

## Research on the Deep Development of Military and Civilian Integration in Mianyang Technological City

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### Abstract

The party after the 19<sup>th</sup> held large in China, China has entered a new era, from the domestic and international pattern, the depth of the development of military and civilian integration national strategy is the requirement of the new era, also is the construction of “Chinese dream” the only way. Combined with the related policy and this background, in Mianyang sci-tech city, for example, on the current policy of Mianyang city system, special achievements, series platform, and experience system review and summary, the civil-military integration has made some progress and summary and analysis on the current situation, the civil-military integration problem consciousness, innovation mechanism, the industrial mechanism, talent incentive, financial services, cooperation, open content such as research, and according to the problems to study and put forward solutions or Suggestions. The scientific research to provide good atmosphere to Mianyang related personnel training, provide a reference for improving the relevant military and civilian integration system, for Mianyang, similar or related areas of military and civilian integration development provide reference and reference of experience, rich civil-military integration of theory and practice in our country, promote the development of China’s military and civilian integration to a higher level and wider platform.

**Key words:** Military and civilian integration; Institutional system; Scientific research and innovation; Mianyang technological city

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## 1. THE DEVELOPMENT STATUS

### 1.1 The Phased Results Achieved

After decades of accumulation, Mianyang has gathered the Chinese academy of engineering physics, China aerodynamics research and development center, China academy of gas turbine, the state-level scientific research institutes, southwest university of science and technology 14 universities, such as Changhong, Jiuzhou, Changgang climbing, rich in more than 50 large and medium-sized backbone enterprises, the Chinese academy of sciences, Chinese academy of engineering, 25, all kinds of professional and technical personnel 217,000 people, the educational resources and scientific and technological innovation capacity in the similar cities in China, the development of city civil-military integration of science and technology industry provides a solid technical foundation.

In 2016, the new town, the aerodynamic xincheng, aviation science phased results were obtained in new town construction, science and technology resources highly, to build a world-class advanced special technology innovation base to lay a solid foundation. Significantly enhance our capacity for independent innovation, the cumulative patent authorized 8,988, r&d spending as a share of GDP reached 6.58%, comprehensive level index reached 65.04%, progress of science and technology innovation elements of similar cities in the west. Civil-military integration depth development mode to speed up the exploration, more powerful policy support, approved by the implementation of the Zhongguancun policy and

national independent innovation demonstration zone four leading policy, provincial support 10 city science and technology policy and city 23 supporting policies, gradually become the western depression “policy” and “innovation zone”, the city of science and technology demonstration effect further reveal in driving.

### **1.1.1 Formed the Three-Level Policy Support System**

In 2007, the provincial government issued the “opinions on accelerating the construction of the technology city in Mianyang”, and the provincial economic management authority was transferred to Mianyang technological city. In June 2013, the Sichuan government has for science and technology city “tailored” issued 10 (land, taxation, finance, personnel, management and transformation of scientific and technological achievements, industries and enterprises) to support policy, Mianyang has formulated the 23 support innovation entrepreneurship policy; on December 12, 2014, in accordance with the relevant policies of the state council, Mianyang sci-tech city executed Zhongguancun “1 + 6” policy and “the new four (“new four”, including technical personnel and management personnel of a reward, can be in five years in installments of personal income tax; for small and medium-sized high-tech enterprises to individual shareholders turn add equity should pay personal income tax, in installments over the next five years, etc.) are allowed “in addition to the related recognition of hi-tech enterprises in various policy beyond the pilot; In December 2015, the national take the lead in introducing the determination of Mianyang civil-military integration enterprises management measure (trial) “(continuous FuBan hair [2015] no. 84) and in January 2016 issued the < determination of Mianyang civil-military integration enterprises management approach (trial) > implementation rules” (cotton city via letter [2016] of the army and the 17), at this point, science and technology in Mianyang city innovation development, the policy basis for the development of cross continuously strengthened.

