ІСТОРІЯ УКРАЇНИ

УДК 94(477+474.5+438) «2019» **PASHCHUK Y.** https://orcid.org/0000-0002-0631-6183 **PROKHOVNYK P.** https://orcid.org/000-001-7278-9184 **FEDORENKO V.** https://orcid.org/0000-0002-1915-5139 https://doi.org/10.33577/2313-5603.33.2020.3-18

MILITARY-HISTORICAL ASPECTS OF MULTINATIONAL MILITARY EXERCISE RAPID TRIDENT-2019

This paper presents military-historical aspects of multinational exercise Rapid Trident-2019 that was conducted in Ukraine in September 2019. The article includes a comparative analysis of the annual exercises Rapid Trident starting 2006.

The work describes main objectives and key events of the Rapid Trident-2019. It outlines using of simulation techniques and imitation technologies as well as experimental application of NATO Lessons Learned Process for collection data and analysis of the exercise performance.

The article contains an assessment of the exercise effectiveness based on analysis of main outcomes of Rapid Trident-2019, evaluation of accomplishment of training tasks and achieving exercise objectives. It introduces the generalized recommendations for further improving military exercises, enhancing Ukrainian Army capabilities and developing operational interoperability with NATO forces.

Keywords: Ukrainian Armed Forces, NATO, military cooperation, military exercises, Rapid Trident, interoperability, Lessons Learned.

Problem statement. Six years of enduring Russian aggression against Ukraine has revealed an urgent need for improving the operational capabilities of Ukrainian Armed Forces. In such context, the Ukraine's military cooperation has been significantly intensified with partner countries especially with NATO member states. And as a result, the dynamics of conducting the joint Ukraine-NATO military exercises as well as number of international participants and their unit's strength have been considerably increased.

Пащук Юрій Михайлович, кандидат технічних наук, доцент кафедри іноземних мов та військового перекладу Національної академії сухопутних військ імені гетьмана Петра Сагайдачного (м. Львів).

Проховник Павло Миколайович, ад'юнкт штатний науково-організаційного відділу Національної академії сухопутних військ імені гетьмана Петра Сагайдачного (м. Львів).

Федоренко Віталій Васильович, старший науковий співробітник Наукового центру Сухопутних військ Національної академії сухопутних військ імені гетьмана Петра Сагайдачного (м. Львів).

[©] Пащук Ю.М., Проховник П.М., Федоренко В.В., 2020

The scheduled international exercises Rapid Trident (RT) are among the capstone events of Ukrainian Army' annual training cycle. These exercises play a key role in training of Ukrainian military personnel according to the Alliance standards under the advisement of allied nations.

There is no doubt that Ukrainian Armed Forces (UAF) and forces from partner nations have significantly benefited from this aspect of military cooperation. Hence, it is important to evaluate the exercise effectiveness as well as generate recommendations for further improving military exercises RT, enhancing Ukrainian Army capabilities and developing operational interoperability with NATO forces.

The aim of the paper is to analyze the main outcomes of the Rapid Trident-2019 (RT19), evaluate accomplishment of the training tasks and achieving the exercise objectives, develop propositions for improving joint Ukraine-NATO military exercises.

The main part of the article. After the end of the Cold War a sovereign and independent Ukraine started dialogue and cooperation with North Atlantic Treaty Organization (NATO) on March 10, 1992 after joining the Euro-Atlantic Partnership Council. Official relations with NATO began when Ukraine became the first country from Commonwealth of Independent States to enter NATO's Partnership for Peace (PfP) program in February 1994 (Signatures of Partnership for Peace Framework Document, 2019).

On July 9, 1997 reaffirming determination to develop and further deepen the strategic cooperation Ukraine and Alliance countries signed a Charter on a Distinctive Partnership between NATO and Ukraine (*Charter on a Distinctive Partnership between the North Atlantic Treaty Organization and Ukraine, 2019*) and NATO-Ukraine Commission was established. The fundamental documents that continue to define the relationship between NATO and Ukraine are the above stated Charter and Declaration to Complement the Charter on a Distinctive Partnership that was signed on 21 August in 2009 (*Declaration to Complement the Charter on a Distinctive Partnership between Ukraine and the North Atlantic Treaty Organization, as signed on 9 July 1997, 2019*).

In the context of constantly developed relations between Ukraine and NATO an important area of cooperation is military training, including PfP exercises on Ukrainian territory (*Signatures of Partnership for Peace Framework Document, 2019*). Since 2006, in the frame the PfP Program the multinational military exercises RT have been held annually excepting 2009. These exercises were organised by Ukraine and the United States and became a continuation of the multinational military exercises Peace Shield which began in 1994 for the first time since Ukraine has gained independence.

