АКТУАЛЬНІ ПРОБЛЕМИ НАУКИ

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THE RESEARCH DEVELOPMENTS OF THE STATE RESEARCH INSTITUTE OF UKRAINE AS AN ELEMENT OF THE ENSURING OF QUALITY OF PRACTICAL ACTIVITIES OF THE ORGANS OF INTERNAL AFFAIRS

Paper describes the current directions of scientific and technical research and the results of the State Research Institute of Ministry of Internal Affairs of Ukraine to develop and modernize the designs of modern technology for the benefit of practical units of the National Police of Ukraine, the National Guard of Ukraine, and also identified priority directions of the Institute for the future.

Keywords: modern technology, development, modernization, Ukraine National Police, the National Guard of Ukraine.

The choice by the people of Ukraine of the vector of the state development, aimed at the European future states to the European future necessitates the reforming of the public administration system and a number of Executive bodies including the Ministry of Interior of Ukraine, bringing their activity in accordance with European and international standards.

Given the complicated situation in the east of the country, where police departments are directly involved in carrying out the antiterrorist operation, this problem is of particular relevance. MIA should quickly become an effective public body which will protect the life, health, rights and freedoms of citizens, interests of society and the state from illegal encroachments and gain public confidence.

The reorganization of the structure of the Interior and improvement of training of specialists are not the only factors that influence the effectiveness of measures for reforming of the Interior Ministry. The optimization of of structure and number of police officers require higher general level of professionalism. This, in addition to organizational factors, is still achieved by equipping the units with modern equipment and weapons.

The State Research Institute of Ministry of Interior of Ukraine was established for the purpose of scientific and technical support of practice activities of OIA. One of the main tasks of the Institute is carrying out of the researches on the development of new and modernization of the existing technical facilities and implementation of the activities in the police departments.

Last year, the Institute conducted series of researches on the development of new models of special equipment, including units of the National Guard of Ukraine, taking part in anti-terrorist operations.

In particular, for an improvement of the properties of existing vests a special anti-ricochet coverage for bullet-proof has been developed. Practical tests in police departments proved the high efficiency of the proposed protective facility of the personnel from from the defeat of the remnants of shell bullet that hits the bullet element [1, p 179].

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Armoured disk with elastic antirebounding covering



Armoured disk with kevlar antirebounding covering

For the purpose of an efficient modernization of put into service samples of small arms several adaptations are developed that allow them to install a variety of equipment mounting on Weaver and Pikatini brackets including thermal sights and night vision [1, p 180].



Transitional Mechanical Arrangement with Slat of Viver



Sight set in AK-74 with Transitional Mechanical Arrangement

To protect the employees of special units of the National Police (cords) and the National Guard during special operations several samples of domestic booletproof targets with improved technical and economic characteristics are implemented in production.

Also for the employees of special units OIA a folding assault ladder, allowing in the course of special operation group fighters to overcome both obstacles up to 5 meters and assault ladder has been created [2, 3, 4].



The activities on the creating for special units of the police the national emergency kits for opening doors and devices for the destruction of the protective glass are in progress [1, pp. 160–161].



Created technical facilities allow the employees of these units to penetrate quickly to the objects of storm (buildings, vehicles).

According to the order of the units of the National Police of Ukraine and the National Guard of Ukraine, which are involved into the ATO or perform the tasks for the protection of public order and combating crime several scientific and technical researches for the creation of special armored vehicles, special cars for road patrol, special buses for transporting of imprisoned persons is carried out, the transport of OIA employees are carried out, portable devices to force the suspension of transport are developed [1, pp. 117–129].









Particular attention by the scientists of the Institute is paid to the study of the experience of armored vehicles in the area of ATO. It identifies the design elements of cars that need further upgrading.

One of the main problems in the country is corruption fighting. To perform this task and others ones, aimed at combating crime, the Institute conducts series of works on creation for the benefit of operational and technical units of the police special equipment for the removal of communications and other means of private information. In 2014, more than 60 samples of products were created.

The traditional direction for the Institute is creation of a variety of means for forensic and highly explosive units of the Service of MIA of Ukraine: rapid tests to detect explosives and drugs in the field, reconnaissance, localization and neutralization of explosive devices etc.

Last year, the specialists of the Institute established 3 modernized fingerprint kits for work with traces and imprints of human hands that allow to seek more

effectively latent fingerprints through the implementation of cyanoacrylate method of its detection in the field [1, p. 151].









The new direction is the creation on the order of the Dog Training Division of the National Police of Ukraine simulators (olfactory substitute) of drugs and explosives for training the dogs of dog units. Now the sample of the simulator (olfactory substitute) of heroin undergoes an examination in dog units [1, p. 149].

