



In Their Own Words:

Science of Second Artillery Campaigns

Translations from Chinese source documents



The “In Their Own Words” series is dedicated to translations of Chinese documents in order to help non-Mandarin speaking audiences access and understand Chinese thinking. CASI would like to thank all of those involved in this effort.

In the “In Their Own Words” series, CASI and its collaborators aim to provide Chinese texts that illustrate thoughtful, clearly articulated, authoritative foreign perspectives on approaches to warfare at the strategic, operational, and tactical levels.

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IN THEIR OWN WORDS

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TRANSLATORS’ NOTES

This translation of the original text aims to accurately capture the technical meanings, in both English and Chinese. This will ensure that the reader will not inadvertently draw the wrong substantive understanding based on inaccurate translations.

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Notice

In order to reinforce basic theoretical research, push the innovation and development of our military campaign training, explore the winning laws of informationized warfare and campaigns, and fully train high-quality campaign command talents, *the Science of Campaigns*, *the Science of Joint Campaigns*, *the Science of Army Campaigns*, *the Science of Naval Campaigns*, *the Science of Air Force Campaigns*, and *the Science of Second Artillery Campaigns*, complied by the Academy of Military Science, the Navy, the Air Force, and the Second Artillery, are printed and distributed to the entire military forces, colleges, and universities as a training and learning reference.

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Chapter 1

A General Introduction to the Scientific Discipline of the Study of Second Artillery Corps Campaigns

The study of Second Artillery Corps campaigns is an important component of the campaign theories of the People's Liberation Army (PLA). It belongs to the category of military academic studies. An in-depth study of the theories of the scientific academic discipline of the study of Second Artillery Corps campaigns is of great significance to an in-depth understanding of the intrinsic objective laws of the study and to the enrichment and development of the theoretical system of the scientific discipline of campaign studies of the Chinese People's Liberation Army.

Section 1. The Definition, the Objects of Study, the Missions and the Content of the Study of Second Artillery Corps Campaigns

Any independent scientific discipline of study has its own peculiar intrinsic meanings, objects of study and missions. As a complete and independent scientific discipline of study, the study of Second Artillery Corps campaigns inevitably has its own peculiar intrinsic meanings, clear objects of study, missions and contents.

I. The Definition of the Study of Second Artillery Corps Campaigns

The study of Second Artillery Corps campaigns is a scientific discipline that studies Second Artillery campaigns and the laws of their direction. As a Class B discipline of campaign studies, it must have clear objects of study, systematic theoretical strata and knowledge structures that can reflect the basic theories and basic laws involved in the formulation and development of Second Artillery Corps campaigns. There must also be a set of scientific methodologies necessary for the acquisition of knowledge of the discipline. The representative work of its theoretical system is The Study of Second Artillery Corps Campaigns, which reflects in concentration the content of the knowledge

of Second Artillery Corps campaigns. It is systematic and theoretical with guidance qualities as well as the characteristics of relative stability within a considerable period of time. **[end of page 1]**

II. The Objects of the Study of Second Artillery Corps Campaigns

Generally speaking, the study of Second Artillery Corps campaigns has Second Artillery Corps campaigns as objects of study. By using scientific methods, it seeks to reveal laws of the campaigns, explores theories for the directing of campaign actions and elevates such theories to a relatively systematic and complete scientific system in order for it to serve as the basis for guiding and commanding future campaign actions.

To study Second Artillery Corps campaigns, one must not only proceed from practices of various types of campaigns but also explore the theoretical aspects.

The campaign practices of the Second Artillery Corps are the objects of study of campaign studies. They include both past campaign practices and future possible campaign practices. To investigate and study past activities in campaign practices and to understand and summarize historical experiences are of great importance to the revelation of laws peculiar to Second Artillery Corps campaigns and to their application in guiding future campaign operations. With the massive penetration of modern information technologies into the units of the Second Artillery Corps, guided missile weapons and equipment, already high in technology content, have become even more automated and digitized. Such developments will greatly spur huge changes in the operational thoughts and concepts of the Second Artillery Corps. Inevitably, they will also give impetus to continuous updates and development of future activities of Second Artillery Corps campaign practices. This requires us to, based on the experiences acquired in past campaign practice activities and in view of changes in future battle fields, weapon equipment and systemic establishment, and to study and resolve issues that one may encounter in Second Artillery Corps campaigns. In this sense, the study of Second Artillery Corps campaigns should have the future in sight and focus on practices of Second Artillery Corps campaigns under informatized conditions.

Campaign guidance theories play an important role in guiding campaign practices. Practices, in turn, are dependent to certain extent on theories. Under informatized conditions, the research and development, and the production of weapon systems of the Second Artillery Corps, the form of the corps' organizational structure, **[end of page 2]** and the concrete ways and combat methods of the corps' campaign operations, all have campaign guidance theories as the lead. Given that the Second Artillery Corps has yet to have any concrete actual combat experiences, we should conduct in-depth study of the theoretical results of guided missile campaigns both ancient and contemporary, both Chinese and foreign, and should explore guidance theories for Second Artillery Corps campaigns.

Hence, we should study in a comprehensive way the objective laws on the origination and development of Second Artillery Corps campaigns, explore factors affecting their development and relations with other aspects, and forecast trends in future campaign developments. This is of great significance to guiding future campaign practices.

III. The Research Missions of the Scientific Discipline of Second Artillery Corps Campaign Study

Mao Zedong pointed out in his article “The Issue of Strategy in Chinese Revolutionary Wars” that to study war guidance laws that have implications for the overall situation is the mission of strategic studies, while to study war guidance laws with local implications is the mission of campaign study and tactics study.

Second Artillery Corps campaigns, as a special social phenomenon, have their own basic laws in origination, development and movement. They are inevitably linked to the development of other social phenomena, natural phenomena and matters, and to the changes in the modes of human thinking. Hence, the basic missions of the study of Second Artillery Corps campaigns are to reveal the laws of Second Artillery Corps campaigns, explore laws for guiding Second Artillery Corps campaigns, forecast trends in the development of Second Artillery Corps campaigns, and perfect theories of the scientific discipline of the study of Second Artillery Corps campaigns, so that the study can serve to correctly guide Second Artillery Corps campaign practices.

1. Revealing the Laws of Second Artillery Corps Campaigns

The laws of Second Artillery Corps campaigns are the basic laws of campaign movements of the Second Artillery Corps. They are the objective essence of contradictions between different phenomena present in the entire process of a campaign, and an inevitable trend in their connections and development. They are an objective existence that is not determined by human wills. They are revealed through activities in campaign practices. **[end of page 3]** And they are objective laws with universal guiding significance to different types of Second Artillery campaigns. Thus, revealing such laws is the primary mission for the scientific discipline of the study of Second Artillery Corps campaigns.

Campaign laws are differentiated into general laws and specific laws. In the revelation of campaign laws, one should study those common laws reflecting general conditions, nature and applicable universally in different campaign modes while, at the same time, studying specific laws of Second Artillery Corps campaigns under specific conditions at different times, in different locations and of different natures. One can only guide a campaign to victory by applying general laws and combining them with the practical conditions of a campaign, finding specific laws, and using them to guide campaign actions.

2. Exploring Laws for Guiding Second Artillery Corps Campaigns

Laws for guiding Second Artillery Corps campaigns are guiding thoughts, principles, combat methods etc. that people have come to understand in campaign practices and people use to guide campaign actions. They are the conscious application of objective campaign laws to subjective guidance. They are also the products of combining subjective guidance with objective practices. They come from the objective and in turn, are applied to the objective. Campaign study seeks not only to reveal campaign laws but more importantly also to apply the understanding of campaign laws to operational actions, exercise comprehensive and systematic abstraction of campaign operation laws, and find the correct laws for guiding campaigns.

3. Forecasting Trends in the Development of Second Artillery Corps Campaigns

Marxists believe that human objective cognance is a reflection of objective matters. Generally speaking, a Second Artillery Corps campaign is like any other objective matter; it develops and changes with the changes of the factors affecting its existence. For instance, the upgrades and replacement of guided missile equipment, changes in systemic establishment, the increased complexity of factors of battlefield environment, the main threats one faces and the birth of theories of joint operations, all have a direct impact on **[end of page 4]** the development and changes in the guiding thoughts, operational principles, campaign modes and combat methods of Second Artillery Corps campaigns. Hence, in understanding Second Artillery Corps campaigns, one should use developing views and scientific methods to analyze and promote various factors affecting the development and changes of Second Artillery Corps campaigns, and accurately forecast trends in campaign development.

Only on the basis of an in-depth revelation of campaign laws, accurate mastery of campaign guiding laws and a scientific forecast of trends in campaign development can one correctly guide future campaign practices and lead campaigns to victory.

4. Perfecting Theories of the Scientific Discipline of the Study of Second Artillery Corps Campaigns

The study of Second Artillery Corps campaigns has been an independent discipline of study for less than 20 years. It is a young scientific discipline of study and an imperfect discipline. Hence, based on existing theories of the discipline, with the development of Second Artillery campaigns and with the deepening of understanding of such campaigns, it is also an important mission of the study of Second Artillery Corps campaigns to study the various factors affecting the development of the study of Second Artillery Corps campaigns and their relationships, explore laws of their development, and put forward new scientific research tasks, content and methods.

IV. The Contents of the Study of Second Artillery Corps Campaigns

To determine the content of the scientific discipline of the study of Second Artillery Corps campaigns is of extremely important significance to revealing campaign laws and to exploring effective combat methods that are suited to the realities of the Second Artillery Corps.

The contents of the study of Second Artillery Corps campaigns mainly include the following areas:

1. The Nature of a Second Artillery Corps Campaign

The nature of a Second Artillery Corps campaign is the essential character that distinguishes it vertically from a war and a battle and horizontally from other service campaigns. It is **[end of page 5]** the logical starting point of the study of Second Artillery Corps campaigns. Only by accurately grasping the special nature of the Second Artillery Corps campaign can one accurately grasp the correct direction in the study of Second Artillery Corps campaigns, strictly distinguish different strata in military struggles and the relationships with other neighboring military science disciplines, and let the special features of its own theories stand out.

2. The History of Development of Second Artillery Corps Campaigns

Although the history of Second Artillery Corps campaigns since its origination is short, it nevertheless follows certain laws in its development. A study of the impact and factors constraining its development, summarizing experiences and lessons in campaign practices, exploring its basic laws of development and forecasting its development trends is of great significance to making well-targeted preparations for military struggles in the new era and to correctly guiding future Second Artillery Corps campaign operations.

3. The Essential Elements and Laws of Second Artillery Corps Campaigns

The essential elements of Second Artillery Corps campaigns are the necessary factors for the formation of a Second Artillery Corps campaign. They mainly include Second Artillery Corps campaign forces, campaign battlefields, campaign timing, campaign command, campaign information, campaign support etc. This is an important content of the study of Second Artillery Corps campaigns. To study campaign essential elements, one should start with a study of the special characteristics of the various essential elements of Second Artillery Corps campaigns and their impact on Second Artillery Corps campaigns. It should be followed by an exploration of the relationships between different essential elements and their inexorable links to the campaign so as to reveal the inner objective laws.

4. The Characteristics of Second Artillery Corps Campaigns

Focusing on characteristics and development is the basic approach in the study of military struggles. It is also the basic approach in the study of Second Artillery Corps campaigns. Characteristics are reflections of laws. Only by grasping the characteristics of Second Artillery Corps campaigns, especially those characteristics of campaign organization and execution in future informatized wars, can we accurately master the basic laws of Second Artillery Corps campaigns **[end of page 6]** and apply such laws to correctly directing future war to victories.

5. The Guiding Thoughts and Principles of Second Artillery Corps Campaigns

The guiding thoughts and the basic principles of Second Artillery Corps campaigns are the basic guidelines for guiding Second Artillery Corps campaign actions. They are important components of the guiding laws for Second Artillery Corps campaigns and an important content of the study of Second Artillery Corps campaigns. Only on the basis of systematically summarizing experiences of past campaign practices and on the premise of scientific forecasting of future campaigns can one scientifically put forward guiding thoughts and principles of Second Artillery Corps campaigns that are compatible with the realities of the Second Artillery Corps.

6. Preparations for A Second Artillery Corps Campaign

Campaign preparations are an important condition for a smooth execution of a campaign. They include two parts – peacetime preparations and preparations on the eve of a war. In the study of Second Artillery Corps campaigns, only by basing oneself on the objective needs of future wars and by putting forward in a comprehensive and scientific manner the basic conditions and contents of campaign preparations can one achieve “precaution averts perils” and lead a campaign to victory.

7. The Methods for the Organization and Execution of Second Artillery Campaign Corps Operations

Operational methods are namely combat methods. Combat methods are at the heart of the campaign studies. They are also at the heart of the study of Second Artillery Corps campaigns. To study combat methods, one should have concrete campaign forms as the object. One should not only study methods for the organization and preparation of a campaign but also study methods to achieve victory in different phases of a campaign, in different environment and with different targets. At present, we should pay special attention to the study of new combat methods under informatized conditions and in the face of powerful enemies.

8. The Command of Second Artillery Corps Campaigns

Campaign command is an extremely peculiar and complex activity. It has its own special, **[end of page 7]** essential and inherent laws. Only on the basis of in-depth analysis and study of Second Artillery Corps campaign phenomena can one recognize laws of campaign command. Practices have proved that correct command can enable a weaker party to win against a stronger adversary. Conversely, command mistakes can result in failure on the part of a stronger party. In campaign studies, one should follow closely campaign strata and reveal in detail the special laws in Second Artillery Corps campaign command so as to establish campaign command principles.

9. Campaign Coordination of the Second Artillery Corps

In the organization and execution of a Second Artillery Corps campaign, one cannot achieve the campaign objectives if there are no well-coordinated actions. Especially in a joint campaign, there is both coordination within a Second Artillery campaign large formation and coordination of a Second Artillery campaign large formation with other services and arms. Thus, coordination is one of the basic principles of campaigns. Coordination ways and methods in different environment and under different campaign form conditions are one of the important contents of the study of Second Artillery Corps campaign.

10. Campaign Support of the Second Artillery Corps

Campaign support of the Second Artillery Corps is an important guarantee for the smooth execution of a campaign. Since the Second Artillery Corps is a high tech military force, one must conduct overall integration of the main battle equipment with support equipment if the capabilities of the guided missile equipment are to be fully utilized. Thus, campaign support is one of the important components of the combat capabilities of the Second Artillery Corps. It has its own special status and role. To conduct in-depth study of the contents and methods of various types of support is one of the indispensable contents in the study of Second Artillery Corps.

11. Development Trends in Second Artillery Corps Campaigns

Second Artillery Corps campaigns lack practical operational experience. Today, when information technologies spring up continuously and are applied widely, wars and campaigns **[end of page 8]** have undergone profound changes both in their types and forms and in operational methods. The application of guided missile weapons in the recent high tech local wars has given us much food for thought. We must make accurate forecast about the future, draw on useful experiences of the past, search for laws of its development, and place the study of Second Artillery Corps campaigns in a correct direction. Only by doing so can we have clearer aims in the research and development of weapons and equipment of the Second Artillery Corps, in campaign force establishment, in campaign training and exercises. Thus, forecasting development trends in Second

Artillery Corps campaigns is also one extremely important content of the study of Second Artillery Corps.

Section 2. The Formation and Development of the Scientific Discipline of the Study of Second Artillery Corps Campaigns

As any other matter, the scientific discipline of the study of Second Artillery Corps campaigns has an inevitable process of origination, formation and development. The sources of the study are the continuous developing and powerful surface-to-surface strategic nuclear guided missile forces and conventional guided missile forces, as well as continuous enriching campaign practices. To study the basic laws of its formation and development is of great significance to revealing and mastering the special laws of the movement of its contradictions, grasping the essential characteristics of Second Artillery Corps campaigns, guiding the practices of Second Artillery Corps campaigns and other military practices, and further exploring the development of the study of campaigns.

I. The Formation of the Scientific Discipline of the Study of Second Artillery Corps Campaigns

The study of Second Artillery Corps campaigns has been formed and developed gradually after the birth of the guided missile force, and based on Mao Zedong (毛泽东) Military Thoughts and general theories of the scientific discipline of the PLA campaign studies. It has been formed and developed as the building and training of the Second Artillery Corps have been raised, and by drawing fully on the useful experiences of foreign military forces.

The former Soviet Union called it the study of strategic missile corps campaigns (also known as campaign method). It was an important component of the scientific discipline of campaign studies of the former Soviet Union. The former Soviet Union believed that as the strategic missile corps [end of page 9] was formed and perfected, the scientific discipline of the study of strategic missile corps campaigns was born and developed steadily. In its development, the study of strategic missile corps campaigns used the general theories of campaign studies as the point of departure while also taking into consideration the special characters of the strategic missile corps campaign large formations in organization and establishment, technical equipment and operational areas, as well as operational capabilities and battle application methods. Its basic contents included adopting various measures to ensure uninterrupted battle duty of the strategic missile corps and its maintaining hair-trigger alert readiness to launch a guided missile assault under any circumstance. In a war in which strategic nuclear weapons are used, the strategic missile corps would play an important role in completing the war missions.

Since July 1959, when the surface-to-surface guided missile battalion was formed and inducted into the battlefield order of the PLA, training and exercises aimed at effective use of this force has been the regular activities of the force. At the same time the P-2 guided missile weapons were purchased from the armed forces of the former Soviet

Union, corresponding theories on tactics were also imported. Translation and publication of The P-2 Guided Missile Battalion Battle Use Ordinance were organized. In addition, under the direction of Soviet military experts, the surface-to-surface guided missile battalion organized field tactical exercises. The battalion began to be familiarized with the operational missions of the guided missile force, the principle of missile employment, launch preparations and execution, battle command, battle support, communications and liaison, operational coordination, battle formation, position selection and assignment, works construction and camouflage, march, camping, sentry and headquarters work and other basic principles and methods. These laid a good foundation for the later-day gradual formation of the Second Artillery Corps' own operational theories.

In the second decade of the Second Artillery Corps, from 1966 and 1978, with the growth and development of the guided missile force, many exercises of different scales with tactical background were organized based on the characteristics of the guided missile troops and on the basis of inheriting the traditional operational methods of the PLA while drawing on the useful elements of foreign theories. As a result, some practical experiences were accumulated. These have effectively enhanced the organization, command and operational capabilities and the usage level of the troops. In October 1978, the first conference on the operations of the Second Artillery Corps **[end of page 10]** for the first time systematically summarized the practical experiences in war preparation, training and exercises in the past ten years and came up with "The Opinions on War Preparation Construction and Operational Issues of the Second Artillery Corps," "The Opinions on Operational Disposition and War Preparation Construction Plan," "The General Rules on Second Artillery Corps Operations" and other guidance documents, which formed the initial operational application theories with Second Artillery Corps characteristics.