From the beginning, in 2006 and 2007, the exercises RT were presented by command post exercise (CPX) on the brigade-level with heavy emphasis on simulated events. These exercises were held at the Simulation Center of National Defense University of Ukraine named after Ivan Cherniakhovskyi (NDU) in Kyiv.

Due to the lack of legal grounds for admission of foreign military units to Ukrainian territory it was decided to reformat the CPX Rapid Trident-2009 into assessment of the Ukrainian Army units within the framework of NATO Operational Capabilities Concept Evaluation (*State, Foreign Operations, and Related Programs: FY2010 Budget* and Appropriations. Prepared for Members and Committees of the USA Congress, 2009: 748-753).

Since 2009 some significant changes in planning and organization of exercises RT have been made. Firstly, these exercises began including not only CPX phase but also field training exercises (FTX) with using various weapons and military equipment. Secondly, they started to be held at the International Peacekeeping and Security Center (IPSC) near Yavoriv (Lviv region) in Western Ukraine.

From 2010 to 2013 exercises RT were focused on improving the interoperability and reinforcing the operational capabilities of Ukrainian Army units that could be deployed in support of UN and NATO-led operations and missions. Therefore, main objectives of exercises RT at this period were related to training of Ukrainian military for participation in peace support operations ($\Pi au_{y\kappa}$, $\Phi e \partial opehko$, 2019: 56).

Since 2014, in the wake of the Russia-Ukraine armed conflict, cooperation and consultation between Ukraine and NATO has been intensified in critical areas to enhance Ukraine's military capability development and capacity-building for its own security. The Alliance countries, in particular the United States of America (US), have considerably reinforced their support for Armed Forces of Ukraine. This also resulted in significant impact on exercises Rapid Trident. First of all, the scale of exercises has been enlarged. The number of troops has significantly increased every year compared to previous

time. For instance, more than 1800 servicemen took part in the Rapid Trident-2015 and Rapid Trident-2016. In 2017 this number rose to 2500 military personnel from 15 NATO Allied and partner nations (*Relations with Ukraine, 2019*).

Based on Lessons Learned (LL) from hybrid warfare the exercises' scenario has changed dramatically with focusing on training to deter a full-scale Russian attack against Ukraine ($\Pi auy\kappa \& \Phi edopehko$, 2019: 56; Kim, 2019). Against the background of Russia's actions against Ukraine, the RT objectives were primarily oriented to improve Ukrainian Army capabilities and constantly develop its interoperability with military units from NATO nations. In such context, during FTX of the Rapid Trident-2017 there was cargo airdropping from aircraft S-130 (US Air Force) for needs of Ukrainian troops as well as from aircraft AN-26 (Air Force of Ukraine) for supporting and supplying of US soldiers ($\Pi auy\kappa$, $\Phi edopehko$, 2019: 56).

Next exercise, Rapid Trident-2018, was conducted involving more than 2200 participants from 14 countries with using about 350 different items of military equipment (*Egnash, 2019*). The exercise was composed of multinational, brigade-level, computer-assisted CPX, integrated battalion-level FTX and platoon-level situational training exercise (STX). First ever, in 2018, Ukrainian Border Guard Service and National Guard troops have taken part in exercises Rapid Trident. The main objectives of the Rapid Trident-2018 were (*Egnash, 2019*):

supporting of wide-ranging defence reforms through the Ukraine's Annual National Programme;

commissioning and testing of the IPCS Simulation Center for supporting of CPX at the brigade level;

development and enhancement of the operational capabilities of Ukrainian Army in accordance with NATO standards and considering Lessons Learned from Joint Forces Operation (JFO)/Anti-Terrorist Operation (ATO) in Eastern Ukraine.

Based on results of the analysis of military-historical aspects of the above-mentioned multinational exercises ($\Pi auy\kappa$, $\Phi edopehko$, 2019: 56), a special emphasis is placed on the Rapid Trident-2019. This exercise took place at the IPCS from 13 to 28 September 2019 and characterized by considerable enlarging of training scale and scope. An unprecedented number of military personnel, over 3,700 troops from 14 countries, as well as more than 600 military equipment items, including 67 armored vehicles and 4 helicopters, were involved in the RT19. For once, the brigade level FTX, the most large-scale in Ukraine, became a part of the multinational exercises Rapid Trident. It was an indicator of the general possibilities of compatibility between the Armies of Ukraine, NATO member countries and partners.

