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Review Article

THE LEGALITY OF DRONE USE UNDER INTERNATIONAL HUMANITARIAN LAW: THEORETICAL PERSPECTIVES AND CASE LAW INSIGHTS

Driss Ed.daran*, Fatima Ezzohra El Hajraoui, Zaid Ali Zaid, Riad Al Ajlani and Zia-ud-Din Malik

ABSTRACT

Background: Modern warfare is increasingly characterised by the use of drone technology to manage and operate aerial systems for surveillance and target identification. Initially, unmanned aerial vehicles (UAVs) were primarily used for surveillance. However, their active involvement in military operations has raised significant legal questions regarding their status under International Humanitarian Law (IHL). The expanded use of drone strikes beyond conventional war zones has brought to light critical issues related to state sovereignty, the principle of distinction, and the principle of proportionality in armed conflict. With the growing reliance on drones in conflict zones, particularly in the Middle East by the United States and Israel, concerns have emerged regarding civilian safety and military accountability.

Methods: This study employs a literature review approach and conducts doctrinal legal research, drawing primarily on primary sources such as the United Nations Charter and secondary sources, including case law like the Corfu Channel Case and Nicaragua v. United States. Journal articles, academic research papers, and reports from human rights organisations were analysed to assess the application of International Humanitarian Law in the context of drone warfare. Case studies from Pakistan, Gaza, and Yemen were examined to evaluate the practical implementation of the principles of distinction, proportionality, and necessity. These examples were used to assess legal standards and state compliance in minimising civilian casualties.

Results and Conclusions: The analysis reveals that while drones provide strategic advantages, their use often violates the fundamental principles of IHL. Drone strikes in Yemen and Gaza have demonstrated instances where civilian casualties were inadequately avoided, raising serious concerns about adherence to the principles of proportionality and distinction. The study also highlights that states employing drone strikes, particularly the U.S. and Israel, bear accountability for civilian deaths despite the lack of a robust legal framework to address such issues. To address these challenges, there is a pressing need for international laws that enhance oversight and ensure compliance with IHL, particularly in safeguarding civilians during armed conflict. Consequently, there is a growing call for stronger international regulation to ensure that the use of force aligns with the protection of civilian populations.

1 INTRODUCTION

The rapid advancements in drone technology have introduced unprecedented capabilities on the battlefield, fundamentally transforming the nature of modern warfare. While drones were initially employed solely for surveillance and reconnaissance, an increasing number of nations are now utilising them for offensive operations, enabling precise and targeted strikes. Their deployment in active conflict zones has sparked significant legal and ethical debates under International Humanitarian Law (IHL). These concerns are further amplified as states increasingly use drones beyond traditional war zones, highlighting the growing importance of IHL in regulating such practices. The use of drones intersects with critical issues such as state responsibility, sovereignty, and the principles of distinction and proportionality in armed conflict.¹ This has become a contentious topic, as drone strikes often occur in territories far from conventional frontlines, challenging established norms on the use of force. While the technology itself is generally considered legal, its application frequently violates international law. Critics have raised objections to the implementation of drone technology, as its use in diverse contexts necessitates addressing varying legal and ethical considerations. Nonetheless, scholars like Henderson, Keane, and Liddy argue that the legal obligations governing drone strikes are no different from those applicable to other weapons, emphasising the need for consistent adherence to IHL standards.2

This paper explores the complexities of drone warfare within the framework of International Humanitarian Law, focusing on four key areas of concern: the legality of remote operations, the role of operators, target identification, and the pervasive lack of

¹ Amelie Theussen, 'International Law Is Dead, Long Live International Law: The State Practice of Drone Strikes' (2023) 60 International Politics 859, doi:10.1057/s41311-021-00333-0.

Ian S Henderson, Patrick Keane and Josh Liddy, 'Remote and Autonomous Warfare Systems: Precautions in Attack and Individual Accountability' in Jens David Ohlin (ed), Research Handbook on Remote Warfare (Edward Elgar Publishing 2017) 335; Afonso Seixas-Nunes, The Legality and Accountability of Autonomous Weapon Systems: A Humanitarian Law Perspective (CUP 2022) doi:10.1017/9781009090001.

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transparency in drone programs. Through practical examples, case studies, and relevant court rulings, this analysis demonstrates that while drone warfare often operates in a legal grey area, the principles and norms of IHL continue to play a crucial role in shaping its regulation and application in contemporary security environments.

2 METHODOLOGY

The method applied in this report and related research on "The Legal Framework of Drones Under International Humanitarian Law" entailed a literature review approach and doctrinal legal research. This approach provided the foundation for evaluating current laws, treaties, and legal norms governing drone warfare, particularly in the Middle East and Gaza. The study began with critically assessing primary and secondary legal materials, including legal statutes and case law. Key documents, such as the United Nations Charter and various International Court of Justice (ICJ) decisions, served as primary sources. These sources were instrumental in understanding the fundamental legal principles governing armed conflict, particularly distinction, proportionality, and necessity.

Additionally, scholarly publications—including peer-reviewed journals, legal commentaries, and statements from human rights organisations—were analysed to assess the real-world application of these legal principles in drone warfare. A crucial aspect of the research involved examining case law, particularly the Corfu Channel Case and Nicaragua v. United States, to explore evolving legal interpretations regarding state sovereignty, the use of force, and extraterritorial jurisdiction.⁵ These cases provided a framework for analysing modern drone strikes, especially in relation to state responsibility and the duty to protect civilians. Another significant component of the study was the examination of key concepts in International Humanitarian Law (IHL), such as distinction, proportionality, and necessity. To evaluate these principles, insights were drawn from drone operations conducted in the Middle East, particularly in Yemen by the United States and in Gaza by Israel. Casualty statistics were used to assess the extent to which these operations complied with IHL, highlighting the ethical and legal challenges posed by modern drone technology.

³ ICRC, 'Views of the International Committee of the Red Cross (ICRC) on autonomous weapon system' (Convention on Certain Conventional Weapons (CCW): Meeting of Experts on Lethal Autonomous Weapons Systems (LAWS), Geneva, 11-15 April 2016) https://www.icrc.org/en/document/views-icrc-autonomous-weapon-system> accessed 25 December 2024; Neil Davison, 'A Legal Perspective: Autonomous Weapon Systems Under International Humanitarian Law' (ICRC, 30 2018) https://www.icrc.org/en/document/autonomous-weapon-systems-under-international-humanitarian-law> accessed 25 December 2024.

⁴ United Nations Charter (26 June 1945) https://www.un.org/en/about-us/un-charter/full-text-accessed 25 December 2024.

