USE OF SMALL ARMS BY UNITS OF THE NATIONAL GUARD OF UKRAINE IN COUNTERING MILITARY THREATS

The article examines the role and importance of the National Guard of Ukraine in ensuring the defence and security of the State. It is indicated that this military formation has unique features that allow it to intervene quickly in any region of the country to perform military tasks. The analysis of its status has led to the conclusion that the National Guard of Ukraine is a law enforcement agency, and the legal aspects of its role in performing law enforcement functions of the State are analyzed.

The author characterizes the legal acts regulating the use of small arms by representatives of the National Guard of Ukraine. The author concludes that it is possible and necessary to use small arms in some cases to counteract enemy unmanned aerial vehicles.

Keywords: National Guard of Ukraine; security sector; military and law enforcement functions; threats to the security of the State; powers, tasks, state security; small arms; angle of target location; angle of aiming

Statement of the problem. The National Guard of Ukraine (NGU) was created during active hostilities. The Law of Ukraine, "On the National Guard of Ukraine", adopted on 13 March 2014 during the Russian-Ukrainian war, defined the NGU as a new military formation with law enforcement functions [1]. In other words, the National Guard of Ukraine is a law enforcement agency, as its main tasks include protection and defence of life, rights, freedoms and legitimate interests of citizens, society and the State from criminal and other unlawful encroachments, protection of public order and ensuring public safety; its performance of law enforcement functions is defined as one of its main tasks; its employees perform duties on a professional basis, may have special ranks, uniforms, insignia; employees of the National Guard have the right to be.

The NGU was created on the basis of the Internal Troops and remains the youngest among Ukraine's military structures. It is important to note that the NGU has been given new tasks compared to the Internal Troops, including participation in resolving situations related to armed conflicts and other threats at the state border. It also participates in special operations against armed groups and criminal organisations on the territory of Ukraine, as well as in measures to prevent illegal border crossings. This study analyses the peculiarities of the use of small arms by units of the National Guard of Ukraine in countering military threats.

Recent research and publications analysis. The main functions of the NGU are participation in repulsing armed aggression; protection of the constitutional order of Ukraine, the integrity of its territory from attempts to change it by violence; participation in measures related to the termination of armed conflicts and other provocations at the state border; participation in special operations to neutralise paramilitary or armed groups not provided for by law; participation in the restoration of constitutional order in case of attempts to seize state power or change the constitutional order by violence; involvement in the implementation of martial law measures; territorial defence tasks and defence of the critical state objects [1].
Scientists in various fields of science, including legal, military and national security, have studied the problems of small arms use. S. V. Zhenzhera, A. V. Lytvyn, and A. A. Brovko define weapons in terms of their purpose and give examples of their individual types [5]. V. M. Senatorov explores the concept of "small arms", which correlates with the concept of "weapons" as a part of the whole [6]. In their works, A. T. Komziuk, O. I. Bilenko and D. V. Pavlov consider the use of small arms as one of the types of administrative and coercive measures [3]. According to A. Y. Allerov and O. V. Kryvenko, weapons are a specific feature of military service [2].

Statement of the task. The purpose of the article is to analyse the peculiarities of using small arms by the units of the National Guard of Ukraine in countering military threats.

Outline of the primary material. On the one hand, the use of weapons is the combat use by service members, military units and units (ships) of weapons and military equipment in their service, authorised by the relevant statutes, guidelines and instructions, as well as orders (commands) of commanders (chiefs). On the other hand, S. V. Zhenzhera, A. V. Lytvyn, and A. A. Brovko analysed the norms of legislation and took into account the signs of administrative coercive measures, including the use of weapons [5]. The researchers consider the use of firearms to be administrative termination measures - means of forcible interruption (termination) of unlawful acts and special termination measures (particular purpose termination measures), which belong to the group of independent (operational) measures.

Ukraine's receipt of small arms from partner states as part of international military logistical assistance allowed it to intensify the rearmament of NGU units with small arms of NATO calibre, significantly increasing its firepower (Table 1).

