

UDC 355.48:623.445



S. Popov



O. Cherkashyn



S. Cherkashyn

METHODOLOGICAL APPROACHES AND TACTICAL TECHNIQUES FOR THE USE OF SHORT-BARRELED WEAPONS IN MODERN COMBAT

The article examines tactical techniques and methodological approaches to the use of short-barreled weapons in modern combat. Emphasis is placed on their use in close fire contact and dynamic combat situations. The relevance of the topic is due to the intensity of combat operations in dense urban areas and confined spaces, where the use of such weapons is of particular importance.

The tactical techniques and methods of using short-barreled weapons in real combat conditions have been systematized and analyzed. The analysis showed that, thanks to their compactness and quick deployment, short-barreled weapons are an effective tool in close combat. In conditions of increased stress on the shooter, key techniques such as instinctive shooting and quick transition to a backup weapon are critical.

Keywords: short-barreled weapons, close combat, urban combat, tactical use, combat conditions, maneuverability in combat, conditions of limited movement of the shooter.

Statement of the problem. The modern battlefield is increasingly becoming a complex, dynamic, and multidimensional environment where military personnel have to operate in critically limited space, under enemy fire, and under the constant threat of sudden close-range combat. The war in Ukraine has shown that a significant part of combat operations takes place not in open terrain, but in dense urban areas, trench systems, underground shelters, building ruins, and other urban structures, where the nature of combat takes the form of close contact with an extremely high level of unpredictability and requires an immediate response.

Short-barreled small arms, in particular pistols, provide combat flexibility, allowing the soldier to maintain the initiative, react instantly to changes in the situation, and engage in accurate firefights in close proximity to the enemy. Thus, the realities of modern combat are shaping a new understanding of the role of short-barreled weapons as an important element of a soldier's tactical arsenal.

Analysis of recent research and publications. The issue of using short-barreled small arms has been addressed by researchers in a number of applied military-analytical sources. Thus, in works [5, 12], short-barreled weapons are considered as a reserve element of armament, intended primarily for self-defense in case of loss of the main firepower.

However, the intensity of combat operations in urban environments, trench systems, narrow infrastructure areas, and enclosed spaces is increasing, and there is an objective need to rethink the role of the pistol as a first-line tactical tool.

In studies [1, 10], the authors highlight the experience of assault operations, especially in densely built-up areas, emphasizing that the effectiveness of long-barreled weapons in such conditions is often limited. Short-barreled weapons are not only more convenient to use, but also critically important for maintaining combat effectiveness in close combat, where fractions of a second determine the outcome of a clash [4, 7].

Most sources do not consider how short-barreled weapons are integrated into the overall combat tactics of a unit, how a soldier's algorithm of actions changes when switching to a pistol, or what techniques ensure effective shooting in dense combat conditions. Thus, the existing research base only partially outlines the general conditions for the appropriate use of short-barreled weapons. We consider it urgent to conduct a further in-depth analysis of combat situations and real examples of clashes, as well as a practical assessment of the effectiveness of various methods of using short-barreled weapons as the main fire unit in close combat.

The purpose of the article is to justify methodological approaches to the combat use of short-barreled weapons in modern combat conditions by analyzing practical combat experience.

Summary of the main material. The realities of combat operations, which often take place in confined spaces, trench systems, underground communications, and densely built-up areas, raise the question of the advisability of using short-barreled weapons as one of the key tools of close combat. The traditional view of the pistol as a secondary, reserve means in the structure of fire support needs to be rethought in view of the rapid transformation of the nature of armed conflicts and changes in the spatial and operational environment where combat clashes take place. Short-barreled small arms, in particular pistols, are increasingly seen not only as a reserve but also as a primary fire unit in conditions where maneuverability, speed of response, and compactness play a decisive role in survival and the accomplishment of combat missions [2].

