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THE IMPORTANCE OF DRONES IN MODERN WARFARE AND ARMED CONFLICTS

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Abstract

This article analyzes the importance of drones in modern warfare and armed conflicts. It explains how states and non-state actors use drones for various purposes. The United States of America was the first country globally to use drones twenty years ago to eliminate dangerous terrorists. George W. Bush was the first president of USA who used drones for counterterrorism operations in different countries. Drones proved to be very effective tool during the war on terror. If USA used drones only as killing machines for the elimination of terrorists, Azerbaijan was the first country that used them for military purposes in the war against Armenia. The massive usage of drones by the armed forces first took place in the Nagorno-Karabakh conflict in 2020. This conflict often referred to as the "war of drones," demonstrated how effective drones could be in modern warfare if used wisely and rationally. This conflict has shown that even a small state can achieve total air supremacy in the conflict if it uses drones properly and effectively. After the Second Nagorno-Karabakh War, the number of states willing to purchase drones has increased considerably. However, it is also noteworthy that not only states are interested in drones, but also terrorist organizations and aggressive non-state actors. Many terrorist organizations have started to use drones in order to achieve their goals. One of the main challenges that faces states today is to develop effective defense mechanisms to neutralize and eliminate threats coming from drones quickly. The research question of this paper is: how did the usage of drones affected modern warfare and what are the advantages and disadvantages of the

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massive usage of drones? The main goal of this article is to find out positive and negative sides of the usage of drones in modern warfare. The aim of this article is also to find what threats to do the states face because of the massive usage of drones by the terrorist organizations.

Keywords: Unmanned aerial vehicles, drones, the usage of drones to fight terrorists, the usage of drones in armed conflicts, terrorist attacks, conflicts.

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Introduction

Unmanned aerial vehicles and drones have been actively used in armed conflicts for the past twenty years. However, interest in drones in warfare has grown since Azerbaijan won a landslide victory against Armenia in the Second Nagorno-Karabakh War using Turkish and Jewish drones. During the Second Karabakh War, drones were used extensively and on a large scale for military purposes; that is why this war is known in history as the "War of the Drones" (ThePrint, 2020). During this war, the Azerbaijani side mainly used two types of drones the Turkish-made "Bayraktar" drone and the Israeli-made "Kamikaze" drone. Through these drones, Azerbaijan managed to gain a full air advantage and destroy the opposing side's armed forces and heavy equipment (Frank, 2021). Before the Second Karabakh War, the Azerbaijani government has purchased many unmanned aerial vehicles because of the financial resources obtained from oil and gas exports and has shown the world that it is quite possible to gain a dominant position even with the operational-tactical drones in the airspace and successfully wage a war.

After the Nagorno-Karabakh conflict, the demand for unmanned aerial vehicles in the world has increased considerably. The leaders of various countries have begun to buy drones en masse for military purposes.

The Usage of Drones in Counterterrorism Operations

For the first time in human history, drones were used when George W. Bush came to power in the United States and launched the war on terror. When George W. Bush declared war on terrorism, the use of drones for counterterrorism activities was not widespread. The main goal of the United States of America was to destroy only the high-ranking terrorists, so the scale of the counterterrorism operations was somewhat limited. However, the United States was the first country in the world to use drones on a broad scale for target killings to destroy members of Al Qaeda and various terrorists (Thomas O Falk, 2021) The first targeted attack on a terrorist by drone was carried out on the 7th of October 2001 and directed against Taliban leader Mullah Omar. Mulah Omar managed to escape and the first attempt to kill a terrorist with a drone did not succeed. (Walsh & Schulzke, 2018). Even though, it wasn't successful the first operation, it became useful for later operation against terrorist targets. The drones proved to be so successful in eliminating terrorists that the next president of the United States, Barack Obama, also used them actively against various

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terrorist organizations. Unmanned aerial vehicles reached their peak in 2010 when attacks on various terrorist groups were carried out on a massive scale in Pakistan. A total of 122 attacks were carried out during that period. The United States government has also begun using drones two years later in Yemen, where they carried out a total of 41 attacks. Thus the United States used drones for counterterrorism operations in Pakistan, Yemen, Somalia, Afghanistan, and Libya. Moreover, in 2015, the Americans used a drone to eliminate a dangerous terrorist - Abu Nabil al-Anbari, the leader of the ISIL in Libya. The United States has purchased an airfield in Sicily specifically to conduct its counterterrorism operations in Libya using unmanned aerial vehicles (Walsh & Schulzke, 2018).