Theussen (n 1); Corfu Channel Case (United Kingdom of Great Britain and Northern Ireland v People's Republic of Albania) [1949] ICJ Rep 4, 244 https://www.icj-cij.org/case/1 accessed 25 December 2024; Military and Paramilitary Activities in and Against Nicaragua (Nicaragua v United States of America) Merits [1986] ICJ Rep 14 https://www.icj-cij.org/case/70 accessed 25 December 2024.

3 THE LEGAL FRAMEWORK OF DRONES LINDER INTERNATIONAL HUMANITARIAN LAW

3.1. Definition and Nature of Drones

Drones, also known as Unmanned Aerial Vehicles (UAVs), are small to medium-sized aircraft that operate without a human pilot. These versatile devices can be remotely controlled or fly autonomously, demonstrating their ability to sustain flight under various conditions. Modern drones are equipped with state-of-the-art technologies, including GPS, radar control, infrared sensors, and high-resolution cameras, enabling them to perform a wide range of tasks efficiently. 6 In many ways, UAVs function similarly to traditional aircraft, such as helicopters and aeroplanes. For instance, UAVs can be programmed to execute aggressive manoeuvres, land or perch on inclined surfaces, and carry out general aviation and civil functions. They are powered by electric, jet, or combustion engines and rely on multiple propellers for balance and manoeuvrability. While most UAVs feature four propellers, variations exist with three, six, or even eight propellers. Each UAV is equipped with a flight control system that regulates stability through magnetic field sensors and adjusts the speed of the propellers accordingly. The presence of an anterior endoskeleton allows drones to execute precise movements without human intervention, following preset flight paths.

Drones are now widely used across various domains, including military applications. In defence operations, they play a crucial role in surveillance, intelligence gathering, and precision strikes. UAVs enhance situational awareness by providing real-time information about the surrounding environment, while reducing the risk to human pilots. They also assist in distinguishing between objects and individuals, identifying potential targets, and detecting weapons or explosives.8 This capability has revolutionised modern warfare, allowing for tactical precision while reducing the risk to human lives.

However, the increasing use of drones raises significant legal and ethical concerns under International Humanitarian Law (IHL). UAVs blur traditional notions of warfare by enabling remote operations, potentially undermining accountability for military actions.9 Their ability to conduct precise strikes necessitates strict adherence to distinction and proportionality principles to prevent collateral damage and human rights violations. Despite advancements in UAV technology, the application and interpretation of IHL

^{&#}x27;Drones: What They Are, How They Work, Spanish Regulations' (Ferrovial, 2024) 6 https://www.ferrovial.com/en/resources/drones/ accessed 25 December 2024.

Bowen Zhang and others, 'Overview of Propulsion Systems for Unmanned Aerial Vehicles' (2022) 15(2) Energies 455, doi:10.3390/en15020455.

Maurice Marshall and Jimmie C Oxley (eds), Aspects of Explosives Detection (Elsevier Science 2011) doi:10.1016/B978-0-12-374533-0.X0001-3.

Hugh Gusterson, Drone: Remote Control Warfare (MIT Press 2016).



remain contested and require ongoing regulation to ensure compliance with humanitarian principles. As a fusion of robotics and aerodynamics, drones have numerous innovative applications, particularly in military and security operations. ¹⁰ Given their increasing role in modern conflicts, assessing their impact on warfare and civilian populations is crucial. A deeper understanding of their implications is essential for establishing appropriate regulatory frameworks and ethical oversight mechanisms as their use continues to expand.

3.2. Relevant International Humanitarian Law Principles

The fundamental principles of International Humanitarian Law (IHL) include distinction, limitation, and precaution. In contemporary warfare—particularly involving drones—principles such as proportionality, necessity, and precaution play a crucial role in protecting both combatants and civilians. One of the core tenets of IHL is the principle of distinction, which prohibits the direct targeting of individuals who are not combatants. This principle is enshrined in Articles 48 and 52 of Additional Protocol I of the Geneva Conventions, which emphasise the protection of civilians. However, the increasing use of drones as instruments of warfare presents significant challenges in this regard. While drones are capable of precision targeting, concerns persist regarding the potential misidentification of targets. This issue arises primarily due to the uncertainty of battlefield conditions and the subjective nature of military advantage assessments, which can lead to differing interpretations of what constitutes "excessive" injury.

Legal compliance with IHL in this context necessitates adherence to the principles of necessity and precaution. Military necessity allows the use of force to achieve a legitimate military objective but does not exempt operators from adhering to humanitarian constraints. The principle of precaution requires that all feasible measures be taken to minimise civilian casualties. This includes gathering intelligence to accurately identify targets, using precision-guided munitions designed to limit collateral damage, and rigorously assessing the potential impact on civilians. The failure to implement such precautions may constitute a violation of IHL, underscoring the need for meticulous planning and execution of drone strikes.

The legal framework governing drone warfare also raises serious concerns regarding extraterritoriality, state sovereignty, and accountability. Issues related to national sovereignty emerge when drone strikes are conducted within the territory of a sovereign

Syed Agha Hassnain Mohsan and others, 'Unmanned Aerial Vehicles (UAVs): Practical Aspects, Applications, Open Challenges, Security Issues, and Future Trends' (2023) 16(1) *Intelligent Service Robotics* 109, doi:10.1007/s11370-022-00452-4.

¹¹ Khoirunnisa Khoirunnisa and others, 'The Ukraine-Russia Conflict: An International Humanitarian Law Review of the Involvement of Foreign Fighters' (2025) 11 Social Sciences & Humanities Open 101340, doi:10.1016/j.ssaho.2025.101340.

¹² Protocol Additional to the Geneva Conventions of 12 August 1949, and Relating to the Protection of Victims of International Armed Conflict (Protocol I) (adopted 8 June 1977) [1979] UNTS 1125/3.

state that is not engaged in an active conflict, particularly when the target does not pose an imminent threat to the attacking state.¹³ Furthermore, the question of accountability for unlawful drone strikes—including the mechanisms for punishing violations of IHL—remains a complex and contentious issue. While drones can enhance the efficiency of military operations, their deployment must align with international humanitarian law standards. The complexities of modern warfare make it challenging to ensure a distinction between combatants and civilians, accurately measure proportionality and uphold the principles of necessity and precaution.¹⁴ Legal and ethical concerns surrounding drone strikes also stem from gaps in the application of international treaties, which are meant to safeguard civilians and promote humanitarian values in armed conflict.