As the Second Artillery Corps construction entered its second decade, under the guidance of the spirit of the Third Plenum of the Central Committee of the 11th Chinese Communist Party Congress, the military training of Second Artillery Corps units and their enthusiasm in conducting military theoretical research rose to an unprecedentedly high level. On the basis of many actual equipment and live ammunition exercises, the Second Artillery Corps again organized a number of research conferences studying operational applications. "Several Issues Concerning the operational applications of the Second Artillery Corps" was reviewed and revised and a number of regulatory documents were successively issued including The Regulations of the Second Artillery Corps for Concealment and Camouflage, and Security and Confidentiality, The Trial Regulations of the Second Artillery Corps on the Levels of Preparedness for Nuclear Counter Attack Operations, The (Trial) Operational Ordinance of Guided Missile Detachments (Zhidui 支队) and Launch Squadrons (Dadui 大队). The two colleges respectively compiled teaching materials such as The Operational Command of DF-X Guided Missile Regiments and The Tactics of DF-X Guided Missile Launch Battalions, which summarize in a relatively systematic manner the experiences of the Second Artillery Corps in construction and war preparation training. These results provided relatively good conditions for the formation of theories of the study of Second Artillery Corps campaigns.

From the early 80s to the middle of the 90s of the 20th century, Second Artillery Corps bases and brigades (regiments) conducted many relatively large-scale collective campaign training and exercises. Especially in the “206 exercise,” for the first time, the Second Artillery Corps “independently” organized campaign actions, which laid a good foundation for the formation of theories of the study of Second Artillery Corps campaigns. From these, “Strict Protection and Focused Counter Attack” was put forward clearly as the campaign guiding thought. In 1985, the State Council Academic Degree Committee for the first time approved the scientific discipline of campaign studies as a first tier scientific discipline of study. Under the discipline, there are five second tier scientific discipline of study: the study of combined campaigns, the study of naval campaigns, the study of air force campaigns, the study of strategic guided missile campaigns and the study of campaign logistics. This was followed by the issuance in September by the chief of the Second Artillery Corps the first Study of Second Artillery Campaigns [end of page 11], which provides relatively deep exposition on the characteristics of a nuclear counter attack campaign, its operational principles, the division of campaign phases, campaign preparations, campaign execution and various support. It shows that the theories of the scientific discipline of the study of Second Artillery Corps campaigns are basically formed. In 1987, a major in the study of Second Artillery Corps campaigns was officially set up in the office of military theory teaching and research of the Second Artillery Corps Command College. The same office in October 1989 compiled The Curriculum of the Study of Second Artillery Corps Campaigns on the basis of beefing up the content of The Study of Second Artillery Corps Campaigns. By then, the three conditions for the formation of a scientific discipline of campaign studies had been met, namely the objects of the objective study – the study of Second Artillery Corps campaigns, theories that systematically deal with issues of Second Artillery Corps campaigns, and institutions and troops dedicated to the research and teaching of theories of the study of Second Artillery Corps campaigns. Thus the study of Second Artillery Corps campaigns was basically formed.

II. The Development of the Scientific Discipline of the Study of Second Artillery Corps Campaigns

The Second Artillery Corps is a strategic guided missile force with nuclear power as its mainstay. With the formulation of the strategic principles for the new era, the strategic missions of the Second Artillery Corps have shifted from the single undertaking of guided missile nuclear assault to nuclear and conventional “dual deterrence and dual operations.” This transformation has spurred innovative developments in the study of Second Artillery Corps campaigns.

In the 70s of the 20th century, the guided missile weapons the troops were equipped with were mainly intermediate range guided missiles. The force construction and training, and the campaign theory research mainly centered on the employment of existing weapons. The Study of Second Artillery Corps Campaigns published in the 80s of the 20th century was also the result of researches after summing up systematically the experiences in training and exercise practices by the intermediate range nuclear guided missile forces. By the mid 80s of the 20th century, long range and intercontinental range missiles with

newly finalized designs were inducted into the troops of the Second Artillery Corps successively. These weapon systems raised new requirements on directing troop training and on conducting study of campaign theories. Subsequently, campaign theory study made a timely shift toward new models and large models. In the Eight Five-Year Plan, **[end of page 12]** in a step further concerning the operational applications of nuclear guided missile troops, the theoretical work *The Campaign Methods of the Second Artillery Corps* was completed. The work saw a qualitative leap in the theories of nuclear counter attack campaigns.

In the late 80s of the 20th century, the Central Military Commission assigned the Second Artillery Corps the mission to build and develop a conventional guided missile force. Especially after the Gulf War, the PLA, under the correct leadership of President Jiang Zemin (江泽民), formulated the military strategic guidelines of the new era. To meet the needs of future high tech local wars, the Central Military Commission issued the new task of “dual deterrence and dual operations” and set up a new conventional guided missile force. On the basis of summing up the experiences of the two large-scale conventional deterrence launching exercises in 1995 and 1996, a series of theoretical results were produced such as “The Conventional Guided Missile Attack Campaign of the Second Artillery Corps,” “The Employment of Conventional Firepower by the Second Artillery Corps,” “The Conventional Operation Command Procedures of the Second Artillery Corps,” and “The DF-XX Data Calculation Support,” – works which, in both theory and practice, provide a relatively systematic exposition on the operational characteristics, campaign guiding thoughts, campaign principles, campaign organization and execution, and campaign support of the conventional guided missile force. They have filled in a blank in conventional guided missile operation theories of the Second Artillery Corps.

In the PLA-wide mass fervor to study combat methods, the whole Second Artillery Corps, officers and men alike, have widely carried out studies of combat methods with an aim to letting guided missile weapons play fully the role of an “assassin’s mace.” Following the spirit of the directive of the chief of the Central Military Commission on the “three thorough understandings,” (san ge gao tou 三个搞透) the Second Artillery Corps put forward a series of basic combat methods and concrete action methods concerning the two operation forms of nuclear counter attack campaigns and conventional guided missile attack campaigns, and concerning multiple operational actions. It produced many results by compiling “A Study of Campaign Combat Methods of the Nuclear Guided Missile Force,” “A Study of Campaign Combat Methods of the Conventional Guided Missile Force,” “Campaign Support Methods,” “A Study of Methods to Carry out Campaign Combat Operations in Coordination with Army, Naval and Air Force in a Joint Campaign” etc. They not only met the needs of troops to carry out campaign training but also elevated the theoretical research on the campaign methods of the Second Artillery Corps to a new height.

In order to standardize the whole PLA including units of the army, navy, air force and the Second Artillery Corps **[end of page 13]** to carry out well coordinated and concerted actions in a future joint campaign, and to meet the needs of future high tech wars, the

headquarters organized a uniformed endeavor to compile and research on the new generation of operational ordinances. Under the unified arrangement made by the headquarters, the Second Artillery Corps completed the compilation of various operational ordinances for units below guided missile bases and The Guidelines of Second Artillery Corps Campaigns, thus enabling the Second Artillery Corps to carry out theoretical research in the study of Second Artillery Corps campaigns in synchronization with the theoretical research in campaign studies by the whole army. They also advanced the theoretical research of the study of Second Artillery Corps Campaigns to the forefront of the theoretical research in campaign studies of the whole army.

By then, the theories of the study of Second Artillery Corps campaigns had developed into a relatively complete theoretical system of the scientific discipline of the study of Second Artillery Corps campaigns, including The Study of Second Artillery Corps Campaigns, The Curriculum of the Study of Second Artillery Corps Campaigns, The Campaign Methods of the Second Artillery Corps, The Guidelines of Second Artillery Corps Campaigns, The Combat Methods of Second Artillery Corps Campaigns, The Study of Second Artillery Corps Campaign Training, Conventional Guided Missile Attack Campaigns of the Second Artillery Corps, and regulations of the Second Artillery Corps on different level and categories of war preparations and operations, as well as regulations for campaign training. At the same time, the scientific discipline of the study of Second Artillery Corps campaigns was approved by the State Council Academic Degree Committee as authorized point for conferring military science masters degrees and Ph.D degrees. It was also designated by the headquarters as a key scientific discipline of the PLA and a key construction scientific discipline of the state. These have advanced the scientific discipline of the study of Second Artillery Corps campaigns to a completely new stage of development.

Section 3. The Characteristics of the Scientific Discipline of the Study of Second Artillery Corps Campaigns and Its Relationship with Related Scientific Disciplines

The scientific discipline of the study of Second Artillery Corps campaigns, in addition to sharing many common characteristics of campaign studies, has its own characteristics. Furthermore, it has close links with other related scientific disciplines.

I. The Characteristics of the Scientific Discipline of the Study of Second Artillery Campaigns

The scientific discipline of the study of Second Artillery Corps campaigns is a scientific summary of campaign practices of the Second Artillery Corps and [end of page 14] an enhancement of cognance. Its basic characteristics are as follows:

1. Paying Attention to Scientifically Summarizing Campaign Practices of the Second Artillery Corps Campaigns and Having a Strong Practical Nature

Practices are the source of cognance generation. They are also the basis for the establishment of the study of Second Artillery Corps. Without practice, no theory can be generated. The practicality of the study of Second Artillery Corps campaigns lies in the objective existence of Second Artillery Corps campaigns. The practical process of Second Artillery Corps campaigns is a process in which the study of Second Artillery Corps campaigns is formed and tested. Divorced from the objective body of campaigns, the study of Second Artillery Corps campaigns can neither be generated nor be developed.

Different campaign practices reflect different campaign laws. The two types of campaign practices in nuclear counter attacks and in conventional guided missile attacks reflect the special laws of the two basic campaign forms of the Second Artillery Corps. Campaign practices under different battlefield conditions and campaign practices in different periods reflect basic laws of different characteristics. The study of Second Artillery Corps campaigns, whether it is a nuclear or a conventional guided missile operation theory, is no idle theorizing but theoretical enhancement established on the basis of campaign practices. It is highly practical in nature. It is necessary to point out that when we stress the practicality of campaign theories, we cannot underestimate the subjective cognance of human being and their initiative. Only through human subjective efforts and through summarizing and refining the way one directs campaigns and campaign experiences, discarding the dross and assimilating the essential, can the formation of Second Artillery campaign theories be elevated to the height of theories and become scientific theoretical knowledge. Only in this way can the theories formed have the value of guidance and have great vitality. **[end of page 15]**

2. Highlighting the Characteristics of the Second Artillery Corps Campaign at Different Stages and Having the Nature of a Phase in Development.

A campaign is the product of war development. It develops along the development of war history. Different historical stages generate and use different campaign forms and important campaign actions. Second Artillery Corps campaigns also originated and developed along with the different stages of Second Artillery Corps troop building and development. The corresponding campaign study theories also have a strong phasic nature. When the Second Artillery Corps mastered the means of nuclear guided missile weapons and reached certain scale, on the basis of gaining rich campaign exercise experiences, the nuclear counter attack campaign theory was born. Due to the constraints of the types of weapon equipment and to limited understanding of campaign laws, campaign theories in the initial stage were only based on two operational scenarios – to guard against a surprise attack by the enemy and to organize and execute nuclear counter attacks – reflecting the basic laws of operational applications of a single category of guide missile weapons. As the scale of the campaign force of the Second Artillery Corps grew gradually stronger and bigger, when the inventory of its weapon types expanded steadily, especially after the conventional guided missile force and a multitude of types of

conventional guided missiles were introduced, the development of the Second Artillery Corps entered a new stage. Theories of conventional guided missile attack operations were born with the change in time. At the same time, theories on important campaign actions such as campaign military deterrence, campaign maneuvers, campaign defense and campaign information operations also emerged. They have greatly developed and enriched the content of campaign theories of the Second Artillery Corps. When PLA's joint campaign theories were formed and became the main operational form for the implementation of the strategic guidelines of the Central Military Commission, the campaign theories of the Second Artillery Corps, based on this general background, made major adjustments and developed a more systematic and complete campaign theory system that includes multiple campaign forms and multiple campaign actions. The reason why the study of Second Artillery Corps campaigns has demonstrated this kind of phasic nature is because factors such as campaign backgrounds, campaign environment, operational objects, the quantity and quality of the troops, weapons and equipment, and the understanding of the campaign commander has about campaign practices of the Second Artillery Corps are constantly changing. Therefore, the phasic nature of campaign theories **[end of page 16]** reflects an inevitable process in which things develop from the primary stage to the advanced stage.

3. Drawing on the Rich Research Results of the Predecessors and Having An Inheritance Nature

Everything is developing and development requires inheritance. Without inheritance, there can be no development. It is the same with the development process of the study of Second Artillery Corps campaigns.

Campaign study theories as they stand now have first of all developed by inheriting the rational parts of the theoretical results of the proceeding stage. This is because campaign theories of different periods have inner and inevitable links between them. Their basic laws are essentially the same. Although they have different characteristics in guidance laws, the basic principles are the same. Although in theoretical development, there is the phasic nature, in terms of the evolution process, the quantity and the quality of troops, weapons and equipment, and battlefield conditions have not occurred all of a sudden. Thus, the changes in the campaign theories of the Second Artillery Corps have also taken place gradually along with the evolutionary changes of campaign forces. Secondly, campaign study theories have also inherited the rich results of decades of research conducted by the PLA and drawn on the experience of theoretical research of many other arms and services. Developing and perfecting on these bases, they have developed their own characteristics. Thirdly, they have also inherited the research results of ancient and foreign armies. From Sun Tzu's The Art of War [sun zi bing fa 孙子兵法] to Surprise Strategies of a Hundred Battles [bai zhan qi lue 百战奇略], the military elite of the Chinese nation has from several thousand years of history summarized results of military theories that can be regarded as treasures of the world. All these are sources for us to draw on in conducting campaign theoretical study. As a matter of fact, in the world, theoretical studies of the military of different countries have always been penetrating and impacting each other's. Whatever is useful, it should be reflected in the content of the

study based on the principles of self-serving, and digestion and assimilation. This has determined that the changes in the theories of the study of Second Artillery Corps campaigns have the inheritance characteristic. **[end of page 17]**

4. Being Based on Current Realities but Higher than Current Realities, and Having the Quality of a Forward Looking Guidance

The study of Second Artillery Corps campaigns belongs to the field of theories. It must be based on current realities while at the same time, rising higher than current realities and staying ahead of current realities. It should be able to play the role of a guide to current realities. First of all, it can unify operational thoughts, making the execution of operational missions even more effective. Up to now, the Second Artillery Corps has not had any combat experience of any practical sense. The series of major issues in future operations need to be dealt with urgently during peacetime through theoretical studies so as to unify the thoughts of the commanders. The study of Second Artillery Corps campaigns is a summary of the long-term practical experiences of the force and represents a relative truth. It not only can serve to guide the future operations of the Second Artillery Corps but also can establish weapon development, army building, military training and other work on a more solid theoretical basis. It can solve the problems of how to fight the battles, what kinds of weapons are needed, in what forms should the training of the force and soldiers be organized. It can play a great role in promoting the comprehensive building of the force.

II. The Relationships Between the Scientific Discipline of the Study of Second Artillery Corps Campaigns and Other Related Scientific Disciplines

The study of Second Artillery Corps campaigns is a scientific discipline of study with very strong comprehensive features and involves a wide range of areas. Its formation and development have not only been subject to impacts and constraints imposed by other related scientific disciplines but also in return generated certain promotional effect on those other related scientific disciplines. They have very close links to each other.

1. The Relationship Between the Study of Second Artillery Corps Campaigns and the Campaign Studies of the PLA

The system of the scientific discipline of campaign studies refers to the whole body of campaign studies made up of its various internal branch scientific disciplines that are mutually connected and mutually constraining. The system is the collective reflection of the discipline's structural form and knowledge hierarchy. **[end of page 18]** Its structure can express itself in different modalities as campaign practices and theories develop. The formation of the study of Second Artillery Corps campaigns has had some impact on the structure of the system of the scientific discipline of campaign studies of the PLA.

1) The study of Second Artillery Corps campaigns is an important component of the system of the scientific discipline of campaign studies of the PLA

From the day of its founding, the PLA has developed from a small to a large force, from a weak to a strong force, from a single service – infantry – force to a combined, multi-service and multi-arm force, consisting of the army, navy, air force and the Second Artillery Corps. The campaign practices of the PLA have also gradually developed from single-service, mainly infantry-led combined campaigns to multiple types of campaigns such as naval campaigns with the navy as the main force, air force campaigns with the air force as the main force, Second Artillery Corps campaigns with surface-to-surface strategic and campaign guided missile units as the main force, as well as joint campaigns involving two and more services. At the same time, the theories of the scientific discipline of campaign studies of the PLA has also developed from the single study of combined campaigns to a multi-tiered system of theories of the scientific discipline of campaign studies of the PLA, including the general theory of the campaign studies of the PLA and service campaign studies (including the study of army campaigns, the study of naval campaigns, the study of air force campaigns and the study of Second Artillery Corps campaigns), the study of campaign logistics, the study of joint campaigns etc. From the above, one can see that the study of Second Artillery Corps campaigns is an important component of the system of the scientific discipline of campaign studies of the PLA.

2) The formation of the study of Second Artillery Corps campaigns has enriched and developed the theories of the scientific discipline of campaign studies of the PLA

The campaign studies of the PLA reveal on a macro level the basic laws of campaigns. They are a theoretical summary at a high level. They serve as a general theoretical guide to service campaigns while standardizing in a scientific way the system of theories of service campaign studies. On their parts, service campaign studies, based on their rich practical experiences, study in deeper and more concrete ways special laws of different service campaigns. These studies have made the campaign studies of the PLA richer and more complete.

The studies of army, naval and air force campaigns of the PLA originated relatively early. They have made important contributions to the formation and development of the system of campaign theories. **[end of page 19]** As the Second Artillery Corps was established later, compared with those of other services, the campaign theories for surface-to-surface strategic and campaign guided missile force were born later. So was the formation of its system of campaign theories. For a relatively long period of time, there was a blank in the system of campaign theories of the PLA regarding theories of Second Artillery Corps campaigns. As a special arm, the Second Artillery Corps will play an important role along with other services in future informatized wars. On the basis of systematically summarizing and studying practical experiences in campaign training and exercises and of inheriting the traditional operational experiences of the PLA, the Second Artillery Corps achieved a series of results in theoretical research such as The Study of Second Artillery Corps Campaigns, The Campaign Methods of the Second Artillery Corps, The

Guidelines of Second Artillery Corps Campaigns, and The Conventional Guided Missile Attack Campaigns of the Second Artillery Corps. These not only have constituted the system of theories of Second Artillery Corps campaigns but as an important component of the campaign theories of the PLA, also further enriched and developed the system of campaign theories of the PLA, making an important contribution to the system of campaign knowledge of the PLA.