The Laboratory of Certification of Small Arms and Special Means of Self-Defense is functioning in the Institute. For the implementation of the State program of standardization laboratory specialists developed and submitted for registration 14 national standards in "sporting and hunting weapon" and 2 projects of industry standards in the sphere of conducting tests of ballistic body armor. As it is required by the Cabinet of Ministers of Ukraine 3 national standards in "Pyrotechnic products" has been developed.

Due to the efficient work of the above mentioned laboratory of the Institute only during last year:

- 35 certification tests of 118 body armors and 10 booletproof helmets are carried out;
- according to the letters from the organizations of Ukraine, in particular for the needs of the Interior Ministry, Security Service, Ministry of Defense (in the military acceptance, conformity, etc.) 151 ballistic testings for the compliance with regulatory documentation were conducted: 171 body armors, 51 booletproof helmets, 174 armor elements and constructions, 24 booletproof glass samples, 17 samples of ballistic spectacles;





– according to the order of the State Center of Certification of Guard 17 ballistic certification tests of 34 samples bullet receiver designs are carried out, 25 samples of a for Special purpose vehicles and 25 samples of bulletproof glass.



The Institute is one of the main institutions that conduct involved in the adoption and acceptance tests for the equipment of the Interior Ministry units with variety of means.

In the interests of special units of the National Police and the National Guard of Ukraine jointly with the Odessa State University of Internal Affairs took part in the organization and conduction of an acceptance testings of TV sight for firearms "Almond 2AK".

In the interests of the National Guard of Ukraine and other units of the Interior Ministry together with experts of the Ministry of Defense of Ukraine the part in the civil trial armored vehicles of care BMM-4C, Armoured Recovery Vehicle BREM, tactical armored vehicle "Dozor B" has been taken.

Specialists of the Institute study an information about new models of weapons, special equipment for law enforcement, including international exhibitions and take a direct part in exhibitions with the exposition of special equipment.



State Research Institute of the Ministry of Internal Affairs of Ukraine is one of the main organizers in the system of the Ministry of Internal Affairs and a regular participant of the annual International Exhibition of protective armament and machinery "Arms and Security". At the exhibition stands their achievements represent most businesses of defense-industrial complex of Ukraine, academic and research institutions, and other domestic and foreign enterprises.





The Ministry of Internal Affairs of Ukraine at the XII International Specialized Exhibition "Arms and Security - 2015" was represented by the state enterprise "Fort", the State Research Institute of Ministry of Interior of Ukraine, a division of Patrol Police and Police Guard National Police of Ukraine. On the stand were exposed several specimens by the State Research Institute of armored vehicles, new forensic engineering, communications and technical protection of information, special vehicles, uniforms for police officers performing their duties in the area of anti-terrorist operations, and so on.



The exhibition was attended by Minister of the Interior, Secretary of the National Security Council and other representatives of the Government, the Presidential Administration, the National Security Council staff, deputies of Ukraine, representatives of the diplomatic corps of foreign countries.





Thus, the implementation of a number of tasks and works for the creation of the latest technological tools, methods and technologies to ensure the practice of police departments will increase the efficiency of practical work employees of the National Police and the National Guard of Ukraine and ensure the execution of their official tasks.

In 2016 the main efforts of specialists of the Institute will focus primarily on the creation and modernization of technical equipment, special small arms, uniforms, personal body armors, armored (multi) vehicles in the interests of units that perform service tasks in the area of ATO.

Several researches of the creation of special equipment to ensure operational and technical units of special equipment, active defense, body armor, special vehicles, uniforms for patrol, special, forensic, technical, explosive and other units of the National Police and the National Guard of Ukraine are still carried out.

Other priority directions of Institute activities can be distinguished:

- research, creation and implementation of fixed and mobile radio systems of the facility;
- methodology and practice of the creation of a comprehensive system of the protection of information in telecommunication systems MIA of Ukraine;
- the development and adaptation of analogue digital systems and wireline tools, as well as data transmission in digital wireless networks to use OIA units;
- the development and implementation of specific systems and means of video documentation:
- research and adaptation of the equipment and IP-based networks for secure data transmission;
- the establishment and implementation of the object detection by using departmental network radio.

An important component of the Institute is the development of national standards and their harmonization with EU in the area of responsibility of the Interior Ministry.

In other words, the specialists of the Institute aren't going to stop their researches. They are actively exploring the practical needs of the National Police, National Guard and other units of the Interior Ministry and on the basis of the achievements of world and domestic scientific achievements have continued to work on the development of new modern models of the equipment for law enforcement bodies.

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