### **1.1.2 The Implementation of Many Major National Defense Projects**

Promote the building of “three new town”, relying on science Zhongwuyuan construction new town, to promote the new material, environmental protection, laser and nuclear technology research and development and integration of industry, most of the project has been settled in Mianyang of sub-project, relying on China’s air power research and development center to build the aerodynamic new city, promote the aerodynamics test research and the civil air power technology industry integration; relying on China gas turbine research institute to build aviation new city, promote the aviation engine big test and aviation technology industry integration; Corresponding a group of Chinese weapons 58 post-disaster reconstruction research institute of building project has been built and put into use, institute of China electronics technology group 9

overall relocation and post-disaster reconstruction and so on key projects completed and run.

### **1.1.3 Set Up a Series of Platforms for Industrial Development**

Established “Mianyang high-tech industrial development zone”, “enterprise park of Mianyang science and education”, “economic and technological development zone in Mianyang,” such as the platform, with state key laboratory of eight, five national engineering technology research center, 6 national enterprise technology center, set up 48 enterprise technology center at all levels, all kinds of professional incubator 12, a productivity promotion center at all levels and technology of science and technology intermediary service institutions, such as property right exchange more than 30. We will accelerate the construction of innovative platforms such as the innovation center of the science and technology city, the dual-use technology trading center and the technology transfer center, and vigorously promote the core competitiveness of the military-civilian integration industry. In April 2016, in the province by the letter, hair change, state-owned assets supervision and administration commission, under the guidance and support of the department, led by Jiuzhou group, Beijing university of aeronautics and astronautics, China aviation industry company, China nuclear power research and design institute and other 73 units have set up a joint civil-military integration “sichuan high technology industry alliance”. On May 26, 2016, the national military and civilian technology trading center was opened in Mianyang. The center is awarded by the national ministry of science and the only military and civilian integration technology trading platform, the goal is to create dual-use technology trading center, strive to built by 3 to 5 years efforts based on science and technology city, the national country dual-use technology trading center.

### **1.2 Experience Gained**

Mianyang military and civilian integration has gone through the arduous process, has achieved relatively significant results. At present, with the reform of our country entering the deep water zone, China’s military and civilian integration system innovation faces new tasks and challenges. Under the new situation, Mianyang must break through the existing institutional barriers and have a far-reaching impact on the development of the military-civilian integration industry.

Four new models of military and civilian integration were formed. After 16 years of exploration development, Mianyang has preliminarily explored “rotates, military industry institutes rotation, turn courtyard by China enterprise confederation, corporation to join the army,” four kinds of military and civilian integration mode, and create the Changhong, Jiuzhou, Lear’s chemistry such as a large number of military and civilian integration on behalf of the enterprise. In the beginning of reform and opening

up, the city of Mianyang, represented by Changhong, Jiuzhou defence companies take the lead in a “first step”: Try to use military technology development of civilian products, reoccupy civilian goods profits feedback military technology research and development, has been a huge success, every two information industry giant laid the industry leading position. With the development of the Times, Mianyang has explored a new model, guided and supported more than 20 leading private enterprises, such as Minshan electromechanics, to actively participate in national defense construction, successfully realizing the “private enterprise army”.

Build platform to promote innovation vitality. Mianyang is approved to perform the Zhongguancun policy and national independent innovation demonstration zone four leading policy, provincial support 10 city science and technology policy and city 23 supporting policies, gradually become the western depression “policy” and “innovation zone”, city of science and technology demonstration effect in driving further reveal. To promote military and civilian resources effectively integrate agglomeration mode of science and technology, let idle in various institutes, colleges and universities to scientific instruments to achieve effective utilization: based on a large scientific instruments sharing service platform of Mianyang integration of the aerodynamic center of China academy of engineering physics, China, southwest university of science and technology and so on more than 40 units in cotton, a total of more than 1,000 sets of large scientific instruments, instrument services experts, more than 120 people to build a bridge between enterprises and research institutes.

Build a financial services system. Multi-level and multi-channel collection of a batch of Sichuan military and civilian integration industry development fund reserve project, for the next fund project investment decision to provide the project pool. Some Internet equity financing platforms in our province have been specially checked and standardized. The project of financing the debt financing of small and medium sized enterprises in Sichuan province is set up. At present, Chengdu, Deyang and Mianyang are actively carrying out financing and connection guidance, and establishing Mianyang military and civilian integration sub-branch. (Financial innovation) three branches of Mianyang are listed and established “military and civilian integration financial service center”; the commercial bank of Mianyang city has launched special credit products, such as research and development loan, project loan, technical reform loan, order loan, purchase loan, subsidy loan, etc. The use of the interbank market to expand direct financing channels for technology-based enterprises. Organize direct debt financing campaigns of the inter-bank market, demand for issuance of science and technology enterprises to carry out the financing to foster counselling, use the interbank

market guide each period, many varieties of financing debt financing instruments.