2. The Relationship Between the Study of Second Artillery Corps Campaigns and the Study of Joint Campaigns and the Studies of Other Service Campaigns

Joint campaigns have become the main campaign form in future informatized wars. The study of joint campaigns is a scientific discipline to study laws of joint campaigns and laws of campaign guidance. Together with the study of Second Artillery Corps campaigns, the study of army campaigns, the study of naval campaigns and the study of air force campaigns, it is a Class B scientific discipline of study under campaign studies. A Second Artillery Corps campaign can be organized and executed independently or organized and executed as a subsidiary campaign against the background of a joint campaign. Hence, in the theories of the scientific discipline, the study of Second Artillery Corps campaigns is subject to the guidance of both the theories of Class A scientific discipline of study and those of the scientific discipline of joint campaigns. The operation laws, guiding thoughts and principles, command and coordination, campaign support and the basic combat methods of a joint campaign are both guides and constraints for Second Artillery Corps campaigns. They also determine the direction of development of campaign theories of the Second Artillery Corps. **[end of page 20]**

Like the study of army campaigns, the study of naval campaigns, and the study of air force campaigns, the study of Second Artillery Corps campaigns belongs to the category of service campaign studies. As their basic theories are influenced by the general laws of Class A campaign studies and joint campaign studies, the theories of various service campaign studies are relatively independent while mutually penetrating, influencing and promoting. As Second Artillery Corps campaigns came into being relatively late, its campaign theories have been formed and developed on the basis of fully assimilating and drawing on the rich results of campaign theories of other services. There are many commonalities in campaign laws. Especially when campaign operations are organized under the background of a joint campaign, campaign operations of various services must be closely coordinated. Thus, their campaign theories must maintain a high degree of uniformity in certain laws.

3. The Relationship Between the Study of Second Artillery Corps Campaigns and Strategic Studies and Tactical Studies

The study of theories of Second Artillery Corps campaigns cannot be divorced from the unified body of war theories and battle theories. In terms of forms of armed struggle, wars, campaigns and battles are practical activities on three different levels. They are respectively the objects of strategic studies, campaign studies and battle studies. Strategies, campaign methods and tactics are results of academic theoretical research of

strategic studies, campaign studies and tactical studies while at the same time, they are action methods guiding war, campaigns and battles. Hence, the strategic study of the Second Artillery Corps, the campaign study of the Second Artillery Corps and the tactical study of the Second Artillery Corps are both academically distinct and closely linked and inseparable. From the perspective of the relationships among the three, campaigns occupies the middle stratum between wars and battles. Thus, in studying theories of Second Artillery Corps campaigns, one must be guided by the strategic theories of the Second Artillery Corps and serve the strategic needs. Only by correctly analyzing the strategic situation on the high ground of the overall strategy can one ensure that the theories of the study of Second Artillery Corps campaigns develop in the correct direction. Battles are the basis of campaigns. A Second Artillery Corps campaign is the sum of a series of executed surface-to-surface guided missile attack battles. The organization of a guided missile battle, **[end of page 21]** successful or not, will have a direct impact on the outcome of the guided missile attack, and will determine the outcome of a Second Artillery Corps campaign. Thus, the support of the study of Second Artillery Corps tactical theories is indispensable to the study of Second Artillery Corps campaign theories. Only by correctly handling the relationships between the study of Second Artillery Corps campaigns and the strategic and tactical studies can one accurately delimit the scope of research of campaign study, grasp the theoretical stratum and discover the essential characteristics and development laws of the campaigns.

4. The Relationship Between the Study of Second Artillery Corps Campaigns and Other Related Scientific Disciplines

The study of Second Artillery Corps campaigns is a comprehensive scientific discipline of study involving many fields. It has close links to relevant disciplines in natural sciences and social sciences such as the study of military command, the study of military logistics, the study of military equipment, the study of military establishment, the study of military's political work, the study of military operational research, applied mathematics, the theory of programs, psychology, computer science etc. They mutually impact and penetrate each other. As the operational application of surface-to-surface guided missile weapons is characterized by "attacking by way of calculation," it has especially close links with the military operational science. The military operational science is an applied military science discipline that uses mathematics to calculate, plan and select the optimal solution in dealing with operational issues based on the overall situation and collectivity. A Second Artillery Corps campaign is in essence an offensive operation striking against various types of strategic and campaign targets with the fire power of long-range guided missile weapons. Whether it is at the planning stage or at each and every important link during an operation, the campaign commander and his command organ are required to make scientific decisions and seek overall optimization regarding the fire power of guided missiles. For instance, scientific and rational quantified targets should be given on major issues such as the selection of strike targets, the setting of targeting points, the setting of target kill or damage requirements, the numerical number of guided missiles to be launched and the fire power unit to be used, the division of launch waves, the order of target strikes, and the prediction and determination of target kill and damage effects. Only, in the course of fire power

planning, by applying the methodology of operational research, carrying out accurate calculations and clarifying the above data after a process of optimization can one organize and execute the operation. Thus, fire power planning is the heart of campaign command. **[end of page 22]** Calculate first and strike later is a salient feature of the Second Artillery Corps campaign. Hence, one can see that the military operational research is the basic scientific discipline for the study of Second Artillery Corps campaigns. The two have a very close relationship.

Section 4. The Theoretical System of the Study of Second Artillery Corps Campaigns

The theoretical system of the study of Second Artillery Corps campaigns refers to the knowledge structure of campaign theories of the Second Artillery Corps and the basic contents included. It is a body of mutually linked and mutually constrained theories organized in accordance with the logical relations of theories and composed of various campaign theory essentials based on certain standards. Correctly setting up the structure of the theoretical system of the Second Artillery Corps campaign study will help deepen the comprehensive and systematic understanding of the campaign theories of the Second Artillery Corps and better handle the relationship between different essential elements.

I. The Requirements for the Study of the Theoretical System of the Study of Second Artillery Corps Campaigns

The campaign theories of the Second Artillery Corps are a complete system that includes different theoretical levels. Its constitution must satisfy the requirements of being structurally rational, hierarchically clear, logically strong, with standardized forms, complete contents and full functions.

1. Structurally Rational and Hierarchically Clear

The theoretical system of the study of Second Artillery Corps campaigns boasts of an extremely rich content, including both theories of a common nature and theories of a special nature, theories that reveal the objective laws of campaigns and theories that reveal the guidance laws of campaigns. In studying the theoretical system of the study of Second Artillery Corps campaigns, one must follow the objective laws in the development of the campaign theories and make a scientifically rational line-up and ordering of all its inclusive contents so as to ensure that it reflect clearly in the theoretical strata the basic laws ranging from the general to the special. **[end of page 23]**

Like any other matter, the theoretical system of the study of Second Artillery Corps campaigns is a unified complete body while at the same time, it can be divided into mutually linked or stand alone parts or aspects. They came into being and developed under certain historical conditions. At present, the Second Artillery Corps is no longer in the state of be equipped with only nuclear guided missile weapons. With the establishment of the conventional guided missile force, the technical qualities of weapons

have seen major improvements. Their quantities have also been increased and developed into operational capabilities. The corresponding operational missions, operational forms and methods have experienced qualitative leaps. People's understanding of the basic laws of Second Artillery Corps campaigns should also gradually deepen with the movements of the contradictions of the campaigns themselves. Thus, to carry out the study of the theoretical system of Second Artillery Corps campaigns, one must not rest only on the superficial phenomena of matters or certain parts, certain aspects. Only by comprehensively exploring the objective laws of development and existence from the mutual relationships and mutual interactions of the various essential elements of Second Artillery Corps campaigns can one ensure the features of the theoretical system of the scientific discipline.

2. Strong in Logic and Standardized in Form

The discipline of campaign studies of the PLA, as other scientific disciplines, has a systematic and complete system of the scientific discipline. It includes: the scientific discipline of campaign studies of the PLA (the general theory), joint campaign studies, and service campaign studies etc. The scientific discipline of the study of Second Artillery Corps campaigns belongs to service campaign studies. In the scientific discipline of campaign studies, the study of Second Artillery Corps campaigns can both exist independently or as an important component closely linked to other campaign study disciplines. The study of the theoretical system of Second Artillery Corps campaigns is an innovative endeavor on the basis of inheritance and trial blazing work that seeks development under the premise of current realities. In trying to explore the objective laws of the theoretical system, one should focus on individuality and summarize the basic laws of the system itself while at the same time, taking into account the overall situation and refraining from a divorce from the common laws applicable generally to campaign studies, subject to their constraints and guidance. While one tries to smooth out the logical relationships of the knowledge system, the establishment of the system of knowledge structure should comply with the overall standards. While reflecting innovation, one should maintain consistency, in both the overall structure and system, with the campaign studies of other services. **[end of page 24]**

3. Complete in Content and Full in Functions

The Second Artillery Corps is a high tech force. With the rapid development of modern information technologies, the types of weapon equipment have increased gradually. Their operational and technical capabilities have improved steadily. Their cycles of upgrades and replacement have become increasingly short. These characteristics have brought unprecedented impact on the theories of the study of Second Artillery Corps campaigns. As a result, to study the theoretical system of the study of Second Artillery Corps campaigns, one must take into full account the characteristics of modern military information technologies, and apply theories of information warfare to continuously upgrading and perfecting the content of the theoretical system of the study of Second Artillery Corps campaigns.

Since the assumption is that the basic form of future PLA campaigns will be joint operations, a Second Artillery Corps campaign will be organized and executed against this big backdrop. The new theories on joint campaigns and campaign theories of other services will inevitably play the roles of tugging and constraint vis-à-vis campaign theories of the Second Artillery Corps. Hence, in the course of studying the theoretical system of the study of Second Artillery Corps campaigns, one must strengthen the consciousness for joint operations and draw fully on the latest results in the studies of joint campaigns and theories of service campaigns so as to advance Second Artillery Corps campaign theories to deeper levels.

The theories of Second Artillery Corps campaigns do not exist in isolation. Their formation and development are also subject to the impact of other related scientific disciplines. With the increased trend toward fusion and integration in modern sciences, social sciences, natural sciences and technological sciences are increasingly making their inroads into the field of military sciences. In the study of campaign theories of the Second Artillery Corps, it will be very difficult to approach from the angle of “pure armed struggle” in the attempt to study and resolve various issues encountered in the course of campaign practices. Hence, it is imperative to introduce into the field of scientific discipline of Second Artillery Corps campaign studies social sciences, natural sciences and their related technologies, as well as the latest results produced by their cross-over fringe sciences and fusion sciences. It is also imperative to apply modern methodologies in scientific research so as to ensure that the campaign theories of the Second Artillery Corps boast of more modern characteristics and be more suited to the needs of local wars under informatized conditions. [end of page 25]

II. The Composition of the Theoretical System of the Study of Second Artillery Corps Campaigns

The theoretical system of the study of Second Artillery Corps campaigns has many structural forms. Based on the characteristics of Second Artillery Corps campaigns and the basic content they cover, the structure of the theoretical system should consist of three major parts including the theories of the scientific discipline of Second Artillery Corps campaigns, the basic theories of Second Artillery Corps campaigns and the theory of campaign methods of the Second Artillery Corps.

1. The Basic Theories of the Scientific Discipline of Second Artillery Corps Campaigns

The basic theories of the scientific discipline of Second Artillery Corps campaigns mainly reveal the development laws of campaign theories and scientific discipline theories. The basic theories themselves study the laws of Second Artillery Corps campaigns. They are the “key links” (gang 纲) of the entire theoretical system of campaigns and are the basis for the establishment of the theoretical system of the scientific discipline. Furthermore, they provided guidance on a macro level to the basic theories of campaigns and the theories of campaign methods. To become an independent scientific discipline, the study of Second Artillery Corps campaigns must clarify the following contents: the definition and characteristics of the study of Second Artillery

Corps campaigns; the objects and the knowledge scope of the study of Second Artillery Corps campaigns; the research missions and theoretical system of the study of Second Artillery Corps campaigns; the formation and development of the theories of the study of Second Artillery Corps campaigns; the research methods in the study of Second Artillery Corps campaigns; the relationship between the study of Second Artillery Corps campaigns and other related scientific disciplines etc.

2. The Essential Theories (benzhi lilun本质理论)of Second Artillery Corps Campaigns

The essential theories of the scientific discipline of the study of Second Artillery Corps campaigns are higher-tier theories that are, among campaign theories, the most abstract, having the widest coverage and relatively long life. They mainly reveal the objective laws of Second Artillery Corps campaigns with a focus placed on the revelation of the essential characteristics of campaigns, the understanding of the general laws of campaigns, and a summary of the development laws of campaigns so as to guide campaign actions. They are the core of the system of campaign theories, pointing out clearly the direction for the study of the theories on the methods of campaigns [end of page 26] and setting the basic principles and methods of campaigns. Their main contents include: the definition and characteristics of Second Artillery Corps campaigns; the classification of Second Artillery Corps campaigns; the origination and development of Second Artillery Corps campaigns; the relationship between the objective essential elements and campaign actions in Second Artillery Corps campaigns etc.

3. The Methodology Theories of Second Artillery Corps Campaigns

The methodology theories of campaigns are theories that guide the concrete operations of a campaign. They are also called the campaign guidance theories.

The methodology theories of Second Artillery Corps campaigns mainly reveal the laws for guiding a campaign. They study the laws of campaign operations and explore the laws in campaign support. They have an extremely practical quality. They not only rely on the basic theories of campaigns but also can promote the development of the basic theories of campaigns. Their main contents include: the guiding thoughts and principles of Second Artillery Corps campaigns; the direction and coordination of Second Artillery Corps campaigns; the forms of Second Artillery Corps campaigns; the important actions of Second Artillery Corps campaigns; and the support of Second Artillery Corps campaigns.

Section 5. The Research Methodology of the Study of Second Artillery Corps Campaigns

The research methodology of campaign studies is in fact a method of cognition and mode of thinking. By mastering the scientific research methodology, one has in his hand the key to open the knowledge door of the scientific discipline, enabling him to carry out his study of the scientific discipline smoothly and to master the knowledge system of this scientific discipline. At the same time, it will also enable him to use the research

methodology of the scientific discipline to study and explore areas that have not been touched in this scientific discipline, thus opening up and deepening the knowledge system of the scientific discipline. The study of Second Artillery Corps campaigns as other scientific disciplines has its own discipline research methodology.

I. The Significance of Exploring Research Methodology

The research methodology of the study of Second Artillery Corps campaigns, fundamentally speaking, is **[end of page 27]** materialist dialectics that reveals the inner essential connections. Only by adhering to a historical, materialist and objective, and comprehensive and dialectical approach in the study of the realities and development of campaigns can the subjective direction match the objective realities, so that one can proactively strive for victory in future campaigns. The significance of exploring research methodology is as follows:

1. Conducive to Seeking Breakthroughs in Updating Concepts

A military strategist once said: “War – it is a possibility in the future. Thus, we cannot greet it with a view of the past.” Under informatized conditions, the operational forms and methods of future local wars in which the Second Artillery Corps will participate have undergone profound changes. They have shown many new characteristics. To truly understand and master them, only by applying Marxist creative thinking and creative methods of practice, breaking with old thinking barriers, and making breakthroughs, first of all, in updating the concepts can one engender fundamental transformation in the theories of Second Artillery Corps campaigns.

The heart of the methodology of Marxism is to “seek change” and to “seek new.”

The key to seeking change is to overcome the thinking barrier of sticking to old ways and following the beaten path, and to break with outdated and obsolete theories and methods. Only this way can one use the perspective of change and development, the standards and requirements that meet the needs of modern warfare, and the attitude of seeking truth from facts, to realize the following three transformations: First is to shift the footing of the theoretical study of Second Artillery Corps campaigns from dealing with a nuclear war in the past to participating in a high tech local war under the condition of nuclear deterrence; Second is to shift the focus of the research from using the single nuclear means to accomplish the mission of nuclear counter attack in the past to using two types of means, both nuclear and conventional, namely to a mission of “dual deterrence and dual operations.” Third is to change the content of research from focusing on strategizing in the past to focusing on a combined use of strategizing and technical means.

The key to seeking new is to overcome the negative attitude of doing nothing, stressing only the aspect of backward weaponry and equipment and ignoring the aspect of bringing into full play subjective initiatives. **[end of page 28]** War practices have proved that the superiority or inferiority of military technologies and weapons and equipment are not the

only factors or conditions for victories in military struggles. First of all, as the “software” to guide campaign actions, campaign theories, under the premise of their being suited to military technologies and the state of weapons and equipment, have the “room of freedom,” that is subject less to the constraints and impact imposed by the state of technologies. The size of this room depends on the play of a man’s subjective initiative, and on the ability of the campaign commander to strategize. In the course of the long period of warfare the PLA fought, many successful battle cases were accomplished without major improvements in the army’s weapons and equipment. Secondly, we should make dialectical analysis of the high tech weapons and equipment of the enemy. We should take into account their superiority and strength while at the same time, finding their weaknesses and deficiencies. Although they are very advanced, high tech weapons are by no means invulnerable and they can play only a limited role. The limitations can be technical or environmental, as well as in the effect of application. By accurately locating the vital parts and the weak links, there is plenty that one can do. Thirdly, we must see that with the improvement in our country’s economic conditions, the comprehensive national power of China is increasing. There will be major changes in the quantity and the quality of the weapons and equipment of the Second Artillery Corps. Hence, to conduct research on campaign theories of the Second Artillery Corps, one should based oneself on the existing equipment while at the same time, appropriately looking toward future development and actively exploring strategies to defeat the enemy.