4 PRACTICAL EXAMPLES OF DRONE USAGE IN MODERN CONFLICTS

4.1. US Drone Operations in the Middle East

Drones have become a focal point in military operations, particularly in the Middle East, with a significant presence in Pakistan, Afghanistan, and Yemen, where the United States has conducted counterterrorism operations. Unmanned Aerial Vehicles (UAVs), such as the MQ-9 Reaper, are effective in reconnaissance and precision strikes. ¹⁵ However, their use under IHL raises serious legal and ethical concerns. The practice of targeted assassinations via drone strikes is often justified as a necessary measure in the war on terror. However, the legality of such actions under IHL depends on several factors, primarily the principles of distinction, proportionality, and necessity. ¹⁶

The principle of distinction requires that parties in armed conflict differentiate between combatants and civilians. It is often argued that drones can target military objectives with high precision, thereby reducing civilian casualties. However, they cannot entirely eliminate the risk of collateral damage. Reports of civilian casualties, particularly in Yemen, have raised concerns about whether these operations are conducted in compliance with IHL. Another legal challenge in drone operations is the principle of proportionality,

¹³ Rosa Brooks, 'Drones and Cognitive Dissonance' in Peter L Bergen and Daniel Rothenberg (eds), Drone Wars: Transforming Conflict, Law, and Policy (CUP 2014) 230.

¹⁴ Jack Beard, 'The Principle of Proportionality in an Era of High Technology' in Christopher M Ford and Winston S Williams (eds), Complex Battlespaces: The Law of Armed Conflict and the Dynamics of Modern Warfare (Lieber Studies Series 1, OUP 2018) 261.

¹⁵ Ankit Kumar, 'Drone Proliferation and Security Threats' (2020) 33(1/2) Indian Journal of Asian Affairs 43.

Nicolene Renske Steyn, 'The Adequacy of International Humanitarian Law in Regulating the Challenges Posed by Drone Warfare' (PhD thesis, North-West University 2019) doi:10.13140/ RG.2.2.17222.24646.

¹⁷ James Igoe Walsh, 'Precision Weapons, Civilian Casualties, and Support for the Use of Force' (2015) 36(5) *Political Psychology* 507, doi:10.1111/pops.12175.

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which mandates that an attack must not cause excessive civilian harm relative to the anticipated military advantage.¹⁸ Proportionality is inherently subjective, particularly in conflict zones where conditions are fluid and unpredictable. The recent escalation of violence in Gaza and the increasing scale of Houthi attacks against U.S. targets highlights the difficulty of ensuring proportionality in military responses.¹⁹

The principle of necessity allows the use of force only when it is essential to achieving a legitimate military objective. The United States maintains that drone strikes help eliminate imminent threats. However, legal concerns arise when these strikes occur in regions where the U.S. is not formally engaged in military operations or lacks the explicit consent of the host country. The extraterritorial nature of sovereignty issues, particularly in countries like Yemen, do not always approve of the U.S. military actions on their territory.

In a recent incident in which Houthi forces reportedly shot down an MQ-9 Reaper drone serves as a stark reminder of the risks and geopolitical tensions associated with drone operations in the Middle East.²⁰ As long as the U.S. military and intelligence agencies continue using drones for counterterrorism missions, the legal framework governing these operations must strike a careful balance between national security interests and compliance with IHL.²¹ The legality of U.S. drone strikes extends beyond the battlefield, impacting international relations, state sovereignty, and global norms of warfare.

4.2. Israel's Use of Drones in Gaza

The deployment of drones by Israel in Gaza, particularly in the context of urban warfare, has raised significant concerns regarding proportionality and distinction in its military operations. Since the escalation of hostilities on 7 October 2023, the use of quadcopter drones has increased substantially, serving various purposes, including surveillance and lethal strikes against Palestinian civilians. ²² Advanced drones such as the "SMASH Dragon" and "Spike Firefly" are equipped with cutting-edge technology that enables both surveillance and targeted attacks. However, their application in Gaza has had devastating consequences on multiple occasions.

¹⁸ Beard (n 14).

¹⁹ Xavier Pons Rafols, 'The War in Gaza and the Israeli-Palestinian Conflict: A Turning Point in the Midst of an Endless Cycle of Violence' (2024) 12 Paix et Securite Internationales 1, doi:10.25267/ Paix_secur_int.2024.i12.1002.

²⁰ Douglas C Youvan, 'Downing the MQ-9 Reaper: Analyzing Yemen's Air Defense Tactics and Capabilities in Modern Warfare' [2024] doi:10.13140/RG.2.2.11144.64005.

²¹ David Hastings Dunn and others, Drones, Force and Law: European Perspectives (CUP 2023) doi:10.1017/9781009451499.

²² Nehaluddin Ahmad, Faizah Rahim and Nurulqayyimah Aziz, 'Can International Humanitarian Law Regulate Recent Drone Strikes?: A Case Study' (2024) 17(1) *Journal of East Asia and International Law* 159, doi:10.14330/jeail.2024.17.1.09.

For instance, the reported extrajudicial assassination of Silah Muhammad Ahmad Odeh, who was shot while holding a white flag, highlights a clear failure to distinguish between combatants and civilians. Similarly, the killing of 70-year-old Fathi Hassan Yassin while he was seeking refuge underscores the severe repercussions of the indiscriminate use of drones in civilian areas.²³

Beyond the physical harm, the psychological impact of these operations is profound. Drones instil a pervasive sense of dread and terror among Palestinians, who live under constant surveillance and the ever-present threat of sudden attacks. The intimidating sound of drones, coupled with the disruption of daily life, exacerbates the suffering of Gazans. This approach violates the ethical principles of armed conflict, which prioritise the protection of civilian lives in accordance with international humanitarian law. Moreover, the principle of proportionality—which stipulates that the anticipated military advantage must outweigh potential civilian casualties—is frequently disregarded. According to Euro-Med Monitor, drone attacks often result in a high civilian death toll, particularly in public areas where distinguishing between combatants and civilians is challenging.

While Israel's military operations benefit from the technological advantages of drones, the necessary precautions to minimise civilian harm are often overlooked. The situation in Gaza reflects a troubling trend in the use of modern military technology in ways that violate established humanitarian norms. The frequent deployment of drones for extrajudicial killings and the targeting of civilians raise serious ethical and legal concerns, warranting an urgent international response.²⁴ Accountability from the global community is essential, along with concerted efforts to ensure the protection of civilians in conflict zones.

4.3. Challenges in Ensuring Compliance with International Humanitarian Law

However, compliance with these principles has so far been elusive in practice, particularly in the context of U.S. drone operations in Pakistan and Yemen, where significant counterterrorism efforts have been concentrated, especially under the Bush, Obama, and Trump administrations. These operations have drawn criticism from human rights groups, and International Humanitarian Law (IHL) advocates due to civilian casualties and potential violations of the principles of distinction and proportionality.²⁵

^{23 &#}x27;Gaza: Israeli Army Expands Its Use of Quadcopters to Kill More Palestinian Civilians' (Euro-Med Human Rights Monitor, 4 June 2024) https://euromedmonitor.org/en/article/6357/Gaza:-Israeli-army-expands-its-use-of-quadcopters-to-kill-more-Palestinian-civilians> accessed 26 December 2024.

