

K.S. Musin, R.B. Botagarin, M.M. Badanova

*Ye.A. Buketov Karaganda State University, Kazakhstan
(E-mail: mkuat80@mail.ru)*

Legal aspects of professional development of military personnel in the Republic of Kazakhstan in the framework of international military cooperation

The purpose of the research is to examine the issues of improving military personnel in the Republic of Kazakhstan in the framework of international military cooperation. To achieve this goal, the author considers the issues of protection and enforcement of constitutional and legal norms of security and military policy. In addition, the article states that in actual conditions, the consolidation of its formation as a state in connection with the proclamation of independence of Kazakhstan and a full-fledged member of the world community directly depends on state policy. In the article the global experience of the development of the Armed Forces of the country and issues of constitutional law regulation of peacekeeping policy are analyzed. In order to master the elements of military-technical cooperation, the optimal experience of training military personnel in military schools of foreign countries, the issue of creating a part of expertise of Kazakhstan and proposals for cooperation in the military Republic of Kazakhstan was considered. Scientific novelty consists in training the military personnel of the Armed Forces of the country in accordance with international requirements, developing proposals aimed at improving the legislation of the Republic of Kazakhstan in the military sphere.

Keywords: military service, serviceman, security, military policy, constitution, norm, military doctrine, military cooperation.

Introduction

Along with Kazakhstan sovereignty the question arose of training military personnel for the Armed Forces of the state, especially rare specialists.

One of the main directions of reforming the Armed Forces of Kazakhstan is an effective system of training military personnel. Over the years of independence, the Republic of Kazakhstan have achieved good results in this area. Nevertheless, the armed forces needed a large number of military specialists in various specialties and levels of knowledge. The question remains of training the missing specialists of rare specialties. In this regard, training of business personnel abroad was organized.

However, this road requires significant financial costs. The question of providing the country's Armed Forces with officer personnel can be solved only through the development and implementation of an integrated system of measures for the development of a national military education system. This will allow in the future to prepare the main officer cadres of the armed forces in the military educational institutions of Kazakhstan, and in a limited number to train and meet the needs of rare officers abroad. The funds spent on the training of modern military personnel of Kazakhstan abroad, give good practical results and economic effect in the development of the national system of military education, provide a certain independence in this matter from other states. But, improving the national system of training military personnel, one should apply the experience and knowledge of leading states in this area.

Methods and materials

Scientific and methodological foundations of general and private research methods of scientific knowledge: normative and logical, historical, comparative law, analytical, synthesis, system and legal and others. In the course of the research work, an analysis of theoretical materials was carried out, providing for theoretical conclusions of transport obligations.

Results

In his message to the people the President spoke about the domestic political proposals of Kazakhstan, about how we received support in the world community. They matter in the previous ten-year message of our foreign policy. Next, we will continue our foreign policy, which not only interacts with the West, but also with the states of Asia.

The next major step in ensuring the safety of a young, independent Kazakhstan is the Treaty of Friendship, cooperation and mutual assistance between the Republic of Kazakhstan and the Russian Federation.

In it the parties bear responsibility for the assistance, functioning, and consolidation of friendly relations between the Republic of Kazakhstan and the Russian Federation, the fundamental national interests of the people of the two states, serve the cause of security and peace. Thus, they form their relations as friendly states, exercise mutual respect and leadership of state and territorial unity, and promote the peaceful settlement of a dispute without the use of other forces and threats, including equal economic and other forms of pressure. In addition, the parties agreed to conduct foreign policy in the regional, as well as in the global dimension, mutual agreement with a view to strengthening peace and security: the impact on the effectiveness of creating a mechanism and a system of collective security; on the basis of the agreed proposals of its military doctrine and the principle of sufficiency of social consent and its military doctrine; the need to assist with the opening of one of the parties. In addition, the parties undertake to recognize and respect each other's territorial integrity, not to allow organizations and people directed against the territorial integrity, independence of both states, or to prohibit the aggravation of international relations, in accordance with their legislation. An important military agreement for Kazakhstan between the Republic of Kazakhstan and the Russian Federation was also signed. The parties, guided by the agreement on mutual assistance and the commonwealth between the states of May 25, 1992, taking into account the agreement reached earlier on the commonwealth in the defense zone within the CIS, in order to ensure collective security, agreed on the following: the signing of an agreement on the use in the Caspian Sea of the means and forces of the naval fleet of the Russian Federation and the naval forces of the Republic of Kazakhstan in order to jointly ensure the security of both parties when a situation threatens the security, independence and territorial integrity of one of the parties.