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## 2. EXISTING PROBLEMS

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### 2.1 Inadequate Understanding of Military and Civilian Integration

According to the central committee of the communist party of China, issued by the state council and the central military commission of the opinion on the development of economic construction and national defense construction integration (hereinafter referred to as “opinions”), of our military and civilian integration new understanding is as follows: Army building and national security and the coordinated development of social economy, so the essence of civil-military integration is reflected in the military construction and the coordinated development of national social and economic problems. The civil-military integration depth of the development of our country and other countries of civil-military integration is different, the content and the level is not the same, such as countries such as America, Japan, in order to implement the main body of “civil-military integration” is “the government (the military defense, services) - enterprise”, the western system determines the army in western countries belong to the government management, and China’s national conditions is the civil-military integration first must adhere to the leadership of the communist party of China and the absolute leadership of the army of the communist party of China. Therefore, we should adhere to the five basic principles of the party’s leadership, strengthening national leadership, focusing on integration and sharing, playing the role of market and deepening reform and innovation. Therefore, our country and the provinces of the top-level design of the civil-military integration depth development and reform, should be the current national leading system unchanged, matching the new army after the “the change” combat command system and service management operation system of the new changes, pay attention to from the aspects of mechanism to design the military construction and the coordinated development of social and economic problems, this requires a lot of research work. Deepen the civil-military integration in Mianyang, at the same time, the future must be made in accordance with the “opinions” civil-military integration key tasks in the base areas, industry, science and technology, education resources, social services, emergency and public safety, Marine development and overall development of the seven domains such as maritime rights.

### 2.2 The Transformation Level of Innovation Results

Firstly, the stimulate measures of innovation is not deep. Enterprise as the main body of technological innovation is not prominent, independent innovation ability is not

strong, the university into the national defense science and technology innovation system of channels and the imperfection of the policy, the national defense scientific research system reform lag, the insufficient capacity of innovation in the process of market elements configuration. Secondly, the transformation channels of military and civilian scientific and technological achievements are not clear. National macro management system has not been rationalized, science and technology for military and civilian integration of concrete plans for the construction of national innovation system of science and technology has been unclear, dual-use technology transfer coordination mechanism is not sound. On the one hand, in the process of "conversion", many have civilian development prospect of military restricted by security regulations, intellectual property rights of scientific and technological achievements, restricted the process of commercialization, industrialization of scientific and technological achievements. Private enterprises to participate in military products research and development production, on the other hand, you have to get "four certificates", requests strictly, and objective existence first production of military products, or the military license, the contradiction of the conversion process is difficult. Thirdly, the procurement system of innovative products is not perfect. The procurement system of innovative products is not yet perfect, and the standard system for the determination of innovative products is uncertain. What's more, organize experts to identify and soliciting purchase demand screening social third parties is not sound, Mianyang, not engaged in the items of evaluation experts, no ability to judge whether meet the requirements of innovative products, the actual operation is difficult; the local information system of Internet construction is not sound. Of Mianyang in the communications infrastructure is still lagging behind the developed eastern region, the Internet penetration in the field of traditional industries, most part of the traditional industry application is still in its infancy, there is no good use of "Internet +" mode to build local information system, information docking flexibly not enough clear, information resource sharing, information asymmetric information between various systems in various fields and even cut off, can cause repetitive construction and facilities scattered waste of resources; and then, the innovation main body lacks the research and development impetus. As the industry of national key protection and development, the military industry has the characteristics of monopoly, high profit and planned economy, which are affected by the market. The management level is different, and the fusion between the military and the people is mostly the "emotional communication" between the military and civil departments, lacking the implementation of the top-level organization and plan. Due to scientific research institutes and war industry group directly managed by the

central ministries and commissions, its core business and focus all depends on the superior departments, military industrial enterprises lack of research and development of civilian goods enthusiasm, lack of technological achievements protection; the lack of incentive measures, the commercialization of technology products, the scale of industrialization and the degree of industrialization are not the main targets and performance evaluation indexes of the military units, resulting in insufficient impetus for the industrialization of military and civilian integration.

