The article deals with the main aspects of training of higher education applicants in higher military educational institutions and scientific institutions of the Ministry of Defence of Ukraine. The author analyzes the regulatory framework for the acquisition of professional competence of higher education students in higher military educational institutions and scientific institutions of the Ministry of Defence of Ukraine. The national security of Ukraine is an integral part and priority goal of the Ministry of Defence of Ukraine, which accordingly determines the main factors of stable development of society. Russia's full-scale invasion of Ukraine has created the conditions for the emergence of a hybrid form of warfare using the information space, which has forced the creation of new approaches to ensuring and maintaining the national security of the state. In this case, an important role is played by the training of students to acquire competencies in the development and testing of weapons and military equipment, which in today's conditions requires constant updating. Graduates of higher education institutions and research institutions of the Ministry of Defence of Ukraine must take into account the peculiarities of the production of weapons and military equipment in a timely manner in order to ensure the country's defense capability.

The issue of training applicants in the modern conditions of the modern educational process should focus on the ability to make decisions in martial law and uncertainty. The level of education of students will be higher, the broader the chosen field of knowledge, as well as the ability to design solutions in an uncertain situation, which will allow them to have a wider range of possible decision-making methods. Therefore, raising the level of training of students in military sciences will create the preconditions for further implementation of measures that will ensure the development of personnel in the system of higher military education and increase Ukraine's defence capabilities.

**Keywords:** applicants; higher military educational and research institutions; level of education, education.

**Introduction**

**Relevance of the topic.** In today's conditions, the scientific personnel policy in the Armed Forces of Ukraine (hereinafter – AFU) is a practical tool and means of strengthening the defense capability of the State, an auxiliary means of complying with the standards of ethical behavior of military personnel and employees, as well as the basis for the rational use of scientific personnel resources in public administration. Taking into account the outdated principles of scientific staffing, the level of service discipline and professionalism of the AFU personnel, there is an urgent need to introduce an updated system of scientific staffing that would meet the current realities and principles of reforming the AFU and would meet NATO standards. In other words, work with scientific personnel, their qualitative selection, and professional development is one of the most effective means of improving the efficiency of the AFU as an institution of the state, which is designed to ensure the defense of Ukraine, protection of its sovereignty, territorial integrity and inviolability.

**Formulation of the problem.** The issue of organizing scientific staffing in the Armed Forces of Ukraine at the current stage of their reform plays a key role in terms of the effectiveness of the Armed Forces of Ukraine as the main institution of the state that protects the sovereignty and territorial integrity of Ukraine, especially during the armed conflict.

**Analysis of recent research and publications.** The issue of assessing the quality of military personnel training was included in the research of such well-known scholars as Antonenko S., Vitchenko Y., Boyko O., Osoadi V., Punda Y., Puchkov O., Stepaniuk Y. and others.

**The purpose of the research** is to determine the peculiarities of the organizational and legal framework of scientific personnel policy in the Armed Forces of Ukraine, to consider the theoretical and methodological foundations, as well as international legal experience, and to provide a theoretical justification and develop practical recommendations for their further improvement.

**Main material**

According to Article 5 of the Law of Ukraine “On the Armed Forces of Ukraine”, the personnel of the Armed Forces of Ukraine includes military personnel and employees under an employment contract [1].

In turn, military personnel are divided into:
1. Conscripts who are called up by military enlistment offices from among medically fit citizens of Ukraine – men who have reached the age of 18 at the time of their assignment to military units and have not reached the age of 27, who have not previously performed military service and are registered with the
military enlistment office at their place of residence as conscripts and do not have valid reasons for postponement or exemption from conscription. Conscripts are used to fill the positions of private, sergeant and sergeant major in combat units and military bodies. The term of conscript service is up to 18 months, and for persons who have obtained a master’s degree or higher – up to 12 months [1].

2. Conscripts during mobilization, for a special period, who are called up by military enlistment offices or directly by commanders of military units from among persons liable for military service as privates, sergeants, non-commissioned officers and officers of the officer group in case mobilization is announced by a presidential decree. Unlike conscripts, such servicemen are filled with any military positions that correspond to their military rank, military specialty and education. There are no specific terms of service during mobilization; these servicemen are dismissed by the decision of the President of Ukraine.

3. Contract servicemen of privates, sergeants and officers who are citizens of Ukraine and who have voluntarily expressed a desire to perform contract service in the respective positions. The selection of such servicemen is carried out by military enlistment offices upon applications from military units or directly by personnel units of military units. The term of contractual service for privates is 3 years, and for non-commissioned officers – from 3 to 5 years [1].