In addition, D. V. Pavlov and O. I. Bilenko divide administrative and coercive measures related to offences, in particular, into administrative suppression measures, including weapons use [3]. According to S. V. Zhenger, A. V. Lytvyn and A. A. Brovka, in a certain sense, the use of force is the use of weapons.

Researchers identify a vertical genus-species series: "state coercion, administrative coercion, administrative restraint measures use of weapons". They conclude that the concept of "use of force (and hence weapons) in the internal affairs of the state" is an essential manifestation of legal (legalised) physical coercion of the state (represented by authorised bodies and officials) about persons with delinquent behaviour with the help of complex tools (including weapons) to stop the offence [2].

It should be noted that there are restrictions on the use of weapons by NGU units; in particular, the use of firearms is prohibited:

<table>
<thead>
<tr>
<th>Type of automation</th>
<th>Calibre</th>
<th>Name of weapons provided as part of international material and technical assistance</th>
<th>Quantity titles</th>
<th>Names of samples of weapons of domestic production</th>
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## Sniper rifles

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## Automatic rifles / Carbines

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## Submachine guns

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<td>Fort-230, SMG-15</td>
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</table>
1. Women with apparent signs of pregnancy, minors, persons with obvious signs of disability or old age, except in cases of armed or group attack, armed resistance to a serviceman of the National Guard of Ukraine that threatens his life and health and other persons, if it is impossible to repel such an attack or resistance by other means;

2. In premises and land plots owned or assigned to diplomatic missions and consular offices of foreign states in Ukraine, unless the head of the diplomatic or other relevant mission (organisation) receives a written request (consent) through official channels to use these means against offenders;

3. In premises or production facilities related to the manufacture of explosives or flammable substances in educational and medical institutions.

4. It is prohibited to use firearms in places where harm may be caused to other persons, except in cases of repelling an attack, if the danger could not be eliminated by different means in the circumstances and the damage caused is significantly less than that prevented.

5. A serviceman has the right to bear firearms and put them in readiness if he believes that, in the current situation, there may be grounds for their use [2].

An example of the successful use of units of the National Guard of Ukraine in countering hybrid aggression is the special operation to stop the separatist movement in Kharkiv, which included the restoration of public administration and the liberation of the Kharkiv Regional State Administration from pro-Russian forces. Due to the timely, effective and decisive use of special units of the NGU at the initial stage of forming a new centre of separatism that opposed the constitutional order of Ukraine, the possibility of further developments in a scenario similar to the events in the Donetsk region was blocked entirely.

Noteworthy are the cases of NGU units using small arms to counter unmanned aerial vehicles while performing state security tasks.

In recent years, the development and proliferation of unmanned aerial vehicles (UAVs) in military use has significantly changed air defence strategies. It calls into question traditional defence concepts against air threats in various military units during combat operations. Sometimes, due to the destruction of air defence equipment by the enemy, lack of ammunition or insufficient air defence equipment in military units, it becomes apparent that small arms are needed to counter UAVs.

The NGU's small arms remain relevant and can effectively be used in conjunction with modern air defence systems to eliminate UAVs. The likelihood of a UAV being hit by the National Guard of Ukraine depends on its characteristics, such as size, altitude, speed, and manoeuvrability. Small UAVs travelling slowly and at low altitudes are prime targets for small arms. NGU units can effectively use small arms to destroy helicopter-type targets at low altitudes and distances and to conduct defensive fire during attacks by fast-moving aircraft and helicopters. Therefore, air defence strategies must be carefully reviewed and adapted to the challenges and capabilities of small arms in the fight against unmanned aerial vehicles.

Sighting is the process of adjusting the position of the barrel to ensure that the bullet hits the target accurately. This is achieved with the help of sighting devices that

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**Pistols**

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<td>Fort 28</td>
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*Note: the calibre of small arms is divided: small - up to 6.5 mm, medium - from 6.5 mm to 9 mm, large - over 9 mm.*

*Source: developed by the author according to [4]*
align the sights' optical axis with the barrel channel's geometric axis. The aiming angle, defined as the angle between the barrel's line of sight and the line of sight, depends on the distance to the target and the rate of bullet velocity deceleration. The higher the rate of bullet velocity deceleration and the greater the distance to the target, the greater the aiming angle required.