### 2.3 Industry Cultivation Level

(a) Small and small enterprises are small and small in size. In general, the number of small and micro businesses of Mianyang military and civilian integration is small, the proportion is low, the enterprises are scattered and unfocused, and most of the small and micro enterprises with military and civilian integration are very difficult to make big and strong in a short time.

(b) The ecological structure of the science and technology industry is irrational and the potential of science and technology is not fully developed. First, the park lacks vitality. The development of science and technology industry in the park is impacted by the real estate industry and the automobile industry, which affects the further development of the technology industry. Second, the economy of science and technology is not very active. In particular, small and micro tech enterprises are in the initial stage. Due to the government orientation, small and micro enterprises are not included in the key work of Mianyang city. The results of the investment promotion work have been shown to be the main role of the research institutes and large enterprises that have been large and strong during the construction period of the first five or three lines. Because of the undeveloped small micro enterprises, investment promotion and capital introduction to the big enterprise, Mianyang science and technology industrial ecological structure is unreasonable, extruding the science and technology, military and civilian integration type of micro, small and medium enterprises development space.

(c) Economic construction thinking is not clear under the new normal. Some department leaders have insufficient understanding of the problem of strategic emerging industries, focusing only on the development of the real economy (enterprises) in their work, and not paying enough attention to developing emerging economies under the new normal.

(d) The local departments lack coordination and support in the promotion of civil-military integration. State enterprise restructuring problems remain to be solved, in promoting the civil-military integration in the development of relevant industries, existence of local enterprise's policy is not recognized by enterprise group headquarters.



## 2.4 Talent System Level

The construction of talent system is not perfect. The integration of military and civilian personnel system includes innovative talents, managerial talents and technical talents, which are complementary and mutually reinforcing. Mianyang is not actively build content for system administration, army, state, and local in process of talent training, the lack of effective communication between each other, no effective organization, leadership and talent cultivation system, cannot be in the process of talent training, will have a full use of resources and can be targeted to the improvement of the system and implementation measures.

## 2.5 Financial Services

The existing funds have achieved periodic results, but lack of coordinated effect. Mianyang now seven big fund (\$500 million military and civilian integration industry development funds, investment of 2 billion yuan in Mianyang sci-tech city civil-military integration, 500 million yuan science and technology achievement transformation fund city “two new” industrial development fund centralized development area, 1.2 billion yuan science and technology city infrastructure construction fund. The establishment of a risk compensation fund of 100 million yuan and a fund of 70 million yuan of funds, actively connecting with emergency revolving loan funds, but the existing management and operation of several major funds lack linkage and coordination and integration.

## 2.6 Cooperation and Openness

Mianyang city at present stage in the aspect of the system construction of the lack of system planning, mainly in the areas of cooperation and open, open to the outside the region cooperation, open to foreign related national and regional cooperation development planning objectives, planning field, the point is not clear, lead to the phases of washout.

# 3. PROMOTE THE IDEAS AND SUGGESTIONS

## 3.1 Perfect Planning and Unified Understanding (Consciousness Level)

### 3.1.1 Improve the Content and Arrangement of Military and Civilian Integration Related Planning

Fully the scheme from the Sichuan province, “Sichuan province to promote military and civilian development implementation plan” depth fusion, the depth of military and civilian integration development of Sichuan province in 2016 work plan and all the scheme of Mianyang city, mainly involves the transformation of innovative achievements and depth of the national defense science and technology and industrial development, industrial problem is more, and the foundation for the development

of the mention of military and civilian depth fusion field resource sharing system, advanced defense science, technology and industry system with Chinese characteristics, military personnel training system, the system of socialization of military security, national defense mobilization system, and synergy innovation system of science and technology system of the six big ratio imbalance. In the future practical work, one is to strengthen research; second, we should strengthen practice and gain relevant experience.