The tactical expediency of using a pistol as a primary or secondary weapon is determined primarily by the specifics of the combat situation, the structure of the unit, and the nature of the task at hand. In cases where combat operations take place at a distance of less than 10 m (in building corridors, basements, trenches, narrow streets, or in conditions of close contact with the enemy), the use of automatic or long-barreled weapons may be difficult or even impossible. The length of the barrel, the weight, as well as the need for both hands to aim an automatic weapon, significantly reduce the soldier's reaction speed and maneuverability – critical parameters in close combat. It is also worth noting that in situations where the main weapon malfunctions (misfire, jamming, running out of ammunition, or damage to aiming devices, etc.), a pistol as a backup weapon allows the soldier to continue fighting without stopping to fix the malfunction, which in close combat can save lives [7]. In this sense, short-barreled weapons become the last line of defense, ensuring combat capability and a rapid fire response in critical moments of engagement.

The effectiveness of using a pistol as a primary weapon also depends largely on the spatial characteristics of the battlefield. In dense urban areas with lots of buildings, fences, entrances, narrow streets, crossings, elevator shafts, and stairwells, fighters have to operate in a super-

restricted environment where every second counts. In such conditions, the use of a pistol ensures quick combat readiness, convenient movement, and shooting from non-standard positions (lying down, from the knee, with one hand, from behind cover), i.e., this weapon becomes indispensable in close fire contact. Moreover, the high probability of sudden contact with an enemy, who appears from around a corner, door, or other infrastructure elements, requires an immediate fire response, which, thanks to a pistol, can be implemented almost instantly [9].

A similar situation is observed in trench systems, where limited space makes it difficult to effectively manipulate long-barreled weapons, especially when moving in tunnels or firing at short range. In such conditions, a pistol allows combat operations to be conducted with minimal body movement, which reduces the soldier's exposure and, accordingly, the likelihood of being hit by the enemy. In addition, the psychological factor of close combat, accompanied by high levels of stress, the need for quick decision-making, and physical exertion, makes the use of a pistol more appropriate for maintaining control of the situation. It is worth emphasizing the effectiveness of short-barreled weapons in terms of accuracy in close combat. In cases where the distance does not exceed a few meters, the accuracy of shooting with a pistol is not inferior to, and sometimes even exceeds, that of automatic weapons due to better recoil control, quick aiming, and the ability to shoot from different positions and angles [3].

One of the key elements of effective use of short-barreled weapons in combat conditions is the ability to quickly remove the pistol from the holster, bring it into combat readiness, and, if necessary, replace the magazine, which requires not only physical dexterity, but also a deep understanding of the mechanics of the weapon and coordination of movements in stressful conditions. Quickly drawing a pistol from its holster requires a well-practiced technique: the correct position of the hand on the grip, a sharp pull of the weapon from the holster, and a smooth transition to the aiming position. A trained shooter can do all this in a minimum amount of time, usually no more than 1-2 seconds. For example, tactical training such as the IDPA (International Defensive Pistol Association) standards emphasizes speed and smoothness of movement to avoid snagging the weapon on equipment or clothing, which can be fatal in a combat situation (Figure 1) [1].



Figure 1 – Combat use of short-barreled weapons

Bringing the weapon into combat readiness, in particular removing the safety catch (if provided for by the design) and feeding a cartridge into the chamber, must be done automatically, without unnecessary movements, which can only be achieved through regular training and muscle memory. Magazine replacement is another critical element that requires synchronization of movements: the shooter simultaneously presses the magazine release button, removes the empty magazine, inserts a new one, and, if necessary, feeds a round into the chamber. Under stressful conditions, this process can be complicated by hand tremors, sweat, or limited visibility. The technique of quick magazine replacement involves the use of a so-called "tactical replacement" (keeping a partially used magazine) or "combat replacement" (complete ejection of an empty magazine), depending on the situation, which requires the shooter to be able to assess the circumstances and make instant decisions [8].

