FORUM:	Disarmament Commission
ISSUE:	Measures to curtail Military Drone Proliferation and Ensuring Compliance with International Law
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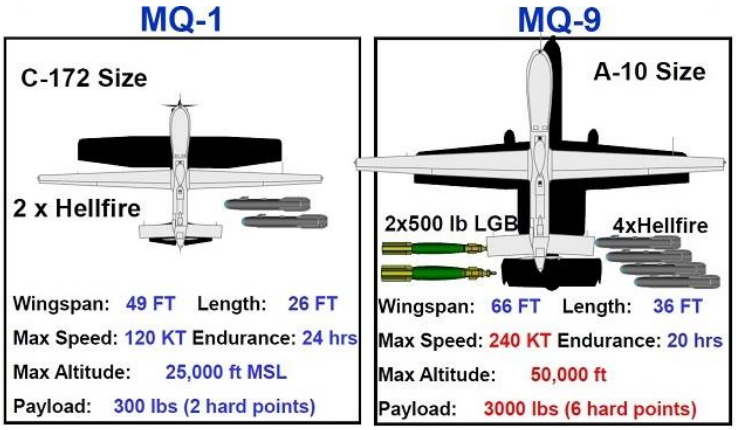
Introduction

Drones, also referred to as UAVs, represent a major advancement in modern technology. Originally created for military purposes in World War I, drones have advanced to fulfill various roles. Their tasks consist of surveillance, communication, and transporting offensive weapons. Due to their small size, relatively low cost, and ability to be controlled from a safe distance, drones are viewed as a less risky option than piloted aircraft. With advancements in technology, drones have transitioned from being primarily used in military to being incorporated into civilian life for various recreational activities. Even though drones offer advantages like increasing utilization, they still brings up significant issues. Military drones have the ability to perform surveillance and use deadly force, as well as transport and drop bombs. This ability presents major dangers, particularly if drones are obtained by non-state actors or hostile groups. The development in drone technology presents difficulties in managing and restricting access, leading to a greater risk of misuse. The existence of military drones raises ethical and legal concerns as well. Concerns that are critical include accountability in drone strikes, potential violations of international law, and the risk of collateral damage. Hence, it is essential to put strategies in place to manage the proliferation of military drones and make sure that they meet international legal standards. This requires global collaboration and enforcing rules that restrict the spread of drones and promise their use complies with humanitarian rights. By overcoming these obstacles, the global community can more effectively handle the dangers linked to drones and take advantage of their advantages.

Picture showing armies testing UAV

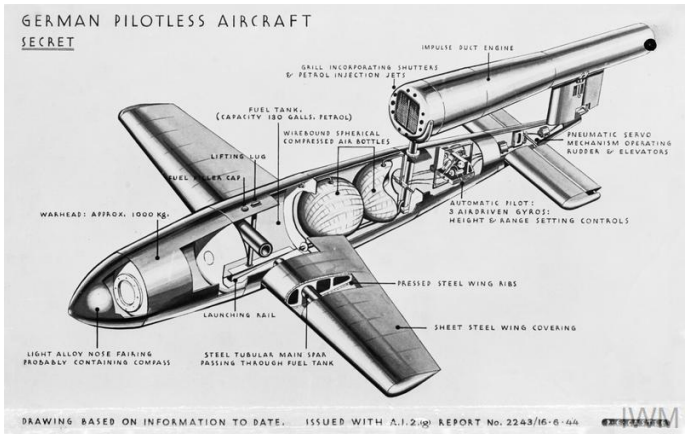
Background

The "Kettering Bug," developed during World War I, stands as an innovative example of the earliest unmanned aerial vehicle technology designed for military purposes. This project was led by Charles Kettering, an inventor and an engineer associated with General Motors, in collaboration with the U.S. Army Signal Corps and the Dayton Wright Airplane Company. The primary use of the Kettering Bug was to deliver explosives into enemy territory, effectively serving as a guided missile. Despite its potential, the Kettering Bug was not used during the war, as the Armistice was signed before it could be deployed in combat. Nevertheless, this early attempt at an unmanned aerial system marked a significant milestone in military aviation, laying the groundwork for future developments in drone technology. The Kettering Bug's conceptual leap into using aircraft for precision strikes foreshadowed the evolution of UAVs in modern warfare, highlighting the continuous quest for technological advancements in military strategy. The World War I was the starting point of the revolutionary development of military drone.