### 3.1.2 Strengthen Overall Development

In terms of strengthening basic areas as a whole, the traffic infrastructure construction as a whole, space, infrastructure construction, information infrastructure construction, the construction of infrastructure of surveying and mapping, meteorological infrastructure construction as well as the standard measurement system. In terms of strengthening the industry as a whole, break the closed industry, expand the introduction of social capital, and lead the advantage of private enterprise into weapons and equipment research and manufacturing maintenance areas, promote the transformation of military technology transfer, actively participate in the development of strategic emerging industries and high technology industries; in the field of science and technology, we should accelerate the integration of military and civilian sectors and improve the mechanism of cooperation and innovation between the military and the people. Flexibly in terms of strengthening social services as a whole, establish and improve the overall cohesion of the public service system, give play to the role of work achieved “service, flexibly to plan as a whole cultural construction, improve the security level, strengthening the construction of infrastructure of military regional pollution control and ecological environment construction; in strengthening emergency and public safety coordination, we should strengthen the construction of military emergency response forces, coordinate the construction of military emergency equipment and facilities, and give full play to the emergency role of national defense mobilization forces. In coordinating Marine development and maritime rights protection, we should give consideration to safeguarding maritime rights and interests, and strengthen the capacity for action and the construction of security facilities.

## 3.2 Transformation of Innovation Results

### 3.2.1 Build a Platform System for Civil-Military Integration and Innovation

Technical achievements transfer trading platform. To speed up the establishment of our state dual-use technology trading center, technology transfer center and Chengguoku dual-use technology, strive to break through the “conversion”, “people join the army” two-way channel, provides professional services for the transformation of military technology transfer. First,

we will try to carry out the defense scientific and technological achievements in advance to declassify and declassify, and build online and offline results of online and offline trading platforms based on the Internet platform. We will regularly hold annual national scientific and technological achievements, and launch, evaluate, auction and other matching services on the achievements of dual-use technology transactions involving the whole country.

A platform for integration of military and civilian services. With the model of "Internet +", build "Internet +" civil-military integration demand information engineering, information release, response and feedback closed loop, break and information communication obstacles, complete technology services online platform "optimal division" construction offline physical platform construction and science and technology innovation service center, form the combined technology of online service system.

### **3.2.2 Unimpeded the Transformation Channels of Military and Civilian Scientific and Technological Achievements**

The transformation and industrialization of national defense patent technology. Led by Mianyang city defense science, technology and industry departments, establishing database of declassified national defense intellectual property, to carry out the declassified national defense patent technology trading service, promoting the transformation of the declassified national defense patent technology transfer and industrialization. The patent administration department under the state council shall grant the patent right to national defense according to the examination of the defense patent agency. We will improve the management of national defense intellectual property rights and promote the transformation of military technology to civilian use. We will establish and improve the national defense research achievements and the technical declassification system, and create strong conditions for the transfer of military technology to civilian use.

Military scientific research and production license management. To refine and improve the interim measures for the identification and management of military and civilian integration enterprises, and to establish the identification of the military and civilian integration enterprises in the first place, and to conclude the existing military and civilian integration enterprises in the year. We will further strengthen the research support identification policy, strive for the approval of the implementation of the national defense intellectual property rights declassification and transfer transformation pilot, and promote the transformation of technology transfer and the cultivation of military and civilian integration enterprises. Innovative military research and production licensing management. Speed for mutual transformation between military and civilian technology can be used directly to weapons and equipment research and

production of electronic information and other civil high and new technology and products, establish a dynamic recommended directory, support for secondary development, service for weapon and equipment development.

### **3.2.3 Military Investment Reform**

To have the qualification of weapons and equipment research and manufacturing, the advantage of private enterprises to focus on military task, through investment, lease, borrow, deployment of a variety of ways, such as to accelerate technological upgrading, and improve weapon assembly scientific research and production capacity. Through various policies, especially defense investment, we will focus on developing dual-use technologies with high compatibility. Investment in research and development activities for dual-use technologies to ensure continued international leadership in technologies critical to national security. In military and civilian integration industry, science and technology demonstration park of collaborative innovation center, theater all kinds of equipment mobilization center construction as the focus, to coordinate the local government and relevant departments should give policy, funds, radiation and leading role to support its development.