The main part of the exercise personnel was presented by Ukrainian contingent. The primary training audience (PTA) was composed of personnel from 10th Separate Mountain-Assault brigade of Ukrainian Army (10th brigade). This unit was established during the war against Russian aggression in Eastern Ukraine and majority of the brigade's troops had combat experience (*Multinational Exercises Rapid Trident-2019, 2019*).

In addition, servicemen of multinational Lithuanian–Polish– Ukrainian brigade and representatives of Ministry of Interior (MOI) as well as from other security and defense agencies from Ukraine have taken part in the RT19 ($\Pi auy\kappa$, $\Phi e opehko$, 2019: 56; Egnash, 2019; Multinational Exercises Rapid Trident-2019, 2019). They formed the secondary trainging audiences that were presented by Ukrainian Special Operations Forces (SOF) unit and the combined Ukrainian MOI battalion.

The largest foreign contingent (about 500 people) was deployed by the US and Canadian Armies. Apart from these states, military personnel from Bulgaria, Georgia, Italy, Lithuania, Moldova, Poland, Romania, Turkey and the United Kingdom took part in the exercise.

An aim of the RT19 was to implement a sustainable UAF institutional training capacity by enhancing military-to- military relationships, exchange professional experiences through planning and training, improve interoperability at the tactical level between the forces of Ukraine, the United States and participating NATO/PfP nations (Пащук, Федоренко, 2019: 56).

The main exercise's objectives included (Пащук, Φ едоренко, 2019: 56):

supporting the Ukraine's defense reform and NATO-Ukraine Annual National Program;

assessing the IPCS Simulation Center's planning and execution of the brigade level computer-assisted command post exercise (CAX/CPX) utilizing the Joint Conflict and Tactical Simulation (JCATS) tools;

assessing the IPCS Combat Training Center and Operations Group in executing battalion and brigade level exercise; assisting UAF and MOI development in operational capabilities in accordance with NATO standards;

improving interoperability and integration of UAF conventional and special operations forces;

integrating MOI elements and SOF into the planning, coordinating and execution of the RT19;

incorporating of non-kinetic enablers (Civil-Military Cooperation, Psychological and Information operations) into the exercise;

assisting to Ukraine's efforts to develop fully deployable units interoperable with NATO forces within NATO Operational Capabilities Concept Evaluation and Feedback Programme (OCC E&F);

continuation of implementing US support to UAF;

implementing the Lessons Learned and Best Practices from JFO/ATO into UAF training.

The RT19 consisted of two main phases (Пащук, Федоренко, 2019: 56; Martin Egnash, 2019; Multinational Exercises Rapid Trident-2019, 2019):

1) CAX/CPX Phase «Planning of employment, command and control of multinational division units over deterring enemy aggression and restoration of the state border» that was integrated with STX;

2) FTX Phase «Preparation and conducting of defense, offensive and stabilization actions of multinational brigade in coordination with other military formations in designated area of responsibility».

According to the exercise's scenario the soldiers from Ukraine and partner states learned to counteract hybrid threats and challenges performing designated combat, logistical and humanitarian tasks. All stages of the exercise were conducted in conditions as close to combat as possible with focuse on enhancing joint and combined readiness and interoperability among forces of partner nations.

For this purpose, various simulation tools were intensively used as part of training to simulate actions of friendly and enemy units combining realistic virtual environments with real-time simulations for close-to-reality conditions. In particularly, the JCATS simulation systems were applied for supporting the CAX/CPX. They were used in modeling and simulation of battlefield, in determining possible outcomes for force-on-force training. In addition to the IPCS Simulation Center the NDU Simulation Center operated as a remote unit and distributed element of the CAX/CPX ($\Pi auy\kappa$, $\Phi edopehko$, 2019: 56; Multinational Exercises Rapid Trident-2019, 2019). To increase realism of battlefield within the FTX phase the multinational forces fought large-scale mock battles using the Multiple Integrated Laser Engagement System (MILES).

The exercise comprised a variety of training activities of multinational forces including live-fire ranges, a wet gap crossing, special operations field training and numerous other events (Gomez, 2019). One of the culminating events was demonstration interopability among large multinational formation moving across uneven terrain to effectively utilize Ukraine's defense against possible attacks from potential adversaries (Gomez, 2019). The RT19 concluded with the first ever live fire demonstration that was completed jointly by the Ukrainian and US soldiers using various vehicles and squad movements (Gomez, 2019; Rapid Trident 19 demonstrates multinational proficiency in Ukraine, 2019). The Ukrainian direct fire weapons systems were integrated with the US forces indirect fires. The Ukrainian infantry fighting vehicles BMP-1s and the US high mobility multi-wheeled vehicles guided the uneven terrain providing fire support with M-2.50 caliber and M-240B machine guns mounted on the turrets. Both mounted and dismounted personnel moved with adjacent fire covering them (Rapid Trident 19 demonstrates multinational proficiency in Ukraine, 2019).