: Diagram showing MQ-1 and MQ-9

In World War II, military drones were in early stages of development and utilization, setting the foundation for future progress and prompting initial worries about spread and adherence to laws. The German V-1 flying bomb, an early type of cruise missile operating as an Unmanned Aerial Vehicle (UAV), was the most remarkable example from this time period. Using the V-1 demonstrated how drones could transport explosive loads across far distances without endangering human pilots. Nevertheless, the initial drones also highlighted the importance of implementing controls to prevent hostile actors from misusing the technology. After World War II, there was a growing focus on global provisions and treaties, like the Geneva Conventions, to control modern types of warfare, such as the deployment of UAVs. The ethical and legal considerations brought up in World War II debates about drones still influence current talks on drone spread and the need for clear international standards and enforcement methods for their use in conflict scenarios.



Picture showing UAV used in World War II

During the 2000s, major countries like the United States, China, and Israel made great progress in the development of military drones, signaling a crucial moment in the advancement of UAV technology.

The US took the lead in the field using systems such as the MQ-1 Predator and MQ-9 Reaper, which were widely utilized for surveillance and targeted strikes, especially in counterterrorism missions throughout the Middle East. These drones displayed how they can combine real time information, precise targeting, and decreased danger to individuals. At the same time, Israel became a significant participant, as its defense sector created advanced UAVs. These drones enhanced Israel's national security and established the country as a significant exporter of drone technology. China has also made significant progress by creating various UAVs series, with the goal of competing in the global weapons market and improving its military's operational capabilities. During this time period, these countries not only developed new UAV technologies but also influenced the worldwide spread of military drones, leading to discussions about regulations and ethical concerns surrounding drone warfare.

Picture showing Ukraine Army

The spread of military drones has been a critical factor in the Russia-Ukraine conflict, significantly influencing the warfare in the region. Both sides have employed a variety of UAVs for reconnaissance, targeting, and offensive operations. Ukraine, with support from Western, has integrated advanced drones that have been instrumental in targeting Russian forces and infrastructure. These drones have provided Ukraine with enhanced surveillance capabilities and precision strike options, often being used to defend against Russian armor and air defenses. Conversely, Russia has deployed its own array of UAVs for reconnaissance and electronic warfare. The widespread use of drones in this conflict highlights their growing role in modern warfare, demonstrating both their strategic value and the complexities they introduce in terms of countermeasures and international law. This proliferation has underscored the need for robust frameworks to manage the ethical and legal implications of drone use in conflicts, as their deployment raises significant concerns about civilian safety, sovereignty, and the escalation of hostilities.

Problems Raised

Military drone Proliferation in modern Warfare

The use of military drones has increased dramatically during the Russia-Ukraine war, reflecting their potential impact on modern warfare. In an effort to minimize casualties and enhance tactical capabilities, Ukraine has effectively utilized small commercial drones, purposefully created for dropping grenades and conducting reconnaissance. For instance, these drones have been instrumental in targeting

enemy positions with greater precision and reducing the risk to Ukrainian soldiers. Additionally, first-person view (FPV) drones have been employed to monitor vehicles and detect signs of hostile activities from far away. Over the initial years of the conflict, Ukraine's rapid advancements in drone technology have been striking, leading to the development of sophisticated aerial systems that contribute to their operational success across land, air, and even underwater domains. This evolution underscores the growing significance of drone technology in modern combat and highlights how it has enabled Ukraine to leverage its capabilities in innovative ways to counteract larger and more resourceful opponents.

Lack of International Binding Agreements on the usage of military drones

International control regimes like the Missile Technology Control Regime (MTCR) and the Wassenaar Arrangement play a crucial role in curbing the proliferation of military drones by setting guidelines and standards for their export and use. However, these regimes face significant limitations due to their non-binding nature, which means that member countries are not legally obligated to adhere to their recommendations. This lack of enforceable commitment leads to inconsistent adherence among nations, undermining the effectiveness of these control measures. As a result, some countries may flout the guidelines or selectively apply them, allowing military drone technology to spread more widely and reach non-state actors or destabilizing regimes. The inconsistency in global commitment highlights the urgent need for stronger, legally binding agreements and more robust enforcement mechanisms to address the challenges posed by the proliferation of military drones.

Access of military drones to Non-State Actors

The increasing access of military drones to non-state actors poses significant challenges to global security and stability. Historically, drones were primarily controlled by state militaries, but advancements in technology and the proliferation of drone technology have allowed various non-state groups, including militant organizations and hostile factions, to acquire and deploy this technology. These non-state actors can now utilize drones for surveillance, targeted attacks, and propaganda, which complicates conventional defense strategies and raises the risk of asymmetric warfare. The ability of non-state groups to exploit drones for their purposes not only amplifies their operational capabilities but also underscores the need for enhanced international regulations and countermeasures to prevent misuse and mitigate potential threats.

