



On Construction of Cultivation Mechanism of Military-civilian Integrated Talents in National defense Science, Technology and Industry

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ABSTRACT. The national defense science and technology industry talents training takes the road of military-civilian integration, which is an experience summary of the national defense science and technology industry talents training mechanism, and is a requirement of economic and social development for the development of national defense science and technology industry talents resources. A series of achievements have been made in the training of military civilian integrated talents in China's defense science and technology industry, but it is still not perfect enough. There are some problems in the training system, operation mechanism and training mode. The construction of a military-civilian integrated talent training mechanism for national defense science and technology industry should be in accordance with the requirements of system coordination, resource sharing, and win-win benefits. We should establish a market competitive employment mechanism, enrich the way of talent cultivation, expand the scope of talent cultivation, and expand the way of relying on social resources to cultivate talents.

Keywords: national defense science and technology industry, military-civilian integration, talents training, mechanism, construction

1 INTRODUCTION

Talent is the foundation of prosperity. The in-depth development of the military-civilian integration of the national defense science and technology industry has given birth to a major transformation of the talent training model. President Xi Jinping has pointed out that to build a strong military through reform, we must win over the people. To achieve the strategic goal of building a strong army, the most urgent thing is to seek for the victory in war by gathering talents. In order to win the information war, it is also necessary to "take extraordinary measures to train the troops in urgent need of talents". The in-depth advancement of the military-civilian integration training strategy for military personnel in the national defense science and technology industry is an

important part of implementing the strategy of reforming and strengthening the army and is an inevitable requirement for achieving the goal of strengthening the army. The “Opinions on the Integrated Development of Economic Construction and National Defense Construction” also proposes to “flexibly strengthen the overall coordination of military and local education resources, fully rely on ordinary institutions of higher learning, weapons and equipment research and development units to reserve emerging professional talents, and to local units that undertake the task of training military talents, and give policy preference to local units undertaking the task of military personnel training, in terms of condition construction, financial investment, commendation and incentive.” To realize the innovation of the military-civilian integration training mode of national defense science, technology and industry talents is the fundamental requirement of the development of The Times and the in-depth development of military-civilian integration, and is the practical way to strengthen the construction of military talents under the new situation.

2 Existing problems of military and civilian integration talent training in national defense science, technology and industry

2.1 Problems in training system

The military-civilian integrated talent training system of the national defense science and technology industry is not sound enough, and the institutional construction still lags behind the development situation of national defense and military construction, which restricts the deep development of the integrated military talent training. First, the country, the army, and localities do not have a specific military-civilian talent training leadership management organization. It will lead to the major issue of military-civilian integrated talent training lacks strong organizational leadership, and there is a lack of unified coordination on strategic issues such as standardization, resource allocation, policies, and regulations. Secondly, the system of talent cultivation relying on social education, scientific research and other resources is not perfect. The main manifestations of this problem are as the follows. The educational system of the integration of military and civilian talents is not smooth enough, the system of the integration of production, education and research is not mature and the system of the integration of military and civilian talents has not been established.

2.2 Problems in cultivation mechanism

The military-civilian integrated talent training and operation mechanism of the national defense science and technology industry is not yet reasonable, and there are still many areas for improvement. First, the military-civilian coordination mechanism is not sound. The military and civilian integration talent training has a wide range of contents and involves a wide range of aspects, there is still a lack of timeliness and flexibility in

the collaboration between the military and the local, and the communication and collaboration methods are relatively simple and need to be expanded.

Second, the military and land management and supervision mechanism is incomplete. Judging from the current situation, the management and supervision mechanism has not played its due role. The military employing unit may have directly submitted opinions to the training unit or reported to the relevant local departments at the joint meeting for coordination and settlement of the serious problems in the training work. However, due to various reasons, it has not been implemented in place, resulting in a weak sense of responsibility, insufficient attention to the training work, and poor completion of tasks.

2.3 Problems in cultivation mode

The military-civilian integrated talent training model of national defense technology industry needs to be further expanded. At present, our country relies on local colleges and universities to train military talents mainly by the mode of national defense students and the model of direct recruitment, the mode is still relatively single, and there are some problems in the existing mode. First, the training model needs to be expanded and enriched. The joint running of military academies and ordinary universities, the organization of military personnel to colleges and universities for further study, etc. have not been well promoted in practice. The function and effect of relying on social resources training have been affected to a certain extent, and the military's high-quality professional talent gap is still very large. Therefore, it is urgent to study and design new training mode and expand training channels so as to provide strong talent support for national defense and military construction. Second, the existing model needs to be improved. Although the training model of national defense students is relatively successful, there are still many problems. The main problems are the poor connection and communication of education in military and local colleges, including the connection of education and management thoughts in military and local colleges, the same or repeated curriculum in military and local colleges, and the outdated teaching content in military academies. Particularly in the past two years, national defense students, as the main training mode in the military-civilian integration talent training system, have exposed many problems. The main problems that grass-roots units report to graduated national defense students are more concentrated on as follows: The military and political qualities of some national defense cadres are relatively weak, the cycle of adapting to the army environment is relatively long, and the job holding capacity is relatively deficient. The main reason for these problems lies in insufficient grasp of the characteristics and rules of the cultivation and use of national defense students. At the same time, there is also a problem of training level, structure and training method. Judging from the actual situation in recent years, defense students are mainly limited to undergraduates, and the proportion of highly educated talents and senior technical and management talents urgently needed by the troops is relatively low, which makes the contradiction of talent shortage faced by some important positions fail to be effectively alleviated.