The exercise drills included different types of military operations, from simulated defensive and offensive operations in the open terrain and woodlands, to river crossings under simulated fire. During one of the battles, soldiers from the US Army's 101st Airborne Division provided covering fire for the Ukrainian amphibious vehicles crossing a contested river, as live artillery fire passed overhead to knock out simulated targets (*Rapid Trident 19 demonstrates multinational proficiency in Ukraine, 2019*).

Besides, it should be noted that for the first time, cadets of the National Army Academy of Ukraine before their graduation had practice as platoon commanders during the exercise ($\Pi auy\kappa$, $\Phi e dopehko$, 2019: 56).

Another important aspect of the RT19 was an evaluation of the Ukrainian chemical, biological, radiological and nuclear defense unit, engineer company and military police platoon within NATO OCC E&F Programme (Пащук, Федоренко, 2019: 56; NATO Operational Capabilities Concept Evaluation and Feedback Programme, 2019).

This assessment was completed in supporting the further development of UAF capabilities while also enabling Alliance to put together tailored force packages that can be deployed in support of NATO-led operations and missions. Ukraine considers completing the NATO OCC E&F Programme as a strategic tool to transform its defence forces (*NATO Operational Capabilities Concept Evaluation and Feedback Programme, 2019*).

The main RT19 outcomes have been analyzed and summarized in everyday and final After Actions Reviews (AARs) with following main recommendations for exercise improvement focusing on the PTA ($\Pi auy\kappa$, $\Phi edopehko$, 2019: 56):

1) Analysis of CAX/CPX phase

All exercise personnel, in particularly the PTA staff officers and JCATS operators, need to be trained before Rapid Trident to perform assigned missions;

Improve the exchange of information among all HQs;

Enhance English communication skills of the Ukrainian personnel and Linguist support to exercise;

2) Analysis of FTX phase

The brigade and battalions' HQs should improve control of subordinate units during the mission with synchronous planning of the further battle actions;

Hold tactical standards in various types of battles;

Organize coordination among the PTA units and cooperation with troops from other security and defense agencies;

Sustain information exchange among command posts and units, other friendly troops;

Ensure security of combat actions, conduct deception operations;

Perform radio communication procedures ensuring appropriate level of information security;

Ensure security and protection of command posts, artillery and air defense units other important military and civilian objects;

3) General Analysis of RT19

Ensure the Rapid Trident PTA remains the rotational training unit, a brigade sized UAF unit;

Earlier planning would be useful regarding Common Operating Picture (COP) development and display;

Organize RT participants based on proficiency in required areas of expertise;

Increase participation and attendance of personnel at key RT events;

Establish additional information sharing tools such as briefings, working groups, and synchronization meetings to increase understanding between exercise personnel.

In addition to the above-mentioned analysis of the RT19 the assigned group of representatives from National Army Academy of Ukraine has researched two specific issues ($\Pi auy\kappa$, $\Phi edopehko$, 2019: 56):

1) Assessment of ability of 10th brigade leadership to plan, coordinate and execute assigned tasks and missions in a quality and timely manner when NATO organizational structure of units was applied;

2) Analysis of experimental application of NATO Lessons Learned Process (LLP) that was completed by Ukrainian Lessons Learned Staff Officers (LL SO) for collection data and analysis of the RT19 performance.

To evaluate ability of the 10th brigade leadership to plan, coordinate and execute assigned tasks and missions in a quality and timely manner, a focus was on the following issues:

ability of Commanders and Staff Officers of 10th brigade to plan operations according to the Military Decision-Making Process (MDMP) and Troop-Leading Procedures (TLP);

developing combat tasks for subordinate units and their relevance to current situation;

quality of developed combat documents;

implementation of comprehensive combat support of units;

staffing and training of the 10th brigade HQs' personnel;

performance of functional duties by Staff Officers.

Methods of analysis of combat documents; monitoring activities of personnel and semi-structured interviews formed on developed questionnaires were used to perform the above-mentioned assessment. Based on results of completed evaluations a conclusion was made that the 10th brigade officers are capable to plan, coordinate and execute assigned tasks and missions in a quality and timely manner when NATO organizational structure of units was applied.