International Actions

Joint Declaration for the export and Subsequent Use of Armed or Strike-Enabled Unmanned Aerial Vehicles (UAV)

The Joint Declaration for the Export and Subsequent Use of Armed UAVs was issued in October 2016 by the United States, along with 53 other nations, including Germany and the United Kingdom. This initiative emerged from the recognition by the United States that the misuse of strike-enabled UAVs could lead to conflict, instability, and even be exploited for terrorism. Therefore, it was deemed necessary for the international community to implement transparency measures to ensure the responsible export and use of this technology. The declaration outlines key principles such as maintaining transparency in export policies, ensuring that the use of UAVs complies with international humanitarian law and human rights law, and controlling the proliferation of these technologies to prevent their misuse.

Foundation of weapon control regimes (MTCR, UNROCA, ATT, Wassenaar Arrangement)

The foundation of weapon control regimes such as the Missile Technology Control Regime (MTCR), United Nations Register of Conventional Arms (UNROCA), Arms Trade Treaty (ATT), and the Wassenaar Arrangement plays a crucial role in regulating the proliferation and use of military drones. The MTCR, established in 1987, focuses on preventing the spread of missile and unmanned aerial vehicle technology capable of delivering weapons of mass destruction, setting guidelines for the export of relevant equipment and technology. UNROCA, created in 1991, encourages transparency by requiring member states to report on their imports and exports of major conventional arms, including UAVs, thereby promoting trust and confidence among nations. The ATT, which came into effect in 2014, seeks to regulate the international trade in conventional arms, including UAVs, to prevent their use in crimes, including terrorism and human rights violations. The Wassenaar Arrangement, established in 1996, promotes transparency and responsibility in transfers of conventional arms and dual-use goods and technologies, including those relevant to drones, ensuring they are not used to fuel conflict or destabilize regions. Together, these regimes provide a framework to control the spread of military drones, addressing concerns about their misuse and contributing to international peace and security.

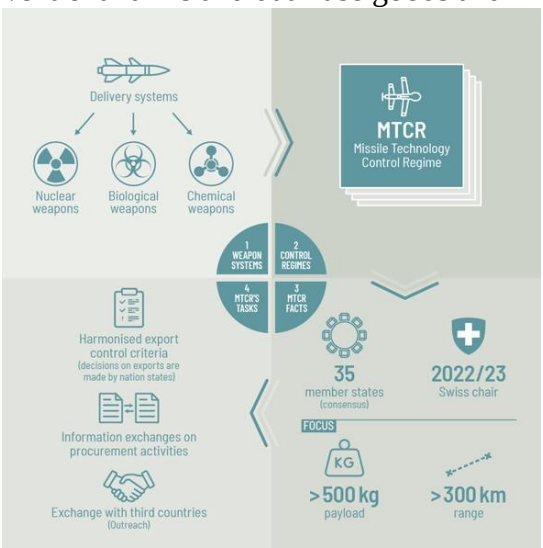


Diagram showing the job of Weapon Control Regime

Key Players

United States

United States are one of the leading developer and operator of military drones. The resources and knowledge that they possess about technology dominants the UAV market. Currently, United States is exporting UAVs to 21 different countries including Italy and UK. They use military drones in almost every aspect of their military operations such as intelligence, surveillance, reconnaissance (ISR). US has a significant influence on global markets as they are also a key exporter of military drones.

Missile Technology control Regime (MTCR)

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United Nations Register of Conventional Arms (UNROCA)

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Picture showing modern types of military drone

Wassenaar Arrangement

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Arms Trade Treaty (ATT)

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Possible Solutions

Enhancing international treaties and agreements

Strengthening international treaties and agreements is crucial for mitigating the potential risks that military drones pose to civilian populations. Governments should be encouraged to enhance and adopt comprehensive frameworks, such as a Drone Non-Proliferation Treaty (DNPT), to curt the global spread of military drone technology. Additionally, it is vital for governments to focus on regulating domestic military drone production carefully, as these technologies could easily fall into the hands of state and non-state actors who might misuse them. By tightening controls and fostering international cooperation, nation can better manage the proliferation of military drones and reduce their potential for causing harm.

Military drone Import and export control

Military drone import and export control can help to limit the number of drones manufactured per nation. Having a strict import and export control over military drone can slow down its technological development as well as reducing the competition between each nation. Put a limit on the number of resources that are required for military drone manufacture import and export. The nation should require a stronger regulation on military drone trading. Moreover, the government should develop regulations on dual-use technology as drones can be use in both risky and beneficial way.

Glossary

Proliferation

Rapid increase in numbers

Accountability

The fact or condition of being responsible

Reconnaissance

Military observation of a region to locate an enemy or ascertain strategic features.

Intelligence

The ability to acquire and apply knowledge and skills.

Surveillance

Close observation, especially of a suspected spy or criminal.

Casualties

A person killed or injured in a war or accident.

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