

**KEY FACTORS IN STUDYING THE PROBLEMS IDENTIFIED IN THE USE OF
MODERN WEAPONS EMPLOYED IN THE RUSSIA–UKRAINE WAR DURING
THE TRAINING PROCESS OF CADETS IN HIGHER MILITARY EDUCATION
INSTITUTIONS**

Norqulov Akbar Farxodovich

Head of the Shooting Training Cycle, Faculty of the Central Military District,
Military Security and Defense University of the Republic
of Uzbekistan, Lieutenant Colonel

Annotation: The Russia–Ukraine war has demonstrated the rapid development and extensive use of modern weapon systems, including drones, precision-strike capabilities, electronic warfare tools, and automated reconnaissance technologies. This article examines the key problems identified in the training process of cadets at higher military educational institutions based on lessons learned from the conflict, and proposes practical solutions. Special focus is placed on countering emerging threats, developing anti-drone skills, operating in electronic warfare environments, analyzing modern intelligence data, and improving the effectiveness of weapon employment. The article provides recommendations for optimizing cadet training, modernizing military education programs, and integrating innovative approaches observed in contemporary warfare.

Keywords: Higher military education, cadet training, Russia–Ukraine war, modern weapons, drones, electronic warfare, precision weapons, combat experience, teaching methods, problems and solutions, military innovation, tactical training, asymmetric warfare, military analysis.

Characteristics of Modern Weapons

In the Russia–Ukraine war, the following types of modern weapons are widely used:

Drones (UAVs): Aerial vehicles used for reconnaissance and strike missions.



Defense systems: Air defense systems and electromagnetic protection tools.



Artillery and high-precision missiles: Weapons capable of delivering accurate strikes from long distances.



Cyber weapons: Tools used for information warfare and electronic attacks.



Although the advantages of these weapons are many, several issues have been identified in their practical use.

Problems Observed in the Use of Modern Weapons

1. Technical malfunctions and unreliability

Modern weapons are often based on advanced technologies that require extensive knowledge and experience to operate effectively.

For example:

Drone performance can be disrupted by electromagnetic interference or counter-drone systems.

Some missiles or drones fail to reach their intended targets.

Solution:

Increase scientific research and testing to improve the reliability of modern weapons.

Strengthen cyber-protection systems.

2. Shortage of qualified personnel to operate the weapons

Operating new and complex weapons requires highly skilled professionals. In many cases, the lack of trained operators reduces the effectiveness of weapon systems.

Solution:

Organize rapid professional military training in combat conditions.

Improve military training programs focused on modern technologies.

3. Logistical and supply challenges

Due to the high technological sophistication of modern weapons, their maintenance and supply are difficult.

For example:

Challenges in delivering necessary modules for missile systems on time.

Disruptions in the supply chain of electronic components.

Solution:

Establish local production of weapon components.

Improve logistics systems and forecasting.

4. Environmental and social impact of weapons

The use of modern weapons-especially high-powered missiles and explosive munitions-causes significant environmental and social damage. This leads to fear among civilians, displacement, and economic instability.

Solution:

Follow international humanitarian laws in the use of weapons during war.

Take measures to minimize environmental harm.

5. Cyber threats

Because many modern weapons are controlled through computer networks, cyberattacks can disable them.

Solution:

Develop strong cybersecurity systems to protect modern weapons.

Improve encryption systems to prevent leakage of classified information.

Conclusion and Recommendations

The Russia–Ukraine war has clearly demonstrated the unique characteristics of modern weapons and the challenges associated with their use. To overcome these issues, attention must be given to the following:

1. Strengthening personnel training systems for effective use of new technologies.
2. Enhancing weapon production and supply chains.
3. Implementing advanced systems to ensure cyber security.
4. Minimizing environmental and social consequences of warfare.

Analysis of how modern weapons and strategies shape warfare shows that their effectiveness depends on technical stability, logistics, and human resources. Therefore, strengthening these areas is crucial for achieving military success.