²⁴ David Cortright, Rachel Fairhurst and Kristen Wall (eds), Drones and the Future of Armed Conflict: Ethical, Legal, and Strategic Implications (University of Chicago Press 2015).

²⁵ Amichai Cohen and David Zlotogorski, Proportionality in International Humanitarian Law: Consequences, Precautions, and Procedures (Lieber Studies Series 6, OUP 2021) doi:10.1093/ oso/9780197556726.001.0001.

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The United States began its drone campaign in Pakistan as early as 2004, with the killing of Taliban leader Nek Muhammad in South Waziristan. However, the drone war escalated significantly during the Obama administration, reaching its peak in 2010.²⁶ While the operations were ostensibly aimed at militant leaders affiliated with al-Qaeda and the Taliban, reports of civilian casualties continued to emerge. Strikes were frequently conducted in the Federally Administered Tribal Areas (FATA) along Pakistan's northern border. Despite claims of targeting terrorists, the lack of transparency and accountability fuelled suspicions that the United States was violating the principle of proportionality and failing to take adequate measures to minimise civilian harm.²⁷

Similarly, U.S. drone strikes in Yemen, which began in 2002, expanded considerably under the Obama administration starting in 2009. One of the most controversial operations occurred in 2011 when a U.S. strike killed Anwar al-Awlaki, an American citizen and alleged leader of al-Qaeda.²⁸ While al-Awlaki was considered a legitimate target under U.S. counterterrorism strategy, the same strike killed his son two weeks later, raising significant legal and ethical questions. Under the Trump administration, the counterterrorism campaign in Yemen intensified further, with at least 131 strikes reported in 2017 alone.²⁹ Trump also eliminated the designation of specific locations as "areas of active hostilities," a move that effectively lowered the threshold for acceptable civilian casualties. The January 2017 Yakla raid, which resulted in the deaths of numerous civilians, including children, sparked global outrage.³⁰ The lack of clear accountability for civilian deaths has led many to question whether the U.S. is adhering to IHL norms.

U.S. drone operations in Pakistan and Yemen illustrate the complexities of complying with IHL in modern warfare. While these operations have targeted high-level insurgents, their secretive nature and the resulting civilian casualties have led to accusations of IHL violations. This underscores the challenges of conducting warfare in non-traditional battlefields, where the lines between combatants and civilians are often blurred, and accountability mechanisms are insufficient.

²⁶ Francis N Okpaleke, Drones and US Grand Strategy in the Contemporary World (New Security Challenges, Springer 2023) 103-44, doi:10.1007/978-3-031-47730-0.

²⁷ Imtiaz Ali, 'Mainstreaming Pakistan's Federally Administered Tribal Areas: Reform Initiatives and Roadblocks' (*United States Institute of Peace*, 20 March 2018) https://www.usip.org/publications/2018/03/mainstreaming-pakistans-federally-administered-tribal-areas accessed 26 December 2024.

²⁸ Charles M McNiel, 'The Killing of Anwar al-Awlaki: How the United States Lost a Crucial Battle in the War of Ideas' (PhD thesis, Air Command and Staff College, Air University 2016).

²⁹ Mahmoud Saleh Al Shawhati, 'Impact of the United States Policy in Supporting the Saudi War in Yemen during the Term of the Trump Administration and the Joe Biden Administration' (PhD thesis, San Francisco State University 2023).

³⁰ Hussam Radman, 'Al-Qaeda's Strategic Retreat in Yemen' (Sana'a Center for Strategic Studies, 17 April 2019) https://sanaacenter.org/publications/analysis/7306> accessed 26 December 2024.

COURT CASES AND JUDICIAL RULINGS

5

5.1. International Court of Justice (ICJ) Cases

The Corfu Channel Case (1949) established fundamental principles regarding state responsibility in preventing harm within its territory.³¹ These principles are also relevant to the legal obligations of states deploying drones in military operations. In its ruling, the International Court of Justice (ICJ) found Albania liable for mine explosions in its territorial waters, even though there was no direct evidence that Albania had laid the mines. 32 The Court ruled that Albania had a duty of awareness and prevention, meaning it should have taken appropriate measures to warn and protect foreign vessels from the minefield. This principle is applicable to modern drone strikes, where states conducting such operations—such as the United States—have a duty of care to ensure they do not cause unnecessary civilian casualties. States deploying drone strikes are obligated to take all feasible precautions to minimise civilian harm. Failure to do so constitutes a breach of due diligence, akin to Albania's failure to safeguard its territorial waters in the Corfu Channel Case.

In the case of Nicaragua v. United States (1986), the ICJ further clarified principles of state sovereignty and the prohibition of force, both of which are directly relevant to transboundary drone strikes.33 The Court found that the United States had violated Nicaragua's sovereignty by supporting paramilitary operations and laying mines in its waters. Additionally, the Court rejected the U.S. justification of collective self-defence, ruling that no state has the right to interfere in another state's affairs through force unless it fully complies with international law. This principle is particularly significant when analysing cross-border drone strikes, which often infringe upon the sovereignty of the targeted state. For instance, U.S. drone strikes in Pakistan and Yemen have frequently been criticised are violations of state sovereignty.³⁴ The ruling in Nicaragua v. United States establishes that no state may unilaterally resort to cross-border force unless it has the explicit consent of the affected state or a recognised legal justification under international law, such as self-defence.35

³¹ Corfu Channel Case (n 5); MA Fitzmaurice, 'The Corfu Channel Case and the Development of International Law' in Nisuke Ando and others (eds), Liber Amicorum Judge Shigeru Oda, vol 1 (Brill 2022) 119, doi:10.1163/9789004531161_015.

³² Katherine Del Mar, 'The International Court of Justice and Standards of Proof' in Karine Bannelier, Théodore Christakis and Sarah Heathcote (eds), The ICJ and the Evolution of International Law: The Enduring Impact of the Corfu Channel Case (Routledge 2012) 98.

³³ Nicaragua v United States of America (n 5).

Max Byrne, 'Consent and the Use of Force: An Examination of "Intervention by Invitation" as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen' (2016) 3(1) Journal on the Use of Force and International Law 97, doi:10.1080/20531702.2015.1135658.

Nicaragua v United States of America (n 5) 25. 35



Furthermore, such operations must comply with the United Nations Charter, which prohibits the threat or use of force except under specific legal circumstances. A drone strike that fails to meet these conditions constitutes a breach of international law and an infringement on state sovereignty. The ICJ's rulings reinforce the principle that states must take responsibility for preventing harm and respect the sovereignty of other nations. ³⁶ These concerns are at the core of ongoing legal debates surrounding the legitimacy of contemporary drone warfare.