### **3.2.4 The Establishment of the Military and Civilian Integration Technology Innovation Alliance of Sichuan University**

Defense Gongban, department of science and education department of Sichuan province guidance and support, southwest university of science and technology as "gen", plan and promote the major universities in Sichuan province and the national defense science, technology and industry research institutes and enterprises to establish a "civil-military integration of colleges and universities of Sichuan province technology innovation alliance". Through the construction of the alliance, we can effectively break through the existing "barriers" of military and civilian integration and open up "obstacles" to promote the in-depth development of civil-military integration related work. We will coordinate the construction of major scientific research bases and infrastructure, and promote two-way opening-up, information interaction and resource sharing. We will encourage people's scientific and technological innovation platforms to participate in military and civilian research and production, and build a number of dual-use innovation platforms based on the key laboratories and technology centers of the people's mouth, and promote normal operation.

### **3.2.5 Carry Out Classified Reform of Military Research Institutes**

To formulate the supporting policies for the reform of military research institutes at the provincial level, and to make specific implementation plans for the reform of military research institutes according to the principle of

“one institute (institute)”. We will support the transfer of non-operational assets of military research institutes that are engaged in the production and operation activities, and encourage them to join forces with local units to build military-civilian integration technology enterprises.

### **3.2.6 Strengthen the Collaborative Innovation of Military and Civilian Integration**

Horizontal coordination. The competent departments of national defense and public research should strengthen the horizontal cooperation between scientific research plans and fund management. Defense technology transfer plan should not be limited to the defense industry enterprises and research institutions, through participation in a phased manner, in the project, the research and development, achievements, maintenance and operation each link to realize the fair competition and active cooperation, promote the exchange and sharing of advanced and applicable technology. We will focus on the development and development of military-to-civilian technology and give full play to the leverage of government funds. Aiming at the characteristics and problems of the various stages of the military process, targeted design support measures are used to absorb the research results of the private sector.

Vertical coordination. According to the technology transfer link can be divided into two categories:

(a) Support the project of project approval and r&d activities. For independent research and development activities planned, implemented and funded by the enterprise, the defense department will communicate with the enterprise from the beginning of r&d. If the project submitted by the enterprise meets the “potential interest requirement” standard of the ministry of defense, the r&d expenditure will be compensated accordingly and the risk of technological transformation will be reduced.

(b) Plans for small business development activities. There are small business technology transfer programs, small business innovation research programs and mentoring programs (MPP). The guidance plan (MPP) encourages the prime contractor to provide free technical assistance to small and disadvantaged enterprises (SDBs) as subcontractors, to establish long-term business contacts with the main contractor and to increase subcontracting opportunities. MPP plans to allow the principal contractor to include the cost of technical assistance into the indirect costs of defense projects. We will encourage cooperation between the national defense research institutes and the public sector to cooperate in r&d, technology transfer and other forms of cooperation, especially encouraging small and medium-sized enterprises to step in.

### **3.2.7 Improve the Cooperative Research and Development Mechanism of Military Enterprises**

The military technology is for civilian use. The main objective is to promote the use of the the existing technical and technical bases for the wider use of non-defence purposes. As for the new channels for military

transfer, it mainly supports the mature technology with civil application potential/prospect, vigorously conducts test verification and meets the requirements of commercial application.

Dual-use science and technology activities. We will strengthen research and development of dual-use technologies, and implement the technology reinvestment plan (TRP) and dual-use science and technology program (DUSTP).

The military of the people. Through the research and development and industry cooperation, drives the civil department of national defense scientific research investment, and reform of defense procurement system to expand the supplier base, thus faster to integrate new technologies and military system, meet the needs of the defense procurement cost. There are mainly small business innovation research projects (SBIR), independent research and development (IR&D), technology achievement transformation initiative (TTI), enlightenment project, etc.

### **3.2.8 Special Technology Transfer and Transformation Management Institutions Shall Be Established**

We will set up specialized national defense technology transfer and transformation offices, formulate national defense technology transfer and transformation plans and policies, and manage national defense technology transfer and transformation plans. Establish a database of national defense scientific and technological achievements, establish a unified information platform for national defense scientific and technological achievements, classify statistics, select information of results, and release them regularly to appropriate departments and units; to establish the annual reporting system for the transfer and transformation of national defense scientific and technological achievements; comprehensive evaluation of technology transfer in the field of defense; we will set up a technical transfer intermediary agency to operate the standard, and establish a professional team of transfer and transformation talents. Technical evaluation expert team (evaluation team) in the secondary development process of military technical decryption.