The effectiveness of short-barreled weapons largely depends on the correct placement of the holster on the equipment to ensure quick access to the pistol even in stressful conditions, when adrenaline and psychological pressure can significantly affect coordination and reaction speed. The holster is usually placed on the belt, hip, or chest, depending on tactical needs and the type of operation, and the choice of location must take into account the shooter's anatomical features, type of clothing, and the specifics of the combat mission. For example, an outside the waistband (OWB) holster provides quick access but is less convenient for concealed carry, while an inside the waistband (IWB) holster is optimal for civilians, although it requires additional time to draw the weapon. In stressful situations (sudden attack or the need to respond to a threat in a confined space), the accessibility of the weapon depends on the correct choice of holster with reliable fasteners that

prevent the pistol from falling out but do not complicate its removal [6]. In addition, the factor of the location of additional magazines should be taken into account; they should be placed in such a way that the shooter can quickly reach them without taking their eyes off the target. For this purpose, special pouches with magnetic or spring fasteners are used. Training with simulated stressful situations, such as shooting under time pressure or under physical stress, helps the shooter adapt to real combat conditions, increasing the chances of successful task completion [5].

Working with short-barreled weapons in confined spaces (doorways, stairwells, or vehicles) requires special attention to safety, as any mistake can lead to an accidental discharge, injury to allies, or loss of control of the situation. When passing through doorways, the shooter must keep the pistol in the so-called "low ready" position, pointing the muzzle downwards and not touching the trigger with their finger, in order to avoid accidental discharge in case of collision with an obstacle or sudden appearance of a target. On stairs, where mobility is limited and the angle of view is difficult, the shooter should use the "slicing the pie" technique, gradually opening up the field of view and keeping the weapon ready to fire. In vehicles (cars, armored vehicles), the use of short-barreled weapons is complicated by limited space, the presence of seat belts, and the need to avoid damaging equipment or other fighters, which requires the shooter to be able to work with one hand or in awkward positions [12].

In combat situations at distances of less than 10 m, where reaction speed and accuracy of movement become decisive factors, short-barreled weapons demonstrate their advantages due to their compactness, ease of one-handed operation, and the ability to aim quickly, which allows the fighter to effectively neutralize the threat even in the chaotic conditions of close contact. At such short distances, which often arise in urban combat, in enclosed spaces, or during sudden clashes, the shooter is faced with the need to make instant decisions, since the enemy may be within physical contact, which complicates the use of traditional shooting positions. In these conditions, so-called "instinctive shooting" is used, when the fighter focuses not on the sights, but on the natural position of the body and the direction of the muzzle, which makes it possible to fire at maximum speed while maintaining control over the weapon. Thus, in a situation where the enemy

approaches to a distance of less than 3 m, the shooter can use the "retention shooting" technique: the pistol is held close to the body to prevent it from being seized by the enemy, and shots are fired with minimal forward movement of the muzzle [11].

In real combat conditions, working in pairs with short-barreled weapons is critical for providing mutual cover, controlling firing sectors, and effectively performing tactical tasks, especially when entering a room where limited space and the unpredictability of the enemy's location create a high level of risk. The tactic of working in pairs involves a clear division of roles between the fighters: one is usually responsible for advancing and conducting an initial survey of the sector, while the other provides cover, controlling potential threats from the rear or flanks. The second fighter also keeps the opposite sector or corridor under control, ensuring the safety of the first fighter from unexpected attacks (Figure 2).



Figure 2 – Two shooters working together to clear an area

In the dynamics of real combat, when the primary weapon (e.g., an assault rifle) becomes unusable due to depletion of ammunition or mechanical failure, the transition to a short-barreled weapon as a backup is a maneuver that requires speed, accuracy, and maintaining control of the situation in order to avoid loss of combat effectiveness. This transition, known as "transition to secondary," usually takes place in a matter of seconds when a fighter, assessing the impossibility of continuing to fire with the primary weapon, instantly releases it (leaving it on the belt or throwing it in a safe direction) and removes the pistol from the holster, simultaneously moving to cover or changing position to continue the fight [10].