Implementing partnerships on the territory of military intelligence, supplying and repairing military equipment and material and technical means, weapons, conducting a coordinated policy of joint development [1].

Further training of Kazakhstani military personnel in educational institutions of the Russian Federation a contract between the Ministry of Defense of the Republic of Kazakhstan and Russia on the training of military specialists of August 19, 1992. The contract defines the quantitative parameters of military personnel up to 400 people per year [2; 163] and provides for joint training of military personnel of the Russian Federation on a single program at no cost. At the same time, according to the made commitments, the training was carried out from the account of Russia, and for the maintenance (monetary and subsistence allowance, transportation costs) — at the expense of the Ministry of Defense of the Republic of Kazakhstan. In particular, the agreement between the Republic of Kazakhstan and the Russian Federation on friendship, cooperation and mutual assistance of March 28, 1994 (based on the friendship, cooperation and mutual assistance agreement between the Russian Federation and the Republic of Kazakhstan of May 25, 1992) differs. «On admission to training of military personnel of the Republic of Kazakhstan in military schools of the Ministry of Defense of the Russian Federation» No. 318/5 / 14–1 of April 6, 1995, a contract was signed for a contract basis, i.e., for compensation.

On the basis of a change in the principles of cooperation, there is a tendency to strengthen the statehood of the sovereign states of Kazakhstan and Russia, which have experienced their development. This was facilitated by the deepening of the economic crisis that both countries survived. As a result, we can see that this period according to the state need can be represented in the distribution of the trainees «self-alien», the transfer of military personnel of the Republic of Kazakhstan to specially reduced for significant importance faculties of military schools, training programs. Only in 43 military educational institutions of the Ministry of Defense of Russia more than 150 specialists and special specialists were trained, who cannot speak about the combat readiness of subunits and units. The main emphasis in air defense comes to the training of specialists in military schools (32.3 %) and aviation universities (22.4 %) of the total number of cadets, that is, in specialties cannot be prepared by our schools [3].

During the bilateral negotiations of the presidents of Kazakhstan and Russia, held at the summit of the heads of state of the Commonwealth of Independent States in 2002 in Almaty and within its framework, issues of deepening military cooperation, including the training of military personnel in the Armed Forces of the Republic of Kazakhstan in Russian universities, were considered. An agreement was reached on expanding cooperation in this area and organizing the preparation of an agreed number of officers in Kazakhstan on a simplified basis. In this regard, the costs associated with training were assumed by the Ministry of Defense of Russia, and the costs associated with the maintenance of Kazakhstani military personnel were taken by the Ministry of Defense of the RK. Selected servicemen of the Armed Forces of the Republic of Kazakhstan in 2002, 2003, 2004 were trained on a preferential basis.

The above findings of the examination will be as follows:

– First, our bilateral relations in the field of personnel training create positive trends within the CSTO, demonstrate an example of structural cooperation, and these trends should be followed in other areas of cooperation.

– Secondly, cooperation has shifted to a new, highest phase of development, characterized by a joint force within the CSTO, the desire for a favorable use of the capabilities of each party to the Treaty.

It should be noted that at present, the training of personnel in the Armed Forces of Kazakhstan is carried out in more than 10 countries of the world, but to a greater extent meets the needs of the Armed Forces of Kazakhstan, both in terms of training and content of specialists trained in military schools of the Ministry of Defense of Russia.

Statistical confirmation of the indicated stages of cooperation in the field of personnel training; change in the dynamics of the annual sample of universities of the Ministry of Defense of Russia: 1993–1996 — 300–400 people, 1997–2000 — 220–340 people, 2001–2002 — decreased to 170 people, since 2003 — up to 300 people [4; 165].

From 1993 to 2004 about 2 thousand people graduated from military educational institutions of the Russian Federation. In their Military Academy and University — 300 officers among the officers with higher military education, which is 66 % of the Armed Forces of Kazakhstan; training in military universities and institutes — about 1200 cadets, which is 18.1 % of officers serving in the Armed Forces of Kazakhstan; short-term courses — about 180 officers. In addition, in 2005 about 50 officers were sent to military academies, about 170 cadets of military universities and institutes, as well as 70 officers for short-term courses [5].