### **3.2.9 Purchasing Mode of Innovative Equipment**

According to the need for the reform of military equipment procurement system, the innovation of equipment procurement mode is promoted. Innovative military procurement information dissemination mechanism, in the construction of weapons and equipment procurement service Mianyang branch, open arms equipment procurement information network Mianyang query point.

## **3.3 Industry Cultivation Level**

### **3.3.1 Support the Technological Innovation and Industrialization of High-Tech Enterprises and Small and Micro Enterprises**

Through the government guidance, small and micro enterprises into the key work in Mianyang city. To have



the qualification, undertaking key military weapons and equipment research and manufacturing task of private enterprises, under the precondition of voluntary enterprises, investment, lease, borrow, deployment of a variety of ways, such as support to accelerate technological upgrading, and improving the capacity of weapons and equipment research and production. Thorough development “thousands of billions of” the small micro enterprise financing cultivation plan, supervise and urge financial institutions with the good of the people’s bank of a small refinancing and rediscount monetary policy tools to deal with the bank for small and mid-sized enterprise “tong” “ticket”, reduce the financing cost.

### **3.3.2 Accelerate the Development of the Military and Civilian Integration Industry and Promote the Development of Cluster Clusters**

Insist on planning for the leading, which is based on the project, to “high-end led, army and people as a whole, optimization of agglomeration, the key drive” for the principle, to break through the growing military and civilian integration industry for key fields, actively use new technology, new technology, new equipment, new materials, vigorously promote the traditional industry technical transformation, optimization and upgrading.

### **3.3.3 Scientific and Systematic Identification Standards of Military and Civilian Integration Enterprises**

In the first place, Mianyang was the first to launch the identification work of military and civilian integration enterprises in China. Firstly, the scientific nature and systematicness of its identification standards were not enough, and further research was needed. Secondly, relevant supporting guidance and support (financial support and subsidy) policies need further intensive research.

## **3.4 Talent Level**

### **3.4.1 Cultivate and Expand the Team of Innovative Talents**

Insist on people first, stimulate creativity, strengthening the construction of civil-military integration innovation of science and technology talent team, through the “provincial institute of” model, founded by featuring military and civilian integration of “Mianyang sci-tech city university”, relying on colleges and universities in the cotton, do a good job in west university institute of defense science and technology and so on a number of departments and professional civil-military integration, the civil-military integration research institute in Sichuan province to build the province’s military and civilian integration talent training, collaborative innovation, technology transfer, technology transfer, and strategic studies, a think-tank. We will strengthen the construction of innovative entrepreneurs, implement training programs

for innovative entrepreneurs, and build training bases for entrepreneurs. The flexible introduction includes a number of high-level talents including the national thousand plan, the academicians of the two houses, the Yangtze river scholar and so on.

### **3.4.2 Innovative Research Talent Management Mode**

In order to speed up the construction of financial center, the support policy of strengthening the construction of financial professionals is put forward. To build up a system for improving military and civilian integration talents training: To improve the relevant education system, and to make the military and social related education resources fully applied in personnel training; we will actively build an institutional system for the integration of the military and the civilian population. To support the establishment of the chief scientist, principal investigator and chief engineer system of university institutions.

### **3.4.3 Innovate Personnel Training and Introduction Mechanism, Improve the Mechanism of Personnel Sharing, Integrate the Advantages of Education and Establish a Sound Training Mechanism for Military Personnel**

First, with “not all, but for the” as the guidance, the construction of domestic and international talents resources sharing platform, a more competitive talent introduction system, to strengthen service as guarantee, retention, optimizing environment, strengthen infrastructure construction, in the life, living, wages, health care, children go to school to knowledge talent preferential treatment, in order to attract high knowledge talented person in developed regions. Second, the establishment of the professional talent special post. In professional stronger government agencies and state-owned enterprises and institutions set up high-end distinguished position, the implementation period of salary management and agreement, flexible way to attract agglomeration jobs in urgent need of high-level professional talents.