2. Conducive to Viewing Issues from the Perspective of the Overall Situation

The basic view of the Marxist theory of knowledge is that one should guard against taking selective points as representative of an entirety, or taking one-sided views as comprehensive views, that one should view issues from the height of the overall situation. The theoretical study of Second Artillery Corps campaigns involves many aspects. It is a complex science of systems engineering. At the same time, it is not an isolated phenomenon. It is invariably tied to the conditions of the era and natural conditions at the time and is subject to the constraints of various factors including political, economic, military and social factors. Hence, only by viewing comprehensively Second Artillery Corps campaigns in the context of linkages among all these factors can one completely and accurately master the characteristics of the campaigns. Second Artillery Corps campaigns, **[end of page 29]** like all other matters, are a complex body of contradiction of opposites and unity. From the perspective of the relationships between operational forces, there are the relationship between two adversaries and the three types of relationships among the enemy, oneself and friends. From the perspective of the environment, there are operating theatres and battlefields etc. From the perspective of campaign phases, there are preparatory, execution and termination phases. From the perspective of campaign operations, there are campaign defense operations, campaign maneuvering operations, campaign information warfare operations, military deterrence operations and guided missile fire power attack operations etc. At the same time, operational supports such as intelligence and reconnaissance, communications and liaison, logistic and equipment supports also play the role of operational sustenance. Thus, in the study of campaign operational theories of the Second Artillery Corps, one must take into full consideration the close links between these factors and their mutual

impacts. Only by doing so can one conform to operational realities. Only by way of scientific application of the basic principles of the theory of knowledge of Marxism, can one explore, in a favorable way, the basic laws from the perspective of the overall situation and overcome subjectivity and partiality. Just as Lenin pointed out: “To truly understand the subject, one must grasp and study all its aspects, all its links and all the ‘intermediaries.’ We sure will not be able to do it completely, but the comprehensive requirement can help us avoid mistakes and ossification.”

3. Conducive to Seeking Countermeasures from a New Perspective

The several local wars that have taken place recently in the world have shown clearly that the modality of modern warfare has evolved from conventional warfare under normal conditions in the post-Second World War period to local wars under high tech conditions. And it is developing continuously in the direction of local wars under informatized conditions. This is a major transformation. In view of this new situation, only by adopting completely new ways of thinking and scientific research methods can we broaden our vista and seek countermeasures from a new perspective. The study of the theories of Second Artillery campaign study should be based on this principle and take as the point of departure the objective material basis – information technology and weapons and equipment – on which the existence of informatized local wars depend. It can be said that the development and progress in science and technology and weapons and equipment are the revolutionary factors for our seeking countermeasures from a new perspective.

Due to the rapid development and wide application of micro-electronic technologies, electronic warfare weapons are massively employed in wars and they play the important role of “trail blazers.” The Gulf War and the War in Kosovo have forcefully borne out this point. In future informatized local wars, electronic warfare and electronic warfare-centered information warfare will inevitably have a major impact on the campaigns of the Second Artillery Corps. Whether it is in terms of the three major basic essential elements of campaign force, campaign battlefield and campaign timing, or in terms of operational forms and methods, we must base ourselves on these objective facts and seek measures to defeat the enemy from a new perspective. **[end of page 30]**

The massive employment of aviation corps weapons with high information content, and of precision guided weapons and cruise missiles has made it possible for the direct accomplishment of the objectives of a campaign through the combined fire power attacks of a multiple of participating services. This has led to a major transformation of operational forms. A completely new campaign form – “joint fire power attack campaign” – emerged. The fire power of guided missiles are the core factor in the joint fire power attack. The Second Artillery Corps is the main body of the campaign force of a joint fire power attack campaign. As a result, the study of the campaign theories of the Second Artillery Corps must change from the past modes of thinking and explore new theories and methods of practice from the two angles of protection and strike. Only in this way can one adapt to the needs of future informatized local wars.

4. Conducive to Seeking Solutions from a Developing Perspective

To carry out the study of the theories of the study of Second Artillery Corps campaigns in depth, one must not get trapped in a small circle of rigidity and enclosure. Instead, one must apply the developing viewpoints and methods of Marxism and seek solutions in points of focus and basic standpoints. An incorrect selection of points of focus could result in “going south by driving the chariot along the northward tracks” and in futile labor. An incorrect selection of basic standpoints would cause a divorce from realities, resulting either in empty talk or blind copying of foreign forces with no use for our own force.

In the study of the theories of Second Artillery Corps campaigns, when we talk about training our sight on the future, [end of page 31] we should avoid empty talks about general concepts and instead, place more efforts on concrete analyses and well-targeted subjects. We should keep track of the realities of daily leaps and bounds in the development of science and technology and carry out “dynamic” studies so as to put forward the objective demands of future wars. In terms of basic standpoints, we should overcome the customary modality of “static” studies that stress existing equipment and fighting the types of wars based on the types of existing equipment. We should see the other side, namely the results of military theories can promote technological changes. We should give full play to the subjective initiative of the commanders, and design, in an appropriately forward looking manner, operational theories and means suited to the objective realities of future wars. On the basis of facing up the current realities, we should pay more attention to developments and to future forecasting. We should consider not only what to do based on current conditions but more importantly what to do to meet the needs of future wars. Just as Engels said, “In military scholarship, we should not use old means to achieve new results. Only by creating new and more powerful means can we achieve new and greater results.”

II. The Main Methods of Research

In the study of theories of Second Artillery Corps campaigns, materialist dialectics is the fundamental method in revealing the inner laws and essential characteristics. Only by insisting on the view of practice first, using practice as the point of departure in all matters, and seeking truth from facts can we make objective analysis and determination in regard to the various essential elements that have an impact on campaign theories, and can we correctly understand and reflect the characteristics and laws of campaign development of the Second Artillery Corps.

The basic point of the method of materialist dialectics is to use historical, factual and developing viewpoints to look at issues. In the study of campaign theories, one should use this basic point as the point of departure, pay attention to the study of history, base oneself on the current realities and have one’s sight on the future. To study history is to summarize campaign development laws from the practical experiences of the Second Artillery Corps in all campaign exercises conducted in the past; It is to widely draw on, and to inherit the experiences and cream of the predecessors as reflected in the campaign

histories and academic research results of ancient times and present, of China and foreign countries, and use them to guide the campaign theoretical research of today **[end of page 32]** and to summarize the direction laws of campaign command of guided missile forces. To base oneself on current realities is to face up squarely the current threats and the operational capabilities of one's force so as to ensure that the study of the theories of Second Artillery Corps campaigns be rooted in the objective realities, and to explore in a factual manner effective means to subdue the enemy to win victory. To have one's sight on the future is to carry out forward looking research based on the study of history and on current realities, and based on a scientific forecast of the development and changes of various essential elements of future campaigns. History, the present and the future are dialectically unified. They are three relatively independent fields in the study of military science that are also closely linked with each other. The present is the development of history and the future is the extension of the present. Only by organically combining the three can one raise the level of theoretical study of Second Artillery Corps campaigns to a new height.

The study of Second Artillery Corps campaigns is a comprehensive scientific discipline. Its methods of basic research have many similarities with many scientific disciplines such as social science, natural science and technology science. The main methods include the following:

1. The Method of Scientific Research

The method of scientific research, also known as the logical inference method, generally includes: analysis and synthesis, comparison and analogy, abstraction and summary, induction and deduction etc. Given that the Second Artillery Corps has no practical operational experience of its own to draw on, these methods are very practical and useful in conducting research on guided missile weapon operational theories based on relevant theoretical results achieved in China and abroad. They can be used not only in the study of the practical experiences of the Second Artillery Corps in campaign exercises but also in forecasting major current issues and application issues in future campaigns.

The analysis and synthesis method is an important means for human cognition of objective matters. As Engels said, "Thinking not only combines mutually inter-connected factors into a unified whole but also catalyzes the object of conscious into factors. Without analysis, there can be no synthesis." He also explained by citing as an example "Chemistry that uses analysis as the main research form **[end of page 33]** is nothing without its antipode, namely synthesis." This shows that analysis and synthesis are the two opposites of a unity in a contradiction. Without analysis, there can be no synthesis. Without synthesis, analysis will also lose its meaning. When this reasoning is reflected in the study of campaign theories of the Second Artillery Corps, one can divide a campaign event into several parts, developing phases and into their attributes, and study them one by one so as to correctly differentiate various essential and non-essential factors, accidental and inevitable factors, to grasp and reveal the contradiction that plays the decisive role, and to reach the correct conclusion. One can also take a campaign event and re-configure it, on the basis of revealing its nature, as a union of diversity, clarify the

complex connections between different parts of the study process and between different factors so as to grasp the laws of its development. Hence, in the study of campaign theories of the Second Artillery Corps, if no analysis is conducted, it is not possible for one to understand the entirety and to synthesize. At the same time, if there is no synthesis of the process, it will be difficult for analysis to achieve its objectives.

The abstraction and summary method is a method that extracts, through thinking activities, the detail and non-essential characters in a campaign event or military activities, and summarizes those contents that are main, essential and decisive. When we summarize the special laws that arise from the military activities of Second Artillery Corps organizations, some laws after abstraction and summary could become laws of universal significance in guiding future military activities. As for those new things that first appear as special laws, this method can also be used to reveal the basic, essential and decisive conclusions so as to develop military theories and to correctly understand and use them.

The comparison and analogy method is a logical method used to determine the objects of objective matters, and the similarities and differences in a phenomenon so as to correctly understand and grasp a new process and new phenomenon. The purpose of comparison is to determine the similarities and differences between a process under study and other known processes. Often in the process to formulate a certain principle in certain campaign event or military **[end of page 34]** activity of the Second Artillery Corps, one is always able to find the process of a known campaign event or military activity to make comparison and analogy. When carrying out comparison and analogy, one must truly grasp the processes that truly belong to the same categories and are similar in essence. At the same time, one should pay attention to the differences in environmental conditions when the comparison process arises. Only in this way can we achieve good results.

In the induction and deduction method, induction refers to the logical method of reaching general results under the premise of individual or special circumstances. For instance, in the recent Gulf War and the War in Kosovo, precision-guided weapons demonstrated on the battlefields their important status and roles. From this, one can induce that in future high tech wars, precision-guided weapons will engender huge changes in the operational forms and methods of the Second Artillery Corps. In order to achieve the established operational objectives, long and intermediate range guided missile weapons will mainly be employed to carry out no-contact, beyond visual range fire power strikes. Deduction, on the other hand, is the logical method that deduces individual events from known or presumed general principles. For instance, from the principle of engaging first in electronic warfare as demonstrated in the Gulf War and the War in Kosovo, and from the fact that this principle achieved great success, one can deduce the basic law that electronic offensive operations are an important means to lift the curtains on a war. Thus, the application of the logical method of unity of opposites – induction and deduction – is also an important method for conducting theoretical research in Second Artillery Corps campaigns.

2. The Battle Case Study Method

This is a method that summarizes and generalizes by abstraction the historical experiences gained in successful battle cases and military activities of the past, and explores basic laws. Mao Zedong pointed out that historical experiences deserve our attention. The purpose of understanding and learning from the past is to guide the present and future. Military strategists in all historical periods of the past paid great attention to this method. Although any military action is not a simple repetition of military actions of the past, they after all have inevitable links in inner laws and historical continuity, and they share many common **[end of page 35]** laws and similarities. Such situation as arbitrary severance from and un-connectivity with the past do not exist. If we look at past successful battle cases, it is not difficult for us to see that many basic principles and basic laws drawn from them have always been of great vitality, and of important significance, in guiding the present and the future. For instance, the operational principles summarized by Mao Zedong from war practices have always been extremely popular and have been regarded as classics. A war is a life and death struggle on the battlefield between the two adversaries. Prior to and during a war, there are many uncertainties, which make its inner laws so unpredictable. Only by digging into the relevant materials after the war and studying the experience can one find and grasp many factual materials unknown to most people, and can one more accurately determine and summarize experiences and lessons that are of guiding significance and value before one can generalize them through abstraction, and elevate them to laws. Past battle cases can be used to test and validate military theories and operational principles put forward today. They can also be used as the basis for guiding future combat operations. In the study, summary and generalization of historical experiences of past battle cases, one should pay attention to not only direct practical experiences but also indirect practical experiences. The key is to adhere to the dialectical materialist method of thinking. It is wrong either to affirm everything or to negate everything. Hence, we must conduct our study by combining closely possible developments at present and in the future. Only by doing so can the conclusions we draw be of correct guiding significance. Although the Second Artillery Corps has no actual combat operational experience, the numerous guided missile warfare battles in the past and its own experiences in training and exercises are valuable resources for it to conduct campaign theory research. To carry out in-depth study of these experiences, we can summarize from them many useful things.

3. The Exercise Research Method

This is an important method in conducting campaign theory research during peacetime. This is a method that conducts repeated testing of operational theories and operational principles that have been put forward or of the possible changes in Second Artillery Corps campaigns brought about by the introduction of new military equipment in exercises, so as to produce new operation theories through continuous revisions and additions. The exercises include **[end of page 36]** military training, campaign exercises including near-real actual-force life-fire confrontational exercises, commanding officer and headquarter map exercises and fire range testing etc. In the study of campaign theories of the Second Artillery Corps, through military exercises, one can not only

discover and revise obsolete and outdated theories and principles but also explore operation theories and principles that meet the needs of future actual operations based on possible new situations and new problems that may arise in the application of new weapons and equipment in the military field. In using the exercise research method, one cannot be divorced from the realities and cannot be aimless. A Second Artillery Corps campaign, as any matter, is subject to the constraint and impact of many factors. Only by following the spirit of “three thorough understandings” and by studying in depth the main factors affecting future campaigns can one accomplish research results of high quality. Of these factors, the conditions of our own forces are the basis for the study of campaign theories. The types of warfare one can fight depend on the type of weapons he has. Only by basing everything on the realities of the Second Artillery Corps troops, by fully exploiting the potentials of the guided missile weapons and the wisdom and talents of the commanding officers, and by using the various operational methods that have been proven effective in training and exercise practices can we place ourselves in an invincible position. A battlefield is a stage on which to wage campaigns and battles. A modern battlefield is a vast multi-dimensional space. Factors that constrain operational actions are numerous and complex. One must conduct comprehensive and in-depth study of the battlefield environment. The analyses of the advantages and disadvantages should cover all aspects, ranging from terrains, landforms, climate, hydrology, human environment on the ground, to electro-magnetic environment and the mesosphere (ban liu ceng半流层) in the air, as well as the characteristics of various orbital paths in the space. Based on the analyses, one should formulate corresponding measures and plans. Only by way of advance preparations can one capture the initiative to carry out a campaign. We should pay special attention to learn thoroughly about the enemy’s conditions. Only by gaining a deep understanding of the operational adversary, and by conducting in-depth study of its operational thinking, weapons and equipment, strike capabilities, position deployment and the real threat it poses against us can we formulate various operational plans targeting the enemy’s conditions, can the plans be effective and can the theoretical results produced be more practical and workable. Thus, in the study of campaigns, we must strengthen the study of various essential elements of campaigns such as our own conditions, battlefield environment and operational targets and increase its effectiveness so as to develop campaign guidance theories and operational methods superior to those of the adversary. **[end of page 37]**

4. The Simulation Testing Method

As it is known to all, a future informatized local war is a trial of military strength and strategizing, but even more so, it is a competition in science and technology. The technology content of weapons and equipment is an important sign of the quality and combat capabilities of an army. The Second Artillery Corps is a high tech force. Advanced military technologies and weapons and equipment of superior quality are an important material basis for campaign theories and practices. The rapid development of military technologies will inevitably lead to continuous upgrading of weapons and equipment of the Second Artillery Corps. Such upgrading will in turn lead to changes in the operational forms and methods of campaigns and thus pose new subjects of study for the study of campaign theories. Hence in an era when high and new technologies are

emerging continuously, we must follow closely the state of development in high and new technologies, objectively analyze the impact of military technologies on campaign operations of the Second Artillery Corps, grasp in a timely manner the new movements and new trends in the development of military technologies and weapons and equipment on both the enemy and our sides, and conduct appropriate forward looking research based on the guided missile weapons and equipment whose designs are to be finalized soon.. Only by doing so can we generate new theories that are suited to future informatized local wars. In the traditional research methods, many factors are hard to quantify. However, with the progress in modern science and technologies, it is already possible to establish real operation simulation systems by widely adopting electronic computer means, applying mathematic models, military systems engineering, cybernetics, information science and other modern scientific methods. Through mathematic analysis, modeling and simulation, one can carry out qualitative and quantitative analyses of military theories, operational principles, operational procedures and operational effects that have already been established or are currently under study. This will help free us from carrying out studies based on personal experiences. In this way, the study of the campaign theories of the Second Artillery Corps can be established on a more scientific and rational basis. **[end of page 38]**

Chapter 2

Definition and Classification of Second Artillery Campaigns

Second Artillery campaign is the main object of the research of the science of Second Artillery campaigns, it is also an important component of our military campaign systems. Researching the definition of Second Artillery campaign and probing its classification is beneficial to grasp the nature of Second Artillery campaigns and unveil the basic laws of Second Artillery campaigns.

Section 1. Definition of Second Artillery Campaigns

Campaign definition is high degree of abstract and generalized nature attributes of campaigns. It is a description of the basic connotations of campaigns and is also a logical starting point for the research of campaigns. Scientific and accurately defining Second Artillery campaigns will possess very important theoretical and practical significance on guiding the practice of Second Artillery campaign.

So-called definition is the succinct explanation on the nature and range of matters. Whether there is scientific definition is an important sign that the subject is mature or not. In campaign theory, campaigns are the core concept. (Since it is a military concept, it should reflect the basic characteristics of military concepts.) All campaign theory is expanded by surrounding it. At the same time, it is the logical starting point of researching the campaign theory. It is also the foundation for the establishment of campaign theoretical systems. It is the link to connect campaign science and campaign laws. Therefore, researching campaign theory must start from the research of campaign definition. Campaign definition must first unveil the nature attributes of campaigns. Only the nature attributes can reflect the basic connotation of matters.

The understanding of Second Artillery campaign definition has a non-stop development [end of page 39] and a process of gradually becoming complete. It first appeared in March 1984 in the published “Chinese People’s Liberation Army Second Artillery Military Language.” It put the definition of Second Artillery campaign as, “Second

Artillery campaign corps, based on the intention and unified planning of the Central Military Commission, and under its command, in order to achieve the specially determined strategic objectives, it is the summation of the implementation of several waves of uniformly coordinated nuclear counterstrike operations on the targets of attacks and times.” In the “Science of Second Artillery Campaign” published in 1985, its definition was, “Second Artillery based on the intention and unified planning of Central Military Commission, in order to achieve specially determined strategic objective, it is the summation of implementing several uniformly coordinated nuclear attacks on the targets of attacks and times.” Its basic connotation is that under the uniformed command of the leading institution of Second Artillery, the operational group formed by several middle-distance, long-distance and intercontinental missile bases, and the support forces of the air defense and engineering, implement nuclear counterstrike campaigns. The background of generating this definition is after the establishment of Second Artillery in July 1966. The scale of nuclear missile forces is expanding non-stop and formed a certain scale. After the diligent explorations of the large commanders, soldiers, and theoretical workers, on the basis of implementation experiences that they had systematically concluded a series of nuclear defense operational exercises and combined trainings, they had concluded the first “Second Artillery Operational Essential Principles.” Under the guidance of this important documents, it has successfully implemented the practice of the “206” campaign exercise. It has laid a certain foundation for the first presented Second Artillery campaign definition. This definition apparently was influenced by our military’s 1960s combined campaign definition. It had adopted the pattern of characteristic descriptive definition. It had only defined partial elements of Second Artillery campaigns. At that time, the composition of Second Artillery only included one single armed service of nuclear missile forces. It also had not clearly defined the missile bases as the basic campaign unit of Second Artillery. Therefore, in the formulation of campaign basic connotation, it used Second Artillery to replace Second Artillery campaign corps. In the command, it had not emphasized high concentration and uniformity. Its greatest drawback was it had not clearly defined the nature attributes of Second Artillery campaign. It used “the summation of several nuclear attacks.” It had not reflected the **[end ofpage 40]** belonging concept of Second Artillery campaign. Due to the restriction of understanding, this definition was used until the early 1990s.