This angle is set by adjusting the reticle depending on the distance to the target. It is also worth noting that the aiming angle may depend on the angle of the target. In the case of small target angles, adjustments to the reticle settings are considered minor and usually do not need to be made. When shooting at aerial targets, it is recommended to advance the aiming point for targets moving slowly, in metres or shapes, to achieve greater shooting efficiency.

Regulatory documents do not contain specific recommendations for aiming when shooting at targets with a field of view of 60° to 90°, which makes it difficult to hit a target accurately with small arms. This is due not only to the increase in the aiming angle as the target angle increases but also to the fact that the aiming angle can reach zero when shooting at targets in a vertical position (zenith).

Most sights on small arms are designed for a minimum firing distance of approximately 100 metres and, therefore, cannot be set to an angle of aim less than the appropriate value for this distance when firing at ground targets. The minimum aiming angle for many typical weapons is usually between 1.4 and 4.7 thousandths of a degree. When firing at the zenith (with a 90° target angle), the deviation of the average point of impact from the reference point for such weapons can be between 0.14 and 0.47 metres at a distance of 100 metres. This significant deviation significantly impacts the weapon's accuracy and the possibility of hitting the target.

The aiming error due to the inability of small arms sights to match the firing of anti-aircraft targets significantly affects the effectiveness of shooting. Even at a distance of 100 metres, the probability of hitting the target is reduced by 25-50%. When firing at longer distances, the situation about accuracy is even worse. For example, at a distance of 200 metres, the impact of this aiming error for 7.62mm Kalashnikovs increases from 25% to 42%, and for 5.45mm Kalashnikovs from 39% to 86%. At a distance of 300 metres, the probability of hitting the target decreases even further and does not exceed 24%.

The exceptions are handguns, which have the smallest aiming angles, and some machine guns, which can provide high accuracy despite their larger aiming angles. The increase in the probability of hitting the target with increasing distance for some machine guns is explained by the increase in bullet dispersion and the possibility of hitting the target even with a significant aiming error. However, this value (24%) is much lower than the 69% that could be achieved with these weapons at the same distance if no aiming error existed.

In such conditions, hitting the target with an acceptable probability is possible only by moving the aiming point to a specific value, which is not given in the operational documentation and training literature and is, therefore, unknown to the shooter. Thus, improving the sights of small arms to ensure accurate fire at air targets with target angles of 60°...90°, as well as developing special rules for shooting at such targets, is an urgent task.

In the future, the NGU will be a mobile, combat-ready and autonomous military unit with law enforcement functions. This unit will consist of professional, motivated and psychologically prepared service members who will be provided with modern weapons, military equipment and special means. It will be tasked with performing a wide range of tasks in the shortest possible time in any region of the country. In the event of a growing threat or emergency, these units of the National Guard of Ukraine will be in constant combat readiness and will be able to counter threats to national security at the initial stage effectively. This will make it possible, if necessary, to quickly deploy the Armed Forces of Ukraine and perform tasks to stop armed conflicts of low and medium intensity and prevent inspired external armed conflicts on the state's territory.

**Conclusions and Prospects for Further Research.** The use of weapons by the units of the NGU is the combat use by servicemen, military units and units (ships) of weapons and military equipment in their service, authorised by the relevant statutes, guidelines and instructions, as well as orders (commands) of commanders (chiefs). Its peculiarities include a) intensification of the use of firearms by the NGU units; b) widespread use of foreign-made firearms transferred to Ukraine by NATO member states; c) use of firearms to destroy unmanned aerial vehicles.

Further research should analyse the regulatory framework for countering threats to Ukraine's State security by the units of the National Guard of Ukraine with regard to timely warning, detection
of external and internal threats to Ukraine's State security, prevention of such threats, and counteraction to such threats.

References