5.2. International Criminal Court (ICC) on Crimes of Aggression and Self-Defense

The International Criminal Court (ICC) plays a crucial role in addressing crimes of aggression and severe violations of international law, particularly regarding the use of military force by one state against another's sovereignty and territorial integrity. The rise of modern warfare, especially the increased use of drones, has raised concerns about whether certain drone strikes could constitute crimes of aggression.³⁷ However, the pre-emptive use of drones presents additional legal challenges, particularly when such strikes occur without the formal consent of the state in which the target is located and without prior authorisation from the United Nations Security Council (UNSC).

In February 2022, as the conflict between Russia and Ukraine escalated, the question of holding perpetrators of aggression accountable became a focal point in international legal discussions. The United Nations General Assembly condemned Russia's military actions, declaring them an act of aggression in violation of the UN Charter. While neither Russia nor Ukraine are signatories to the Rome Statute, Ukraine has accepted the ICC's jurisdiction. However, the ICC can only prosecute crimes of aggression if referred by the UNSC, a process that Russia has blocked using its veto power. This legal barrier complicates prosecution under existing international frameworks, prompting discussions about the establishment of a special tribunal to address severe crimes of aggression. Additionally, these debates highlight the importance of regional norms, particularly in Eastern Europe, when determining responsibility for acts of violence under customary international law.

For instance, drone warfare, specifically the anticipatory use of drones by states to eliminate targets on foreign territory, could be classified as an act of aggression if it violates another

³⁶ Jennifer Welsh and Maria Banda, 'International Law and the Responsibility to Protect: Clarifying or Expanding States' Responsibilities?' (2010) 2(3) Global Responsibility to Protect 213, doi:10.1163/ 187598410X500363.

³⁷ Patrycja Grzebyk, 'Crime of Aggression against Ukraine' (2023) 21(3) Journal of International Criminal Justice 435, doi:10.1093/jicj/mqad045.

Driss Ed.daran, Rehman Akhtar and Hafiz Syed Shoaib Altaf, 'The International Legal Framework with Regards to Russia's Invasion of Ukraine' (2023) 3(1) Pakistan Journal of Criminal Justice 40, doi:10.62585/pjcj.v3i1.18.

³⁹ Iryna Marchuk, 'Ukraine and the International Criminal Court: Implications of the Ad Hoc Jurisdiction Acceptance and Beyond' (2021) 49(2) Vanderbilt Journal of Transnational Law 323.

state's sovereignty. Drone strikes conducted without the consent of the targeted state or without UN authorisation may reach the threshold of aggression, particularly if they result in significant harm and an escalation of conflict. While ICC cases addressing drone warfare are limited, legal precedents on aggression—such as the first use of force doctrine, which was excluded from the Rome Statute but remains part of customary law in some Eastern European legal frameworks—could provide guidance in future cases. The key legal challenge lies in determining whether a drone strike constitutes an unprovoked and unjustifiable use of armed force, which could lead to international criminal liability.

On the other hand, various states invoke Article 51 of the UN Charter to justify the use of drones in self-defence against perceived threats. 40 Article 51 grants states the inherent right to self-defence when they are under attack, provided that any use of force is reported to the UNSC. A major legal hurdle in drone-related litigation is defining what constitutes an "imminent threat" that justifies the use of force. Leading states, such as the United States, have argued that drone strikes against terrorist targets serve to prevent imminent attacks. However, such claims have been met with scepticism by the ICC and other international legal bodies. In practice, many states justify extraterritorial drone operations, such as those conducted in Pakistan and Yemen, as pre-emptive measures against terrorist groups, whose threats must be neutralised before they materialise. 41 These actions, however, raise significant legal and ethical concerns, particularly regarding the principles of proportionality and necessity. Under international law, these justifications become problematic when the imminence of the threat is uncertain or when the response is deemed disproportionate. 42

5.3. The Role of International Justice and Accountability

International justice and accountability have increasingly played a crucial role in regulating drone strikes, particularly in addressing civilian casualties and violations of International Humanitarian Law (IHL). However, a significant accountability gap persists, as there are no clearly defined mechanisms for assessing and responding to drone strikes. One of the most serious concerns surrounding drone operations is the lack of transparency and accountability, especially regarding civilian deaths. Many drone strikes—primarily those carried out by the United States in Pakistan and Yemen—are conducted as covert

⁴⁰ Jordan J Paust, 'Operationalizing Use of Drones Against Non-State Terrorists Under the International Law of Self-Defense' (2015) 8(1) Albany Government Law Review 166.

⁴¹ Alabo Ozubide, 'Extraterritorial Use of Force Against Non-State Actors and the Transformation of the Law of Self-Defence' (PhD thesis, University of Pretoria 2016).

⁴² Stephen Townley, 'The Rise and Risk in International Law' (2017) 18(2) Chicago Journal of International Law 594.

⁴³ James Michael Page and John Williams, 'Drones, Afghanistan, and Beyond: Towards Analysis and Assessment in Context' (2022) 7(3) European Journal of International Security 283, doi:10.1017/eis.2021.19.

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operations, making them difficult to investigate. This secrecy hinders efforts to document civilian harm and obstructs accountability for potential violations of IHL.

International humanitarian law mandates that states distinguish between combatants and civilians, ensuring that any use of force is proportionate to the military advantage gained. However, when drone strikes result in high civilian casualties, often dismissed as "collateral damage," questions arise about whether these legal requirements are genuinely upheld. Many incidents remain unreported, as there is minimal international oversight and no rigorous mechanism for assessing or investigating drone attacks.

International tribunals and local courts have made some progress in addressing this accountability gap but with mixed results. While the International Criminal Court (ICC) has jurisdiction over war crimes and crimes against humanity, prosecuting unlawful drone strikes remains challenging due to jurisdictional limitations. 44 Not all nations fall under the ICC's authority, as several states—including the United States—have refused to sign the Rome Statute, thereby limiting the Court's ability to challenge drone warfare policies.

Despite these constraints, domestic courts have occasionally intervened in drone-related legal cases. For instance, Pakistani nationals have sought legal redress against the U.S. drone program, arguing that it violates their constitutional rights. While Pakistani courts have raised concerns about civilian losses, the prospects for meaningful accountability remain limited due to the political dimensions of such cases and the reluctance of powerful states to support legal actions against drone strikes.

One of the most notable cases involves the United States' use of drone strikes in Pakistan to eliminate suspected terrorists. Since 2004, U.S. drone operations have primarily targeted high-ranking leaders of groups such as the Taliban and al-Qaeda. However, these strikes have been shrouded in secrecy and controversy, particularly regarding civilian casualties. The Obama administration faced criticism for failing to provide sufficient transparency about civilian exposure in counterterrorism operations, especially following the surge in drone attacks. Under the Trump administration, operational constraints were loosened, leading to a significant increase in drone strikes and raising further concerns about accountability and oversight.