However, the research identified a number of problems that need solving. First of all, approximately 90% of officers of the 10th brigade was recently appointed to their posts and they were not properly trained to perform their new duties as well as they did not have any

practice and experience in HQ activities (*Пащук, Федоренко, 2019: 56*). Officers of the 10th brigade, which participated in the RT19, were assigned to their temporary exercise positions in accordance with NATO organizational structure, which is radically different from the relevant structure of UAF units. During the exercise these officers got training in planning of operations according to MDMP/TLP according to NATO standards. But after completing the RT19 they should continue to operate within the existing military planning system in UAF, which is different from a similar NATO system, especially with regard to their further deployment to the area of JFO. Considering these facts as well as need for improving interoperability with NATO forces and priority in training of UAF personnel for current military operation in Eastern Ukraine, it should be scheduled certain interval between participation of UAF units in the multinational exercises and their assignments to JFO or other specified operations.

Based on obtained research results we also propose to make changes to individual training programs of UAF personnel and to curriculars of Ukrainian Military Academies with focus on studying MDMP/TLP as well as organizational structure of units according to NATO standards.

In the frame of developing a prospective UAF Lessons Learned System (LLS) (План створення у Збройних Силах України перспективної системи узагальнення та впровадження досвіду, 2018: 3), during the RT19 there was an experimental application of the NATO LLP (Bi-SC 075-003. Collective Training and Exercise Directive, 2013; Bi-SC 080-006 "Lessons Learned Directive", 2011; NATO Lessons Learned Policy for Release to Partners, 2012; The NATO Lessons Learned Handbook. NATO Joint Analysis and Lessons Learned Centre, 2016.) that was completed by the assigned Ukrainian LL group. It should be stated that the current procedures for capturing training and combat experiences are based on the System of Lessons Analysis and Dissemination (SLAD), inherited from Soviet Union. Using SLAD from 2014 to 2018 has significantly improved the UAF capabilities. Despite these successes, operational numerous disadvantages were discovered during JOF/ATO in Eastern Ukraine. These limitations with SLAD are preventing the Army's ability to address all challenges and make use of potential best practices in the Ukrainian military. Therefore, in August of 2018, the UAF leadership made a decision to focus an initiative on significantly improving Ukrainian Army LL Capability by creating a fundamentally new prospective LLS (План створення у Збройних Силах України перспективної системи узагальнення та впровадження досвіду, 2018: 3). This effort was also driven by the priorities of Ukrainian foreign policy towards gaining NATO membership and fully embracing interoperability. The new LLS Road Map was developed in November 2018 (План створення у Збройних Силах України перспективної системи узагальнення та впровадження досвіду, 2018: 3; Пащук, Пашковський, 2019: 36-43). Within this article we use the following definition for understanding the UAF Lessons Learned Program: LLS is a set of methods and techniques for using prescribed structure and tools in order to execute the LLP (Пащук, Пашковський, 2019: 36-43).

During the RT19 information about the exercise performance, in particularly about Potential Lessons Learned and Best Practices, was collected by the Ukrainian LL SOs with application of NATO LLP procedures. The following ways of gathering data were used:

monitoring activities of the personnel during CPX and FTX phases;

studying of planning materials, reports and other exercise documents, assessment of checklists that were prepared by training audiences; studying of everyday and final AARs;

surveying of participants from Ukraine and other countries using questionnaires (both in Ukrainian and English) that were developed by the LL group.

It is worth noting that the completed surveys have demonstrated active participation of UAF personnel and representatives of partner states that submitted their honest observations. They openly covered unresolved issues, identified root causes and consequences, and provided their recommendations on needed remedial actions. But, if military from Alliance nations were familiar with NATO LLP procedures and corresponding forms of questionnaires, then Ukrainian soldiers and officers needed appropriate training.

The main objectives of experimental application of NATO LLP were achieved. First of all, Database of Lessons Learned and Best Practices from exercises RT was created. It is equally important from the experiment that the UAF personnel may be quickly trained to understand LLP and after the RT19many Ukrainian participants aware of using LL procedures. Furthermore, it is not such complicated issue to use the concepts and procedures inherent to the NATO LLP and absorb them into Ukrainian Army practice to improve its LL capabilities. The above-stated experiment also revealed some general shortcomings pertaining to LLP in UAF:

overall lack of awareness and understanding of the LLP at all levels of rank and organizational structure;

the absence of endorsed doctrine outlining the LL concept, into include standard operating procedures on lessons analysis, field manuals for implementation, and means of sharing lessons;

