**Strengthening scientific and technological awareness of strategic capabilities in emerging fields**

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President Xi Jinping profoundly pointed out that strategic capabilities in emerging fields are an important part of the national strategic system and capabilities, which are related to the high-quality development of my country's economy and society, national security and military struggle initiative, and are of great significance to comprehensively promoting the construction of a strong country and the great cause of national rejuvenation with Chinese-style modernization. Strategic capabilities in emerging fields are the cross-generational advantages formed by the application of emerging technologies in the military field, with innovation playing a leading role, the efficient integration and two-way pull of new-quality productivity and new-quality combat effectiveness. On the new journey, we must comprehensively enhance our strategic capabilities in emerging fields, enhance our scientific and technological cognition of strategic, cutting-edge and disruptive technologies in emerging fields, vigorously promote independent innovation and original innovation, strengthen integrated innovation and comprehensive application, and effectively defend national sovereignty, security and development interests.

**Strengthen your understanding of emerging fields**

Emerging fields are new strategic spaces and key technology areas that have emerged with the advancement of science and technology and the expansion of human activities. Seizing the commanding heights of strategic competition and seizing the initiative in future wars depends on a deep understanding and thorough understanding of the value and role of emerging technologies.

Focus on strengthening the military and winning wars and building a solid scientific and technological foundation. At present, strategic high-tech in emerging fields such as artificial intelligence, big data, blockchain, quantum technology, biotechnology, and new energy are having a profound impact on the national defense and military fields. They can not only give birth to new quality productivity, but also effectively provide new quality combat power. It is necessary to build a multi-dimensional knowledge system with information and intelligent technology as the main body, strengthen the study of modern science and technology, especially military high-tech knowledge, timely grasp the latest scientific and technological achievements, scientific and technological means and practical experience, and continuously improve the scientific thinking ability under the inspiration and guidance of scientific spirit, scientific theory, and scientific methods, accelerate the transformation of scientific and technological "variables" in emerging fields into energy for strengthening the military and winning wars, and firmly control the initiative of national development, military competition and future wars.

Focus on new domains and new qualities to cultivate scientific and technological thinking. The development of emerging fields often brings about drastic changes in the mode of production and great social progress, and also profoundly affects the direction of world military development. From cold weapons to hot weapons, from mechanization to the integrated development of mechanization, informatization and intelligence, it is essentially a process of "new quality" replacing "old quality", which contains the continuous improvement of scientific and technological cognition. We must deepen our understanding of the basic principles of science and the technical principles of weapons and equipment, be good at judging the evolution of war forms from changes in science and technology, and grasp the winning mechanism of war from technical principles. We must insist on the resonance of theory and technology, the coordination of strategy and tools, and the advancement of thought and action, and build a fast channel and institutional mechanism for the transformation of advanced science and technology, high-quality potential resources into new quality combat effectiveness, and promote the transformation of strategic capabilities in emerging fields from "quantity" value-added to "quality" improvement.

Focus on empowerment and efficiency to expand the vision of science and technology. As the growth pole of national strategic capabilities, emerging fields are also key areas for the in-depth investment of scientific and technological cognition in high-end warfare. Judging from the recent local wars and military operations in the world, intelligent unmanned combat systems have been put into actual combat in large quantities, and new quality combat power has shown unprecedented transformation and subversion, becoming the "first driving force" for the evolution of war forms. If the scientific and technological cognition is narrow, it may not be able to understand the opponent, the battlefield, let alone win the battle. We must focus on high-tech empowerment and efficiency, examine the general trend of military technological revolution from a multi-dimensional perspective, and see and recognize emerging fields before they sprout. We must firmly establish the idea that science and technology are the core combat power, take the construction of new combat forces as a breakthrough, use the use of new domains and new quality forces as support, focus on the development of people's war strategies and tactics, and deeply explore the technical effectiveness of emerging fields to form a victory advantage in cross-domain asymmetric strategic games.

**Select the main direction of strategic cutting-edge technology**

The core of emerging fields is "technology + innovation". The construction of strategic capabilities in emerging fields is largely reflected in technological subversion and counter-subversion, raids and counter-raids, offsets and counter-offsets. It usually starts with linear gradual changes and leaps and mutations in forward-looking emerging technologies, and then promotes the widespread application and integrated innovation of emerging technologies in the military field through key core technology research and development of core equipment. This technical path requires us to strengthen our scientific and technological cognition, innovation, and application capabilities, aim at the forefront and find breakthroughs to enhance our strategic capabilities in emerging fields.

Make the first move in scientific and technological innovation. Emerging fields are the frontiers of the game between major powers and the key battlefield for defending national security. Once some technologies achieve breakthroughs, the impact will be subversive, which may bring about fundamental changes in the form of war and the way of fighting, and completely subvert the traditional war offense and defense pattern. The construction of strategic capabilities in emerging fields is essentially to strengthen the "new quality" from the source of science and technology, enhance strategic deterrence, and accelerate the transformation of emerging scientific and technological achievements into the military field. We must closely follow the development trend of the new military revolution in the world with a forward-looking vision, clarify the development priorities, and implement the relevant strategies and plans for the construction of strategic capabilities in emerging fields. We must keep a close eye on the changes in science and technology, the changes in war, and the changes in opponents, bravely enter the "no man's land" of science and technology, use advanced thinking to analyze the internal connection between the construction and development of strategic emerging industries and new combat forces, and dare to put forward new theories, explore new fields, and open up new paths.