3 Basic Requirements for Improving the Cultivation Mechanism of Military-civilian Integrated Talents of National Defense Technology Industry

The military civilian integration training of national defense science and technology industry talents is to integrate the national defense science and technology industry talent training into the social talent education, storage, selection, appointment and exchange system. For those stuffs which can make use of social resources will not set up their own business, and for stuffs can be incorporated into the national system for developing economic and social talents will not start all over again. Its core lies in military-civilian integration, combining the military with the civilian, military-civilian integration. [4] And the basic requirements are as follows.

3.1 Institutional coordination

The integration of military and civilian training of personnel in science, technology and industry for national defense is to make full use of talent training in science, technology and industry for national defense to form an organic whole with the education, personnel, science and technology, enterprises and other departments and units of both the military and the local government, and play an important role in personnel training in science, technology and industry for national defense. All departments and units have a clear division of labor, clear responsibilities, and can achieve unified commands; not subject to the restrictions of military and military barriers and division to form a long-term coordination mechanism; the military and the local authorities jointly abide by the laws and regulations on personnel training, and the relevant laws and regulations are mandatory in the military and localities.

3.2 Resource sharing

Both the military and the local governments share human resources and personnel training resources, which can be obtained by the military as long as they are needed by the army and are available locally; It can not only share the existing general education and talent resources, but also share the high-quality resources of scarce talents. High-level military talents flow smoothly between the military and the local government, restricting the institutionality of the rational flow of talents and institutional barriers have been effectively removed. The relationship between the flow of talents, retention of talents, and security can be properly handled. All of these mentioned above could reflect the demand and reserve of military and local resources in a timely manner and realize the effective match between resource supply and talent demand. Localities can also share parts of the military's education and training resources to promote national defense education and the development of economic and social undertakings of the country.

3.3 Benefit win-win

Through the integration of military and civilian talent training, both sides can improve efficiency, form a benign interaction in the exchange of military and civilian personnel, and promote the development of national defense and economic and social construction of a virtuous cycle. The military can obtain new types of military talents with higher quality and lower cost under the effective support of local governments through the cultivation of military-civilian integrated talents. And through integrated military-civilian talent training, local governments can provide more talents to serve the military, enhance the ability of social talent training, improve social and economic benefits, and better promote employment and social harmony.

4 Strategies for improving training mechanism of military-civilian integrated talents

4.1 Establish employment mechanism with market competitiveness

In accordance with the socialist market economic system, China's talent resource allocation is market-oriented, the flow of military talents should make proper use of the human resource market. And market means two-way selection and the profit-pursuit trend towards the flow of talent resources. The national defense science and technology industry should establish a policy system that adapts to market rules and is conducive to obtaining high-quality human resources, all aspects such as introduction, use, and withdrawal of military talents have shown their attractiveness, maintaining strong competitiveness in the talent market, especially in the high-level talent market. Establish an accurate matching mechanism for talent supply and demand. It requires us to establish an accurate matching mechanism between talent supply and demand and coordinate the supply and demand of military and local talents. On the one hand, the army should find out the post demand, regularly release the information of talent demand to the society, influence the orientation of social talent demand, and form a reservoir of military talents in the society, so as to maintain a certain number of talents available for the army to choose by relying on the social storage. Local authorities should establish a database of talents to dynamically reflect the accurate information of all kinds of talents and ensure the timely and efficient completion of the recruitment and training of talents. On the other hand, the army should find out the social demand for talents and provide necessary skills training for those who have retired from active service.

4.2 Enrich talent training methods

The first step is the cooperative application. By cooperating between the military and the localities, they jointly carry out scientific research projects, participate in major activities, and complete major tasks to improve the quality of military talents. The second is the leasing-type application, which directly introduces the personnel urgently needed by the army from the society, and signs employment contracts of different

durations according to the length of time required. Thirdly, to cultivate military talents relies on the advantages of the national education, the local technical training institutions, the local scientific research institutions and the local enterprises in personnel training. The fourth is the use of sharing, "not for ownership, but for use". Local talents are hired to work part-time in the army, and the intelligence of local talents is utilized without affecting the attribution of talents. Fifth, joint efforts should be made to establish dual-use personnel training institutions with joint investment from the military and the local governments to train the professional and technical personnel in short supply in the military and local areas. And the last is to retain a certain number of scientific and technological enterprises and support personnel through the procurement of equipment and services. In wartime, these talents can be mobilized to directly participate in support work such as equipment maintenance.