In addition, the Republic is being thoroughly trained, scientific and personnel support of qualified specialists in the space industry, including Russia, Rosaviakosmos. In the branch of «Sunrise» on Baikonur, Moscow aviation institute (MAI) under the quota of the Ministry of education and science of the Republic of Kazakhstan has 10 people of Kazakhstan. The government noted that in cooperation with Russia in the implementation of the space rocket project «Baiterek» will require a large number of specialists and said that such a number of students is not enough. The Ministry of education and science was instructed to increase the quota in the branch of traffic police to 50 people.

According to the Deputy Chairman of the aerospace Committee of the Ministry of transport and communications of Kazakhstan, the head of the Baikonur cosmodrome, the training of Kazakh personnel for the cosmodrome was considered from the first days of the complex lease. In 1995, the Ministry of education and science of the Republic of Kazakhstan and the state Committee of the Russian Federation signed an agreement on the training of people of Kazakhstan in the field of space technology in higher education.

The first graduation took place in 2001. Since that time, 64 people have graduated: 21 specialists in testing of aircraft machines, 14 people received the specialty «computers, complexes, systems and networks», 25 — «automated information processing and management system» and 4 — applied in mathematics. Since 1991, about 50 citizens of Kazakhstan have been studying without a quota. Currently, they work at various facilities of the Baikonur cosmodrome and other cities, organizations and enterprises, in subordinate organizations of Rosaviakosmos places, state and educational institutions, as well as in commercial structures, small enterprises. The core team of the Aerospace Committee means graduates of this «sunrise». Currently, in coordination with the Ministry of education and the Aerospace Committee, 39 people of Kazakhstan studied at the Moscow aviation institute.

For the first time, the Ministry of defence reached an agreement on the training of civilian specialists in Russian universities, such as the Moscow higher technical school. Bauman, an international financial institution, decided to train Kazakhstan military personnel in these institutions on a lightweight basis.

One of the directions of military cooperation of Kazakhstan is the training of military personnel for the CSTO. So, beginning in 1998, the Kyrgyz soldiers are trained in military educational institutions of Kazakhstan on a grant basis. Cadets and officers selected in 2002, 2003 and 2004 were currently being trained.

In February 1994, in Washington, a Memorandum was signed between the defense Ministers of the Republic of Kazakhstan and the United States «On mutual understanding and cooperation in the field of defense and military relations», which defines the methods and directions of military treaties between the two countries. In accordance with this, meetings on the Kazakh-American defense cooperation, a list of joint works and planned future activities are held annually.

As follows, the interaction between the departments of the Ministry of defense of the two States is expanding, the evidence of which in March and April 1995 the Minister of defense of the United States U. Peri

came to Kazakhstan on an official visit. In turn, the Minister of defense of the Republic of Kazakhstan was on an official business trip as part of the US state delegation.

Further, the General personnel of the armed Forces of Kazakhstan and the joint Committee of U.S. chiefs of personnel with the leadership of defense agencies coordinate and approve the program of military contacts, as well as determine the scope and direction of cooperation and mutual exchange. The basis for this is the «General statement on future relations between the United States and Kazakhstan in the field of military and defense relations», signed in Washington on February 26, 1996.

Military cooperation with the United States rises to the highest level, the proof of which is the Atlantic control of the United States under the code name «Balance Kayak» and special squad of the Ministry of defence, held on the territory of the Republic in June 1997. In the process of training, our servicemen will seek and disarm, provide medical assistance on the battlefields and in emergency situations. It should be noted that these exercises were conducted through the communication «military-military» of the General personnel of the Armed Forces of Kazakhstan and the joint Committee of the chiefs of personnel for 1997, according to a phased plan of military cooperation.

In July 2002, the United States held talks between the working group of defense agencies of the two States on the training of Kazakh soldiers under the program «military education and training», military assistance under the program «Foreign military financing», «surplus military equipment». With the American party differed an increase in military funding. Since 2003, the United States has reached an agreement to expand the training of Kazakh military personnel in the best military schools, especially at the national University of defense West point (Colorado), which trains the commander of the management of the American army.

