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THE IMPACT OF MILITARY DRONES ON GEOPOLITICS

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ABOUT ARTICLE

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Abstract: It is no secret that modern warfare increasingly uses drones in place of soldiers. Due to the effectiveness in counterterrorism operations, drones, whose use in battle was barely acknowledged in the 20th century, became quite popular in the 21st. We can see that drones have grown in geopolitical significance and those war weapons are undergoing a transition if we consider that they are playing an increasingly important role in current conflicts and that they account for a sizable portion of national military budgets. This article discusses importance of the drones` usage in geopolitics.

INTRODUCTION

For centuries, go-to tool for boosting trade, gaining power, and in some cases, creating large empires was the sea. In some ways, aviation took over from the navy as the primary means of international dominance throughout the interwar period and immediately following World War II . The 21st century began with a war of remotely controlled drones when they started fighting against the Taliban in Afghanistan in response to the terrorist acts of 9/11 in New York in 2001. After this, drones got the most attention among the new emerging technologies.

Today, over 100 nations and non-state organizations operate drones and at least 30 countries using them for military applications. Armed drones allow states to execute attacks without putting their pilots` lives in danger.

Drones are currently the most cutting-edge form of aviation weaponry. Their reduction in costs, abilities to perform tasks with high efficiency and a range of capabilities they possess indicate its bright future. Due to its low cost, ease of fabrication, and flexibility to be launched from hostile and logistically difficult areas, the use of drones can work in the attacker's favor. At the same time it is reshaping the geopolitical landscape of the world and warfare in unprecedented ways and as a result, air space is becoming an intense battlefield.

METHODS

In this article SWOT, event and comparative analysis were used.

RESULTS

Already, non-state actors such as Hamas, Hezbollah, the Islamic State of Iraq and Syria (ISIS), and Libyan rebel groups have used drones to conduct tactical surveillance. (Sayler, 2015, p.24). The development of drone technology has outpaced the establishment of international norms and regulations governing their use, creating a legal and ethical vacuum that could have dangerous consequences for global security (Frąckiewicz, 2023). Drones symbolize a transformation in warfare (Mahadevan, 2010), and UAVs are going to revolutionize how nations and nonstate actors threaten the use of violence (Horowitz, Kreps, & Fuhrmann, 2016).

There are many different types of drones, ranging in size and weight from the 600-gram "Black Hornet" nanodrones deployed by NATO soldiers to the 7-ton "Global Hawk" drones created to track all-around combatants (Bode, 2021).

Drones are divided into 4 large groups according to their size and purpose of use:

Hobbyist drones can cost anywhere from a few hundred dollars to several thousand dollars and can be controlled by an individual on a smartphone. It can be used mainly for entertainment purposes or for taking photos and videos.

Medium-sized military and commercial drones can cost from several hundred thousand dollars to a million dollars. It can replace expensive helicopters for making professional photos and videos. It is used in the agro-industry for sowing or watering purposes, for controlling nature reserves, and for quick delivery of humanitarian aid.

Large-scale military drones can deliver loads of up to 1 ton or heavier over thousands of kilometers, the ability to fly over dozens of countries for up to 45 hours, the ability to identify targets with laser beams and other illuminator technologies, and the ability to deliver projectiles to the target.

Superfighter drones are self-moving and decision-making, with independent GPS and self-fueling functions. Ready for any weather conditions. This type of drone is currently only available in the US, and all information about it is kept confidential. Russia, Israel, China, India, France, Italy, Sweden, Spain, Greece, Switzerland, and Great Britain are conducting research to achieve this type of drone.

Strengths

Armed forces now have a tactical advantage over their adversaries thanks to the advancement of drone technology. UAVs enable more precise and efficient strikes by giving a real-time perspective of the battlefield. Additionally, they enable military to gather intelligence and send out forces in a more secure and effective manner. Modern combat is being revolutionized by drone technology, which also gives forces a tactical advantage.

Military drones are produced and maintained at a substantially lower cost than aircraft. The price of Lockheed Martin's fifth-generation fighter, the F-35, was $100 million until recently. A quadcopter of superior grade costs $1000. This means that for the price of one fighter, the US military can order hundreds of thousands of small unmanned aerial vehicles (Ali, 2021, p.21). Additionally, they require less maintenance, and the Armed Forces may spend less on training air traffic controllers and other maintenance personnel.

Less risk to military lives: The use of US military drones has lowered the number of American troops that must be sent overseas and the number of high-risk tactical missions that personnel must participate in.

Fewer civilian casualties: Compared to more conventional air strikes from bombers and fighter jets, the Armed Forces have been able to reduce the amount of civilian casualties by using drones and Precision Guided Munitions.

Weaknesses

The notion that humanity will soon turn into the technologically equipped techno-war regime's Achilles heel is one that is quickly gaining popularity. In other words, independent human agents will soon be unnecessary for clever machines (Johnson, 2022).

