THE SARYSHAGAN GROUND – THE SHORT HISTORICAL ANALYSIS

Abstract. Centuries-old history of Kazakhstan is the richest well of historical events which often characterized by global scales of their consequences. Geographically connecting the European states with the Asian countries, Kazakhstan in the historical development sometimes had the most direct influence on relationship of the world states. Similar interrelations come to light in the context of historical researches of geopolitical confrontations caused by the development of science, the equipment and technologies in the sphere of providing military safety and development of military art. In this regard in the modern conditions the military space direction of scientific search in general and historical researches in particular is actualized. The territory of the Republic of Kazakhstan historically reasonably became the homeland and the center of the embodiment of a practical celebration of a scientific thought in the sphere of development of space-rocket technologies that in turn staticizes carrying out additional researches the purpose of which must to be a definition of historic facts and the defining events in a complex of the manifestation caused the existing order of things and a conjuncture of interstate relationship. In the context of told in this article historical experience of implementation in the territory of Kazakhstan, one of components of military space activity which is development of antimissile component is considered. Within the provided analysis, the historical prerequisites and conditions of formation of this direction of the state activity in a section of a historiography of her origin and further development in modern conditions are revealed. Actions of public authorities at the historical moment of disintegration of the Soviet state and formation of independent Kazakhstan are shown, results of interstate arrangements are revealed; the prospects of their further execution are defined. In general, leaning on number of new sources, the impartial view of a historiography of historical development of system of missile defense in the context of disclosure of content of the related activity which is carried out in the territory of Kazakhstan is presented.

Key words: Saryshagan, Balkhash hub, missile warning system.

Introduction
The historical analysis of implementation of space-rocket activity in the territory of Kazakhstan, being the highly specialized direction of domestic historical science, has undoubted relevance that is defined as current trends of the theory and practice of military science, so requirement of society and state to expansion of the available knowledge of national history for defining the optimum directions of further development [1]. In the context of told it is noted that modernization of arms since ancient times was carried out by the principle of mutual confrontation of attack and defense instruments: to a sword the shield resisted, to spears and arrows – armor and a chain mail, to a shell – armor, to a rocket – the systems of missile defense. In this regard, the short historical analysis of the state activities for development of working out in the sphere of development of the system of warning of missile attack and control of space is of adequately by the relevant and being of interest research.

Methods
During the research, the combination of general scientific and historical methods of scientific research, which are the analysis of a problem and a chronological method of its statement were used. Thus, it was succeeded to isolate the defining events of national history which have caused change of dynamics and the directions of a course of the considered historical process.
Results

Intensive development of nuclear missile arms has caused need of development and the fastest commissioning of reliable remedies of counteractions. For this purpose, from the middle of the 1950th years under the leadership of G.V. Kisunoko specially created design bureau (SKB-30) has started research and development projects on formation of theoretical bases and development of practical products in the field of missile defense. The first steps which are carried out in this direction have caused the necessity of carrying out full-scale natural experiments. For implementation of these actions in the territory of Kazakhstan near Lake Balkhash (on its northwest side) near the Saryshagan station in July, 1956 the construction of the State research and proving ground No. 10 of the Ministry of Defence (No. 10 GNIIP) has begun [2 Page 51-52].

On the ground the development and tests of an experimental complex of missile defense was conducted (system "A"), during which ways of creation the effective remedies of defeat of intercontinental ballistic missiles of the possible opponent were fulfilled. As a result of the executed actions the first-ever successful defeat of a ballistic missile by an antimeasure has been carried out on March 4, 1961. The medium-range missile R-12 launched from the 4th State Central Ground (SCG) "Kapustin Yar" after its localization on a distance of 1500 km at the height of 25 km has been destroyed in the automatic mode by the V-1000 antimeasure, which were started from the State research and proving ground No. 10 of Saryshagan (there were in total 11 tests on hitting the R-5M and R-12 ballistic missiles). Further for determination of operability of radio-electronic means in the conditions of impact of high-rise nuclear explosions the Soviet Union government initiated carrying out of a series of the special test operations designated by a letter "K": the operations "K1", "K2" – in October, 1961, the operation "K3" - "K5" – in October, 1962. During tests about two rockets were let into the region of GNIIP No. 10 "Saryshagan" from GTsP "Kapustin Yar", first of which has been supplied with a nuclear charge. At approach to system "A" the nuclear charge blasted and then the possibility of hitting targets by an antimeasure in the conditions of the nuclear explosion factors was examined [3]. In the subsequent the uniqueness of this object in the context of a possibility of carrying out tests of perspective weapon for long time has provided its necessity in military circles even in the conditions of the post-Soviet geopolitics [4].