The 2017 Yemen raid, which resulted in civilian deaths, further highlighted the challenges of ensuring proportionality and legality in drone operations.⁴⁵ A major obstacle to prosecuting unlawful drone strikes is the difficulty of obtaining concrete evidence. In

⁴⁴ Victor Tsilonis, 'Lethal Autonomous Weapons, Drones and Robots: To What Extent Their Usage Infringes Upon Established Principles of International Criminal Law?' in Victor Tsilonis, The Jurisdiction of the International Criminal Court (2nd edn, Springer 2024) 299, doi:10.1007/978-3-031-46138-5 11

⁴⁵ Mohammad Bitar and Benarji Chakka, 'Drone Attacks During Armed Conflict: Quest for Legality and Regulation' (2023) 13(3-4) International Journal of Intellectual Property Management 397, doi:10.1504/IJIPM.2023.134058.

stealth operations conducted in remote areas, it is often challenging to prove that an attack took place, let alone establish responsibility for violations of international law. Additionally, high-level authorities, including the United Nations, frequently invoke Article 51 of the UN Charter to justify drone strikes as acts of self-defence, further complicating legal challenges.

5.4. Balancing Theory and Practical Implementation

The theoretical discourse surrounding key legal concepts and the practical realities of drone warfare remains difficult to reconcile, particularly in the context of IHL. Although state sovereignty, state responsibility, and the protection of civilians are well-established principles under international law, their practical application in modern warfare remains problematic. ⁴⁶ As drone strikes become increasingly prevalent in contemporary conflicts, there is a growing need to harmonise these legal principles with the tactical realities of drone warfare.

A fundamental concept in international law and relations is sovereignty, which refers to a state's right to govern itself without external interference. However, drone warfare often challenges this principle, as states frequently conduct strikes within the borders of another state without its explicit consent. For example, the United States has carried out drone strikes in Pakistan and Yemen, raising concerns about violations of sovereignty. These strikes are often justified on the grounds of self-defence, particularly against non-state actors, such as terrorist groups, that pose cross-border threats. Another crucial theoretical issue is state accountability under international law, particularly IHL. This principle demands that states ensure distinction and proportionality in the use of force. However, applying these standards in practice has proven challenging, especially in clandestine operations where transparency is limited and civilian casualties often go unreported or unrecognised.⁴⁷

While IHL principles are theoretically well-defined, their practical enforcement in drone warfare has been extremely limited. For instance, gathering reliable intelligence for drone strikes is particularly difficult in areas that are inaccessible or unsafe for human agents. Advanced surveillance technologies, which are designed to help distinguish combatants from civilians, often fail in complex environments where moving targets or terrorist groups blend into civilian populations.⁴⁸ This failure undermines the principle of distinction, which forms the foundation of IHL. Moreover, since most drone operations are covert, accountability mechanisms are significantly weakened. Many states conduct drone strikes

⁴⁶ Francis Deng, 'From "Sovereignty as Responsibility" to the "Responsibility to Protect" (2010) 2(4) Global Responsibility to Protect 353, doi:10.1163/187598410X519534.

⁴⁷ Sam Dubberley, Alexa Koenig and Daragh Murray (eds), Digital Witness: Using Open Source Information for Human Rights Investigation, Documentation, and Accountability (OUP 2020).

⁴⁸ Audrey Kurth Cronin, Power to the People: How Open Technological Innovation Is Arming Tomorrow's Terrorists (OUP 2020).

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in secrecy, classifying them as matters of national security, which leads to a lack of transparency regarding civilian casualties. As a result, many civilian deaths go unreported or are dismissed as collateral damage. For example, the United States' drone operations in Pakistan and Yemen have faced criticism for their lack of transparency regarding civilian casualties and IHL compliance. Due to insufficient legal oversight, states cannot easily be held accountable for violations of international law.

To address these challenges, it is crucial to enhance IHL frameworks and enforcement mechanisms to regulate the use of drones in modern warfare. One key measure is the need for increased transparency and accountability in drone operations. States employing drones should be required to provide regular updates on their military actions, including their justification for target selection and anticipated non-combatant casualties. This would allow independent verification of IHL compliance and strengthen state accountability in cases of unlawful strikes. Another possible solution is to reinforce international oversight mechanisms by expanding the authority of international bodies, such as the ICC, or by introducing comprehensive legal frameworks specifically addressing drone warfare. However, similar to the jurisdictional constraints that have previously limited the ICC, efforts to expand legal jurisdiction must be carefully designed to avoid inadvertently reducing accountability in regions most affected by drone operations.

6 CONCLUSIONS

Thus, the legal ambiguities surrounding drone warfare under International Humanitarian Law (IHL) raise significant concerns regarding legal responsibility, proportionality, and civilian protection. While drones have become integral to modern military operations, enabling remote strikes and surveillance, their use challenges traditional definitions of warfare, particularly the distinction between combatants and civilians. The principles of distinction and necessity, which are central to IHL, are often difficult to uphold, especially in situations where target misidentification leads to high civilian casualties.

As drone warfare continues to evolve, IHL must also adapt to address emerging legal and ethical challenges. The rapid advancement of drone technology necessitates the development of clear regulatory frameworks that define accountability for IHL violations and ensure mechanisms for civilian protection. Strengthening global oversight and accountability measures will be crucial in mitigating the risks associated with drone operations and reinforcing compliance with international legal standards.

⁴⁹ Kaja Kowalczewska, 'Legal Aspects of Unmanned Warfare and Military Drone Operations' in Katarzyna Zombory and János Ede Szilágyi (eds), Shielding Europe with the Common Security and Defence Policy: The EU Legal Framework for the Development of an Innovative European Defence Industry in Times of a Changing Global Security Environment (Central European Academic Publishing 2024) 581, doi:10.54237/profnet.2024.zkjeszcodef_13.

Ultimately, a balance must be struck between military necessity and humanitarian obligations. Achieving this balance will require enhanced international cooperation, legal reforms, and greater transparency in drone operations. By implementing robust accountability measures and reinforcing adherence to IHL, the international community can ensure that drone warfare remains within the bounds of legality and upholds the fundamental rights of those affected by armed conflict.