4. Servicemen-cadets of higher military education institutions, as well as higher education institutions that have military institutes, military training faculties, military training departments, military training departments. Persons who have complete secondary, vocational or higher education, who are between the ages of 17 and 30 and who do not hold military officer ranks, have the right to enter higher military educational institutions that train officers for the needs of the Armed Forces of Ukraine. The term of military service for this category is the period of study at the educational institution. At the same time, cadets of higher military education institutions sign a contract during their studies that specifies their further obligation to perform contractual service as officers after graduation. Otherwise, the cadet faces reimbursement to the state of the funds spent on his/her training.

5. Contract servicemen of the officer category, who are recruited from among graduates of higher military education institutions and citizens of Ukraine from among reserve officers who have voluntarily expressed a desire to perform contract service in officer positions. The selection of such servicemen from among reserve officers is carried out by military enlistment offices upon applications from combat units or directly by personnel units of military units. The term of contractual service for officers is: for graduates of higher military educational institutions who have obtained a specialty of aviation flight personnel – 10 years, for other specialties – 5 years. For reserve officers who were assigned their primary military rank after the military department – from 2 to 5 years, for other reserve officers – from 1 to 5 years [1].

6. Servicemen called up for retraining and reserve officer training by military enlistment offices from among medically fit male and female citizens of Ukraine who have graduated from military training departments at higher education institutions and have been awarded the primary military rank of officer, who have not performed military service, who are under 43 years of age at the time of their assignment to military units and do not have valid reasons for postponement or exemption from conscription. Servicemen conscripted for military service are appointed to primary positions of officers in military units and military bodies. The term of such service is up to 18 months [2];

Employees of the Armed Forces of Ukraine are divided into:

1. Specialists covered by the Law of Ukraine “On Civil Service”. Such employees fill positions of specialists in military bodies, such as military enlistment offices, operational commands, commands of branches of service, the General Staff of the Armed Forces of Ukraine and the apparatus of the Ministry of Defence. They are recruited on a competitive basis in accordance with the legislation of Ukraine on public service.

2. Employees who are not covered by the Law of Ukraine “On Civil Service”. These are the positions of specialists and workers (who do not perform state functions) in military units, formations and military bodies mentioned in the previous paragraph. Such employees are appointed in accordance with the procedure established by the Labor Code of Ukraine.

To date, the Armed Forces of Ukraine have 21 training centers for training, retraining and advanced training of privates, sergeants and officers, which train specialists in 200 specialties and can train up to 14,000 people at a time.

Basic general military training for privates is designed to provide citizens called up for military service with the primary knowledge, skills and abilities necessary to perform combat missions and is conducted in training centers for up to three months.

Special courses in military units are measures of professional theoretical and practical training of servicemen under the combat training program for contract service in a specific position using regular weapons and military equipment.

Professional training is intended to prepare persons for contractual service in positions of privates in a certain military specialty and is carried out within the following time limits:

– up to one month – at specialized courses in military units at the place of service or in certain specialties or positions in another military unit with servicemen who are appointed to positions in specialties for which training or retraining is not conducted in
training centers;
- up to four months – in training centers [2].

Professional development of servicemen is carried out for the purpose of professional growth and further promotion and can be carried out in the following forms:
- training of privates in training centers that provide training for sergeants and non-commissioned officers with subsequent distribution and appointment to the relevant positions;
- training of servicemen and women of the rank of private, sergeant and sergeant major at officer training courses at higher military educational institutions with subsequent assignment of the primary officer rank and appointment to the relevant positions;
- enrollment of servicemen of the rank of private, sergeant and non-commissioned officer in higher military educational institutions under the full officer training program with transfer to the status of cadet;
- obtaining higher education by correspondence and distance learning;
- other forms of professional development.

A properly organized system of training of high-quality scientific personnel for the Armed Forces of Ukraine (hereinafter – the AFU) depends primarily on a high level of organization of the administration of this process. The training of scientific personnel for the AFU is carried out in higher military educational institutions and scientific institutions of the Ministry of Defence of Ukraine (hereinafter – MDU).

The quality of training of motivated highly qualified scientists depends on the correct formulation of the tasks and their consolidation in the relevant legal framework. A study of the current state of the legal framework regulating this issue reveals that its norms contain general tasks and functions of the subjects of officer training for the AFU.

The main goal of higher military educational institutions and research institutions, as the main subjects of training scientific personnel for the AFU, is to create favorable conditions for obtaining the appropriate level of education and training of qualified specialists. Some believe that in general terms these tasks do not differ from the tasks of any higher education institution or research institution that trains specialists for various spheres of life, but there is a specificity in the tasks of higher military education institutions and research institutions as subjects of training future scientists, and this specificity is distinguished by the very nature of their subordination, because they are subordinated not only to the Ministry of Education and Science of Ukraine, but also to the Ministry of Defence of Ukraine [3].