On August 5, 1963 in Moscow the Agreement between the USSR and the USA "About prohibition of nuclear explosions in the atmosphere, in space and under water" has been signed [5], however by the time in the Soviet Union polygon tests of the relevant products, evidently confirming the potential possibility of the intercontinental ballistic missiles destruction before their approach to the object including conditions of influence of the nuclear explosions factors, have been already executed. Thus, the Soviet military science was enriched with the valuable skilled data which results have formed the basis of creation of the whole direction of the space-rocket industry in the sphere of development of systems and means of missile and antispase defense, having allowed to create in a consequence the effective system of cover of the important administrative centers of the country from potentially possible blows of the opponent.

Creation of above-the-horizon radar stations became a progressive step in development of systems of missile defense as a result of which on the State research and proving ground No. 10 (Saryshagan) since 1973 the radar knot on the basis of Dniester 5H15 and 5H86 Dnieper radar stations (entering the missile warning system and control of space) has been equipped and put into operation which forces and means successfully solved problems of detection of artificial Earth satellites [6 Page 211-214].

The Almaty technological enterprise of Granit concern of the Ministry of the radio industry of the USSR created in 1976 became lead agency of the Soviet Union in the field of implementation of installation and test works of the radio-electronic equipment of the complexes of the missile warning system tested on the Saryshagan ground. This organization has made the powerful contribution to development and modernization of many perspective samples of arms of missile and air defense; and also participated in creation of control systems of the Buran spacecraft [7].

Thus, the State research and proving ground No. 10 of the Ministry of Defence (Saryshagan) located in the territory of the Kazakh SSR has been involved in the structure of actively operating military space branch of the Soviet state. Capability of the ground were used as for development and tests (in interaction with GTsP "Kapustin Yar") means of missile defense in various conditions, so for the organization of continuous monitoring of space regarding detection of artificial Earth satellites and a warning of missile attack. The general specifics of the carried-out tasks of objects assumed their further scientific and
technical development in the context of formation of united system of aerospace defense. However, the socio-political realities which have followed in the USSR have caused other way of succession of events.

In 1985-1988 under the leadership of M.S. Gorbachev in the Soviet Union a number of the reforms which have affected the system of public administration, foreign and domestic policy of the country, her economy, armed forces and some questions of ideology has been initiated [8]. At the heart of the accepted policy of "New thinking" acceleration of social and economic development of the country, reorganization of all parties of public and foreign policy strategy of the CPSU, restraint of a race of arms, democratization of the international relations and peaceful co-existence with the states with various social order was proclaimed. However as has shown time, in fact, the result of the chosen way of public administration became the chain of the historical events differing by its extreme character and irreversibility of consequences. The internal political situation caused by crash of economic system, commodity and grocery crisis, a hyperinflation, political confrontations in the highest echelons of the government and also escalation of a series of the international conflicts has sharply become aggravated in the country (December events in Kazakhstan – 1986; Novouzensky and Tbilisi events, the Karabakh and Georgian-South Ossetia conflicts, the conflict in the Fergana Valley – 1989; the conflicts in Baku, Dushanbe, Yerevan – 1989; Baltic region – 1989 and some other).

The social tension increasing in the state has caused rapid development of centrifugal forces. In the 1988-90th years in the USSR occurs, so-called, the "parade of sovereignties" caused by the declaration of a priority of republican laws over all-union [9]. On December 8, 1991 heads of the Russian Federation, Republic of Belarus and Ukraine have signed the Agreement on creation of the Commonwealth of Independent States [10 Page 50-51]. In a prompt stream of the occurring events the contemporary history of Kazakhstan also developed: On October 25, 1990 the Supreme Council of the Kazakh SSR has adopted the Declaration on the state sovereignty [11]; On December 16, 1991 the Republic of Kazakhstan has declared the state independence [12], and on December 21 the same year signing of the Almaty Declaration entered the Commonwealth of Independent States [13].

In the conditions of socio-political processes tormenting the agony Soviet state full activity of various institutes consisting its statehood became almost impossible. The situation was aggravated with destruction of interrepublican communications of economic, production and scientific character.

Progressing "disease" of society has affected also moral atmosphere in his Armed forces. The people bearing military service have faced the necessity of solution of a difficult dilemma: on the one hand they have been obliged to remain faithful to the military duty and, carrying out the official duties, to ensure military safety of the state; with another – they were resisted by the uncertainty of the near future caused by the outlined disintegration of once united country. Besides, emerging sovereign states quickly sought to create the national armies. Thus, further successful functioning of military space branch has appeared under the threat of the elimination.