REFERENCES

- 1. Ahmad N, Rahim F and Aziz N, 'Can International Humanitarian Law Regulate Recent Drone Strikes?: A Case Study' (2024) 17(1) Journal of East Asia and International Law 159, doi:10.14330/jeail.2024.17.1.09.
- 2. Al Shawhati MS, 'Impact of the United States Policy in Supporting the Saudi War in Yemen during the Term of the Trump Administration and the Joe Biden Administration' (PhD thesis, San Francisco State University 2023).
- 3. Ali I, 'Mainstreaming Pakistan's Federally Administered Tribal Areas: Reform Initiatives and Roadblocks' (United States Institute of Peace, 20 March 2018) https://www.usip.org/publications/2018/03/mainstreaming-pakistans-federally- administered-tribal-areas> accessed 26 December 2024.
- 4. Beard J, 'The Principle of Proportionality in an Era of High Technology' in Ford CM and Williams WS (eds), Complex Battlespaces: The Law of Armed Conflict and the Dynamics of Modern Warfare (Lieber Studies Series 1, OUP 2018) 261.
- 5. Bitar M and Chakka B, 'Drone Attacks During Armed Conflict: Quest for Legality and Regulation' (2023) 13(3-4) International Journal of Intellectual Property Management 397, doi:10.1504/IJIPM.2023.134058.
- 6. Brooks R, 'Drones and Cognitive Dissonance' in Bergen PL and Rothenberg D (eds), Drone Wars: Transforming Conflict, Law, and Policy (CUP 2014) 230.
- 7. Byrne M, 'Consent and the Use of Force: An Examination of "Intervention by Invitation" as a Basis for US Drone Strikes in Pakistan, Somalia and Yemen' (2016) 3(1) Journal on the Use of Force and International Law 97, doi:10.1080/ 20531702.2015.1135658.
- 8. Cohen A and Zlotogorski D, Proportionality in International Humanitarian Law: Consequences, Precautions, and Procedures (Lieber Studies Series 6, OUP 2021) doi:10.1093/oso/9780197556726.001.0001.
- 9. Cortright D, Fairhurst R and Wall K (eds), Drones and the Future of Armed Conflict: Ethical, Legal, and Strategic Implications (University of Chicago Press 2015).
- 10. Cronin AK, Power to the People: How Open Technological Innovation Is Arming Tomorrow's Terrorists (OUP 2020).



- 11. Davison N, 'A Legal Perspective: Autonomous Weapon Systems Under International Humanitarian Law' (*ICRC*, 30 2018) https://www.icrc.org/en/document/autonomous-weapon-systems-under-international-humanitarian-law accessed 25 December 2024.
- 12. Del Mar K, 'The International Court of Justice and Standards of Proof in Bannelier K, Christakis T and Heathcote S (eds), *The ICJ and the Evolution of International Law: The Enduring Impact of the Corfu Channel Case* (Routledge 2012) 98.
- 13. Deng F, 'From "Sovereignty as Responsibility" to the "Responsibility to Protect" (2010) 2(4) *Global Responsibility to Protect* 353, doi:10.1163/187598410X519534.
- 14. Dubberley S, Koenig A and Murray D (eds), Digital Witness: Using Open Source Information for Human Rights Investigation, Documentation, and Accountability (OUP 2020).
- 15. Dunn DH and others, *Drones, Force and Law: European Perspectives* (CUP 2023) doi:10.1017/9781009451499.
- 16. Ed.daran D, Akhtar R and Altaf HSS, 'The International Legal Framework with Regards to Russia's Invasion of Ukraine' (2023) 3(1) Pakistan Journal of Criminal Justice 40, doi:10.62585/pjcj.v3i1.18.
- 17. Fitzmaurice MA, 'The Corfu Channel Case and the Development of International Law' in Ando N and others (eds), *Liber Amicorum Judge Shigeru Oda*, vol 1 (Brill 2022) 119, doi:10.1163/9789004531161_015.
- 18. Grzebyk P, 'Crime of Aggression against Ukraine' (2023) 21(3) *Journal of International Criminal Justice* 435, doi:10.1093/jicj/mqad045.
- 19. Gusterson H, Drone: Remote Control Warfare (MIT Press 2016).
- 20. Henderson IS, Keane P and Liddy J, 'Remote and Autonomous Warfare Systems: Precautions in Attack and Individual Accountability' in Ohlin JD (ed), *Research Handbook on Remote Warfare* (Edward Elgar Publishing 2017) 335.
- 21. Khoirunnisa K and others, 'The Ukraine-Russia Conflict: An International Humanitarian Law Review of the Involvement of Foreign Fighters' (2025) 11 Social Sciences & Humanities Open 101340, doi:10.1016/j.ssaho.2025.101340.
- 22. Kowalczewska K, 'Legal Aspects of Unmanned Warfare and Military Drone Operations' in Zombory K and Szilágyi JE (eds), Shielding Europe with the Common Security and Defence Policy: The EU Legal Framework for the Development of an Innovative European Defence Industry in Times of a Changing Global Security Environment (Central European Academic Publishing 2024) 581, doi:10.54237/profnet.2024.zkjeszcodef_13.
- 23. Kumar A, 'Drone Proliferation and Security Threats' (2020) 33(1/2) *Indian Journal of Asian Affairs* 43.

- 24. Marchuk I, 'Ukraine and the International Criminal Court: Implications of the Ad Hoc Jurisdiction Acceptance and Beyond' (2021) 49(2) Vanderbilt Journal of Transnational Law 323.
- 25. Marshall M and Oxley JC (eds), *Aspects of Explosives Detection* (Elsevier Science 2011) doi:10.1016/B978-0-12-374533-0.X0001-3.
- 26. McNiel CM, 'The Killing of Anwar al-Awlaki: How the United States Lost a Crucial Battle in the War of Ideas' (PhD thesis, Air Command and Staff College, Air University 2016).
- 27. Mohsan SAH and others, 'Unmanned Aerial Vehicles (UAVs): Practical Aspects, Applications, Open Challenges, Security Issues, and Future Trends' (2023) 16(1) *Intelligent Service Robotics* 109, doi:10.1007/s11370-022-00452-4.
- 28. Okpaleke FN, *Drones and US Grand Strategy in the Contemporary World* (New Security Challenges, Springer 2023) 103-44, doi:10.1007/978-3-031-47730-0.
- 29. Ozubide A, 'Extraterritorial Use of Force Against Non-State Actors and the Transformation of the Law of Self-Defence' (PhD thesis, University of Pretoria 2016).
- 30. Page JM and Williams J, 'Drones, Afghanistan, and Beyond: Towards Analysis and Assessment in Context' (2022) 7(3) European Journal of International Security 283, doi:10.1017/eis.2021.19.
- 31. Paust JJ, 'Operationalizing Use of Drones Against Non-State Terrorists Under the International Law of Self-Defense' (2015) 8(1) *Albany Government Law Review* 166.
- 32. Pons Rafols X, 'The War in Gaza and the Israeli-Palestinian Conflict: A Turning Point in the Midst of an Endless Cycle of Violence' (2024) 12 Paix et Securite Internationales 1, doi:10.25267/Paix secur int.2024.i12.1002.
- 33. Radman H, 'Al-Qaeda's Strategic Retreat in Yemen' (*Sana'a Center for Strategic Studies*, 17 April 2019) https://sanaacenter.org/publications/analysis/7306 accessed 26 December 2024.
- 34. Seixas-Nunes A, *The Legality and Accountability of Autonomous Weapon Systems: A Humanitarian Law Perspective* (CUP 2022) doi:10.1017/9781009090001.
- 35. Steyn NR, 'The Adequacy of International Humanitarian Law in Regulating the Challenges Posed by Drone Warfare' (PhD thesis, North-West University 2019) doi:10.13140/RG.2.2.17222.24646.
- Theussen A, 'International Law Is Dead, Long Live International Law: The State Practice of Drone Strikes' (2023) 60 International Politics 859, doi:10.1057/s41311-021-00333-0.
- 37. Townley S, 'The Rise and Risk in International Law' (2017) 18(2) Chicago Journal of International Law 594.