Citizens studying in these educational institutions master, in addition to general educational components, special military components that determine the specifics of training scientific personnel in the Armed Forces of Ukraine. At the same time, the educational process in these higher education institutions and research institutions is combined with practical or probationary training, and also follows from the tasks assigned to the higher military education institution or research institution. Given the above, the tasks of training military scientific personnel are also determined by acts of special legislation.

At the present stage, an important aspect of the implementation of the research function is an integrated interdisciplinary approach. The interdisciplinary training of postgraduate students is becoming increasingly important: the formation of competencies in the field of science management, innovation, as well as other knowledge and skills necessary for successful scientific and scientific-pedagogical work.

Improving the quality of master’s and doctoral research results is an important part of training scientific personnel. It is the level of their organization that is crucial in ensuring the development of Ukraine’s scientific and educational potential.

In most European countries, obtaining a Doctor of Philosophy (PhD) degree as a result of “postgraduate education” at universities or other higher education institutions is considered the third level of higher education. In recent years, postgraduate education in a number of European universities has been implemented in new organizational forms – doctoral schools. An applicant for this degree must conduct an original scientific research within a special curriculum (PhD program/studies), pass a number of exams and must submit a dissertation (doctoral thesis/dissertation). A researcher begins preparing a doctoral dissertation after obtaining a master’s degree. The European degree of Doctor of Philosophy (PhD) is the equivalent of the degree of Candidate of Sciences in Ukraine. The difference is that these degrees are awarded exclusively by higher education institutions. Along with the PhD degree, European countries have a professional doctorate, which is awarded to a postgraduate student when he or she is engaged primarily in professional activities.

An honorary doctorate awarded to some scientists for their long and fruitful scientific work. Among them are doctoral degrees in natural sciences, humanities, law etc.

The peculiarity of the German system of training highly qualified scientific personnel is its two-stage nature: training of candidates of sciences (promotion) and doctors of sciences (habilitation). The degree of Doctor of Engineering is also awarded, which corresponds to both a candidate and a doctor of technical sciences, and also allows for a professorship [4].

In France, the formation of a research scientist takes place in the master’s program when choosing a direction – professional or research. Graduates of both programs have the opportunity to continue their studies in a doctoral program. For master’s students of the
research program, the research conducted in the first year of the master’s program is educational and also the basis for the transition to the second year of study. A characteristic feature of the French research master’s program is that not all first-year students can enter the second year of study, but only those who successfully defend their first-year research paper and are selected by a special committee. From the second year of study, French master’s students in the research program begin to participate in the work of the research school with their supervisors [5].

The comparative analysis proposed by Reshetnyak O. will make it possible to provide one of the components of information and analytical support for the training of scientific personnel in Ukraine (Table 1).

Thus, the development of national science requires improving the quality of training of scientific personnel through its modernization and reform.

We believe that the training of citizens of the country, future scientists of the Armed Forces of Ukraine, who are potentially ready to acquire scientific education, will be carried out on the basis of a transdisciplinary approach with the effective use of modern technologies of information and analytical support for their training.

Table 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Bachelor’s degree</th>
<th>Master’s degree</th>
<th>Doctoral studies PhD / postgraduate studies</th>
<th>Doctoral studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>Study program↔ Bachelor’s degree qualifying exam</td>
<td>Study program research activity → master’s thesis</td>
<td>Research activities, study programs → PhD thesis</td>
<td></td>
</tr>
<tr>
<td>Canada</td>
<td>Study program↔ Bachelor’s degree qualifying exam</td>
<td>Study program research activity → master’s thesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>Study program↔ Bachelor’s degree qualifying exam</td>
<td>Study program research activity → master’s thesis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>Study program↔ Bachelor’s degree qualifying exam</td>
<td>Study program research activity → master’s thesis</td>
<td>Research activities, study programs → PhD thesis</td>
<td></td>
</tr>
<tr>
<td>Ukraine</td>
<td>Study program↔ Bachelor’s degree qualifying exam</td>
<td>Study program research activity → master’s thesis</td>
<td></td>
<td>Research activity ↔ doctoral dissertation</td>
</tr>
<tr>
<td>Finland</td>
<td>Study program↔ Bachelor’s degree qualifying exam</td>
<td>Study program research activity → master’s thesis</td>
<td>Research activities, study programs ↔ qualifying examination; research activities → PhD thesis</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Study program↔ Bachelor’s degree qualifying exam</td>
<td>Study program research activity → master’s thesis</td>
<td>Research activities, study programs → PhD thesis</td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>–</td>
<td>Study program research activity → master’s thesis</td>
<td>Research activities, study programs ↔ qualifying examination; research activities → PhD thesis</td>
<td></td>
</tr>
</tbody>
</table>


Higher military educational institutions and research institutions of the MDU train scientific personnel for the Land Forces, Airborne Forces, Air Force and Navy. The specificity of training of scientific personnel in higher military educational institutions and research institutions is primarily in the fact that a civilian who enters such an institution takes a military oath and is assigned the military rank of “soldier”, and therefore the cadet has all the rights and obligations of a military serviceman.

