

# Seizing Historic Opportunities to Develop Our Weapons Systems

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At the turn of the century, tremendously powerful waves of a worldwide new military revolution are hitting hard on the traditional military. The trend to thoroughly modernize weapons systems, backed by comprehensive national power, in order to increase military strength, has provided us with not only serious challenges to the buildup of our military's weapons programs, but also great opportunities for leapfrogging development of our weapons equipment. We must become aware of this and seize these historic opportunities to develop our military's weapons systems as the foundation and prerequisite of this leapfrogging development.

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## THE ERA OF PEACE AND DEVELOPMENT HAS TURNED A NEW PAGE FOR OUR COUNTRY'S WEAPONS DEVELOPMENT

Since the Cold War ended, the world situation has been moving toward multipolarity; in this period of peace and development, the international security environment has seen fundamental changes. The era's main characteristics of peace, stability and development have altered the trend of global weapons development from a massive arms race to comprehensive competition in high-tech areas; the increasingly transparent pattern of global multipolarity further highlights the deterrent effect of high-tech weapons within various military forces. Large-scale wars will not break out for a relatively long period of time, which gives our nation excellent opportunities to take a great leap in developing our weapons equipment.

### A. Global Weapons Developments from Large-Scale Arms Race to Comprehensive Competition in the High Tech Areas

During the 1990's, the overall international security situation has shown two characteristics: the first is the disintegration of the Soviet Union and the disappearance of bi-polar confrontation. The military alliances or the direct confrontations among the militarily powerful nations no longer exist. A large-scale global war will be unlikely to occur for a relatively long period of time. The second is the rapid development of science and technology and the wide application of high-tech products in the military. Global weapons development has been going through a change from large-scale arms race to

comprehensive competition in the high tech areas. This has forced various countries' weapons development to abandon programs designed specifically for the short-term demands of a large-scale war, and to instead adopt a new policy of comprehensively developing weapons that are future-oriented and have long-term implications. The major militarily powers are also taking advantage of the current tendency of international order toward peace and of the unlikelihood of a large-scale war in the near future to actively promote the progress of the new military revolution to guarantee advantages in acquiring military technologies and weapons equipment, and to gain the freedom of action in future wars.

After the Third Plenum of the Eleventh Party Congress, there has been a strategic shift in the guiding doctrine for our military, and the development of our weapons programs has also entered a new historical age. It is absolutely necessary and possible that we fully take advantage of the auspicious opportunity of the unlikelihood of a global large-scale war, and develop long-term plans for our weapons equipment, drastically raise the technological components and combat effectiveness of our weapons systems. We can achieve all this by following the basic laws of weapons development and the basic demands from our military's operational units.

#### B. The Development of A Multi-Polar World Still Requires the Support of Sufficient Military Strength

As demonstrated by the actual historical course of international society since the end of the Cold War, the five major power centers, i.e., the U.S., Russia, Japan, Europe and China, are exerting stronger and stronger influence over the developments of the world's politics, economy, military, and science and technology. Through several years' competition, re-adjustments and re-alliance, the U.S., Russia, Japan, Europe and China are gradually formulating an international pattern of "One Superpower with Many Big Powers," which is marked by its being multi-layered and multi-polar. These five nations mutually compete, restrict, and co-exist with each other. In this new round of competition through comprehensive national powers, although economics and science and technology assume leading roles, military strength, due to the influence of the Cold War thinking, still is the major factor in engendering changes to the world order. Weapons equipment as an important hardware foundation of any military strength still is the key objective of development in some major militarily strong nations.

As a developing socialist country, China already assumed "big power" status ever since the founding of the United Nations. Especially since the Third Plenum of the Eleventh Party Congress, reforms and openness have ushered in remarkable progress in our national economy, and our comprehensive national power and international prestige have been noticeably enhanced. We have in turn made our due contributions to safeguard world peace, global stability and

international development, which have won trust and praises from developing countries worldwide. The facts have proven that in the settlements of any current and future international affairs, especially the settlements of affairs of the Asian countries, the world can not afford losing the participation of China, a nation of 1.2 billion people. During the process of the gradual formation of a multi-polar world order, if China, as a big developing country, would seek to fully play its important role on international stage, China must have a strong military as its buttress. The international community expected as much.