underdeveloped organizational structure which tasks personnel with managing Lessons Learned Capability. Duty assignments such as LL SOs and LL Points of Contact are often vacant, and many officers appointed do not receive proper training;

while deeply engaged with routine activities, HQ staff at all levels are not likely prioritize attention towards the LL process;

commanders usually resist the outward flow of honest and candid observations within their organizations because of their inability to receive and digest constructive criticism. Due to prevailing command climate existing throughout the Ukrainian army, soldiers hesitate to submit their honest observations and contribute to the LL process due to fear of reprisal from their commanders;

sharing LL is ineffective, primarily due to collected experiences not being properly categorized and archived, as well as unreliable access to the LL database using obsolete software.

In addition, some specific problems concerning the LLP were discovered within the RT19. The assigned LL SOs were not involved in exercise planning events. The LL group was too small, there were only two LL SOs. They had to develop data collection plan in compressed time. Additional time was required to get permission from Exercise Directors and Commanders of Training Audience to collect data by the means identified as possible without wider preparation. Therefore, implementation of the LLP during only the execution phase of exercise was not enough efficient.

For improvement of next RT exercises the above stated issues must be taken into account and the network of LL SOs and LLPOCs from all participating HQs/staffs should be built. In this relation we also propose:

Summarize information on LL and best practices that was obtained from the RT19 and previous multinational exercises using

ODCR (Observation, Discussion, Conclusion, Recommendation) template (The NATO Lessons Learned Handbook. NATO Joint Analysis and Lessons Learned Centre. Third Edition, 2016; Пащук, Пашковський, 2019: 36-43).

Disseminate LL and Best Practices, information on experience from the RT exercises to designated UAF Command and Control Bodies, to Officers who will organize and participate in the following multinational exercises.

To improve UAF Lessons Learned capabilities we propose to form the prospective LLS on basis of the previous SLAD using principal NATO LLS achievements, first of all, implementing Standardized LLP. This approach will allow exploiting the Alliance's LLS advantages, as well as ensuring interoperability of Ukrainian Army units with NATO Forces in multinational exercises and joint military operations. In addition, we propose implementing the prospective LLS Road Map based on four dominant directions (Пашук, Пашковський, 2019: 36-43):

creating a three-tier LL Organizational Structure, which includes LL SOs and LL POCs;

implementing NATO LLP into Ukrainian Army practice;

organizing effective LL training for all UAF personnel, especially tailored courses designed specifically for LL SOs;

consistently using the improved LL Tools, especially through the Ukrainian Army Lessons Learned Portal.

Conclusions. Hence, the Rapid Trident-2019 was important for further enhancement of Ukrainian Army capabilities and its transition to NATO standards. Analysis of the main exercise outcomes allows concluding that the training tasks have been accomplished and exercise objectives have been achieved. The Rapid Trident-2019 enabled Ukrainin military personnel to gain hands-on experience in working with servicemen from NATO countries and other partners. The US and other Alliance nations have not only contributed to improvement of the Ukrainian Army capabilities, but also benefited from this cooperation. The RT19 has enhanced European security by strengthening not only Ukrainian Armed Forces, but also the NATO soldiers training alongside them.

In the context of continued Russian armed aggression against Ukraine and adopted priorities of Ukrainian foreign policy towards gaining NATO membership, the multinational exercises Rapid Trident have been and will be the important aspect of Ukraine's international military cooperation with partner countries. These exercises are key events for maintaining, testing and evaluating readiness of UAF units as well as their interoperability with military from NATO nations and their patners. In addition, exercises Rapid Trident are intended to demonstrate that the NATO nations and their partners support Ukraine and ready to respond to any crisis. It is worth to continue studying military-historical aspects of these exercises, investigate their effectiveness and develop propositions on their improvement.

Використані посилання

План створення у Збройних Силах України перспективної системи узагальнення та впровадження досвіду (2018), Генеральний штаб ЗС України, 3 с.

Пащук Ю., Федоренко В. (2019). Звіт Національної академії сухопутних військ «Аналіз результатів досліджень на українсько-американському командно-штабному навчанні із залученням військ Репід Трайдент - 2019». Львів: Національна академія сухопутних військ імені гетьмана Петра Сагайдачного. 56 с.

Пащук Ю., Пашковський В. (2019). Методологічні підходи до формування у Збройних Силах України перспективної системи вивчення і впровадження досвіду. Наука і техніка Повітряних сил Збройних Сил України, № 4 (37), 36-43 с.