Determining the place and role of higher military educational institutions and research institutions in the system of scientific personnel policy in the Armed Forces of Ukraine, it is possible to define their main functions in this area, in particular: training of highly qualified scientific personnel, who in turn will be able to transfer the experience gained during the training of subordinate personnel, conducting scientific research on
urgent issues of military service, training of scientific and pedagogical personnel in the relevant specialties [9].

According to the results of the study, it is possible to note the high level of importance of studying international experience (on the example of the US Armed Forces) and implementing its positive experience in reforming the modern military scientific personnel policy of Ukraine. It has been found that the US Armed Forces have successfully implemented a fully voluntary principle of recruitment. Today in Ukraine, there are a number of negative phenomena in military scientific personnel policy, such as the level of financial support, imperfect legislation on service, including dismissal, bureaucratization of career development, problems with housing, rather long service periods for the right to retirement, etc. [10].

An important characteristic of the formation of scientific personnel is the sectorial structure of postgraduate and doctoral training, which needs to be constantly improved in line with the requirements of the country’s economy, global trends in scientific and technological development, etc. An analysis of postgraduate training by field of science shows that in 2022, as in previous years, the largest number of postgraduates studied in engineering and economics. The top five sciences chosen by PhD students also include law, pedagogy, and medicine. The majority of doctoral students also study in technical and economic sciences, and the top five most attractive sciences include physical and mathematical sciences. Military sciences remain less attractive for future scientists.

To improve the quality of training of researchers and academic staff in the Armed Forces of Ukraine, it is proposed to introduce an improved system of intellectual capital organization in higher military educational institutions and research institutions of the Ministry of Defence of Ukraine, which will significantly affect the quality of training of military specialists and can be the basis for reforming the system of training and advanced training of researchers and academic staff.

**Conclusions**

In most developed countries, the training of highly qualified personnel is carried out within the third level of higher education and contains a significant educational component. The experience of forming scientific competencies in applicants from the moment they enter a higher education institution until the moment they defend their PhD thesis or research work is noteworthy. Taking into account the practice of doctoral training in the leading countries of the world and the needs of national military science, it is advisable to choose the following areas of reforming the national system of training of scientific personnel:

- improving the organizational structures of postgraduate and doctoral studies (creation of structured doctoral programs and doctoral schools);
- increasing responsibility for the quality of training of scientists by introducing criteria for evaluating training at all stages and levels;
- formation of a system of selection and training of scientific personnel, from school to doctoral studies, based on ensuring the continuity of educational and research programs of master’s, postgraduate, and doctoral studies.

Thus, in our opinion, the proposed improved models of training and advanced training of scientific and scientific-pedagogical workers in the Armed Forces of Ukraine will significantly affect the quality of training of military specialists and can be the basis for reforming the system of training and advanced training of scientific and scientific–pedagogical workers.

In the leading countries of the world have an active and targeted state policy in the in the field of military vocational education. The basis of the latter is the protection of national interests and ensuring the national security of the state.

A mandatory requirement in the process of training both career officers and reserve officers is to focus on the realization of the goals and objectives of the armed forces of the armed forces set out in the military doctrine of the state. It is the national interests and ensuring the national security of the state are the source and a powerful factor in the development of military education. Officer training takes into account the need to ensure national security in view of the possibility of major regional conflicts and the proliferation of weapons of mass destruction, destabilization of the situation in key regions of the world.

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РОЛЬ ОСВІТИ В ЗАБЕЗПЕЧЕННІ НАЦІОНАЛЬНОЇ БЕЗПЕКИ:
ПІДГОТОВКА НАУКОВИХ КАДРІВ ДЛЯ ЗБРОЙНИХ СИЛ УКРАЇНИ
В.В. Ларін, В.П. Гмира, Л.В. Романовська

У науковій статті розглянуті основні аспекти підготовки здобувачів вищої освіти у військових відомствах та військових установах системи Міністерства оборони України. Проаналізовано нормативні засади здобуття професійної компетентності здобувачів вищої освіти у ВВЗ і наукових установах системи Міністерства оборони України. Національна безпека України є невід’ємною складовою і пріоритетною цілью Міністерства оборони України, яка відповідно визначає основні фактори стабільного розвитку суспільства. Висновки та рекомендації для подальшого здійснення заходів щодо забезпечення національної безпеки держави.

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Ключові слова: здобувачі; військові відомства та наукові установи; рівень освіти; освіта.