In 1993, Second Artillery established the conventional missile brigade. After this, the theory and practice issues of conventional missile attack campaign had become the focus of the old and young of Second Artillery. Following more gradual in-depth understanding of nature attributes of Second Artillery campaign, on the formulation of Second Artillery campaign definition, although the campaign definition still appeared in the pattern of nuclear counterstrike campaign, due to the establishment of conventional missile forces, Second Artillery had started to renew the examination of the connotations of Second Artillery campaigns. The revision task had been implemented from three sides.

I. Nuclear Counterstrike Campaign Definition Continues to Receive Non-stop Perfection

In 1966, “Second Artillery Campaign Laws” and “Second Artillery Campaigns Science Course of Study” had defined it, “Second Artillery campaign refers to Second Artillery campaign corps based on the nuclear counterstrike operational order of the Central Military Commission, in order to achieve specially determined strategic and campaign objectives, it is the summation of several uniformly coordinated nuclear attacks on the targets of attacks and times.” This definition compared to the previously mentioned definitions, they have more clearly defined the campaign forces and objectives. With respect to campaign forces, it refers to Second Artillery campaign corps. It had avoided the vague presentation on Second Artillery. It had more precisely reflected the object of Second Artillery strength. With respect to the objectives, it defined as achieving specially defined strategic and campaign objectives. It made the nature of objective more precise.

II. The “Chinese Military Encyclopedia” Published in July 1997, It Had Redefined the Strategic Missile Forces Campaigns

It indicated, “Strategic missile forces based on the intention and unified plan of the Headquarters, in order to achieve the specially determined strategic objectives or strategic campaign objectives, it implemented several uniformly coordinated nuclear attack actions on the targets of attacks and times.” Apparently, this definition had made one step forward than the previous one. It used “actions” to replace the “summation.”

III. Presentation of Conventional Missile Attack Campaigns Definition

In 1996, the military uniformly edited teaching material “Conventional Missile Attack Campaign” had defined it, “It uses conventional firepower as the basic measure and uses mobile operation as the main pattern [end of page 41] of implementing missile attack operation.” This nuclear and conventional campaign definition separately formulating measures had been used until the late 1990s.

In January 1999, the announcement and implementation of “The Outlines of Second Artillery Campaigns” had indicated the general principle of “Second Artillery campaigns are that Second Artillery campaign corps based on upper-level operational intention, in order to achieve partial or overall nature of operational objectives, under the uniformed command to implement a series of operational attacks of nuclear attacks or conventional missile attacks.” This definition, it had defined the composition of campaign as a series of nuclear attacks or conventional missile attacks. It reflected the operation thoughts of integrating nuclear and conventional operations. It also use “operational actions” to describe the nature attributes of Second Artillery campaign. This definition possesses the significance of initiating nature on the research and development of Second Artillery campaigns theory.

The nature attributes of Second Artillery campaigns refer to basic attributes firmly possessed by Second Artillery campaigns themselves or the attributes that can determine the nature, face, and development of themselves. It mainly expressed in the four areas:

I. Scale of Forces that Second Artillery Can Participate in Campaign Operations

It is campaign corps or the equivalent operational group that can implement campaign missions. Only the group of forces above the scale of missile base that can implement campaign operational missions.

II. Second Artillery Campaigns Objectives Must Firmly Carry Out the Strategic Campaign Intention of Military Commission

Achieving the overall situation or partial operational objectives, especially nuclear counterstrike campaigns belong to strategic campaigns. Usually what are achieved is the overall situation objectives.

III. Second Artillery Is a Strategic Missile Strength Directly Under the Command of Military Commission Headquarters

The use of Second Artillery missile strength must be extremely strict and precise in execution following the order of the Military Commission Headquarters. Therefore, Second Artillery campaign must emphasize more on unified command. All actions must be implemented according to unified plan.

IV. Missiles Used by Second Artillery Campaigns

They are middle-distance, long-distance and intercontinental missiles. Its campaigns are consisted of a series of nuclear missile attacks or conventional missile attacks. It has determined the nature connotations of Second Artillery campaign definition. It has to include the contents in four areas. The connotations of these four areas, [end of page 42] not only have differences in natures of operations and combats but also have differences in natures with other armed service campaigns. It is particularly true on the first area. It is what only Second Artillery has. It is basic difference with other similar type of definition. Aside from the above basic connotations, according the he regulations of definition, we should also standardize its belonging concept. It should not only find out the neighboring belonging of the definition concept. From the perspective of the relations between operation, campaign, and combat, they all belong to military confrontational activities. They operational actions of the three have different scales. Therefore, the general meaning of campaign, its nature attributes are operational actions. Second artillery campaigns are the armed service campaigns of campaign categories. Thus, it belongs to campaigns.

This way, based on the method of “belonging plus determinant definition,” Second Artillery campaigns can be defined as, “Is referring to Second Artillery campaign corps

organize and implement campaigns.” Its basic connotation must include Second Artillery campaign strength, objectives, intentions, plan, command and components. It is the organic whole of composing Second Artillery definition. It is also the concrete contents of forming campaign operation object. At the same time, it is the basic criterion and important mark for measuring Second Artillery campaigns. Second Artillery operational participating forces are Second Artillery campaign corps. Its forming usually include three kinds, such as, missile bases, group of missile bases, and campaign level scale missile brigade group. In order to achieve campaign objectives, with respect to conventional missile attack campaign, usually it is partial objectives of the operation. With respect to nuclear counterstrike campaign, usually it is overall objectives of operation. Its operational intention, plan, and command are based on upper-level intention and unified plan. It implements highly concentrated unify command. The “upper-level” here has two layers of connotations. First, when implementing conventional missile attack, it is by the joint campaign command post or headquarters. Second, when implementing nuclear attack, it is implemented by the Headquarters with highly concentrated unified command. Second Artillery has possessed strategic nuclear missile forces and conventional missile forces. In future campaign operation, Second Artillery campaign has two basic patterns. The nuclear counterstrike campaign is the summation of a series of nuclear missile attack actions. The conventional missile attack campaign is the summation of a series of conventional missile attacks. It is very obvious [end of page 43] the greatest characteristic of this definition of Second Artillery campaign is integrated nuclear and conventional forces. It has comprehensively and totally reflected Second Artillery campaign as the nature distinguishing feature of armed service campaign.

Section 2. Classification of Second Artillery Campaign

Classification of campaigns is based on different standards and criteria to divide campaign types and patterns. Campaign types are basic classification of campaigns. Campaign patterns are further distinguishing of campaign types. From the perspective of entirety, campaign types include two big kinds, attack and defense. Any campaign actions must be expressed through offense and defense. Therefore, campaign can be distinguished into two basic kinds of offense and defense. Under this general principle, we can research the classification issues of Second Artillery campaigns.

I. Objectives, Significance, and Methods of Campaign Classification

Researching on the classification of Second Artillery campaigns is to unveil the internal nature and its regulations of Second Artillery campaigns from both flanks and search the theoretical guidance and countermeasures. This will match the subjective guidance and objective reality. This is for the sake of harmonizing the hierarchical relations between every kind of Second Artillery campaign. This can sort out the train of thoughts of campaign theoretical research. This will benefit the implementation of research with aim based on different campaign patterns and action characteristics. This will lay solid theoretical foundation for scientifically plan and guide the implementation of Second Artillery campaigns.

Although Second Artillery campaigns have with two basic types on offense and defense due to their special status and the special nature of weapons applications, Second Artillery campaigns have its special nature. They are not using ordinary weapons to achieve ordinary campaign objectives. They use formidable long-distance offensive missiles to attack the enemy's important strategic targets outside the enemy defensive area and at their campaign depth to achieve strategic or campaign objectives. **[end ofpage 44]** Therefore, Second Artillery campaigns mainly belong to offensive campaign basic types. On this basis, we should make further distinction on Second Artillery campaigns. The methods of distinction usually are implemented based on the nature of the weapons used and the combined scale and strength of the forces. The basic principles of division are: first, classification of campaigns must reflect the basic regulations of the armed services. Second, between various campaigns there must have great distinctions. Due to every kind of campaign have different characteristics, natures, and their expressions and campaigns with various natures have all express certain scale without exception. Campaigns of various scales are expanded at certain areas and spaces. Campaigns with various natures, scales, and spaces are expressed with certain operational forms. Therefore, various types of campaigns have their own characteristics.

II. Classification of Campaigns

Based on the above mentioned principles, Second Artillery campaigns based on the nature of weapons used can be classified into nuclear counterstrike campaigns and conventional missile strike campaigns. Based on the scales of forces use, we can classify them into missile base group campaigns and campaign scales of conventional missile brigade group campaigns.

1. Classification According to the Natures of Weapons Used

Due to Second Artillery currently has equipped with two kinds of weapons with different natures, the nuclear missiles and conventional missiles, and they have established two forces with different natures, no matter it is on operational objectives or on action measures, there exist apparent differences. Therefore, objectively there exists two campaign patters with two different natures.

1) Nuclear Counterstrike Campaigns

Nuclear counterstrike campaigns are the operational actions of Second Artillery nuclear missile campaign corps in order to achieve specially determined strategic objectives or strategic campaign objectives in implementing several missile nuclear strikes based on unified plan and high degree of **[end ofpage 45]** concentrated command. Nuclear counterstrike campaigns are the campaign corps consisted of nuclear missile forces and nuclear equipment inspection forces and corresponding support forces (or elements.) Missile bases and equipment inspection bases are the basic campaign units. Missile brigade is basic operational unit. Missile battalion is the basic firepower unit. Nuclear counterstrike campaign can be independently implemented but also can be jointly

implemented with the nuclear forces of other armed services. Due to nuclear counterstrike campaigns belonging to strategic campaigns, they must strictly organize and implement according to the final decision of the Headquarters.

2) Conventional Missile Attack Campaigns

Conventional missile attack campaigns refer to Second Artillery conventional missile campaign corps based on the operational intention of upper-level, in order to achieve a certain strategic or campaign objective, under the uniformed planning, to implement offensive operational actions by using conventional firepower attacks to the enemy's important targets. Conventional missile attack campaigns use conventional missile forces and corresponding support forces to form campaign corps. Conventional missile brigade is the basic operational unit. Firing racks are basic firepower units. Conventional missile attack campaigns usually are implemented during joint campaigns but they can also be independently implemented.

2. Classification According to Scales of Forces Used

Due to different operational missions of Second Artillery, when organizing campaign operations, the sizes of scales of forces used are different. Therefore, aside from using the natures of weapons in classifying campaign patterns we can classify them according to scales of forces used.

1) Missile Base Group Campaigns

Missile base group campaigns refer to over two (or contain) missile bases forming the campaign corps under the unified plan and organized command of Second Artillery campaign commander and his command institution according to the operational order of Headquarters or joint campaign command post in implementing operational actions with a series of missile strikes. Due to the large-scale of these types of campaigns **[end of page 46]** the command authority is concentrated at Second Artillery commander and his command institution. Thus, the type of campaign corps is high level campaign corps.

2) Conventional Missile Brigade Group Campaigns

Conventional missile brigade group campaigns are based on the operational order of Headquarters or joint campaign command post under the uniformed plan and organized command of Second Artillery commander and his command institution or war zone direction command post. They are formed into campaign corps by several conventional missile brigades in implementing the operational actions with a series of missile strikes. Due to Second Artillery conventional missiles have many different models, their conventional missile brigades are separately belonging to different units of organizational systems. Therefore, the campaign forces used by the conventional missile brigade group campaign usually are formed by several conventional missile brigades under different

units of organizational systems. They can also be formed by several conventional missile brigades under the same unit of organizational systems.

3) Missile Base Campaigns

Missile base campaigns are based on the operational order of upper-level under the concrete plan and organized command of missile base campaign commander and his command institution in implementing operational actions with a series of missile strikes. Due to these types of campaigns are organized and implemented by Second Artillery basic campaign units, so these types of campaign corps are called the basic campaign corps.

Second Artillery campaigns aside from dividing into the above campaign types, they also include four important campaign actions: campaign mobility, military deterrence, information warfare, and campaign defense. **[end of page 47]**

Chapter 3

Emergence, Characteristics, and Development of Second Artillery Campaigns

Section 1. Emergence of Second Artillery Campaigns

Second Artillery campaigns have emerged based on the foundation of non-stop strengthening of the overall forces of Second Artillery, capabilities of possessing certain scale of forces, command institutions' possessing of campaign hierarchy, and capabilities of independently implementing campaign activities in their execution plus richer experiences.

I. Emergence and Development of Foreign Militaries' Missile Warfare Campaigns

The missile force campaigns of foreign militaries were generated due to the emergence of missile weaponry and wide application of such weaponry in the battlefields. Following non-stop development and strengthening of the strength of missile forces they have become one important campaign style of modern high tech localized warfare.

As early as the last stage of WWII, when the war entered white heat period, following the emergence of radars and air defense weaponry the Fascist Germans had quickly lost their aerial supremacy. It had sorrowfully brought them the fate of defeat. In order to turn the unfavorable war situation around the Germans successfully researched and developed

“V-1” and “V-2” missiles. They implemented mass production and deployment of these missiles. From June of 1944 to March of 1945, in very short few months, the Germans had early or late fired in total of 8,070 “V-1” cruise missiles and more than 4,320 “V-2” ballistic missiles to the British capital of London and European continent. Despite the technique at the time was rough; the rate of missile **[end ofpage 48]** hit was low, it could not directly achieve strategic campaign objective and it could not fundamentally alter the failure of German forces. The implemented missile strikes did possess the characteristics of a campaign from the analysis of various operational factors and the German forces’ intention. With respect to the operational objective, the Germans had used missile weaponry as strong spiritual bombs and the “Assassin’s Mace” in retrieving the failure. They attempted to use missile attacks to shatter the allied countries’ military and people’s morale; destroy the fighting will of the allied forces, and grab back the initiative of the war. It possessed the nature of strategic campaign.

In fact, under the enormous pressure of the missile strikes, the morale of the military and people in London suffered serious bruises. If the government of Churchill did not try its best to encourage and urge its soldiers and people, it was hard to predict the direction of the localized war situation. From the perspective of operational forces, the Germans had fired more than ten thousand missiles. The forces participated in that efforts had the complete scale of a campaign corps. The British had more than ten thousand people participated in the implementation of tracking, observing, and warning in dealing with the “V-2” missiles. The missile attacks lasted close to nine months. With respect to the operational space, it almost involved the whole area of England and European continent. In terms of operational command, the selection right of the targets and timing of missile strikes were all concentrated in the leading Nazi institution at the time. Therefore, the application of missile weaponry in the battlefield at the last stage of WWII had realized the initial form of missile force campaign. Moreover, once this type of campaign emerged, not only it had greatly prompted the development of modern warfare weaponry but also greatly altered the traditional concept that mankind held for the operational patterns.

After the end of WWII, the missile weaponry had gradually received attention from people, especially those countries with strong military power. The technologies of missile weaponry also developed forward with surprising speed. Many countries had included missile weaponry as the most advanced main conventional weaponry and for long-distance operation into their arms warehouses. They also started to put them in large-scale into operations at the battlefields. While the technology of missile weaponry was quickly developing, the missile strengths were quickly getting expanded. More and more countries had organized their own strategic missile forces. Due to the development of these forces, **[end ofpage 49]** the missile forces not only could handle long-distance combined operational missions but also could implement specialized missile strike operations. They could single handedly achieve strategic campaign objective and play one of the major roles in warfare. Missile force campaigns also developed non-stop in the implementation of missile weaponry in operations. From the Fourth Middle East War to the American strikes against Libya, from the sea saw warfare between Iraq and Iran to Gulf War, we could see the figures of missile force campaigns. We could say that in the

high tech localized warfare the missile force campaigns had become one of the indispensable main campaign patterns.

If we say that during the Fourth Middle East War of October 1973, the Egypt and Syria fired “Frog style” and “Scud” ground-to-ground missiles to Israel, and Libya in April 1986 fired two “Scud” ground-to-ground missiles to the American military base at the coastal area of Italy for retaliation against the American strikes, could not constitute missile force campaigns due to the limited scale of missile strikes and functions, then the emergence of ground-to-ground missiles’ “Raids against cities” in the spring of 1988 between Iraq and Iran War was a typical pattern of missile force campaign. It also marked the entry into a new developmental phase of missile force campaign. During more than fifty days of continuous ground-to-ground missiles’ “Raids against cities” of the Iraq and Iran war, both sides fired missiles against each other. Iraq had fired in total of 149 self-made “Hussein” style and “Scud” missiles, which struck more than forty Iranian cities. It killed and injured more than ten thousand people. Several thousand buildings were destroyed. Iran also fired sixty “Scud-B” model missiles, which struck the center of Baghdad and more than twenty other cities. It had killed and wounded several thousand people. Due to almost total destructions of missile warning and command control systems during the war, the missile forces lacked proper trainings, and many problems existed in target selections and applications of tactics on the missile strikes on both sides, they did not fully express the functions and power of the expensive and modern ground-to-ground missiles. However, despite using whatever kind of elements to assess, analyze, and judge, this “Raids against cities” [end ofpage 50] with missiles possessed significant campaign characteristics. It not only brought both sides mentally, economically, and militarily insufferable pressure and great losses, it also became the catalyst in ending the war between Iraq and Iran.