On August 24, 1991 M.S. Gorbachev has resigned of the Secretary general of the Central Committee of the CPSU and has expressed the idea about expediency of self-dissolution of the Central Committee of the CPSU [14 Page 319]. On August 30, 1991 he has abolished military-political bodies in army and on the fleet [15]. These events has negatively affected already low level of a moral and psychological condition of troops and not in the best way stabilized the situation in army. The military discipline of staff has weakened, among the military personnel of conscription service the discontent facts, warmed up on the national soil began to be shown, cases of unauthorized leaving of a part and mass desertion have become frequent.

In the conditions of lack of the personnel, economic, technical and technological potential, necessary for independent operation of proving grounds, by the country leaders into the forefront paramount tasks were taken out – first of all, it was necessary to safe military facilities from destruction and plunders and to provide their working capacity for future generations.

Thus, thanks to forward-looking policy of the President of Kazakhstan N.A. Nazarbayev the territorial principle of accessory of earlier allied objects of military space infrastructure has been defined [16]. On May 7, 1992 the decree of the President of the Republic of Kazakhstan has created Armed forces of independent Kazakhstan [17]. Construction of the military organization of the state has begun.

In June-July, 1992 the Cabinet of ministers of RK has organized preparation of documents for a meeting of Council of heads of states of the CIS. Development of the draft agreement on means of missile
warning systems and control of space [18] became one of the raised questions. As a result of carried out on July 6, 1992 in Moscow official meeting – "The agreement on means of missile warning systems and control of space" has been signed, according to which the property right to means of missile warning system and the space control system was assigned to the states in the territory of which they accommodate, the possibility of transfer of the rights of use by the sides on the basis of separate agreements and some other questions in the field of interstate relationship is stipulated, the structure of systems, an order of their fighting functioning, management and providing the State Parties with output information was defined [19].

In July of the 1993rd, considering the facts of illegal export of property of military units and industrial enterprises of defense industry out of RK – by the order of the Prime minister of RK has formed the commission on inventory and acceptance in maintaining state bodies of RK of property of military units, industrial enterprises and organizations of Baikonur Cosmodrome and the objects of space infrastructure located in the territory of RK, the Saryshagan, Semipalatinsk and Emba grounds [20]. The commission was obliged to accept objects on proving grounds, property of the military units, enterprises and organizations located or which are carrying out the activity in the territory of RK on balance of state bodies for what she has been given the right to attract to work of specialists of the regional, city administrations, ministries and departments of RK. Thus, the leaders of the state carried out actions for the organization of accounting of arms and military equipment, property and other material values of the military units deployed in the territory of Kazakhstan, to prevention of his plunder and adoption of the reasonable decision on expediency of further use.

On March 28, 1994 between the Republic of Kazakhstan and the Russian Federation the Agreement on military cooperation, among other, the defined status and an order of use of the Russian Strategic nuclear forces deployed in the territory of Kazakhstan and in the subsequent formed the basis for adoption of many important interstate agreements has been signed [21], [22].

Within performance of the Agreement on means of missile warning systems and control of space (of July 6, 1992) – on December 14, 1994 the Governments of Kazakhstan and Russia have signed the bilateral agreement "About the Order of contents and use of the Knot Balkhash missile warning systems located in the territory of the Republic of Kazakhstan"; according to what, the Republic of Kazakhstan transferred real and personal estate of Knot Balkhash of the Russian Federation to free use, and the Russian side undertook to provide on points of the public and military administration of Kazakhstan information from means of missile warning system and the space control system [23]. This document had important historical and political value for both states as has allowed to define the future of elements of strategic arms of the former Soviet state, having in many respects formed a basis of the Russian-Kazakhstan arrangements in this sector of interstate relationship.

In development of the agreements reached earlier, on December 2, 2014 in Moscow signing between the Governments of the Republic of Kazakhstan and the Russian Federation of the Agreement on conditions of transfer and on an order of further use of the Kazakhstan Knot Balkhash in the Russian missile warning system has taken place; and on October 12, 2015 this document has been ratified; among an other obliging [24]:

Russian side:
- to carry out preparation of the Kazakhstan command and engineering shots for joint operation of Knot Balkhash and executions of alert;
- until the end of 2016 to realize actions and further to carry out delivery on points of the public and military administration of the Republic of Kazakhstan of information about:
  - rocket situation in the automated warning system about missile attack;
  - development and use of space by the foreign states and international organizations in the form of monthly transfer of newsletters;
  - the predicted dangerous rapprochements of space objects with the operating spacecrafts of the Republic of Kazakhstan;
  - the predicted areas of falling of the burning-down space objects posing a threat of day of the Republic of Kazakhstan;
  - parameters of orbits of foreign prospecting spacecrafts for calculations in the automated warning system about flights of foreign prospecting spacecrafts over the territory of the Republic of Kazakhstan;
Kazakhstan side:
- to provide activity of the Kazakhstan military personnel and the persons of civil personnel designated for joint operation and execution of alert on Knot Balkhash;
- to carry out antiaircraft cover of Knot Balkhash in the Uniform regional air defense system of the Republic of Kazakhstan and the Russian Federation;
- to provide exchange of information about a land, air, radio-electronic, chemical, biological, meteorological situation and threat of emergence of emergency situations around dislocation of Knot Balkhash.