Identify technical traps in emerging fields. Emerging fields are rich in technology, resources and industries, and contain tremendous energy that affects national security. To enhance scientific and technological cognition, it is important to improve technical sensitivity to new inventions and creations in emerging fields. We must "go to a higher level" in scientific and technological cognition, identify the authenticity of forward-looking, leading and disruptive technologies that are included in the military development vision, and avoid "traps". We must start both theoretical innovation and scientific and technological innovation engines to lay a solid foundation and add confidence to cope with the "worst case" on future battlefields. We must aim at the forefront of science and technology, accurately judge the application prospects of digitalization, intelligence, networking, etc. in future wars, and provide "hard core" support for our army to remain invincible.

Guard against potential adversaries' technological surprise attacks. When the results of scientific and technological innovation in emerging fields are applied to the military field, the first mover can easily take the initiative by taking advantage of technological advantages, while the latecomer can hardly "change the rules of the game". If there is a gap in scientific and technological cognition, there may be a technological gap in shaping new quality combat power, and there is a risk of being attacked by the opponent's new combat force technology. It is necessary to closely follow the dynamics of the main adversaries' technological frontiers, especially disruptive technological innovations, and determine the correct follow-up and breakthrough strategies for the construction of strategic capabilities in emerging fields. We must aim at the future issues of "what war to fight, who to fight, where to fight, and how to fight", adhere to the national security strategic needs and the actual combat capabilities of the military, fully recognize the pros and cons of technological innovation in emerging fields on all parties and the degree of impact, develop and accumulate resources in emerging fields, and enable the results of scientific and technological innovation in emerging fields to better empower the decision-making chain, command chain and combat power generation chain.

**Fully liberate and develop new quality combat capabilities**

The development of emerging fields is fundamentally derived from the innovation and application of science and technology, which provides the material basis and technical support for the generation of new quality combat power. The biggest feature of new quality combat power is "new". The higher the scientific and technological cognition, the stronger the innovation and creativity in emerging fields. By building a bridge to transform the scientific and technological strength and innovation strength in emerging fields into military strength, we can generate new quality combat power with new principles and new mechanisms.

Constructing a new type of combat power to generate quality. The construction of strategic capabilities in emerging fields is a complex system project, which includes not only the research and development and deployment of hardware facilities, but also the construction and application of software systems, as well as the new combat theories, tactics, strategies and rules of action formed on this basis. We must innovate and explore new combat force construction and application models, and abandon the old combat power system from the aspects of new expansion of combat domains, new changes in winning mechanisms, new modes of weapons and equipment, and new forms of force organization. Strengthen scientific and technological innovation in deep sea, space, underground, polar regions and other fields, improve the conversion rate of scientific and technological achievements, and give birth to new elements of combat power system. Aiming at the bull's eye of combat needs, promote the transformation and application of scientific and technological innovation achievements in emerging fields to combat, training, management, equipment and other fields, promote a qualitative leap in combat power, and create advanced combat power with full-factor, full-process and full-system combat capabilities.

Accelerate the effective supply of new quality combat power. At present, emerging fields are showing an all-round, multi-field and deep-level development trend. The core technology supporting the generation of new quality combat power has accelerated the transformation from traditional categories to emerging fields. Driven by scientific and technological innovation, when the directions of various fields trigger changes in the quality, direction, scale, and function of the core factors of combat power - "lethality" through multi-point breakthroughs, multi-party penetration and deep integration, new quality combat power will be generated. We must deepen reform and innovation, highlight the reform of emerging fields, build an independent, self-reliant, open and integrated, and vibrant innovation ecology, and promote multi-point breakthroughs and group bursts of scientific and technological innovation in emerging fields. Accelerate the generation of new equipment capabilities and talent training and pre-placement, and stimulate the vitality of various elements of new quality combat power with high-level emerging field talents of high quality supply. Improve and perfect the institutional mechanisms in demand docking, planning connection, resource sharing, etc., take the path of standardization and generalization, broaden the transformation path, and accelerate the penetration of scientific and technological innovation into various units of combat power. Deepen the reform of the defense science and technology industry system, build an innovation chain, industrial chain, and value chain that are compatible with the development of emerging fields, pool forces and resources from all sides, create birthplaces and growth poles for the materialization of emerging technologies, and strive to form a systematic emergence and synergistic effect of new quality combat capabilities.

Explore new modes of using combat power. Scientific and technological cognition forms a multiplier effect of technological advantages in emerging fields, and promotes the continuous development of new modes of using combat power. It is necessary to use "iterative" thinking to plan the development of emerging fields, unify the development of traditional fields with the expansion of emerging fields, and "change lanes and overtake" around advanced technologies that "cannot be bought" to create "trump cards" in emerging fields. Accurately grasp the significant characteristics of hybrid warfare in the digital age, based on the present and beyond the present, focus on the leading directions of strategic planning, campaign command, tactical application, strategic delivery and logistics support, make good use of new technologies and means such as big data and artificial intelligence, integrate and promote the combat application of new forces and tap the potential of current equipment capabilities, and continuously improve the effectiveness of the systematic application of combat power.

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