In some cases, when the primary weapon remains in the hands but cannot be used, the fighter can perform a so-called "one-handed transition," holding the rifle with one hand and drawing the pistol with the other, which allows them to maintain control over both weapons. This maneuver is quite difficult in dynamic conditions when the enemy is actively maneuvering or firing, so fighters must be prepared to quickly change tactics, for example, using cover to reload their primary weapon after neutralizing the immediate threat with a pistol (Table 1).

The use of short-barreled weapons in real combat conditions requires a soldier not only to be able to shoot accurately, but also to be able to quickly adapt to dynamic and unpredictable situations using specialized tactical techniques and action algorithms that ensure efficiency and safety.

Table 1 – Tactical techniques and methods of using short-barreled weapons in modern combat conditions (compiled by the author)

Technique / Technique	Description	Application	Advantages	Limitations
Quick removal of the pistol	Enables quick removal of the pistol from the holster with the correct hand position on the grip, clear release from the lock and smooth transition to the aiming position in 1-2 seconds	Used in stressful situations for immediate response to a threat, especially at distances up to 10 m	Provides quick access to the weapon, minimizes preparation time to prepare for shooting	Requires the correct choice of holster and no obstacles (clothing, equipment)
Magazine replacement	Synchronized movements to eject the empty magazine, insert a new one, and, if necessary, feed a cartridge, including tactical (storing a partially used magazine) or combat (ejecting an empty one) replacement	Used in prolonged combat when the ammunition in the main magazine is exhausted	Enables rapid restoration of combat capability by adapting to the situation	Complicated in stressful conditions due to hand tremors, sweat, or limited visibility

End Table 1

Technique / Technique	Description	Application	Advantages	Limitations
Instinctive shooting	Shooting without using sights, relying on the natural position of the body and the direction of the muzzle, often with the weapon held close to the body (retention shooting)	Effective at distances up to 3 m close contact when the enemy is within physical contact	Maximizes reaction speed, allows you to fire in confined spaces	Reduced accuracy at longer ranges, requires high coordination
Working in pairs (entering a room)	Tactics involving the distribution of roles: one fighter moves forward using the "slicing" technique to survey the sector, while the other provides cover for the rear or flanks	Used when clearing rooms or in confined spaces to control potential threats	Provides mutual cover, reduces vulnerability, increases control over the situation	Requires clear coordination and synchronization of actions between fighters
Transition to a secondary weapon	Quick removal of the pistol from the holster when the primary weapon cannot be used (jamming, running out of ammunition) with movement to cover	Are used in the dynamics of combat when the primary weapon becomes unusable, especially in close combat	Allows you to maintain combat effectiveness in critical situations	Requires speed and maintaining visual contact with the enemy
Safety techniques in confined spaces	Keep the pistol in a "low ready" position (muzzle down, finger off the trigger) when passing through doors or stairs	Used in confined spaces (doors, stairs, vehicles) to avoid accidental shots and injuries	Reduces the risk of accidental discharge, increases control over the situation	Limited mobility and viewing angle make it difficult to react quickly

Conclusions

Various methods of using a pistol in close combat were studied: techniques for instantly drawing a pistol from a holster, shooting from atypical positions, interacting in pairs during assault operations in buildings, as well as algorithms for switching to a backup weapon if the main one becomes inoperable. The effectiveness of this weapon in various combat conditions has been studied:

- sudden contact with the enemy;
- firing in vehicles, underground passages, stairwells, and narrow corridors.

The study revealed the following key advantages of the pistol: short preparation time for shooting, ease of holding with one hand, and compactness in mobile situations.

Based on the results obtained, the importance of revising the role of the pistol in the combat armament of the unit has been proven. It is an autonomous unit that ensures the combat effectiveness of personnel in conditions where the use of automatic weapons is difficult. Recommendations have been developed for

modernizing approaches to training in the use of pistols as part of the tactical training of military formations.