Summary, discussion, conclusions
Thus, on the basis of the considered historical experience of formation and development in the territory of Kazakhstan of one of the most important components of military space activity which development and operation of missile warning systems and control of space is – it is noted that presence at Kazakhstan in the field of the state activity of the richest past, along with the tendentious growth of use in the military purposes of opportunities of near-earth space and the technical means placed in him in modern conditions staticize necessity of development of domestic initiatives in this sphere.

Modern technologies promptly get practically into all aspects of human activity, and therefore theoretically and practically reasonable vision of the perspective directions of development of military space activity of the country have to be taken in vanguard of a complex of actions for construction of the military organization of the state; which key condition has to be a principle of implementation of preliminary preparation.

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ПОЛИГОН САРЫШАГАН – ҚЫСКАША ТАРИХИ ТАЛДАУ

Аннотация. Қазақстандың ғасырлық тарихы тарихи оқиғалардың ең бай кезі көбінесе салдарларды анықтаудың жақындық ауыыммен сипатталады. Ғеографиялық жағынан Еуропа мемлекеттері мен азиялық әлдердің байланыстығы, Қазақстан өзінің тарихы дамушына зеңбілді мемлекеттердің қарын-қатынасына тікелей ықпал етті. Осындай қарын-қатынасы ескери қуанысқықтық қамтамасыз ету және ескери зерттеулер контекстінде анықталады. Осына жақыныстық қазірі заманды ақиқат ескери-гарыштар багыты ғалымдық ізденісін нәктәр тарихи зерттеулердің әдетті сипатын береді. Қазақстан Республикасының дамуы тарихы негізінде зыртыстық-гарыштық технологияларды дамуы сапасында практикалық салтанатты ғалымдық ойлар өткен және жінеңізді болды. Бұл орта кезінде қосымша зерттеулер қорап жазылған арнайы ақиқат, олардың іздеу қазірі ақиқат қамтыстың ортасындағы қорап жазылған арнайы ақиқат, олардың іздеу қазірі ақиқат қамтыстың ортасындағы қорап жазылған арнайы ақиқат.
ПОЛИГОН САРЫШАГАН – КРАТКИЙ ИСТОРИЧЕСКИЙ АНАЛИЗ

Аннотация. Многовековая история Казахстана является собой богатейший кладезь исторических событий, задающийся глобальными масштабами определяющих последствий. Географически связанных с азиатскими странами, Казахстан в своем историческом развитии подчеркнул свое непосредственное влияние на взаимоотношения мировых государств. Подобные взаимосвязи выявляются в контексте исторических исследований геополитических конфликтов обусловленных развитием науки, техники и технологий в сфере обеспечения военной безопасности и развития военного искусства. В этой связи в условиях современности актуализируется военно-космическое направление научного поиска вообще и исторических исследований в частности. Территория Республики Казахстан исторически обоснованно стала родной и средоточием воплощения практических достижений научной мысли в сфере развития ракетно-космических технологий, что в свою очередь актуализирует проведение дополнительных исследований целью которых должно стать определение исторических фактов и определяющих событий в комплексе своего проявления обусловивших существующий порядок вещей и взаимоотношений межгосударственных взаимоотношений. В контексте сказанного в данной статье рассматривается исторический опыт осуществления на территории Казахстана одной из составляющих военно-космической деятельности, а именно развитие ее противоракетной составляющей. В рамках приведенного анализа раскрываются исторические предпосылки и условия формирования данного направления государственной деятельности в разрезе историографии ее зарождения и дальнейшего развития в современных условиях. Показаны действия государственных органов в исторический момент разведения советского государства и становления независимого Казахстана, выявлены результаты межгосударственных договоренностей, определены перспективы их дальнейшего исполнения. В целом, опираясь на ряд новых источников, представлен непредвзятый взгляд на историографию исторического процесса развития системы противоракетной обороны в контексте раскрытия содержания соответствующей деятельности осуществленной на территории Казахстана.

Ключевые слова: Сарышаган, Узел Балхаш, система предупреждения о ракетном нападении.

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