Pakistan attack houses," *All Stories, Covert Drone War, Drone strikes in Pakistan*, May 23, 2014, accessed August 15, 2016, <https://www.thebureauinvestigates.com/2014/05/23/most-us-drone-strikes-in-pakistan-attack-houses/>

⁴⁹ Jack Serle, "Yemen: Reported US covert actions 2015," *Covert Drone War, Get the data: Drone wars*, January 26, 2015, accessed August 16, 2016, <https://www.thebureauinvestigates.com/2015/01/26/yemen-reported-us-covert-actions-2015/>.

The principle of proportionality is a fundamental principle of International Humanitarian Law. Article 57(2)(b) of Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) provides, an attack shall be cancelled or suspended if it becomes apparent that the attack may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated.

Thus, under this Article, each state party has been placed under an obligation to make a comparison between intended military advantage and incidental loss to civilian and if the attack is expected to cause excessive injury or damage to civilians or civilian objects than under the principle of proportionality the attack will be prohibited. It is to be noted that, 'proportionality in attack is an inherently subjective determination that will be resolved on a case-by-case basis.'⁵⁰ Besides, determination of proportionality is basically dependent on diverse contextual factors. In case of drone attack, proportionality is determined by the operator in remote place on the basis of collected data, transmitted photos, images and videos etc. It is alleged, on account of bad weather condition, faulty intelligence, proportionality cannot be determined objectively before launching any drone attack in each and every case.

Requirement to take Precautionary Measures and the Drone System

As regards requirement to take precautionary measures, Article 57 of Protocol Additional to the Geneva Conventions of 12 August 1949, and relating to the Protection of Victims of International Armed Conflicts (Protocol I) provides, in each and every attack, every state party is required to-

- . Take constant care to spare the civilian population, civilians and civilian objects. [Article 57(1)]
- . Take every feasible steps to ascertain whether the targeted objectives are civilians or civilian objects and whether they are entitled to special protection and whether this Protocol prohibits to attack them. [Article 57(2)(a)(i)]
- . Choose means and methods of attack of a nature that avoids, and in any event minimizes, incidental loss or injury or damage to civilians life, civilians or civilian objects. [Article 57(2)(a)(ii)]
- . Refrain from making a decision to launch any attack which may result in excessive incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof. [Article 57(2)(a)(iii)]
- . To give advance warning of attacks that may affect civilians. [Article 57(2)(c)]

⁵⁰ US Air Force Judge Advocate General's Department, '*Air Force Operations and the Law: A Guide for Air and Space Forces*' (first edition, 2002), 27.

Article 57(4) requires each state party to take such precautionary measures even in the conduct of military operations at sea or in the air. Article 58 of this Protocol obliges the parties involved in any armed conflict to endeavour to remove the civilian population, individual civilians and civilian objects from the target area.

Drones are generally used in operations which are dangerous in nature. In an operation of this nature, it is not possible to take precautionary measures as required under this Article before launching any attack by drone. In an operation where military personnel are placed on the battlefield, in that case, it becomes easier to take precautionary measures as required under this Article. Because, military personnel can effectively warn and remove civilian population from the target place before launching any attack. Besides, military personnel, being placed on the battlefield directly, can determine whether these measures have been taken or not. But, in an operation where drone is used, the operator ascertains whether the precautionary measures as required under this Article have been taken or not depending on intelligence information, transmitted data, photos, images and videos etc. On account of faulty intelligence, bad weather condition, such determination cannot be made effectively. Thus, drone system poses a threat to the protection of civilian population.

Persons Accountable for Crimes Committed during Drone Attacks

International humanitarian law does not recognize impunity for international crimes and for systematic and widespread violations of fundamental human rights and regards these as betrayal of human solidarity. International humanitarian law requires every criminal act committed during any armed conflict must be prosecuted. Under the Fourth Geneva Convention of 1949 and its Additional Protocol I of 1977, state party is required to prosecute 'grave breaches,' i.e., war crimes, for instance, launching an indiscriminate attack willfully against the civilians. Thus, the International Criminal Court (ICC), the International Criminal Tribunal for the former Yugoslavia (ICTY), and the International Criminal Tribunal for Rwanda (ICTR), were established to deal with war crimes, genocide and crimes against humanity.

It has already been mentioned, drone is not made as a weapon itself. It is used for carrying weapons to the targeted place. Therefore, if any war crime is committed on account of drone attack, in that case, it is the operator who has operated the drone without taking proper precautions in order to avoid civil casualties will be liable. In this case, the designer who has designed the drone or the engineer who has manufactured the drone will not be liable. Because, the operator, before launching any attack by drone is required to take precautionary measures and to ascertain that no civilian is left in target area. International Humanitarian Law requires him to launch attack only against military personnel and objectives and to spare the civilian population and civilian objectives. Besides, in cases, where there is a possibility of causing incidental loss to civilian, the operator is required to determine its proportionality by comparing it with intended military benefit. If the attack is expected to cause excessive loss, injury or damage to civilian population or object, then it must not be carried out. Thus, if the operator instructs a particular drone to fire on target

area in violation of all these requirements, he will be liable for injury, loss and damage caused to civilian population and civilian objects.

Article 36 of Protocol Additional to the Geneva Conventions of 12 August 1949 and relating to the Protection of Victims of International Armed Conflicts (Protocol I) in the study, development, acquisition or adoption of a new weapon, it must be ascertained whether the employment of such a weapon would be in contradiction with this Protocol or any other rule of international law. Thus, under this Article each engineer and manufacturer of drone is required to manufacture a drone in a way and with such features and capabilities so that all the requirements under International Humanitarian Law can be fulfilled. Each engineer and manufacturer is required to ascertain, the employment of any drone made by him would not be contradictory to the principles of International Humanitarian Law. If any manufacturer or engineer manufactures any drone in violation of these requirements, he will be liable under International Humanitarian Law.

Concluding Remarks

Drones are unmanned aerial vehicles controlled autonomously and they are not themselves weapons. They are used only for carrying weapons to the target area. There are arguments both in favour of and against drone system. In operations where drones are used, the operators are not placed on the battlefield and they control drones from a remote place and their instructions to make an attack are based on collected and transmitted data, photos, images, videos, etc. Therefore, utmost respect towards principles, rules and obligations developed by International Humanitarian Law and absolute integrity to comply with the requirements of International Humanitarian Law are required to exist in the minds of drone operators. On account of physical distance between the operator and the target area, drone operators are required to remain sincere, cautious and careful at all time. In order to ensure protection of civilians, a sense of humanity and respect towards the rights of innocent civilians on the target area should grow in the minds of drone operators. Thus, in this respect, ethical issues have a vital role to play along with existing legal instruments of International Humanitarian Law. Therefore, proper policies should be taken to cover each and every stage involved in deploying drone to make an attack.