If we say that the ground-to-ground missiles’ “Raids against cities” of the Iraq and Iran War had created the missile force campaigns of high tech localized warfare that was advocated earlier, then the missile offensive and defensive battles of the Gulf War signified the entry of a relatively mature period of the missile force campaigns. In the morning of January 17, 1991, one of the American “Tomahawk” cruise missiles hit the communications command building of Iraq. It had opened the thirty-eight days Gulf War, which brought deep impact to the military theory and practice of the world. On the first day of the Gulf War, the American battleships “Missouri” and “Wisconsin” docked at the Gulf area first fired more than one hundred ship-to-ground “Tomahawk” cruise missiles to military facilities, such as, air defense positions, command control centers, etc. Only three days after the war got underway, the American forces had fired 216 “Tomahawk” cruise missiles to Iraq. During the war, the Americans also fired thirty short-distance conventional ballistic missiles to Iraqi territory. Through these missile strikes, the Americans had basically destroyed the Iraqi air defense capabilities and command control functions. It created very good environment for large-scale air raids later. Facing the coalition forces possessing advanced high tech weaponry, equipment, and strong military offensive, the Iraqis realized that they were in absolute military inferiority.

In order to turn around this passive and unfavorable situation, the Iraqi military could only think of ways in strategy. On the second day of the War, Iraqis fired eight “Scud” missiles to the capital of Israel, Tel Aviv, and two cities, Haifa and Al Khalil. In total, they fired thirty- seven missiles to Israel during the entire Gulf War. It was close to half of the total firings. They intended to drag Israel into the war so that the Gulf War could turn into the Arab war against Israel. They hoped to achieve the objective of splitting the Anti-Iraqi coalition and reversing the unfavorable situation. The Iraqis wanted to use missiles to strike at the common enemy of the Arab world [end ofpage 51] and obtain the sympathy and support of some Arab countries, especially those Islamic fundamentalists. This could force the “Anti-Iraq Coalition Forces” that the Americans painstakingly organized facing the danger of collapse. While attacking Israel, the Iraqi also fired several tens of “Scud” missiles to Saudi Arabia. Despite the limited losses that were sustained by the Israel, Saudi Arabia, and coalition forces by the Iraqi missile strikes, (Only the American military suffered its greatest casualties during the Gulf War when the “Scud” hit the military base of Dhahran in Saudi Arabia.) it brought great psychological pressure and seriously impacted the normal livelihood of the residents of these cities and let them feel very insecure. According to reports, several hundred thousands of people living in the capital of Saudi Arabia, Riyadh, evacuated to other places to avoid the missile strikes. The loyal families of Saudi Arabia all moved to the city Jeddah on the west coast. The missile strikes did not reverse the fate of failure of the Iraqis, but it did not demonstrate that the strike campaign of missile forces could not express its functions in the modern high tech warfare. On the contrary, under the circumstances that the coalition forces had great superiority; the Iraqi’s most crack troops, the Republican Guards, were disarmed without being utilized; the naval ships were sank and totally annihilated before they went out to sea, and aircraft dared not took off, only the ballistic missile forces fought alone and, they had implemented the “Sacred Orders” of Saddam Hussein from the beginning to the end. It also had frightened the enemy and displayed important status and functions of missile forces’ strike campaign in future high tech localized warfare.

There was one more important reason why Gulf War in military history had particularly caused attention from people. It was the first time the missile and anti-missile operational model was applied in actual implementation. The “Patriot” missiles fought against the “Scud” missiles and successfully realized the interception of missiles by missile weaponry. It made the missile forces campaign from pure offensive campaign of the past into a campaign with integrated offense and defense. It had greatly enriched the connotation of the missile force campaigns.

After the end of Gulf War, the world’s military theory, including the U.S., had implemented systematic and in-depth research on important campaign model, the missile force campaigns. It had gradually formed a more scientific system of missile force campaign theory, [end ofpage 52] which was later supplemented and improved non-stop in the Wars of Kosovo and Afghanistan. We can believe that due to the development and maturation of missile force campaign theory, the missile force campaigns will gradually receive more attention by more people. It will express greater functions during future localized warfare.

II. Emergence of Second Artillery Campaigns

The emergence of Second Artillery campaigns was not an accident. Under a certain condition, it is an inevitable outcome following the non-stop growth of the entire strength of Second Artillery.

The emergence of our military's first ground-to-ground missile forces was in July 1959. At that time, there was only the authorized strength of three battalions. It did not equip with the condition of expanding campaign trainings. In June 1964, the first missile base was constructed. In the next two years, we had built six missile bases and twelve missile regiments. Due to each missile base was at the initial building phase that it was not equipped with the capability of organizing force trainings. Therefore, prior to building Second Artillery forces, each missile regiment was separately managed by relevant schools and academies and the artillery forces of military regions. Each implemented separate missile technology and tactical trainings. It did not have the capability of expanding campaign-level trainings.

In July 1966, it was declared that the leading institution of Second Artillery was established. It signified the establishment and development of the missile forces had entered into an important phase. Each missile regiment was formally incorporated into corresponding missile bases and implemented relevant trainings in techniques and tactics. It had established necessary conditions for expanding the campaign trainings.

The missile weaponry used by Second Artillery contained high level of technology. It had more quantity of forming a complete set equipment and stronger nature of systems. Following rapid development of science and technology, new weapons and equipment were developed and gradually used to equip the troops. It had notable enhancement on the missile weaponry models, quantities, and qualities for the missile forces. The levels of the tactical and campaign trainings by the forces had made great progress. When the constructions of Second Artillery entered into the second ten years cycle, **[end ofpage 53]** under the leadership of the Party's Third Plenum Session of the Eleventh Congress, Second Artillery forces had stirred up unprecedented trainings upsurge. On the basis of implementing the construction of forming a complete set with the firing battalion at the center, it studied hard on the techniques and tactics and gained a wealth of combined training experiences. Relying on its own ability, it even independently and successfully formed the campaign exercises of "206" and "83-01" in 1982. We can even say that these two exercises were the important marks of the emergence of nuclear counterattack campaigns of Second Artillery. Thereafter, it successfully organized a series of campaign exercises, such as, "86-01 campaign exercises," "91-10" campaign group trainings and exercises, and "94-01" campaign group trainings and exercises. It had examined the leading institutions of Second Artillery in its entirety in organizing and commanding nuclear counterattack operational capability. It had accumulated rich implementation experiences.

In the late 1980s, the Military Commission gave the mission of constructing and developing conventional missile forces to Second Artillery. Especially after the Gulf

War, our military under the correct leadership of Chairman Jiang Zemin had formulated the military strategic principles of the new era. In order to adjust to the requirements of future high tech localized warfare, the Central Military Commission had issued double missions of “Double Deterrence and Double Operations” to Second Artillery. This had added new vitality to the constructions and development of Second Artillery. From then on, the armed forces of Second Artillery had added one conventional missile forces. It had early or late in 1995 and 1996 implemented two “Magic Arrow - 95” and “Joint 96-1” large-scale conventional deterrence firing exercises. It had successfully completed the important mission given by the Central Military Commission. From then on, the new Second Artillery campaign pattern of the conventional missile strike campaign had emerged.

Section 2. Characteristics of Second Artillery Campaigns

Characteristics of campaigns are the special attributes of the campaigns themselves. They are the important basis for formulating campaign principles. The objectives of researching campaign characteristics are to reveal the internal nature [end of page 54] and laws of the campaigns. In order to provide theoretical support for the organization of campaign trainings and campaign operations, aside from possessing the common characteristics of modern campaigns, Second Artillery campaigns also possess some unique characteristics of their own. Therefore, in researching campaign characteristics of Second Artillery, we should stand on the background of modern high tech warfare and use the implementation of Second Artillery campaign trainings as the basis. We should implement it from the characteristics of Second Artillery weapons and equipment and the laws of campaign operation.

I. Equipped with both Nuclear and Conventional Weaponry so the Strategic Nature Is Strong

Military struggles always serve the politics. “Warfare is the continuation of politics through a different measure.” Second Artillery had very prominent status and functions in warfare due to its possession of nuclear and conventional missiles.

Second Artillery campaigns are the operational activities of using strategic nuclear missiles and conventional missiles to strike at the important enemy political, economical and military targets that are several hundred, several thousands, and several tens of thousands kilometers away. Due to the important impact of the special functions and production of these weapons, not only they possess powerful physical destruction effects but also possess profound and lasting psychological deterrence effects and social effects. They can directly relate to the entire situation of national political, military, and economic struggles. They can affect the developmental changes of international strategic situation. No matter whether it is nuclear counterattack campaign or conventional missile strike campaign, the strong firepower can directly achieve the strategic and campaign objectives. They can directly impact on the progress and end results of warfare.

Therefore, the application of missiles can directly relate to the entire strategic situation and is strictly controlled by the entire strategic situation.

1. The Campaign Goals of Second Artillery Must Obey and Serve the Overall Strategic Situation.

They should follow the basic principles of serving the political struggles and national strategic interests. They should satisfy the requirements of the overall situation of national political and diplomatic struggles. Therefore, the campaign goals of Second Artillery must only obey and not surpass or deviate from the requirements of the overall strategic situation. **[end of page 55]** Under normal circumstances, the campaign goals of Second Artillery must be defined based on the strategic missions of the Headquarters. They cannot willfully express by the campaign commander.

2. Campaign Scale of Second Artillery Must Be Defined According to the Requirements of the Overall Strategic Situation.

The scale and goals of campaigns are directly related. They are restricted by the strength, battlefield capacity, and campaign missions, but mainly received strict control by the strategic goals. In one campaign, how much weapons and forces must be put into an operation, on one hand, it should consider military effectiveness of achieving the determined objectives with minimal cost. We know that no matter it is nuclear missile or conventional weapon they are all very expensive. The quantity produced is limited. At the same time, the consumptions of supporting equipment and operational material are very high. They rely heavily on the national economical strength. Therefore, they should be considered from the overall strategic situation. The campaign scale should be under strict control. On the other hand, we should consider the enormous impact created by the use of missile strikes. It should achieve the determined strategic and campaign objectives but also try our best to avoid the generation of negative effects.

3. Time to Start Second Artillery Campaigns Must Be Determined by the Headquarters Based on the Requirements of the Overall Strategic Situation.

No matter whether it is nuclear counterattack or conventional missile strike, they are related to the big situation. We can pull a hair but move the entire body. Many countries in the world, the use of missiles, especially the use of nuclear weapons and the time of firing them must be directly handled by the supreme leader of that country. Our country has no exception. The use, stoppage, advance, and retreat of missiles must serve the requirements of political and diplomatic struggles. It allows the starting time of Second Artillery campaigns best serve the basic interest of protecting the country. It serves to optimize the political and military effects.

Therefore, when implementing Second Artillery campaigns, the important issues of the deployment of forces, defining of objectives, selection of strike targets, scale of campaign, timing of operation, and coordination with other armed services must be

carefully determined. It usually determined or approved by the Headquarters or joint command institution. [end of page 56]

II. The Overall Nature Is Strong and the Requirements on Composition and Forming a Complete Set Are High.

Informationized warfare is the confrontation between systems against systems. The level of forming a complete set of military systems can determine the overall operational effectiveness. Strategic missile forces are big systems with complex force structure. Aside from the individual attributes of each element in forming the systems, there are overall characteristics after the systems are formed. Strategic and campaign missiles have assembled various advanced technologies into one body. The systems are complex and there are strong technological and overall natures. They include such subsystems as, warhead, missile body, ground facility, propellant, and operational positions, which form a complete set. Only one missile is consisted of several tens of thousands parts and components. In firing one missile we should use several tens of vehicles and several tens of professionals. We can express the overall effects of the systems only by optimizing the internal structure of the systems. The more complete the systems' structure, the stronger the forces' overall operational capabilities and the greater the operational effects.

This is because,

1. Only by Forming a Complete Set that We Can Perfect the Force Systems

The composition and forming a complete set of the Second Artillery campaign forces are based on the requirements of an operation. The scientific composition of the necessary equipment, facilities, and elements in the entire process of judging the operational preparation, implementation, and operational effectiveness, is to organically integrate and form an entirety on matching the elements of the forces, missiles, operational positions, and command supports according to a certain method. The strategic missile forces consist of several force elements. They have soldiers, and weapons; there are operational forces and supporting forces; they are weapons for main battle and support equipment. The forces have high technical contents and related to many different professions. There is strong nature of coordination and high requirements for forming a complete set. Therefore, only under the function of a certain composition method through optimal combination of composing elements and promoting non-stop forming of a complete set of the overall systems that we can finally form the complete force systems.

2. Only through High Degree of Composition that We Can Enhance the Overall Operational Capabilities

Composition is organically integrating various operational elements in forming overall operational combined forces. [end of page 57] Overall composition determines the entire overall operational capabilities. Between the force elements of strategic missile forces, there are connections and they piled together orderly and systematically. They are

scientifically and reasonably combined based on certain ratio and order. From the perspective of personnel, we should combine the firing element, technical support element, and logistic support element. From the perspective of operational capability factors, we should include combined factors of command, support, rapid reaction, and penetration. From the perspective of contents, we should have the composition of technical, tactical, combat troops, and support troops. The priority condition of forming overall operational capability is based on forming a complete set composition to combine the factors of scattered personnel and capabilities in resolving the issues of composition. Composition is a dynamic process, which possesses the characteristics of long-term and complex natures. It is based on the regulation of composition – enhancement – re-composition – and further enhancement, to develop forward. Each element will fully adjust to each other during the composition and achieve the optimal dynamic balance.

3. Missile Forces Can Express the Overall Superiority Only Through Systematic Composition and Forming a Complete Set

Military constructions under informationized conditions emphasize the composition of systems, the pluralism of forces, and the overall nature of military constructions. Due to the characteristics of many weapon and equipment models, complex technologies, and large operational support systems of the strategic missile forces, they pay particular attention to the composition and forming a complete set of the systems. The composition and forming a complete set of strategic missile forces is to coordinate each part. It is the coordination of the composition and forming a complete set of various force elements. It makes sure of the composition on the basis of forming a complete set. It is using the composition to promote the forming of a complete set. By handling the balance of force structure, the overall superiority will become more apparent and operational capability will become stronger. On the contrary, if only one item piled high above the brim and the system has shortcoming, it will lower and weaken the level of constructions and even affect the entire operational effectiveness. Under the circumstances that the weapons and equipment of the strategic missile forces are in inferior conditions, only by optimizing the systems' structure, enhancing the systems' effectiveness, and seeking the overall superiority that we can generate the overall magnifying effects of one plus one greater than two. [end ofpage 58]

III. Operations under the Nuclear Conditions and Nuclear Deterrence Conditions

Based on the stand of the principles that our country will not first use nuclear weapon under any circumstance, the strategic nuclear forces of Second Artillery will be based on the order of the Headquarters to implement nuclear counterattacks if the enemy had implemented the nuclear attacks first. Therefore, as a whole, the nuclear counterattack campaigns will be implemented under the nuclear conditions. Once the enemy implemented the nuclear attacks to our country, they will definitely treat the operational positions of Second Artillery and nuclear missile weapon systems as their focal point targets. After Second Artillery operational areas suffered the attacks, the battlefield situation becomes very complex and the environment became very harsh. Our personnel, weapon and equipment, position engineering, roads, bridges, and the reconnaissance,

communications, and command control systems will suffer serious injuries and destructions. The nuclear counterattacks of Second Artillery will have to be implemented under very difficult conditions.

The conventional missile strike campaigns of Second Artillery will be implemented under the nuclear deterrence conditions. Even if the future warfare mainly will be conventional localized warfare, the major militarily powerful nations possessing nuclear weapons had never promised not to use nuclear weapons first. In the most recent few localized warfare, there were several implementations of nuclear deterrence. Therefore, under the informationized conditions, the implementation of conventional missile strike campaigns of Second Artillery will definitely receive strong countries' nuclear deterrence. The possible occurrence of area conflicts or localized warfare in the surrounding areas of our country, there exist real nuclear threats.

Therefore, no matter whether it is nuclear counterattack campaigns or conventional missile strike campaigns, it will receive serious threats from nuclear weapons. Second Artillery must do well on the long-term preparation for nuclear strikes and standing firm on implementing operations under nuclear conditions or nuclear deterrence conditions.

IV. Long Period of Battlefield Preparations, Deployment Scattered, and Coordination of Command Difficult

Battlefield refers to the space where the opposition confronts each other. The operational activities of strategic missile forces [end ofpage 59] have strong dependency on the battlefield. They must depend on it to build military construction projects and facilities at predetermined operational areas as the main contents of battlefield preparations. They involve building missile position engineering projects, building and repairing transportation lines, changing the terrains, storing operational material, and formulating battlefield data. The battlefield preparation of Second Artillery possesses its own uniqueness.

1. Long-Term Nature of Battlefield Preparations

The battlefield constructions of strategic missile forces have complex elements, huge engineering tasks, and high demand for quality. They are a long-term and gradual process. Under the modern warfare condition, the missile positions not only are the trusty support of implementing missile strikes but are the important assurance for survival. Therefore, in a rather short time, the battlefield constructions cannot meet the requirements of war preparations.

2. Special Nature of Operational Applications

Missiles are large-size equipment. Its operational applications require huge support systems and facilities forming a complete set. They are related to many professions and personnel. Moreover, the nuclear weapons must be used for counterattack operations

under the condition “Not to use it first.” It has high requirements on the surviving environment. It brings a certain level of difficulty to the battlefield preparations.

3. Complex Nature of Battlefield Constructions

The battlefield constructions of strategic missile forces and other armed services are different. They are very complex systems engineering. They require the alternate implementations of many construction items, such as, engineering, installations, transportations, communications, repairs and maintenance, measurements, and camouflage. They require strict organization and fine construction works in order to satisfy the operational requirements.

4. Requires Large Amount of Money

The battlefield preparations of Second Artillery, especially the engineering constructions of the positions and basic construction engineering have large work loads, long period, high requirements for installing the facilities and equipments, and the items needed in forming a complete set are many. Therefore, they require large amount of construction money for support. After the positions are built, during the long-term process of operational preparations, they still require large amount of money to repair, maintain, and renew the position facilities and equipment. Otherwise, the operational conditions of the positions cannot obtain improvement and the forming a complete set of the facilities is not healthy, which can restrict the full expression of the battlefield functions.

The deployment of Second Artillery nuclear forces and conventional missile forces are established at peace time based on the strategic intentions of the Headquarters. In order to benefit the [end ofpage 60] concealment and camouflage of the forces, enhance the survivability, and avoid the simultaneous destructions of several positions by the enemy, we should scatter and deploy the operational positions to a wide area of the strategic depth. We should deploy with more points, on wide surface, and possessing relative nature of stability. By doing so, although it is beneficial for enhancing the survivability, it can bring many difficulties simultaneously to campaign command and every support and campaign coordination. Second Artillery implements non-contact type of operation. It is particularly true in implementing the campaigns of group missile bases, the span of battlefield is large and it can make coordination of every war zone and campaign activities very complex. Every support activity will become very difficult. Moreover, due to the enemy's electronic jamming and firepower destructions during the operation, it will easily cause the communications to be interrupted and the difficulty of survivability even greater. Therefore, the missile forces must have a foot hold on the most difficult circumstance and made good preparations at peace time. They should formulate various optional plans in dealing with various complex situations. They should adopt effective measures and assure the smooth implementation of the campaign.