The Usage of Drones during Armed Conflicts and Wars

The number of countries that own operational-tactical drones is gradually increasing. As far as the production of unmanned aerial vehicles is concerned, especially China, Israel, and Turkey have made huge progress in the field over the last years. These countries massively produce drones and sell them all over the world. Recently, the Turkish-made drone - Bayraktar TB2 has gained massive popularity. The "Bayraktar" drones allowed the Azerbaijani Army to gain a significant advantage in the Karabakh war and destroy the military equipment of the Armenian Armed Forces.

After this war, the number of countries wishing to purchase Turkish unmanned aerial vehicles has increased considerably. For instance, various European countries such as Poland, Ukraine, Latvia, and Serbia have also shown interest in purchasing Turkish drones. Ukraine has recently started using Turkish-made drones, and thanks to Turkish "Bayraktars," it has successfully launched attacks against the separatist forces in Donetsk and Lugansk regions. Through Turkish unmanned aerial vehicles, Ukraine could destroy separatist military equipment in the Russian-occupied areas and gain air superiority against the separatists. In addition, the General Staff of the Ukrainian Armed Forces has stated that they had used unmanned aerial vehicles to force pro-Russian separatists to a ceasefire (The MoscowTimes, 2021).

Moreover, Ukraine has signed an agreement with Ankara on the joint production of unmanned aerial vehicles. Ukraine and Turkey plan to jointly manifacturing drones at one of the factories near the Ukrainian capital, Kyiv (Daily Sabah, 2021). This agreement has angered Russia. Russia has recently contacted and has close dialogue with Turkey in Syria, Libya, and Nagorno-

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Karabakh. However, they support different sides in these conflicts, and their geopolitical goals and objectives often do not coincide. After implementing large-scale joint energy projects such as TurkStream and Akkuyu Nuclear Power Plant, Turkey and Russia, which were historically hostile to each other, have become so economically interdependent that, despite their different geopolitical interests, they still manage to find common ground and ease political tensions through negotiation and diplomacy (Reuters, 2021).

When Kremlin expressed concern over Ukraine's use of Turkish-made unmanned aerial vehicles and stated that drones could cause destabilization in eastern Ukraine, Turkish authorities immediately denied Moscow's allegations that Ankara was to blame for the situation. Turkish Foreign Minister Mevlüt Çavuşoğlu stated that Turkey could not be held responsible for Ukraine's use of drones. After meeting with the Russian Foreign Minister at the G20 summit in Rome, Çavuşoğlu told reporters that if any country buys an unmanned aerial vehicle from Turkey, it is no longer considered a Turkish product. The state that uses it carries the full responsibility for its usage. Therefore, in his opinion, unmanned aerial vehicles may be made in Turkey. Still, after the purchase, it belongs to Ukraine, and therefore, Turkey cannot be blamed for Ukraine's use of operational-tactical unmanned aerial vehicles in military conflicts.

Furthermore, Çavuşoğlu stated that the Turkish military often encounters weapons made in different countries, including military equipment made in the Russian Federation, during its fight against terrorism. Still, they never blame Russia for this (Daily Sabah, 2021). He also called Ukraine to stop referring unmanned aerial vehicles as "Turkish" drones, as Turkey no longer owned them after their acquisition. Ukraine is now fully responsible for its use (Reuters, 2021).

Unmanned aerial vehicles have many advantages. Their popularity is growing day by day, especially in small countries: with the help of unmanned aerial vehicles, it is possible to reduce military spending significantly. Purchasing drones is especially advantageous for a small country that does not have a large military budget and cannot afford to buy expensive aircraft. Unmanned aerial vehicles reduce the cost of war and provide even a small country with the opportunity to gain air superiority during the war. Another strength of operational-tactical unmanned aerial vehicles is that the air defense systems find it extremely hard to detect them due to their small size. It is complicated to detect drones if the country does not have a modern and robust air defense system.

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For example, during the Nagorno-Karabakh war, Armenia mainly used outdated Soviet-made air defense systems that could not detect the operational-tactical drones of the Azerbaijani Army, which gave Azerbaijan total air supremacy during the conflict.

Drones are, therefore, especially advantageous in asymmetric conflicts when the enemy does not possess anti-aircraft systems. One example is the anti-terrorist operation carried out by Turkey in northern Iraq, when drones killed large numbers of terrorists and the infrastructure of the Kurdistan Workers' Party was destroyed (Cancian, 2021).