In addition, at the invitation of the heads of government, citizens of Kazakhstan will take part in the admission to the military academies of West point, the coast guard, the US air force, which will be attended by 146 candidates. Currently three soldiers of Kazakhstan trained at the military Academy of West point successfully passed the competition.

Then the visit of the British contingent to Kazakhstan was organized, the participation of British representatives in the tactical and special training «Steppe eagle-2003» was organized. In accordance with the action Plan for military cooperation between the Ministry of defence of the Republic of Kazakhstan and the United Kingdom, 16 servicemen of the Armed Forces of the Republic of Kazakhstan have been selected since 2003, who have successfully completed training and are implementing the acquired knowledge in the units of the Ministry of defence of the Republic of Kazakhstan in combat and training with subordinates and satellites.

There is no doubt that bilateral relations give a positive impetus, but their further development requires attention.

Evidence of this is the training conducted by the Partnership for Peace military training center, training of military personnel in modern combat skills and conducting peacekeeping and counter-terrorism operations, as well as drug trafficking and smuggling, search and rescue at sea. At the same time, the training of the faculty of the Naval Institute of the Ministry of Defense of the Republic of Kazakhstan was conducted. The Center for training special-purpose personnel, as well as training units of brigade units was equipped. Currently, officers from Turkey have received good training from their colleagues in Kazakhstan, the Kazbat battalion, the Naval Military Institute in Aktau, and other military units of the Ministry of Defense of the Republic of Kazakhstan.

In February 1994, the Minister of Defense of the Republic of Kazakhstan established direct contacts at the level of the ministries of defense of the first visitor to China. The visit of the Commander-in-Chief of the People's Liberation Army of China (PLAC), Lieutenant General Cao Ganchuan in March 1995, became a solid foundation and an innovative achievement between the military departments of the two countries. In order to resolve border issues in July 1995, negotiations were held in Kazakhstan with the Chinese military delegation. They exchanged views on mutually beneficial decisions based on trust and commitment.

In addition, the visit of the Chief of the Joint Chiefs of Staff, General Fu-Tszuang in May 1996, testified to the continuation of military contacts at the level of Chiefs of the General Staff. In the course of the previous negotiations, specific areas of military cooperation in bilateral relations of the state were identified. In June 1997, an official visit was made by the Minister of Defense of China, Colonel-General Chi Hayatyan to Kazakhstan. The meeting discussed issues of further development of military cooperation and training of Kazakhstani personnel in military schools in China. Intensive participation of both parties in the military departments means intensive work of states. For example: the Minister of Defense of Kazakh-

stan, Mukhtar Altynbayev, visited China three times on business trips in 1997, 1998 and 2002. In April 2000, the Minister of Defense of Kazakhstan and members of the Kazakhstani military delegation visited China. There were also business trips from China. In March and August 2002, the main leaders were Deputy Chief of Staff Colonel Xiong Guangkai and Commander of the Lanzhou Military District, Lieutenant General Zheng Shensen. The missions of the representatives of the Ministry of Defense of the two countries testify to the intensification of cooperation between the two countries in the military sphere. The result of the summit of the heads of military departments is the development of military cooperation in training Kazakhstani personnel in military schools in China, followed by the following figures: from 1997 to 2004, about 15 military personnel from the top commanders of the Kazakh army to junior officers were trained in the Chinese military educational institutions, and reforming experience. Currently, two officers are studying at the Academy of the National Defense Army and one officer at the Foreign Languages Institute, and in 2003 eight military personnel were sent to the Air Force of the Republic of Kazakhstan — the Institute for Air Force Management, the Institute for Foreign Languages and Ground Forces. Seven servicemen of the Armed Forces of the Republic of Kazakhstan have been trained on short-term courses, and they are considering sending three officers for training to the National Defense Academy, the State Guard of Defense and the University of National Defense Of Kazakhstan. It is worth noting that the servicemen of the Armed Forces of Kazakhstan, trained in the Chinese military educational institutions, are gradually growing in the armed forces of China.

A special feature in cooperation with China is the opportunity for our officers to go on vacation with their families in this country. From 22 to 30 March 2003, 4 families of Kazakhstani military personnel were in the People's Republic of China, but not only in close and friendly relations between the defense departments, but also with the Kazakh military.