V. Technologies of Weaponry and Equipment Are Complicated. Time for Campaign Preparation Is Long and the Requirements Are High

Aside from being restricted by the political, military, and diplomatic conditions of the country, the campaign activities of Second Artillery also get restricted by the complexity, technical nature, overall nature, and high support requirements of their own weapons and equipment systems. The weapons and equipment used by Second Artillery are the complex systems with high degree composition of advanced technologies. In the systematic checking of operational preparations, no matter which link has emerged with problems it can affect the accomplishment of the entire campaign missions. Therefore, we should adopt a series of support measures so that every professional support unit (or element) must strictly and accurately act with unified coordination so that it can accomplish a series of checks, testing, and missile firing missions. At the same time, we should also possess complete support elements so that they form an organically integrated operation with main operational weaponry. This way the campaign can be implemented orderly.

No matter whether Second Artillery is organizing nuclear counterattack operations or organizing conventional missile strike campaigns, they have many support items, which mainly include various supports on targets, reconnaissance intelligence, [end ofpage 61] land measurement, various unit trajectory calculations, meteorology, communications, engineering, chemical defense, camouflage, logistics, and equipment. All these are the composition elements for the missile campaign forces to accomplish campaign strike missions. In many support elements, they all adopt large amount of advanced technological measures. The technical factors are particularly prominent. These technical factors possess very prominent influence on the decision-making of campaign commander and campaign operational activities. Only by establishing perfect technical support systems at every level we should strictly implement technical guarding of the pass on single unit checks, combined checks, the inspections prior to entering the firing position, and the pre-firing inspections after entering into the firing position during the process of implementing the strike mission. This way, we can assure the maintenance of weapons and equipment in good technical conditions from the start to the end. Otherwise, it will directly affect the progress and end results of the strike campaign. Therefore, on one hand, we should form a complete set between various support elements and main operational weapons in peace time. We should also maintain the equipment and material in good conditions from the beginning to the end. On the other hand, we should diligently enhance the quality of the officers and soldiers so that they possess high operational capabilities and abilities to eliminate problems of breakdown. At war time, the commander at every level should strictly guard the pass and solve various technical and tactical problems that can affect the operation of the missile forces on the ground. This is to assure that the missile can fire properly and it will not affect the progress of the entire campaign.

VI. Using Missile Forces' Firepower Strikes in Achieving Campaign Objectives. The Core Status of Firepower Application Is Prominent

We all know that during the application of middle-distance, long-distance, and intercontinental missiles of Second Artillery, it will implement large-scale firepower strikes to strategic and campaign targets at a distance of several hundreds, several thousands, and several hundred thousand kilometers away in achieving the campaign objectives. Whether we have inflicted a certain degree of injuries or destructions to the targets are the only criteria of measuring the operational effects of a campaign. The commander at every level must finely organize the firepower strike activities and put forth his energy on guaranteeing the strike effects in order to finally achieving the campaign objectives. [end of page 62] Therefore, when organizing the implementation of missile firepower strikes, the commander should be based on the strategic intentions and strictly follow the instructions of upper-level and apply various campaign forces. He should implement scientific decision-making. The establishment of operational intention, selection of strike targets, forces to be used, and equipping with support forces in decision-making must be implemented by surrounding the core issue of firepower application. Only through scientific operation and accurately responding to the commander on important issues that he is concerned about, such as, what are the strike targets this time? Where is the aiming point? How to determine the number of waves of strikes? Based on what sequence in implementing the strikes? To what extent the destructions of the targets must be achieved in order to accomplish the mission? After the strikes, what kinds of effects are anticipated to emerge? Only on the basis of implementing scientific calculation in advance in providing the accurate information to the above questions that the commander can make accurate final decisions and the command institution can formulate a reliable and practical operational plan.

VII. Campaign Defensive Operation and Information Warfare Penetrate through the Entire Campaign Process

Second Artillery missile forces are important targets for the enemy's sudden attacks. At peace time, during the process of position constructions, there are many machines and equipment, and large drainage and dumping projects, which have obvious characteristics. They are easily discovered by enemy reconnaissance. This is particularly true of the characteristics at the silo and level field of the missile base. The difficulty in concealment is great. At war time, the forces need to use many equipment and the activities are frequent at the operational area in implementing the process of an operation, which is very easy to be discovered by the enemy. This added the fact that the missile forces have very weak self-protection capability. It is very difficult to protect from the enemy's sudden attacks. The survivability can receive serious threats. Therefore, campaign defense and electronic warfare became more important. Facing these circumstances, Second Artillery must first do well on tight defense in organizing campaign activities. We should combine the use of various methods and adopt all effective measures in defending against the enemy's satellites and aerial reconnaissance, defend against the attacks of enemy's controlled and guided weapons, and defend against the strikes of enemy's aerial weapons. We should also defend against the enemy's

ground troops' surprise attacks. We should avoid or, to the maximum degree, reduce the losses due to the enemy's attacks and effectively maintain [end ofpage 63] nuclear counterattack capabilities and conventional missile strike capabilities. If the position and forces suffered the enemy's attacks, we can lose the basic premise of implementing retaliation and missile strikes against the enemy. Due to the wide application of high tech in military domain with information technology as the core, the information warfare as a brand new operational pattern will appear in the modern battlefield. It will implement intense struggles in the domains of intelligence, reconnaissance, and electronic warfare, computer network warfare, and communications warfare. Therefore, not only the defensive operations of Second Artillery but also the information warfare will penetrate through the entire campaign process.

Section 3. Main Factors that Influence the Emergence and Development of Second Artillery Campaigns

Second Artillery campaigns are moving and developing. The factors that cause them to move and develop are varied. We can only implement diligent analysis and research on these factors in order to ascertain the developmental orbit of Second Artillery campaigns and accurately grasp the developmental direction of Second Artillery campaigns.

I. Strategic Principles of the New Era Guide the Developmental Direction of Second Artillery Campaigns

At the present, our military struggle has entered into a new historical phase. Great changes have taken place in international politics and economic pattern. The world peace forces are increasing non-stop. The danger of world war has subsided. Localized warfare has become the main warfare pattern. The main subject of our military is to deal with the possible occurrence of localized warfare. The Party Central and the Central Military Commissions, based on the military thoughts of Mao Zedong and military theories of Deng Xiaoping have judged the time and sized up the situation. We have looked far ahead and aimed high. We have implemented enrichment and perfection on our strategic principles and formed new strategic principles by the Military Commission. The development of Second Artillery campaigns must [end ofpage 64] use the strategic principles of the Military Commission as the centralized guidance. Obeying and servicing the requirements of this strategic principles and many characteristics of informationized and localized warfare will guide and promote Second Artillery to stand at the front edge of the development of the time and actively collect and use modern new information, data, and experience, which are changing with passing days. From them we will explore the internal laws of informationized localized warfare development and predict the developmental trend of Second Artillery campaign development and search and formulate effective winning strategy. First, on operational measures, while enhancing the nuclear strike capabilities, we should greatly strengthen the conventional strike capabilities so that they move toward electronic, intelligence, and digitalize direction. Second, on the command control measures and methods, they will develop toward the networks and integrated direction. Third, on the operational measures and

methods, they will have profound changes. In the integrated land, sea, air, space and electronic operational methods and measures and joint firepower strike, new patterns and new operational methods will emerge.

II. Weapons and Equipment of Second Artillery and Technical Level Determine the Development of Campaign Factors and their Actions

The development of military scientific technology and weapons and equipment determines the changes of operational measures. It is the objective laws of warfare development. It is also one of the basic concepts of Marxism's military theory. Engel said, "Once the advancement on technology can be applied to military objective and is used in military objective, it will immediately, almost forcefully, and also frequently violate the will of the commander in causing the changes and reforms on operational measures." The development of Second Artillery technical level and weapons and equipment will determine the development of Second Artillery campaigns. Second Artillery as strategic missile forces of our military, after more than forty years of development have formed into both nuclear and conventional, solid and liquid fuel, and link-up firing range strategic campaign missile series. It is also equipped partially with some advanced electronic warfare equipment. Not only that, in order to accomplish the missions of "Double Deterrence, Double operations" given to Second Artillery by the Central Military Commission, it has [end of page 65] developed new techniques and new equipment non-stop in the recent years. It is predicted that, around 2010, Second Artillery will initially form a new generation strategic nuclear missile series that can implement global firepower control, with high firing precision, and with advanced technology. It will also develop conventional missile series that can participate and win localized warfare under the informationized conditions. It will develop advanced electronic equipment that can effectively implement electronic warfare. All these will greatly enhance the capable and effective nuclear retaliation capabilities and adequate effective conventional strike capabilities.

Non-stop development of technical level and weapons and equipment of Second Artillery will directly impact and determine the development of Second Artillery campaign elements and their actions.

1. Promote Second Artillery Campaign Forces to Be Plural

Following further development of Second Artillery technical level and weapons and equipment, the original campaign forces will be strengthened non-stop. New campaign forces will emerge non-stop. Some of the support forces will be upgraded to become main operational forces.

2. Promote Second Artillery Campaign Actions' Composition to Appear More Varied

Following the daily renewal of Second Artillery weapons and equipment, some of the action patterns will gradually become main action patterns. At the same time, they will increase some new campaign action patterns.

3. Promote the Special Time-Space Characteristics of Second Artillery Campaigns to Generate New Changes

Following the enhancement of operational effectiveness of the weapons and equipment of Second Artillery, the operational effectiveness of the forces has also greatly been upgraded. This has provided objective material basis in achieving operational objectives in the shortest time possible. It increases the operational rhythm and reduced the process. At the same time, following the development of the technologies of precision control and guidance, navigational positioning, and information transmission, Second Artillery campaign space area will be expanded and connotation increased.

4. Promote More Complexity on Second Artillery Campaign Plans and Preparations

Missile is the crystallization of modern high tech. It possesses the characteristics of technical precision and exorbitant cost. Thus, the use of missiles must be "Carefully calculated and strictly budgeted." Campaign actions must be implemented with fine planning and preparation. [end of page 66]

III. Modern Advanced and New Technology Promoted New Breakthrough on Campaign Patterns and Campaign Operational Actions

Modern advanced technology mainly refers to the peak technology at the front line of modern scientific and technical development, advanced knowledge, and technical group close to this front line area. Following the development of modern high tech and daily penetration to the field of Second Artillery military domain, the gradual impact on Second Artillery campaigns becomes more apparent and more wide-ranging.

1. Modern High Tech Has Promoted Weapons and Equipment Developing toward Miniaturized and Intelligent

This will make the organization of campaign forces appear to be smaller and capable, the force structure appear to be scientific and reasonable, logistic support personnel will be reduced, and technical support personnel will be increased. The general ratio of commander and staff personnel will be reduced. The ratio of technical officers will be increased. Campaign forces will transform from quantity-scale and manpower-concentrated type to quality-efficient and scientifically-concentrated type.

2. Following the Development of Modern High Tech and Wide-Ranging Application to Second Artillery, It Will Continuously Strengthen Various Operational Forces of Second Artillery

It will also promote Second Artillery campaign forces to develop toward the composition of multiple armed services from a single armed service.

3. Weapons and Equipment of Modern High Tech Possess Characteristics of Stealth, Precision Control and Guidance, Strong Jamming Capabilities, Strong Destructive Power, and Automation

Operational forces must possess strong and rapid reaction capabilities. They will promote new breakthrough on campaign patterns and campaign operational actions.

IV. New Military Reforms Will Generate Great Pounding to Campaign Development

When human society will enter into information era from industrial era under the great push of modern science and technology, new military reforms are rising in the world and they are gradually getting into more depth.

These new military reforms relate to every aspect of military domain. Their basic [end of page 67] contents include military technical, theoretical and organizational reforms. In which, the military technical reform is the basis and premise of these new military reforms. Military technical reform has fully utilized the new achievements of advance technology with the information technology at the core. It has realized the rise of overall nature of military technology. It has realized the informationized, intelligent, and integration of weapons and equipment. It provides solid technical foundation, which is needed by the new military reforms. Military theoretical reform is the core of these military reforms. It is the inevitable result of military technical reform. It is also the guide for the further development of military technical reform and military organizational reform. In military reforms, the priority mission of military theoretical reform is to create new military theory using information warfare as the core and also proposes new operational method corresponding to this new military theory. Military organizational reform is the key link of these new military reforms. Even if military technology and military theoretical reform are very complete and thorough, if they are unable to express with a certain military organization form, it cannot fully complete new military reform at the end. It will not form realistic operational forces. In these new military reforms, the final objective of the military organizational reform is to form a small scale, highly efficient, and multi-capable informationized force able to adjust to the requirements of future informationized warfare. This force is established on the basis of military technological and theoretical reforms. It is formed through thorough reforms of the areas of military construction thoughts, systems of authorized strength patterns, and organized command organizations.

The tide of new military reforms will generate intense and great pounding function on many aspects of Second Artillery, such as, weapons and equipment, operational theory, authorized strength systems, war-readiness trainings, and every support item. This is particularly true for nuclear counterattack campaigns and conventional missile strike campaigns of Second Artillery. It is also true for future operational actions of joint campaigns, which will receive grave impacts from the strong enemy's high tech weapons and advance operational theory. Second Artillery as a young armed service in our military is very important armed forces. There are many issues, such as, how to face the new military reforms and how to fully express their functions in future joint campaigns, require urgent resolutions. Therefore, in-depth theoretical research on Second Artillery's future joint campaigns [end ofpage 68] is a very imminent requirement. In short, facing new military reforms, Second Artillery must implement in-depth and comprehensive technological, theoretical and organizational research so that it can adjust to the requirements of new military reforms. Thus, it can lay solid foundation for handling the historical missions of Second Artillery.

Section 4. Development Trends of Second Artillery Campaigns

The development trends of Second Artillery campaigns refer to the developmental tendencies of Second Artillery campaigns. The dialectically materialism believes: during the process of development, a matter will encounter many unavoidable complexity and repetition due to various impacts from subjective and objective elements and mutual functioning of its internal contradictions. The development of Second Artillery campaigns is no exception. During its development, it will be impacted by various subjective and objective factors and emerge with complexity and repetition. Among these influential factors, its most basic factor is the advancement of science and technology and the development of weapons and equipment. These two factors have provided the campaigns with material basis and premise. Therefore, if we use modern science and technology and the development of weapons and equipment as a clue, informationized local warfare as a background, and the world's strong military powers campaign development as a reference, we can closely surround the possible development and changes of various factors of Second Artillery campaigns and implement initial prediction on the future developmental trends of the campaigns. The goals are that we can more accurately handle the future characteristics of Second Artillery campaigns. By doing so, we can make the current Second Artillery campaign preparations possessing more focus and clearly defined goals. This will allow us to grab more initiative in future campaigns. [end ofpage 69]

I. Pluralism of Campaign Forces Will Move toward the Direction of Forming of the Force with More Operational Units Combined

Campaign forces refer to the armed forces participating in a campaign operation. It mainly includes personnel and weapons and equipment two basic components and the organic form built between the two based on certain organizational methods. Developmental trends of various factors of Second Artillery campaigns impact on the developmental changes of the campaigns. In the past, Second Artillery campaign forces

only had nuclear missile forces and corresponding support forces. This made the campaign patterns and campaign actions of Second Artillery rather singular. It gravely restricted the development of Second Artillery campaigns. After the 1990s, following the development of the level of weapons and equipment of Second Artillery, it continuously increased the conventional missile forces, electronic warfare forces, and cruise missile forces. These made Second Artillery campaign forces appear to have the characteristics of pluralism. They are mainly reflected on the structure of Second Artillery campaign operations.

At the present, Second Artillery campaign operational forces consist of strategic missile forces, conventional missile forces, and various professional forces. The strategic missile forces can be classified according to its ranges into intercontinental, long-distance, middle-distance, and middle-to-close-distance missile forces. The conventional missile forces can be classified according to its trajectories into ballistic and cruise missile forces. In which, the operational forces include electronic warfare forces and ground defensive forces. In the future, there is a plan for the computer network forces, psychological warfare forces, and space warfare forces. Support forces (or elements) include operational support forces (or elements,) logistic support forces (or elements,) and equipment support forces (or elements.) The operational support forces (or elements) based on different models of missile forces can be divided into more than ten different varieties. We can see that following the rapid development of science and technology, the level of weapons and equipment of Second Artillery will make further advancement. It will lead to the emergence of new forces and non-stop strengthening. It will eventually make Second Artillery an armed service with multiple forces.

Following the change of Second Artillery campaign forces moving toward pluralism, the form of future **[end ofpage 70]** Second Artillery campaign forces will develop toward the combination of multiple operational units. In future operation, the battlefield situation is very complex. The enemy and our situation can change quickly and operational patterns will change rapidly. This requires the commander of Second Artillery to quickly implement optimal combination of various operational units based on the realistic requirements of the operation so that it can form an operational force with the strongest functions. For example, in the form of future Second Artillery campaign forces, we can make the nuclear and conventional firepower strike capabilities become the main forces and assign them with the forces of electronic warfare, network warfare, psychological warfare, intelligence and reconnaissance, mobile defensive and synthesized support forces. We can even add space assistance forces so that all these forces can be organized into an individual operational module. Based on realistic requirements of the battlefield situation, we can implement adjustment, supplement, or transfer to each direction for combat at any time. Adopting this module type organizational structure, the greatest superiority is that it possesses strong flexibility and adaptability. It can implement combination at any time. It can form a new deployment and handle new mission. It is like piling wood blocks. We can take away or supplement them at will so that it can form operational real object with different functions. It will adjust to the changes of operational situation from the beginning to the end. Through the use of imported digitalized systems and common software, similar technical standards and regulations, we

can eventually realize the integration of every weapon and equipment system at the battlefield. This will establish the foundation that we can share the use of weapons for each operational unit. This will more effectively achieve optimal combination between various operational units.