Since it is impossible to estimate death tolls, it is challenging to assess the success of drone strikes. Targets can occasionally be found in difficult-to-reach places. Additionally, some of the operations are covert and contain classified information. If terrorists are apprehended, they might be questioned and asked for information. This is prevented by drone strikes.

High collateral damage: Many drone targets have been found in residential areas, raising the possibility of casualties among civilians. For example, from June 18, 2004 to September 2017, 429 drone attacks were carried out by the US in Pakistan, and 2,514–4,023 people were killed as a result of these attacks (Shah, 2018). Sometimes covert military operations are carried out in nations that are not formally at war. Most analysts believe it is illegal to employ unmanned aerial vehicles to attack military objectives in nations like Yemen, Pakistan, or Somalia where war has not yet been declared. 98 military actions against al-Qaeda in Yemen were carried out by remotely operated US military drones between 2002 and 2015. Between 2003 and 2021, there were 263 counterterrorism airstrikes, drone strikes, and ground raids in Somalia, 202 of which took place under the Trump administration (Shane, 2015, p.4). Regarding openness, national security, and the appropriateness of hostile activities, this presents ethical and political questions.

Opportunities

Due to their small size, moderate speed, and low radar cross section (RCS), drones are challenging to detect and even more challenging to identify and locate and the anti-drone systems and will definitely be expensive owing to the technology involved (Gopal, 2020). UAVs greatly profit from this in terms of reconnaissance and surveillance objectives.

Improved monitoring capabilities are one of the drone technology's most important advantages in military drills. Drones can take pictures and videos in high quality from the air, giving soldiers a bird's-eye view of the battlefield. Soldiers can watch the actions of the enemy from a safe distance by using drones to fly over hostile territory in difficult locations. Effective plans can be developed and put into practice using real-time surveillance data.

The influence of the aerocracy (air authority) has grown significantly as a result of the widespread employment of drones equipped with AI in combat. The first intelligent autonomous weapons to be utilized in a conflict in human history were the Kargu-2 smart drones, which were employed in 2020 against Khalifa Haftar's forces in Libya. There is no need for remote controls for these drones. They have artificial intelligence (AI) systems that can recognize faces of people, and both autonomous and remotely controlled drones were employed throughout the conflict. Later, when discussing these drones, Turkish President Recep Tayyip Erdoğan boasted in his address that “these weapons will force us to rewrite war strategies”(Dettmer, 2021).

One of the most important trends to monitor is the incorporation of artificial intelligence (AI) and machine learning in drone technology. This advancement will allow drones to carry out difficult tasks with little assistance from humans (Guarnera, 2023).

Drones have always been constrained by their battery life. Recent developments in battery and charging technologies, however, are about to change this. Thanks to more effective batteries and cutting-edge charging techniques like wireless charging and solar-powered solutions, drones should have greater flying periods in the future. Drones will be able to complete jobs more effectively and have a wider range of uses thanks to these advancements.

Threats

The widespread availability and low cost of drones make them a very easy weapon, even among ordinary people. This raises concerns about both public safety and conflict breakout.

An airplane, a radar antenna, a vehicle, and many other targets can be destroyed by a targeted drone strike using GPS technology and a 30 kilogram explosion. It has the option to let go of the load and land somewhere other than where it was launched.

It is clear that arming drones will lead to a particular race, particularly in some areas or between nations that infringe on one another's sovereignty. Israel has grown to be one of the biggest manufacturers and exporters of military drones, which has inspired Turkey and Iran to acquire drones as well. Both Taiwan and Japan have recently placed a strong emphasis on drones and anti-drone systems as a result of China's military operations in the South China Sea having an impact on their respective countries' security. In particular, Japan started to devote a significant amount of funding to the sector in 2023 (Gettinger, 2023).

A UAV was flown illegally in the area of Malaysia's Kuala Lumpur International Airport (KLIA) in March 2015 in order to take pictures of an airline landing. A UAV was flown onto the roof of the Japanese Prime Minister's office by a protester in April 2015. It was carrying a bag of sand that contained some harmless radioactive isotopes (Sathyamoorthy, 2015, p.82).

Regular consumer drones can be turned into deadly weapons in the wrong hands, giving terrorists the ability to organize, plan, and carry out a wide range of deadly and potentially disruptive assaults on innocent people, soft targets, and vital infrastructure. The use of such effective weapons by terrorists, in turn, makes their work easier. A terrorist who is ready to blow himself up in the path of his goal can now do this through other kamikaze drones.

DISCUSSION

Modern military technology will be made available in a reasonably short amount of time thanks to the new global technology race. Because a lagging competitor increases the vulnerability that will be very challenging to cover with. All the major powers of the globe will use conventional weaponry resolve it.

Drone technology has a bright future ahead of it, as ground-breaking developments and cutting-edge uses are about to revolutionize industries all over the world. It is important to be informed and understand how these advancements may affect balance of superpowers and geopolitical trends.

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