4.3 Expand scope of talent training

The military-civilian integrated military personnel training mechanism of the national defense science and technology industry is a comprehensive system covering many aspects such as resources, personnel, and ability and quality, etc. Continuously expanding its coverage will enable it to better display its due benefits. We should expand the scope of resources and pay attention to the exploration of talent training resources in the society, fully realize the different roles of different resources in talent cultivation, and get rid of the narrow vision limited to local colleges and universities. We will actively develop the talent cultivation capabilities contained in the system of party schools, administrative colleges, vocational education, administrative departments, enterprises and institutions, scientific research institutions and other systems, so as to make all local high-quality training resources available for our use. We had better expand the scope of personnel. The abundance of resources in the integrated training system determines that different types of personnel in the army can make use of certain social resources for training. Therefore, not only should ordinary professionals be included in the integration scope, but also joint operations command personnel, information construction management personnel, information technology professionals, and new equipment operation and maintenance personnel should be included in the integration training scope. We should expand the scope of our qualities. The resources in the integrated training system can not only cultivate the professional quality of science and engineering, but also cultivate the general military and local professional knowledge and skills needed to carry out political work, and conduct non-war military operations and so on. Therefore, when cultivating specific capabilities and qualities of military personnel, those who can rely on military-civilian integrated training should conduct such method. Based on the professional quality of science and technology as the main body and focusing on information technology knowledge and information security knowledge, the scope of integrated training is gradually expanded to political, legal, psychological, linguistic knowledge and skills, ethnic policies, religious culture and other aspects.

4.4 Expand ways of cultivating talents based on social resources

The focus of national defense science, technology and industry is to make full use of education, scientific research and other personnel training resources in the national economy and society to serve national defense and military construction. At present, we can consider cultivating the following training models. [5] First, military civilian joint education. On the premise of the same geographical area, military colleges and local universities share resources and take advantage of the joint development activities. By signing an agreement, military and tertiary universities in the same region can mutually select courses and credits, and make full use of the professional advantages of local colleges and universities to cultivate talents needed for national defense and military construction. Second, reserve Officers Training Corps should be established in local universities. In order to train and reserve a large number of reserve personnel for China's national defense and military construction, the reserve Officers Training Corps has been extensively established in local colleges and universities, and outstanding college students are enrolled in accordance with certain standards. To set up the reserve officers training corps, the content of military and political training should be reasonably arranged. In addition to their regular study, the university students are invited to organize and carry out regular and scientific military and political training courses. We should formulate and implement the elimination system, it is necessary to formulate the assessment standards strictly, achieve quantitative scoring, regularly publish the assessment results, and implement the combination of rewards and punishments. it will not only mobilize the enthusiasm of local college students to participate in the reserve officer training corps, but also ensure the continuous improvement of training quality and students' competence. Third, military departments should be set up in local colleges and universities. Relying on the characteristic resources of local colleges and universities to cultivate military talents is a common practice in most countries in the world. The PLA has not formally adopted the method of cultivating military talents by setting up military departments in local universities, but such intention has been reflected in the national policy and the practice of some large military units.[6] The "decision on establishing a system of training military cadres relying on general higher education" promulgated by the State Council and the Central Military Commission points out that ordinary colleges and universities, in accordance with the targeted enrollment plan issued by the state and the relevant military departments, recruit students with good quality in both academic and moral qualities from ordinary high school graduates, carry out necessary military and political training, and will be allocated to predetermined places based on demands after graduation.

5 conclusion

The establishment of the military-civilian integration talent training mechanism for national defense science, technology and industry is a major innovative measure to implement the strategic thought of the CPC Central Committee on military-civilian integration development, effectively expand the generation channels of military human resources, and comprehensively improve the quality and efficiency of new talent

training for national defense science, technology and industry. This exploration fully reflects the modern vocational talent cultivation concept of demand pulling, demand-oriented supply, open schooling and complementary advantages, which is of great practical significance for raising the starting point of new talent team construction in China's national defense science, technology and industry, improving the overall structure of talent quality and enhancing the efficiency of military vocational education. At present, the army and local governments are highly enthusiastic about promoting military-civilian integration and cultivating military talents, and they have basically formed consensus. It has fallen into the dilemma of "consensus and difficulty in implementation", "integration but not conformity", and acceptance but not integration", which makes it difficult to advance the process effectively and orderly. Only by constructing a scientific, standardized, energetic, dynamic and motivated, and united joint education system can we realize the win-win situation of national strategic competitiveness, social productivity and military combat effectiveness in the field of national defense science, technology and industry. This is the direction that the field needs to focus on in the future.

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