Bi-SC 075-003. Collective Training and Exercise Directive (CT&ED). 02 Oct 2013. *Bi-SC 080-006 "Lessons Learned Directive".* 06 July 2011.

Charter on a Distinctive Partnership between the North Atlantic Treaty Organization and Ukraine (1997). Available at: https://www.nato.int/cps/en/natohq/official_texts_25457.htm [Accessed 12 December 2019].

Declaration to Complement the Charter on a Distinctive Partnership between Ukraine and the North Atlantic Treaty Organization (1997). Available at: https://mfa.gov.ua/en/about-ukraine/euroatlantic-cooperation/official-documents> [Accessed 12 December 2019].

Gomez J. U.S. and Ukrainian forces demonstrate elite tactical provess during RT19 (2019). Available at: https://www.dvidshub.net/news/342819/us-and-ukrainian-forces [Accessed 14 December 2019].

Kim L. *How U.S. Military Aid Has Helped Ukraine Since 2014* (2019). Available at: https://www.kuow.org/stories/how-u-s-military-aid-has-helped-ukraine-since-2014 https://www.kuow.org/stories/how-u-s-military-aid-has-helped-ukraine-since-2014 https://www.huow.org/stories/how-u-s-military-aid-has-helped-ukraine-since-2014 https://www.natohurt.cps/uk/natohq/topics_37750 [Accessed 14 December 2019].

Egnash M. *Stars and stripes* (2019). Available at: https://www.stripes.com/news/ europe/nato-allies-ukraine-wrap-up-rapid-trident-exercise> [Accessed 14 December 2019].

Multinational Exercises Rapid Trident-2019: more than 3600 troops and 600 equipment items (2019) Available at: < http:// www.mil. gov.ua/en/ news/ 2019/09/09/ multinational-exercises-rapid-trident-2019-more-than-3600-troops-and-600-equipment-items/?fbclid=IwAR0Ots9hGoaE0CDIDxDgJ4_lpGatYnsTrYrGSZonMD5SPJadwsOCzP B239w> [Accessed 14 December 2019].

NATO Lessons Learned Policy for Release to Partners. PO 0294 (2012).

NATO Operational Capabilities Concept Evaluation and Feedback Programme (2012). Available at: https://jfcbs.nato.int/page5745830/operational-capabilities-concept-evaluation-and-feedback-programmes [Accessed 14 December 2019].

Rapid Trident 19 demonstrates multinational proficiency in Ukraine. Available at:<https://www.army.mil/article/227818/rapid_trident_19_demonstrates_multination al_proficiency_in_ukraine>[Accessed 14 December 2019].

Relations with Ukraine (2019). Available at: https://www.nato.int/cps/uk/natohq/topics_37750 [Accessed 14 December 2019].

Signatures of Partnership for Peace Framework Document (1994). Available at: https://www.nato.int/cps/en/natolive/topics_82584.htm> [Accessed 12 December 2019].

State, Foreign Operations, and Related Programs: FY2010 Budget and Appropriations. Prepared for Members and Committees of the USA Congress. (2009), 1225 p.

The NATO Lessons Learned Handbook. Third Edition. (2016). Lisbon: NATO Joint Analysis and Lessons Learned Centre. 81 p.

References

Bi-SC 075-003. Collective Training and Exercise Directive (CT&ED). 02 Oct 2013. *Bi-SC 080-006 "Lessons Learned Directive".* 06 July 2011.

Charter on a Distinctive Partnership between the North Atlantic Treaty Organization and Ukraine (1997). Available at: https://www.nato.int/cps/en/natohq/official_texts_25457.htm [Accessed 12 December 2019].

Declaration to Complement the Charter on a Distinctive Partnership between Ukraine and the North Atlantic Treaty Organization (1997). Available at: https://mfa.gov.ua/ en/about-ukraine/euroatlantic-cooperation/official-documents> [Accessed 12 December 2019].

Gomez J. U.S. and Ukrainian forces demonstrate elite tactical provess during RT19 (2019). Available at: https://www.dvidshub.net/news/342819/us-and-ukrainian-forces [Accessed 14 December 2019].

Kim L. *How U.S. Military Aid Has Helped Ukraine Since 2014* (2019). Available at: https://www.kuow.org/stories/how-u-s-military-aid-has-helped-ukraine-since-2014 https://www.huow.org/stories/how-u-s-military-aid-has-helped-ukraine-since-2014 https://www.huow.org/stories/how-u-s-military-aid-has-helped-ukraine-since-2014 https://www.natohq/topics_37750 [Accessed 14 December 2019].

