

THE ROLE OF GAMING SIMULATORS IN TRAINING THE CADETS OF THE ARMED FORCES

Belarusian State University of Informatics and Radioelectronics

Romanovich D.V., Kardash I.A., Abramnikov-Guriev D.A.

Zhidiliaeva N.I. – scientific adviser

Nowadays, military high schools together with the traditional methods are testing and implementing new information technology training: the use of computer virtual simulators. Modern information technologies are defined as a synthesis of informatics and management technologies organized by the intellectual dialogue between a computer and a human being. The implementation of information technologies in the form of computer games and virtual simulators, to be particular, plays a vast role in the educational process of military high school. It helps to:

- develop cadets' necessary practical and research skills;
- predict possible mistakes and identify to identify their sources;
 - adjust the level of task complexity.

What is more, virtual simulators make the studying process more efficient as they reduce the time of operations up to 20 times and make it possible to return to problem points; simulators are always accompanied by a full-scale image of the object and individualized, i.e. every cadet works with a separate model of a real object independently.

The experience gained by the computer games developers and lovers today is a key to creating a new type of army that literally go out of film or computer screens: they consist of flying, walking, floating above and under water robots remotely controlled by operators. The majority of military operations scenarios have already been used by the authors of computer games; these created scenarios are very complex and often are as close to reality as possible. That is why American soldiers and officer, for example, play special "quests" to gain new knowledge and skills that will be used in a real fight.

The pioneer in this field was the game Doom (manufacturer ID Software) which appeared in 1994. Battlezone was adapted by the US army to their needs. Among other popular and both technically and tactically useful games is Red Storm, which is now used to train soldiers to operate in urban environment. For comparison: the cost of one training flight of the F-16 is about \$15,000, while during the classes students can "fly" several times a day.

We can now predict the future of a modern generation. Young people are becoming addicted to the computer and actually cannot imagine their future without it. As soon as they are so accustomed to electronic gadgets, it is becoming easier for the youth to perceive information via electronic resources. Moreover, the gaming space is being regularly updated. We know that today many armies of the world are implementing and using game simulators and the results are very positive.

Therefore, we suggest that our Armed Forces should come to grips with the development of the game simulators for soldiers and cadets' training. This will contribute to the safety during the military training, will lead to a careful designing of curricular material and will undoubtedly ensure soldiers' confidence and understanding of what is going to be done.

Certainly, it will cost a lot of money, but it will undoubtedly increase the rating of the Armed Forces of Belarus, both in our country and abroad. An example of this approach to learning is implemented in the armies of the United States of America, Germany, South Korea, Denmark and other countries.

According to the surveys, the question "Do you want to introduce the system of game simulators as a part of military education?" was answered the following way: 85% were "for" the introduction; 10% were satisfied with the existing educational system; 5% abstained.

Speaking about our country, we can start collaborating with such company as "Wargaming", which is a leader among free-to-play MMO games and has already released more than a dozen of successful projects including World of Tanks, World of Warplanes, Operation "Bagration". The task is made easier due to the fact that there is a Wargaming center in Minsk.

To sum up, it can be mentioned that the computer will never replace a real war machine or the real military experience, but it is able to help to prepare the soldiers, as now the virtual reality is connected with the real world more than ever.