Further research should focus on improving tactical techniques, taking into account the latest technologies, analyzing the impact of psychological and physiological factors on shooting effectiveness, and developing new training methods.

References

1. KNT (2023). *Viiskovi operatsii na urbanizovaniyi mistevosti (MOUT). Boiovyi statut morskoi pikhoty SShA (MCWP) 3-35.3* [Military operations in urbanized terrain (MOUT). U.S. Marine Corps Warfighting Publication (MCWP) 3-35.3]. Kyiv [in Ukrainian].
2. Koniev O. Yu., Herashchenko O. S. (2022). *Udoskonalennia metodyky navchannia vohnevoi pidhotovky zdobuvachiv vyshchoi osvity navchalnykh zakladiv zi spetsyfichnymy umovamy navchannia ta tsvyilnykh osib v umovakh voiennoho stanu* [Improvement of the methodology of fire training for higher education students in educational institutions with specific

learning conditions and civilians under martial law]. *Pivdennoukrainskyi pravnychi chasopys*, no. 1-2, pp. 99–104. DOI: <https://doi.org/10.32850/sulj.2022.1-2.18> [in Ukrainian].

3. Yosypiv Yu. R., Synenkyi V. M., Kurliak M. D., Lysa M. O., Tuz N. D., Verbytskyi P. S. (2022). *Suchasni vydy vohnepalnoi striletskoi zbroi pidrozdiliv MVS Ukrayny* [Modern types of firearms of the Ministry of Internal Affairs of Ukraine units : training manual]. Lviv : Lvivskyi derzhavnyi universytet vnutrishnikh sprav [in Ukrainian].

4. Khatsaiuk O., Samsonov Yu., Samsonova H. (2024). *Pidhotovka instruktoriv z vohnevoi pidhotovky* [Training of fire instructors]. London-Chisinau : Dodo Books Indian Ocean Ltd. and OmniScriptum S.R.L. publishing group [in Ukrainian].

5. Yasko V. A., Mentus I. E., Bambuliak M. P., Kuchynskyi S. A. (2022). *Striletska zbroia ta vohneva pidhotovka. Chastyna 1. Osnovy strilby zi striletskoi zbroi* [Small arms and fire training. Part 1. Fundamentals of small arms firing]. Kamianets-Podilskyi : KPNU [in Ukrainian].

6. Kodur V. K. R., Aziz E. M., Naser M. Z. (2017). Strategies for enhancing fire performance of steel bridges. *Engineering Structures*, vol. 131, pp. 446–458. DOI: <https://doi.org/10.1016/j.engstruct.2016.10.040> [in English].

7. Lang D., Zhou A. (2022). Relationships between postural balance, aiming technique and performance in elite rifle shooters. *European Journal of Sport Science*, vol. 22, no. 10, pp. 1493–1498. DOI: <https://doi.org/10.1080/17461391.2021.1971775> [in English].

8. Lemay P. (2019). Small caliber ammunition solutions for reduced range, low cost and reduced

environmental impact training. *General Dynamics Ordnance and Tactical Systems – Canada. NDIA Armament Conference. Small Arms Division*. Retrieved from: <https://surl.li/zjejbr> (accessed 28 July 2025) [in English].

9. Makedon V., Myachin V., Plakhotnik O., Fisunenko N., Mykhailenko O. (2024). Construction of a model for evaluating the efficiency of technology transfer process based on a fuzzy logic approach. *Eastern-European Journal of Enterprise Technologies*, vol. 2, no. 13 (128), pp. 47–57. DOI: <https://doi.org/10.15587/1729-4061.2024.300796> [in English].

10. Murugaiyan S., Ruthwik M. S., Gatta A., Bellam K. (2024). An Enhanced Weapon Detection System using Deep Learning. *Proceedings of the 2nd International Conference on Networking and Communications (ICNWC)* (May 2024). DOI: <https://doi.org/10.1109/ICNWC60771.2024.10537568> [in English].