Egnash M. Stars and stripes (2019). Available at: https://www.stripes.com/ news/ europe/nato-allies-ukraine-wrap-up-rapid-trident-exercise> [Accessed 14 December 2019].

Multinational Exercises Rapid Trident-2019: more than 3600 troops and 600 equipment items (2019) Available at: http://www.mil.gov.ua/en/news/2019/09/09/ multinational-exercises-rapid-trident-2019-more-than-3600-troops-and-600-equipment-items/?fbclid=IwAR00ts9hGoaE0CDIDxDgJ4_lpGatYnsTrYrGSZonMD5SPJadwsOCz PB239w> [Accessed 14 December 2019].

NATO Lessons Learned Policy for Release to Partners. PO 0294 (2012).

NATO Operational Capabilities Concept Evaluation and Feedback Programme (2012). Available at: https://jfcbs.nato.int/page5745830/operational-capabilities-concept-evaluation-and-feedback-programme [Accessed 14 December 2019].

Rapid Trident 19 demonstrates multinational proficiency in Ukraine. Available at:<https://www.army.mil/article/227818/rapid_trident_19_demonstrates_multination al_proficiency_in_ukraine>[Accessed 14 December 2019].

Relations with Ukraine (2019). Available at: https://www.nato.int/cps/uk/natohq/topics_37750> [Accessed 14 December 2019].

Signatures of Partnership for Peace Framework Document (1994). Available at: https://www.nato.int/cps/en/natolive/topics_82584.htm> [Accessed 12 December 2019].

State, Foreign Operations, and Related Programs: FY2010 Budget and Appropriations. Prepared for Members and Committees of the USA Congress. (2009), 1225 p.

The NATO Lessons Learned Handbook. Third Edition. (2016). Lisbon: NATO Joint Analysis and Lessons Learned Centre. 81 p.

Pashchuk Y., Fedorenko V. Research report of National Army Academy of Ukraine "Analysis of Multinational Exercise Rapid Trident-2019". Lviv. 08 Oct 2019. 56 p. [In Ukrainian].

Pashchuk Y., Pashkovskyi V. Methodological approach to forming prospective Lessons Learned System in Ukrainian Army. Journal of Science and Technology of the Air Force of the Armed Forces of Ukraine, 2019, № 4 (37). Kharkiv, National University of the Air Force named after I. Kozhedub. P. 36-43 [In Ukrainian]

Plan for creation a Lessons Learned System in Ukrainian Army (2018), Ukrainian Armed Forces General Staff. 3 p. [In Ukrainian]

Пащук Ю.М., Проховник П.М., Федоренко В.В.

ВІЙСЬКОВО-ІСТОРИЧНІ АСПЕКТИ МІЖНАРОДНОГО ВІЙСЬКО-ВОГО НАВЧАННЯ «RAPID TRIDENT-2019»

У статті розглянуто військово-історичні аспекти багатонаціонального військового навчання «Rapid Trident-2019», що відбулось за участі підрозділів Збройних Сил України. У роботі представлено головну мету та основні заходи навчання «Rapid Trident-2019», оцінено ступінь виконання поставлених навчальних цілей, а також рівень підготовки частин та підрозділів Збройних Сил України.

Описано використання під час проведення навчання різних методів моделювання та технологій імітації, а також застосування Системи вивчення та впровадження досвіду НАТО, що стосується збору та аналізу інформації про хід та ефективність навчання «Rapid Trident-2019». За результатами експериментального застосування вказаної Системи накопичено інформаційно-аналітичні матеріали щодо отриманого досвіду під час проведення даного навчання. Також розроблено пропозиції щодо формування та функціонування у Збройних Силах України перспективної Системи вивчення та впровадження досвіду на основі попередньої Системи узагальнення та поширення досвіду, що діяла до 2019 року, із застосуванням базових підходів НАТО та урахуванням особливостей Збройних Сил України.

Стаття містить оцінку ефективності проведеного навчання на основі аналізу основних здобутків, виконання завдань та досягнення цілей підготовки військ. На підставі результатів даного аналізу узагальнено пропозиції щодо подальшого підвищення ефективності багатонаціональних військових навчань «Rapid Trident-2019», а також підвищення оперативних спроможностей Збройних Сил України і покращення взаємосумісності їх підрозділів з військовими підрозділами країн – членів Північноатлантичного Альянсу.

Ключові слова: Збройні Сили України, НАТО, міжнародне військове співробітництво, багатонаціональні військові навчання, «Rapid Trident-2019», взаємосумісність, вивчення та впровадження досвіду.