### **3.4.4 Improve the Flow Mechanism of Innovative Talents**

We will innovate the mechanism for the mobilization of personnel in the military field and establish a database of dual-use talents. The scientific and technological personnel of colleges and universities can start their own businesses by the approval of the units, such as unpaid leave, paid leave, part-time and salary. We will carry out a pilot program for the two-way flow of innovative talents for enterprises and institutions, and the relevant results obtained by researchers in enterprises can be used as the basis for evaluation of the original unit titles. It allows colleges and universities to set up a certain proportion of mobile jobs to attract entrepreneurs and enterprises to work part-time.



### 3.5 Financial Services

#### 3.5.1 Accelerate the Integration of Finance and Technology and Improve the Financial Service System

In improving the financial service system, we should focus on accelerating the combination of science and technology and finance, and build the technology into a financial support system. We should establish a good transmission mechanism between technology and finance, not only to support the development of science and technology industry, but also to promote the integration of “technology-finance”. First is to promote science and technology of small and medium-sized enterprise loan mode, product and service innovation, and promote the banking institutions to do small business financial services; second is to build a military and civilian integration financial services dedicated to evaluate mechanism, perfect the financial regulatory policies conducive to the development of innovation, exploring to establish expert evaluation system of innovative financial products.

#### 3.5.2 Accelerate the Innovation of Science and Technology Financial Products

We will encourage financial institutions to make special institutional arrangements for the in-depth integration and development of military and people. Actively promote related preparatory work, according to the national unification deployment, according to the conditions and requirements of the pilot, get into TouDai linkage pilot areas, encourage qualified banking financial institutions in the premise of compliance, risk control, in accordance with the law and the venture investment institutions, equity investment institutions such as realize TouDai linkage, support kechuang enterprise’s development. We will support the innovation of commercial Banks in carrying out non-fixed asset mortgage pledge mode. We will improve the credit risk compensation methods for technology enterprises and small and micro businesses. We will energetically develop science and technology and patent insurance, and improve the compensation mechanism for risk compensation for technology insurance, patent insurance and intellectual property rights. We will support eligible military-industrial enterprises to list financing and merger and reorganization.

#### 3.5.3 Improve the Financial Organization System of Service Science and Technology Innovation

Support the eligible private capital to establish private Banks, and support the banking financial institutions in the establishment of key service technology sector branches. To study the credit incentive policy of the science and technology branch of commercial bank and the financial department of science and technology.

### 3.6 Cooperation and Openness

#### 3.6.1 Strengthen the External Opening-Up and Serve as a Platform for Integration and Cooperation Between the Military and the People

With the production base of Changhong in Europe as bridgehead, we support the “go out” of the backbone enterprises such as Changhong and Jiuzhou, and fully integrate into the “One Belt and One Road” national strategy. Build the project of science and technology innovation center city sub-center, high-tech industrial park in Mianyang, planning and construction (Germany), based on is building city international incubator of science and technology, strengthen the cooperative innovation and Chengdu, Deyang, comprehensive free trade zone across, good operating Mianyang cross-border electric business platform for customs clearance, achieve a major breakthrough in the discovery of this year’s investment promotion and capital introduction.

#### 3.6.2 Take an Opportunity to Enhance International Visibility

Elaborate organization good preparation and hosting of the fourth China (Mianyang sci-tech city international science and technology exposition, make sure to invite more than 50 countries and regions to continuous exhibition participants, including world 500 strong, well-known enterprises at home and abroad, research institutes, institutions of higher learning, such as more than 800 units, strive to contract amount exceed 100 billion yuan, comprehensively promote professionalism, effectiveness and internationalization, to expand the international and domestic influence. Launch the third phase project of the science and technology city convention center.

#### 3.6.3 Support for Overseas Innovation and Investment m&a

We will explore a pilot project to set up an overseas equity investment enterprise, and encourage enterprises in Mianyang to set up funds for innovation and investment. Encouraging overseas investment of Mianyang, venture investment, equity investment institutions to explore mergers and acquisitions, to support its cooperation with overseas well-known technology investment institutions to form the international science and technology innovation fund, mergers and acquisitions funds, promote formation of cross-border integration of open cooperation.

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