11. Small Arms Survey (2023). *Statement for the Third Substantive Session of the Open-ended Working Group on Conventional Ammunition, 14 February 2023*. Sarajevo : IANSA / Small Arms Survey. (Statement published FTS file). Retrieved from: <https://surl.cc/mkbewk> (accessed 28 July 2025) [in English].

12. Tsegaye D. A. (2024). The Impact of Proliferation of Small Arms on Human Security in Amhara Regional State, Ethiopia: The Case of Gondar City. *Research paper presented in partial fulfillment of the requirements for the degree of Master of Arts in Development Studies. Erasmus University Rotterdam, International Institute of Social Studies*. Retrieved from: <https://surl.li/fycqqv> (accessed 28 July 2025) [in English].

The article was submitted to the editorial office on 12 August 2025

УДК 355.48:623.445

С. А. Попов, О. Д. Черкашин, С. Д. Черкашин

МЕТОДИЧНІ ПІДХОДИ І ТАКТИЧНІ ПРИЙОМИ ЗАСТОСУВАННЯ КОРОТКОСТВОЛЬНОЇ ЗБРОЇ В УМОВАХ СУЧASNOGO BOЮ

Досліджено методичні підходи і тактичні прийоми застосування короткоствольної зброї в умовах сучасного бою. Акцентовано на її використанні у близькому контакти, роботі в парі та переході до резервної зброї у динамічних бойових ситуаціях.

У контексті сучасних збройних конфліктів, що характеризуються високою інтенсивністю бойових дій у щільних міських середовищах, траншеях і замкненому просторі, короткоствольна зброя набуває

дедалі більшого значення як первинний або резервний засіб вогневого ураження. Це потребує переосмислення її ролі й удосконалення тактичних підходів до застосування цієї зброї з огляду на зміну просторово-операційного середовища і зростання вимог до маневреності та швидкості реакції бійців.

Здійснено систематизацію і досліджено тактичні прийоми й техніки використання короткоствольної зброї в реальних бойових умовах. Використано методи аналізу та синтезу інформації, отриманої з відкритих джерел, зокрема тактичних посібників, а також узагальнено досвід бойового застосування короткоствольної зброї у сучасних конфліктах. Дослідження ґрунтуються на вивчені реальних бойових сценаріїв, зокрема це міські бої, штурмові операції та дії в обмеженому просторі. Зроблено акцент на практичних аспектах, як-от: швидке вилучення пістолета, заміна магазина, інсінктивна стрільба, техніка безпеки.

Установлено, що короткоствольна зброя є ефективним інструментом у ближньому бою завдяки своїй компактності, можливості швидкого приведення до бойової готовності та стрільби з нестандартних положень, що забезпечує перевагу в умовах обмеженого простору. Під час входження до приміщення такі техніки, як інсінктивна стрільба і швидкий перехід до резервної зброї, гарантують збереження боєздатності у критичних ситуаціях, зокрема у разі раптового контакту з противником або несправності основної зброї.

Ключові слова: короткоствольна зброя, близький бій, міські бої, тактичне застосування, бойові умови, маневреність у бою, умови обмеженого руху стрільця.

Popov Serhii – Doctor of Sciences in Public Administration, Candidate of Technical Sciences, Professor of the Department of Daily Unit Management, Military Academy (Odesa)

<https://orcid.org/0000-0002-0729-9581>

Cherkashyn Oleksandr – Candidate of Pedagogical Sciences, Senior Researcher, Head of the Language Training Center, National Academy of the National Guard of Ukraine

<https://orcid.org/0000-0003-4848-246X>

Cherkashyn Serhii – Candidate of Military Sciences, Associate Professor of the Tactics Department the State Security Educational and Scientific Institute, National Academy of the National Guard of Ukraine

<https://orcid.org/0000-0002-1973-3648>