In this regard, the Embassy of India in the Republic of Kazakhstan in military schools of the Ministry of Defense of the Republic of India and in accordance with agreements concluded at the invitation of short courses now read 4 officers of the Armed Forces of the Republic of Kazakhstan, finished 4. They know that they are studying in accordance with our circumstances.

The first step in the field of military education with our country was made by the Republic of Hungary. This is a good result. Two soldiers from our country are studying 25 short courses in the Hungarian military schools. Training for military personnel abroad remains a top priority for the Armed Forces of the Republic of Kazakhstan, and the Ministry of Defense is charged with stepping up this work.

Conclusions

The geography of military cooperation of the Republic of Kazakhstan is wide and endless. Training of military personnel in the Armed Forces of the Republic of Kazakhstan is conducted in 10 countries of the world. At the new stage of military cooperation of Kazakhstan, the University of Defense of the Republic of Kazakhstan maintains contacts with 18 countries of near and far abroad, including the creation of the most productive military cooperation with Russia in the preparation of military-scientific personnel. The first Kazakhstan-Russian scientific-practical conference, held in March 2004, decided to establish a joint dissertation council.

In this regard, it is necessary to consider the creation of expertise and the proposals of the Kazakhstan Cooperation Section in the Department of International Cooperation of the Ministry of Defense of the Republic of Kazakhstan in order to gain the best experience in training military personnel in foreign military schools, elements of military technical cooperation. The military personnel of the Republic of Kazakhstan should use the knowledge and experience gained in the course of training to increase combat and mobilization readiness in units and subunits, as well as in military educational institutions and peacekeeping units.

Moreover, to improve the quality of military training of the CSTO member states in military schools of the Russian Federation, in our opinion, it is necessary to pay attention to the following areas:

1. Preparation of scientific, scientific and pedagogical personnel.
2. Joint training of Russian military personnel for military training programs for the closest joint programs with a group of students and cadets.
3. In particular, students and trainees of the Republic of Kazakhstan should master the existing equipment and weapons as part of the Armed Forces of the Republic of Kazakhstan. Theoretical and practical classes are conducted on the use of operational (emergency) art and methods, the use of power tools and the use of the army in a mountain desert zone, such as the region of Central Asia.

4. According to commanders and managers, graduates of military schools of the Russian Federation are distinguished by a high level of professional training and are well versed in military specialties. At the same time, it is necessary to send officers of the Main Department of Internal Affairs of the Republic of Kazakhstan to the management of military educational institutions of the Russian Federation, and not just ordinary military personnel interested in obtaining their competent specialists.

This is one of the successful areas of cooperation. For example, on the basis of the linguistic laboratory at the Ministry of Defense of the Republic of Kazakhstan and the Ministry of Defense of the USA, English is taught with military personnel free of charge. This will increase the number of students studying in the United States and reduce the number of Kazakhstani military personnel in their respective courses; supply of linguistic laboratories and other educational materials to Kazakhstan; continue to prepare teachers for teaching in linguistic laboratories at the Lackland air force base, Texas, USA.

References

- 1 Токаев К.К. Казахстан в мировом сообществе / К.К. Токаев // Международная жизнь. — Алматы, 2002. — № 7. — С. 45–53.
- 2 Назарбаев Н.А. Прямой телемост выступления Президента Казахстана. — Астана. — Хабар. — 24 августа 2005.
- 3 Материалы выступления Президента РК на презентации МО РК в Астане. Войсковая часть 10234. — Текущий архив. — Д. 26. — Т. 1. — С. 38–39.
- 4 Ертысбаев Е. Казахстан и Назарбаев: логика перемен. — Астана: Елорда, 2001. — 462 с.
- 5 Қазақстан Республикасы Президенті Н.Ә. Назарбаевтың «Дағдарыстан дамуға» атты Жолдауы. 2009 ж. [Электрондық ресурс]. — Қолжетімділік тәртібі: <http://www.adilet.gov.kz/kk/node/8888>.