## THE UNINTERRUPTED GROWTH OF OUR NATIONAL ECONOMY HAS LAID THE SOLID FOUNDATION FOR THE DEVELOPMENT OF OUR WEAPONS EQUIPMENT

“By the end of this century” is an inspiring phrase. Comrade Deng Xiaoping once uttered the following words with resounding confidence, “To quadruple our GNP is of great significance. It means that by the end of this century, our GNP will reach \$1 trillion. That total sum will place us among the leading countries in the world.” Comrade Deng also said, “By then, if we take one percent of our GNP for defense, it will be \$10 billion. It will be quite easy then to improve some of our military equipment;” and “By the end of this century, we will surely reach our goal of quadrupling our GNP, by then our economic strength will be formidable and we will be able to spend more money on upgrading our military equipment.”[1] In 1995, our nation reached the grand strategic goal of quadrupling our GNP, five years ahead of the schedule, and we have kept our economy growing uninterrupted. Without a doubt, the next century will be the great opportunity for our military to take off in military modernization and wholesale upgrading of our weapons systems.

### C. Maintaining To Be The Fastest Growing Economy In The World Has Greatly Strengthened Our Comprehensive National Power

The national economy is the material foundation for defense development. The level of a country's comprehensive national power will directly determine its potential for defense development, thus deciding the speed and scale at which its defense S&T and weapons equipment develop. In 1980, our GNP was 451.78 billion *renminbi*; by 1995, it reached 5,765 billion *renminbi*, an increase by 4.3 times according to comparable price index. This was done within 15 years of time. Our country has become the 7<sup>th</sup> largest economy after the U.S., Japan, Germany, France, Italy and the Great Britain, all traditional big powers. Since 1980, the average annual growth rate in our economy has been 10.2%, which is more than three times of the world's average during the same period. We have become the fastest growing and most vibrant economy in the world. By experts' predictions, the momentum of our growth is expected to continue to the year 2020, which lays a strong economic foundation for our nation's weapons development.

#### D. Within Our Powerful Industrial Base Lies Tremendous Potential For Weapons Development

Since the 1990s, our nation's basic industries have been rapidly growing. Take the telecommunications industry as an example. In 1990, our nation's telephone exchange capacity was 12.31 million switches; by 1995, it reached 72.03 million, an annual increase of 42%. Nationwide, the percentage of the population that has access to telephones jumped from 1.11% to 4.66%. During the entire 1990's, our country planned to construct an "eight vertical lines by eight horizontal lines" network of fiber optic communications. During the "Eighth Five Year Plan," we finished a network of "three vertical lines by five horizontal lines." By 2000, we predict that the total length of fiber optic lines in our country will reach more than seventy thousand kilometers, with the inter-provincial and intra-provincial fiber optic lines reaching even more than two hundred thousand kilometers. By then, there will be a nationwide communications network woven together with numerous east/west and north/south fiber optic lines. A powerful telecommunications industry will greatly help bring our nation into the age of the information society.

In particular, our nation's computer industry, during its fierce competition with the computer giants of the world, has chosen a route most appropriate to our nation's conditions and has been successful in leapfrogging ahead. According to related statistics, in 1990, total value generated by the computer industry in our country was only equivalent to five billion *renminbi*; in 1995, it reached 61.5 billion *renminbi*. It is predicted that by 2000 it will go over 200 billion *renminbi*, an annual increase of 47%. According to predictions by concerned agencies, the demand in our country for personal computers will exceed six million by 2000. Our developed computer industry and huge market demand for computers signal the coming of an information society, and it simultaneously has laid the foundation for our nation to welcome the challenges posed by the new military revolution and to totally develop information-based weapons systems.

#### — — EMBRACE THE OPPORTUNITY FOR DEVELOPING OUR WEAPONS SYSTEMS, AS BROUGHT UP BY THE CHALLENGES COMING FROM THE NEW MILITARY REVOLUTION

Headed by the United States, the coalition forces during the Gulf War defeated Iraq with overwhelming superiority. This event warned people all over the world that clusters of advanced technologies, with information technology at the core, were changing the face of the military and of future wars. A worldwide military revolution is unfolding. Every nation is struggling to set a foothold in the global competition of the next century. Embracing the challenges posed by the global military revolution will bring us excellent opportunities for our weapons development.