The Usage of Drones by Terrorist Organizations

Drones are used not only by states in times of conflict but also by non-state actors. There is a great danger that terrorist organizations will also start using drones en masse to achieve their goals. Such an occurrence is the attack on India's military infrastructure in Kashmir province. On June 27, 2021, an unmanned aerial vehicle loaded with two explosives crashed into an Indian Air Force station. One explosive device damaged the roof of a military building, while another exploded in an open area. Two servicemen were slightly injured. This is the first time in the history of India that terrorists have used unmanned aerial vehicles to attack an Indian military facility. Although unmanned aerial vehicles were not able to do much damage to the Indian Army, the incident still raised the alarm around the world as even well-protected military facilities were vulnerable to drone attacks. India fears drone strikes could become a preferred choice for groups operating in Pakistan. The terrorist groups could launch massive drone strikes against India, further exacerbating the already complex political situation in Kashmir (Ramachandran, 2021).

Another example is related to the terrorist organization of Kurdistan Workers' Party (PKK). The PKK has recently used unmanned aerial vehicles against Turkey. For several years now, the Kurdistan Workers' Party (PKK) has been attacking various facilities in Turkey with drones. Moreover, the Kurdistan Workers' Party (PKK) uses quadcopters and large-scale drones to drop explosives and attack opponents (Cancian, 2021). Thus, it is quiet possible that various terrorist organizations may start massively purchasing and using drones to carry out terrorist attacks. Drones will be especially dangerous if terrorists start using them to destroy critical infrastructure.

In 2017, Christopher Ray, director of the U.S. Federal Bureau of Investigation (FBI), stated that unmanned aerial vehicles and drones pose a deadly threat to U.S. cities. He warned Congress

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against various terrorist groups' interest in carrying out drone attacks in the United States. However, as he pointed out, drones are not expensive technology and can be freely purchased by state and non-state actors, including private companies and individuals. Neither the management nor the operation of an unmanned aerial vehicle is a challenging task, although it is quite challenging to monitor and destroy it.

Furthermore, buying drone parts is not a big problem. Assembling a drone is also a relatively simple and easy procedure. That is why it is quite possible that terrorist organizations may start mass production and manufacture of drones in the near future. If aggressive non-state actors acquire large numbers of drones, the world would face new challenges as the number of terrorist attacks and acts would increase dramatically.

One of the main challenges facing states today remains to be the development of defense mechanisms to neutralize such threats quickly. Unfortunately, many states are not ready to deal effectively with such a challenge yet. However, the threat is accurate, and if the defense mechanisms are not developed on time, it can cause significant financial and material damage to different countries in the future. Destroying unmanned aerial vehicles may be a simple procedure in conflict zones where the military has the resources and the potential to deal with such threats. Still, it is much more challenging to eliminate them in populated areas and peaceful areas where residents have no specific knowledge or experience of eliminating threats coming from drones.

Modern terrorist groups can easily modify consumer-level drones so that they can be used to launch large-scale attacks against a civilian population. For example, terrorists of the ISIL often use such drones to achieve their political goals and attack the enemy. Terrorists use drones not only to carry out terrorist attacks but also for surveillance and for propaganda purposes (Shajkovci & Kanunnikova, 2021). Therefore, unmanned aerial vehicles and drones are actively used by non-state organizations such as Hezbollah, Hamas, Al Qaeda, ISIL, etc. In the near future, the number of terrorist organizations that posses and use operational-tactical drones during conflicts may increase significantly.

Conclusion

Drones have become increasingly common during armed conflicts in recent decades, leading to fundamental changes in modern warfare tactics and strategy. The research revealed that drones

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have become essential tools in modern combat and the use of unmanned aerial vehicles during a conflict can be financially advantageous for a small state with a limited military budget. Drones significantly reduce the cost of war and provide even a small country with the chance to gain an air superiority during an armed conflict. Another strength of operational-tactical unmanned aerial vehicles is that the air defense systems cannot detect them because of their small size. It is complicated to detect drones especially if the country uses old and outdated air defense systems. The Nagorno-Karabakh conflict demonstrated the effectiveness of drones during armed conflicts and wars.

Despite the above-mentioned positive effects of the usage of drones, there are also great risks associated with its extensive use. Not only states but also many non-state actors have started to use unmanned aerial vehicles. Particularly dangerous is the use of drones by aggressive non-state actors. They often use unmanned aerial vehicles in order to carry out terrorist acts. Terrorist organizations may soon develop capabilities to produce and manufacture drones. As terrorist organizations increasingly use drones to achieve their aggressive goals, states need to develop defense mechanisms and refine their security strategies to quickly and safely neutralize terrorist acts. Unfortunately, the vast majority of states are not ready to deal with such challenges and they have nod developed any strategies how to eliminate such threats. Armed drones are deadly weapons and therefore, States have to make some effort to develop counter-drone systems and counter-drone capabilities in order to neutralize drone strikes and terrorist attacks on time and avoid civilian casualties.

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