Қ.С. Мусин, Р.Б. Ботагарин, М.М. Баданова

Қазақстан Республикасындағы әскери кадрларды халықаралық әскери ынтымақтастық шеңберінде жетілдірудің құқықтық мәселелері

Зерттеу жұмысының мақсаты — Қазақстан Республикасындағы әскери кадрларды халықаралық әскери ынтымақтастық шеңберінде жетілдіру мәселелерін қарастыру. Аталмыш мақсатқа жету үшін авторлар әскери саясат және қауіпсіздіктің конституциялық-құқықтық нормаларының қорғау және қамтамасыз ету сұрақтарын қарастырған. Сондай-ақ мақалада Қазақстан өзінің тәуелсіздігін жариялап, әлем қауымдастығына толыққанды мүше болуына байланысты өзінің мемлекет ретінде қалыптасуын нақты жағдайда бекіту тікелей мемлекеттік саясатқа да байланысты болғаны жайлы сөз етілді. Мақалада еліміздің Қарулы Күш дамыту барысында әлемдік тәжірибелер және бітімгершілік саясатының конституциялық құқықтық реттелу мәселелері зерттелген. Шетелдердің әскери оқу орындарында әскери кадрларды дайындаудың оңтайлы тәжірибелерін, әскери-техникалық ынтымақтастықтың элементтерін меңгеру мақсатында ҚР Қорғаныс министрлігінің Халықаралық ынтымақтастық департаментінде Қазақстанның ынтымақтастығы сараптамалары мен ұсыныстары бөлімін құру туралы да сұрақты қарастырған. Ғылыми жаңалығы еліміздің Қарулы Күшін халықаралық талаптарға сай кәсіпқой әскери кадрларды дайындау, Қазақстан Республикасының әскери саладағы заңнамасын жетілдіруге бағытталған ұсыныстар әзірлеу болып табылады.

Кілт сөздер: әскери қызмет, әскери қызметші, әскери қауіпсіздік, әскери саясат, конституция, норма, әскери доктрина, әскери ынтымақтастық.

К.С. Мусин, Р.Б. Ботагарин, М.М. Баданова

Правовые вопросы совершенствования военных кадров в Республике Казахстан в рамках международного военного сотрудничества

Целью исследовательской работы является изучение вопросов совершенствования военных кадров в Республике Казахстан в рамках международного военного сотрудничества. Для достижения данной цели авторы рассмотрели вопросы защиты и обеспечения конституционно-правовых норм безопасности и военной политики. В реальных условиях закрепление становления Казахстана как государства в связи с провозглашением независимости и признание его полноценным членом мирового сообщества напрямую зависит и от государственной политики. В статье проанализированы мировой опыт развития Вооруженных сил и вопросы конституционно-правового регулирования

миротворческой политики. В целях освоения элементов военно-технического сотрудничества, оптимального опыта подготовки военных кадров в военных учебных заведениях зарубежных стран был рассмотрен вопрос о создании в Департаменте международного сотрудничества Министерства обороны РК Отдела экспертиз и предложений сотрудничества Казахстана. Научная новизна статьи заключается в анализе в подготовке военных кадров Вооруженных Сил страны в соответствии с международными требованиями, в выработке предложений, направленных на совершенствование законодательства Республики Казахстан в военной сфере.

Ключевые слова: военная служба, военнослужащий, безопасность, военная политика, конституция, норма, военная доктрина, военное сотрудничество.

References

- 1 Tokayev, K.K. (2002). Kazakhstan v mirovom soobshchestve [Kazakhstan in the world community]. *Mezhdunarodnaia zhizn — International life*, 7, 45–53 [in Russian].
- 2 Nazarbayev, N.A. (2005). *Priamoi telemost vystupleniia Prezidenta Kazakhstana [Direct teleconference of the President of Kazakhstan]*. Astana, Khabar [in Russian].
- 3 Materialy vystupleniia Prezidenta RK na prezentatsii MO RK v Astane. Voiskovaia chast 10234 [Materials of the speech of the President of the Republic of Kazakhstan at the presentation of the ME RK in Astana. Military unit 10234]. (Vol. 1) [in Russian].
- 4 Yertysbayev, Ye. (2001). *Kazakhstan i Nazarbaev: lohika peremen [Kazakhstan and Nazarbayev: change logic]*. Astana: Elorda [in Russian].
- 5 Kazakstan Respublikasy Prezidenti N.A. Nazarbaevtyn «Dahdarystan damuha» atty Zholdauly. 2009 zhyl [Message from the President of the Republic of Kazakhstan N.A. Nazarbayev «From crisis to development» 2009]. *adilet.gov.kz*. Retrieved from <http://www.adilet.gov.kz/kk/node/8888> [in Kazakh].