E. Thinking Far Ahead While Studying Military Theories Will Play An Important Role In Guiding Our Weapons Development

Based on each country's specific conditions, every nation has chosen its own route to develop the weapons systems most suitable to the country. In our country, our defense industry has a weak base, the gap between our weapons equipment and that of the developed countries is quite wide; in addition, there are also many items we don't have at all. While embracing the challenges of the new military revolution, we face many difficulties in developing our weaponry. This requires us to have the correct theories as guidance.

As the new and advanced technologies rapidly develop, during the process of converting these technologies into military applications, people have been closely studying the important roles that high tech may play in the future wars. Theoretical study indicates that the emerging new military revolution has been fundamentally motivated by the demand to completely upgrade military technologies. The high-tech clusters led by information technologies are changing every aspect of future military forces, and they will create a qualitative leap in changing the way the future war will be fought. Unquestionably, the development of weapons systems will also take a qualitative leap forward – a leap toward information-based, artificial intelligence-based and holistic developments. This tendency will greatly influence the cross-the-board structural adjustment of our weapons systems, and the formation of a whole new way of thinking for further weapons development.

F. The Emergence of the New Military Revolution Can Help Make A Trans-generational Leap For Our Weapons Development

Unlike the monopolizing nature of the core technologies in the past military revolutions, the core technologies of the current new military revolution – information technologies – possess a highly distributable nature that allows people to easily disseminate them. As important strategic resources, information technologies themselves are made for the purpose of easy communications. They have the characteristics of being impossible to be monopolized and being able to be shared by all. Especially the process of global economic and S&T integration further encourages the dissemination of information technologies. Driven by economic interests, those new information technologies traditionally applied to the battlefields are often developed and upgraded in the civilian worlds. The characteristics of information technology's easy dissemination and duo-use capability have determined that any country's hold on new technologies can be broken; that any superiority in technologies will be temporary; and that it's completely possible for the technologically relatively backward countries to emerge robust from the race and surpass the leaders. The emergence of the Four

Little Asian Dragons in the 1970s, and the current leading status enjoyed by Israel in electronic field have given us great inspirations in this regard.

Since the 1980's, the rapid and robust development in information technology has brought profound impact upon various countries' economies, militaries and social lives. Taking advantage of the highly disseminateable nature of the information technology, we can obtain part of the new and advanced technologies, while in the mean time sharing certain more maturely developed advanced technologies in the international arena. Through digestion and absorption, we can push forward the starting point for our technological research, thereby bypassing some phases of the technological development, and shorten the distance between the developed countries and us in military technologies. By so doing, we will bypass a whole generation of weapons development and make a great leap forward.

## THE COMPLETION OF “TWO FUNDAMENTAL CHANGES” HAS GUIDED OUR WEAPONS DEVELOPMENT IN THE RIGHT DIRECTION

Under the new historical circumstances, the Central Military Commission of the Chinese Communist Party, with brilliant foresight and sophisticated understanding of our times, has formulated our military strategy for the new era, and called for “two fundamental changes” in our military construction. The military strategy for the new era not only clarifies our military's mission and guiding principles in future military struggles, but also provides the guiding doctrine for building our military. It demonstrates the objective laws of keeping military readiness for military struggles under the economic conditions of socialist market economy. In carrying out the military strategy for the new era and completing our military's “two fundamental changes,” it is key to enhancing the quality of our military, to pursuing a strong military through science and technology.