- 38. Tsilonis V, 'Lethal Autonomous Weapons, Drones and Robots: To What Extent Their Usage Infringes Upon Established Principles of International Criminal Law?' in Tsilonis V, *The Jurisdiction of the International Criminal Court* (2nd edn, Springer 2024) 299, doi:10.1007/978-3-031-46138-5_11.
- 39. Walsh JI, 'Precision Weapons, Civilian Casualties, and Support for the Use of Force' (2015) 36(5) *Political Psychology* 507, doi:10.1111/pops.12175.
- 40. Welsh J and Banda M, 'International Law and the Responsibility to Protect: Clarifying or Expanding States' Responsibilities?' (2010) 2(3) *Global Responsibility to Protect* 213, doi:10.1163/187598410X500363.
- 41. Youvan DC, 'Downing the MQ-9 Reaper: Analyzing Yemen's Air Defense Tactics and Capabilities in Modern Warfare' [2024] doi:10.13140/RG.2.2.11144.64005.
- 42. Zhang B and others, 'Overview of Propulsion Systems for Unmanned Aerial Vehicles' (2022) 15(2) *Energies* 455, doi:10.3390/en15020455.

AUTHORS INFORMATION

Driss Ed.daran*

PhD (Law), Assistant Professor, College of Law, Public Law Department, United Arab Emirates University, Al Ain, United Arab Emirates

driss.eddaran@uaeu.ac.ae

https://orcid.org/0000-0001-9954-7249

Corresponding author, responsible for conceptualization, funding acquisition, formal analysis, methodology, project administration, supervision, validation, writing-original draft.

Fatima Ezzohra El Hajraoui

PhD (Law), Assistant Professor, Faculty of Law and Political Sciences, Ibn-Tofail University, Kenitra, Marocco

fatimazahra-17@hotmail.com

https://orcid.org/0009-0004-9074-8799

Co-author, responsible for data curation, investigation, resources, writing-original draft.

Zaid Ali Zaid

PhD (Law), Associate Professor, College of Law, University of Sharjah, Sharjah, United Arab Emirates

zzaid@sharjah.ac.ae

https://orcid.org/0000-0002-7213-5700

Co-author, responsible for conceptualization, methodology, investigation, writing-original draft.

Riad Al Ajlani

PhD (Law), Associate Professor, College of Law, Department of Public Law, United Arab Emirates University, Al Ain, United Arab Emirates

r_alajlani@uaeu.ac.ae

https://orcid.org/0000-0002-2587-6733

Co-author, responsible for project administration, funding acquisition, investigation, supervision, formal analysis, data curation, writing – review & editing.

Zia-ud-Din Malik

PhD (Law), Assistant Professor, Department of Law, Islamia University of Bahawalpur, Bahawalpur, Punjab, Pakistan malikziaudin@yahoo.com

https://orcid.org/0000-0001-6015-0914

Co-author, responsible for data curation, writing - review & editing.

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АНОТАЦІЯ УКРАЇНСЬКОЮ МОВОЮ

Оглядова стаття

ЗАКОННІСТЬ ВИКОРИСТАННЯ БЕЗПІЛОТНИКІВ ЗГІДНО З МІЖНАРОДНИМ ГУМАНІТАРНИМ ПРАВОМ: ТЕОРЕТИЧНІ ПЕРСПЕКТИВИ ТА СУДОВА ПРАКТИКА

Дріс Ед.даран*, Фатіма Еззохра Ель-Хаджрауї, Заїд Алі Заїд, Ріад Аль Айлані та Зіа-уд-Дін Малік

КІЦАТОНА

Вступ. Сучасна війна все частіше характеризується використанням технологій безпілотників для управління та експлуатації повітряних систем із метою спостереження та ідентифікації цілей. Спочатку безпілотні літальні апарати (БПЛА) в основному використовувалися для спостереження. Однак їхня активна участь у військових операціях викликала серйозні правові питання щодо статусу БПЛА згідно з міжнародним гуманітарним правом (МГП). Розширене використання безпілотників за межами звичайних зон бойових дій виявило критичні питання, пов'язані з державним суверенітетом, принципом розрізнення та принципом пропорційності у збройному конфлікті. Використання безпілотників у зонах конфлікту стало розповсюдженим, зокрема на Близькому Сході, у Сполучених Штатах та Ізраїлі, тож виникло занепокоєння щодо безпеки цивільного населення та військової відповідальності.

Методи. У цьому дослідженні використовується підхід, заснований на огляді літератури, та проведено доктринальне юридичне дослідження, спираючись головним чином на першоджерела, такі як Статут Організації Об'єднаних Націй, і вторинні джерела, включно з прецедентним правом, такими як Справа про канал Корфу та Нікарагуа проти Сполучених Штатів. Академічні статті, наукові дослідження та звіти правозахисних організацій були проаналізовані для оцінки застосування міжнародного гуманітарного права в контексті використання безпілотників під час бойових дій. Для оцінки практичного впровадження принципів розрізнення, пропорційності та необхідності були розглянуті тематичні дослідження з Пакистану, Гази та Ємену. Ці приклади були використані, щоб оцінити правові стандарти і дотримання державою вимог щодо мінімізації жертв серед цивільного населення.

Результати та висновки. Аналіз показує, що хоча безпілотники забезпечують стратегічні переваги, їх використання часто порушує фундаментальні принципи МГП. Удари безпілотників у Ємені та Газі продемонстрували випадки, коли втрат серед цивільного населення не вдалося уникнути, що викликає серйозні занепокоєння щодо дотримання принципів пропорційності та розрізнення. У дослідженні також підкреслено,



що держави, які застосовують удари безпілотників, зокрема США та Ізраїль, несуть відповідальність за загибель цивільних, незважаючи на відсутність надійної правової бази для вирішення таких проблем. Щоб подолати ці виклики, існує нагальна потреба в міжнародних законах, які посилюють нагляд і забезпечують дотримання МГП, зокрема щодо захисту цивільних осіб під час збройного конфлікту. Отже, зростає вимога до посилення міжнародного регулювання, щоб гарантувати, що застосування сили узгоджується із захистом цивільного населення.

Ключові слова: безпілотники, суверенітет, розрізнення, пропорційність, військові, самооборона, цивільне населення.