### G. The Development of Weapons Equipment Is An Important Part of Our Military's Modernization

To carry out the new military strategy for the new era is to study the main mission facing our military in the future military struggles, to grasp the basic trend of changes and developments of modern wars in the context of advanced technologies, to modernize our weapons systems as demanded by future warfare and military struggles, and to increase our military's fighting capability in a modernized regional war. Comrade Jiang Zemin, when commenting on weapons development, once pointed out, “We must raise our troops' fighting ability, and emphasize at all time weapons improvement. It is wrong and dangerous to neglect this. When our nation's finances and resources permit, we must take as much money as possible to strengthen our weapons equipment.”[2]

To complete the “two fundamental changes” in our military work reflects the overall demand of our military for a total improvement in the new era. Specifically speaking, for weapons development, we should rely upon scientific progress to elevate our military’s level of weapons modernization. Past experiences have proven that if you failed to rely upon scientific progress, failed to raise the degree of technological components in our weapons systems, it would be unlikely for us to control the terms of the fighting in future wars. Deng Xiaoping pointed out long time ago that “nowadays the development of the world, especially the development in the advanced technologies moves forward rapidly. China should not be complacent with being backward, we must from the beginning participate in the development in this field.” He on numerous occasions stressed that scientific research must lead the way. “We must improve our equipment, speed up our defense modernization, while we constantly develop our national economy.”[3] These statements fully manifest the importance of developing our military’s weapons systems by relying upon scientific progress. They also reflect Comrade Deng Xiaoping’s desire to enhance our military’s overall quality by way of improving the quality of our weapons systems.

#### H. The Strategic Thinking of “Strengthening Our Military Through Science And Technology” Lays the Theoretical Foundation For Improving the Quality of Our Military’s Weapons Equipment

“Strengthening our military through science and technology” is an important strategic thought with which to strengthen our military’s construction. Whether our combat capability can be lifted fundamentally, whether we can win a regional war in the context of advanced technologies, whether we can withstand the test of the 21<sup>st</sup> century’s military struggles, fundamentally depends upon whether we can rely upon the advances in science and technology and develop our military’s advanced weapons systems. The strategy of “Strengthening our military through science and technology” is not only a necessity in carrying out our new military strategy for the new era, in sync with the tide of the new military revolution, but also a conclusive statement of our military’s historical experiences. This strategic thought not only displays the important characteristics of scientific and technological development, but also reflects the internal laws of weapons development.

When applied to weapons development, science and technology becomes the pulling pin with which to raise our combat capability, and the “multiplier.” While science and technology enhance weapons technical sophistication, they have also completely changed the old appearance of the “man vs. weapons” combat relationship, forcibly made various elements of the combat capability change to adapt to new technological conditions and new technological methods. About this, Frederick Engels has given us the classic summary, “Once technological advances could be applied to military operations and

once they have been used for military purposes, they at once forcibly, and often against the will of the commanders, cause changes even reforms to the way the war is fought.” [4]

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Discovering opportunities, seizing opportunities, and developing ourselves have been the important components of Deng Xiaoping’s military construction thought system for the new era. They are also the theoretical basis for our nation’s weapons development. Comrade Xiaoping pointed out on many occasions that “Excellent opportunities such as now are so hard to come by” that “We should never lose the timing and opportunities;” that “Whenever encountering opportunity, never let it go away,” and that “We must be good at solving our problems by grasping the timing and opportunities.”[5]

He also stressed that to seize opportunities, we should not just pay attention to affairs at hand, but instead, we must utilize a macro approach to study things. We must take the initiative and be keenly aware of what lies ahead; if we are busy in passively responding to things, we cannot be well equipped to grasp the opportunity. Only when we scientifically predict and analyze the situation, and recommend proposals with specific objectives, can we avoid panicking when encountering opportunities. To grasp opportunities requires creative spirit. Dogmatic devotion to old rules and old traditions can only let the hard-to-come-by opportunities slip away. In this regard, Comrade Xiaoping’s attitude was, “once the target was set, we should daringly try, and rush to it without trepidation.” Only by “trying” and “rushing” can we make the opportunities better serve our own development. To grasp opportunities also requires decisiveness and bravery. Any display of indecisiveness and reluctance before opportunities often leads to the loss of timing and opportunities, placing us in a disadvantageous position. Therefore we must develop the unusual bravery and chutzpah with which to grasp opportunities. The development of weapons equipment is connected with the safety of our country, and the life and death of our nation. Under the new historical circumstance, astute observation, careful analysis, decisive policy, and leapfrogging advances are key to grasping historic opportunities for the all-encompassing development of our weapons systems.

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