II. Compressed Campaign Time Will Increase the Speed of Campaign Progression

Time is one of the most important objective factors of Second Artillery campaigns. It is an objective form for the existence of Second Artillery campaigns. The developmental change of campaign time reflects the developmental trends of Second Artillery campaigns. The history of campaign development indicates that the campaign times of different campaign era have different characteristics and different orbits of changes. Following the development of science and technology and weapons and equipment, the time element in future campaigns will appear with new characteristics and obtain new development. The campaign time of future Second Artillery [end ofpage 71] will become more sharply compressed and the progression becomes more rapid. The reason for these trends, aside from such factors as, strategy, national politics, economics, and diplomatic, its basic reason is the development of science and technology, especially missile technology, which has provided technical support.

Following the development of modern high tech and its application in the battlefield,

1. Operational Opponents Possess Quick Strike Capabilities, which Compresses the Campaign Time

In recent localized warfare, the strong enemy relied on its military technology and absolute superiority on weapons and equipment gave the opponents full dimensional quick strikes. They achieved the operational objectives in a rather short time. This could be seen from several operational actions by the U.S. military. The invasion of Grenada lasted only eight days. The operational actions of air raids against Libya lasted only fifteen hours. In Gulf War, the ground operational actions lasted only four days. The large-scale war of Kosovo also lasted only seventy-eight days.

2. With Wide-Ranging Application of High Tech Weapons, such as, Missiles, They Reduce the Time of Operation

Missiles have very intense firepower. The intensity of strike within unit time is strong. We can achieve campaign objectives in a short time. They compress the time of operation. The elevation of the precision of missile strike technique has increased the probability of hit. In the past, we needed several missiles in destroying a target group. Due to the application of precision technique, now we need only one or two precision guided missiles to destroy the targets. It not only saves the ammunition, at the same time, it also saves the operational time. The wide application of night vision equipment and high tech weapons makes the natural conditions harder to hamper the continuous implementation of operational activities. All weathers and all times continuous operation

will become possible. Due to the overload use of time, it will correspondingly compress the time for operation.

3. Advance C⁴ISR System

This system let the commander make quick collection, analysis, processing of battlefield intelligence and information, which elevates the predictability, plan nature, and rapid nature of operational actions. It has correspondingly reduced the time of campaign operation. According to relevant data, the U.S. military uses its C⁴ISR system **[end ofpage 72]** in formulating its operational plan. It can reduce the work from ten hours in the past to ten minutes. Using its reconnaissance and firepower integrated systems it can achieve simultaneous destructions of the targets when the targets were discovered. It has greatly reduced the operational time.

Moreover, the limited objectives of modern localized warfare and unlimited increase of operational consumptions can also compress Second Artillery campaign time. The victory and defeat of the past warfare usually was accumulated from victories and defeats of many campaigns. The modern warfare often can be determined by one or two large-scale campaigns. The opponents intend to “End the warfare with one campaign.” The campaign as the carrier of warfare, the limited nature of warfare objectives will lead to the limited nature of campaign objectives so that the total time of the campaign becomes compressed. At the same time, the great consumptions of warfare make every country hard to carry this burden for long. For example, in the 1991 Gulf War, the U.S. military consumed 1.17 million varieties and more than 30 million tons of materials. This was equaled to half of the Soviet troop’s consumptions of 66 million tons of material in their four years of operations defending their country. The coalition forces spent in total of \$60 billion dollars. In the 1999 war of Kosovo, the NATO countries spent in total of \$100 billion dollars. This kind of consumptions could not be handled even by the Americans. They had to rely on other allies to provide these funds.

The rapid compression of Second Artillery campaign time will make the campaign progression even quicker. It will bring new changes to Second Artillery campaigns.

1. Selection and Use of Campaign Opportunities Become More Difficult

The same campaign activities used at different times can achieve very different effects. The reason an able commander is able is that he can place campaign activities on a decisive moment. This is a matter of selection and use of opportunity. In future Second Artillery campaign operation, due to quick changes of battlefield situation, uncertainty of the rise and fall of opposition, operational situation is clear and unclear at times, and campaign progression is rapid, thus, the control over the battlefield situation, deployment of forces, and firepower application become extremely complex. The time for having or not having the right opportunity **[end ofpage 73]** becomes very short. The selection and use of campaign opportunities become more difficult.

2. Campaign Time Sequence Can Be Easily Disturbed

Due to the restrictions of special characteristics of missile technology, the requirements on Second Artillery campaign progression have very strict time sequence. Nuclear counterattack is implemented based on three phases of campaign preparation, implementation, and completion. The sequence of checks and firing sequences of unit checks, vertical checks, pour in propellant, and inspections prior to firing can not be turned up side down. Thus, every phase and every action of Second Artillery are advanced step-by-step. It possesses the characteristics of no overstepping. In future operation, due to the changes of battlefield situation, Second Artillery campaign actions often have difficulty proceeding according to proper sequence. It often happened that the first campaign action was not yet ended but the later campaign action has already been implemented. The campaign action at a certain direction just gets underway and the campaign action at different direction is imminent. If we do not handle the campaign time sequence well, it will directly impact on the expression of operational effectiveness.

3. Campaign Rhythm Becomes More Difficult to Handle

Campaign rhythm refers to the frequency of important events emerging in the campaign progression. It is the rise and fall of campaign progression. Adjusting and grasping campaign rhythm have great significance on handling the speed of campaign progression, the length of activity period, the speed on the degree of operation, and the link-up of every phase. However, in future implementation of Second Artillery campaign operation, due to non-stop quickening of operational activity, the gap between operations gradually dissipates and the campaign progression becomes gradually shorter, it will make the speed of campaign rhythm quicker and difficulty of handling the campaign rhythm greater.

In order to adjust to high speed nature of future campaigns, we should establish the concept that time is victory in an operation from the perspective of action. We should timely make the decision, quick in giving command, and organize various operational activities in real time. From the perspective of technique, we should establish the concept to seek time from technology. Due to the fact that technology determines the tactics, the height of technology can directly impact on the speed of operational action. Therefore, we should make great efforts in developing advance missile technology and weapons and equipment. At the premise of not influencing the functions of weapons, we can adopt the technology of making checks and firing with compressed time. We should improve the internal structure of the missile so that we can seal it up for long safe keeping after checks and it can maintain operational technical condition for a long time. Once it is **[end of page 74]** required for war time, we can use it at any time so that we can save operational time.

III. Expansion of Battlefield Space will Develop Campaign Battlefield toward the Directions of Multiple Domains and Total Depth

Battlefield space refers to the space and location where both sides in the campaign implement their contest. It is the form of campaign existence. It is one of the very important objective factors in the campaign. At the same time, battlefield space possesses the characteristics of dynamic changes. The non-stop development of science and technology and weapons and equipment has greatly expanded the connotations and external reaches of battlefield space. It makes the battlefield space appear to have different characteristics at different historical phases and operational hierarchies.

Under modern high tech operational conditions, battlefield space appears to have the tendency of sharp expansion. Following the developmental changes of Second Artillery weapons and equipment, technical levels, and forces' authorized strength system, its battlefield is no longer restricted on the battlefield of land, sea, and air. It is moving toward the directions of multiple domains and total depth. Multiple domains refer to campaign battlefield of Second Artillery has expanded from the traditional domains of land, sea, and air to the domains of land, sea, air, space, electronic, and network battlefields. For example, due to the gradual penetration of electronic technology and its equipment into every operational system, it has made the struggles of electromagnetic domain of Second Artillery more intense. The rapid development and wide application of computer network technology has made the network battlefield becoming the brand new battlefield domain of Second Artillery. The space domain will become a special battlefield domain of Second Artillery. Due to the fact that missile is very complex weapon systems, its operational use cannot be separated from various supports, such as, reconnaissance, communications, land measurements, meteorology, and the evaluation of destruction effects on targets. All these support cannot just rely on ground facilities. They should rely on such things as the satellites for intelligence and reconnaissance, communications, ground measurements, and meteorology and various supports and assistance of space military systems. In particular, due to its technical characteristics, the cruise missile must increase its strike precision, [end of page 75] which relies on the reconnaissance, navigation, and position technology provided from the space battlefield. From this, we can see that the reliance of Second Artillery on the space military systems will increase not decrease.

The total depth refers to the strike against the enemy targets moving from the front edge to the rear and extending from the façade to the enemy's depth. At the same time, we should protect our own depth and rear of the battlefield so that they will not suffer attacks by the enemy. The development of Second Artillery missiles has expanded the range of Second Artillery strikes non-stop. At the present, the range of firepower strikes can reach several hundreds, thousands, and even tens of thousands of kilometers. We are able to implement total depth strikes against our enemy.

Second Artillery battlefield has developed into the directions of multiple domains and total depth, which will bring profound changes to the campaign guidance and activities of Second Artillery. In the past, Second Artillery campaigns mainly paid attention to the

wide land battlefield of our country's depth in organizing our offensive and defensive campaign activities, which is very singular. We had only nuclear counterattack campaign, campaign defensive actions and campaign support actions. Following the daily expansion of campaign battlefield, now the campaign battlefields of Second Artillery must be standing on the footing of multiple domains battlefields and pay attention to operations at total depth.

1. On Campaign Guidance, We Should Fully Understand the Enormous Value Brought on By the Battlefield Changes

At the present, Second Artillery battlefield has occurred changes but to understand these changes, which brought great value, is a complex process. For example, in the electromagnetic domain, Second Artillery has upgraded the electronic warfare from support status to the status of main operational action. If we want to fully express the function of electromagnetic battlefield and let it become the new growth point of operational capability, it still requires more in-depth research.

2. We Should Stand On the Footing of Overall Superiority of Multiple Domains to Grab the Battlefield Initiative

Grabbing the initiative of future battlefield is determined by the synthesized superiority of several battlefields. The superiority of a single battlefield cannot be a true superiority. We must stand on the footing of multiple domains and plan as a whole in applying the forces of several battlefields. We should use the overall superiority in winning the victory. Only by maintaining superiority at one battlefield is likely to bring defeat. At the same time, we should also be based on the requirements of campaign action to rotate the battlefields in real time. We can use the superiority of one battlefield to supplement the shortcoming of another battlefield. We should make it such that we can mutually rotate every battlefield and achieve the goal of using the strength in one to supplement the weakness of the other. **[end of page 76]** This way, the energy of all the battlefields can be effectively released.

3. Pay Attention to the Missile Strikes at Total Depth

With respect to the range of targets, it includes the strikes at the enemy's total depth and also includes the defense of our own side in avoiding the enemy's attacks. With respect to operational space, it includes ground-to-ground missile firepower strikes and the assistance of the battlefields from sea, air, and space. With respect to time, the simultaneous or almost simultaneous strikes are implemented at the depth and front line. It even includes strikes at depth first and then the strikes at the front line. For this, the future Second Artillery campaign operations not only should stand on the footing of land, sea, and air, it must also pay attention to the space, electromagnetic, and network battlefields. We should pay attention to the battlefield struggles with forms but also pay attention to struggles at formless battlefields. We should strike at the important strategic and campaign targets at the enemy's depth but also effectively protect our own deployments of targets at our depth. We should fully express the superiority of every

battlefield but also implement effective mutual supplement of superiority between different battlefields.

IV. Strengthening of Information Warfare Has Moved the Direction of Campaign Operation toward Soft and Hard Combined

Information warfare has gradually become a new type of operational action due to the development of information technology. Following the wide application of information technology in military domain, we need to grab information supremacy in future warfare. If we fail to do so we will have no other “Three Supremacy” and we don’t even have to talk about grabbing the initiative of the battlefield. Therefore, grabbing a certain degree of information supremacy at the battlefield becomes very important for Second Artillery campaigns.

In future operation, the firepower strikes of Second Artillery missiles are facing very bad information environment.

1. Enemy Reconnaissance and Monitoring Are All Times and Multi-Dimensional. It Makes the Intention of Missile Forces’ Operations Very Difficult to Conceal

The tough enemy has constructed three-dimensional reconnaissance systems of all time and space, with multiple-layers, and great depth. They possess very strong reconnaissance and monitoring capabilities. They have increased the transparency of battlefield without precedent. The period needed for building missile positions is long and the target characteristics are apparent. The equipment exterior shape is very unique. Moreover, the ability for missile forces to counter the high tech reconnaissance and monitoring capabilities and measures [end of page 77] is limited. The forces’ actions will be under the enemy’s tight monitoring, which makes the concealing of operational intention very difficult.

2. Enemy Has Far Superior Information Offensive Capabilities

It makes the missile forces’ command control very difficult. At the present, the missile forces’ ability to counter information warfare is rather weak. In the future, if we fight an operation with the enemy, we will face very grave challenge. The tough enemy will combine the use of different killing and wounding mechanisms in electronic warfare to implement their attacks against us. They will use such measures as, network penetration, virus attacks, etc. to implement focal point attacks against our computer networks. They will use great strengths in promoting NMD and TMD systems constructions. It will form country and war zone missile defense systems with the enemy as the main lead and its allies’ cooperation as support. This will serve to lower our missile penetration probabilities. It will produce grave impacts on our missile firepower strikes. Therefore, Second Artillery must possess certain ability in information warfare. Otherwise, implementing a single firepower strike in operation will probably bring us defeat at the end.

In future warfare between our country and the tough enemy, when they implement attacks against us, they will use multiple measures simultaneously, including soft and hard killing and wounding. When they implement defense, they will also adopt multiple information protective measures. This will no doubt force us to be equipped with soft and hard operational capabilities against them. At the present, Second Artillery has already established electronic warfare forces. Based on the laws of developing Second Artillery electronic warfare forces, it will establish electronic warfare systems equipped with both offensive and defensive capabilities that can satisfy operational requirements of conventional missile forces. It can be predicted that following non-stop strengthening of Second Artillery information warfare capabilities, we will develop toward the direction of combining the soft and hard in future campaign operations.

In future Second Artillery campaign operation trends, they will combine the soft and hard, which are mainly reflected on:

1) With Respect to Application of Operational Measures, Missile Firepower Strikes and Information Strikes Are Highly Fused

Due to the development of cruise missiles, Second Artillery firepower strikes will fuse the strikes of ballistic-type missiles and cruise-type missiles into one. Following further development of electronic warfare and network warfare weapons, Second Artillery information strikes will move toward the integration of network and electronic. We can predict that Second Artillery firepower strike capabilities and information strike capabilities will be elevated **[end ofpage 78]** daily. It will promote great fusion between the two.

2) With Respect to Battlefield Preparations, We Should Stand on the Footing of Multi-Dimensional Compounded Battlefields on Land, Sea, Air, Space, and Electromagnetic Domains and Network Space, We Should Pay Special Attention to the Formless Battlefield Preparations of Electromagnetic Domain and Network Space

This is because following the development of information technology, which has gradually penetrated into every domain of the battlefield, the battlefields with form, such as, land, sea, air, and space becomes more restricted by the formless battlefields. The degree of expression of entire battlefield functions has become more determined by the degree of preparations at formless battlefields.

3) With Respect to Operational Actions, Information Operational Actions Will Be Closely Combined with Missile Firepower Strike Actions and Penetrated Throughout the Entire Campaign Progression

In modern campaign operation, information warfare will be ahead of the start of the firepower strikes. It will pave the way for firepower strikes.

4) Targets of Strikes Combine the Soft and Hard. Soft Target Will Be the First Target of Strikes

The soft and hard targets are merely speaking as an image. The so-called soft targets refer to the targets related to information systems, for example, such targets as, command control networks, communications networks, intelligence networks, command center, communications links, radar stations, and computer network stations. These targets are the “Ears and eyes, cerebrum, and central nervous system.” They are the core of operational systems. At the same time, they are the weakest parts. Striking these targets can achieve the effects of “Striking one point and paralyze a big part of the body.”

V. Intelligent Command Measures Will Develop toward the Directions of Easier, Quicker, and Highly Effective Campaign Command

Following the development of science and technology, the operational command measures have gone through handwork operation and mechanized command phases. At the present, automated command measures using computers as the main body is quickly rising. In the future, intelligent command measures will become important trend of campaign commands. In fact, intelligent command measures are further advancement and betterment on the basis of automated command measures. The two have very close relations. At the same time, there are distinctions in their nature.

1. Technical Levels Are Different

The automated command measures used general electronic computer, information networks, and military expert systems. **[end ofpage 79]** It is not equipped with the capabilities to think and conduct logical reasoning. Intelligent command measures use nerve network computers, such as intelligent computers, intelligent information networks, and intelligent military expert systems. They possess many artificial intelligence, such as, self-reform, repair, learning, thinking, logical reasoning, and making judgment.

2. Functions Are Different

Automated command measures can only provide the commander various military information and implement assistance in decision-making. They cannot participate in decision-making and cannot replace people in decision-making. Intelligent command measures not only can provide large quantity of military information and various decision-making plans in real time, but also can participate in decision-making to a certain degree. Under special circumstances, it can replace people and implement limited decision-making. The core of campaign commands is campaign decision-making. The greatest advantages of intelligent command measures are that campaign decision-making can be scientific, grouping, and done in real time. When campaign decision-making is scientific, the commander can use intelligent command measures to implement quantitative and qualitative analysis on various situations at the battlefields. Through operational simulation and fictitious battlefield, we can revise decision-making plan non-

stop so that campaign decision-making is established on scientific basis. This can prevent the mistakes in commands. When the grouping reflects on campaign decision-making, the commander at every level even the combatants can participate in the decision-making through intelligent command systems. This way, we can achieve the effects of pulling the wisdom of the masses. By using the group's wisdom in decision-making, we can avoid the past mistakes brought on by relying on the individual knowledge and experience of the commander. Realizing the real time is reflected on campaign decision-making, the commander can obtain battlefield information in real time through intelligent information highway network. He can implement decision-making and command his forces in operation in real time so that the decision-making and operational implementation can be synchronized.

It is because intelligent command measures have these advantages thus the strong military powers in the world are actively researching intelligent technology and elevating the intelligent degree of command measures. The key of elevating intelligent degree of command measures is to develop intelligent computers and intelligent software systems. The Americans had started to research on the science of brain from the 1980s. They had developed intelligent computer similar to human brain and proposed the assumption of imitating human brain in developing biological computer. **[end of page 80]** They assembled approximately three thousand scientists to get involved in this project. According to the introduction of relevant data, the U.S. military had already developed an intelligent command system to a certain degree. This system can be very familiar with the temper, habits, thinking habits, other emotional characteristics and behavior of a commander. At the fast changing battlefield it can help the decision-maker quickly assess and ascertain the situation, make decision, and issue orders. When the commander's emotion is not normal and his thinking is confused, he may prone to make incomplete or wrong decision. This system can persuade the commander with a series of rigorous reasoning and proofs to revise, correct, or supplement the original decision. It can be predicted that following the development of the thinking science, decision-making science, knowledge science, imitating biological science, and intelligent technology, the command measures of the 21st century will reach high degree of intelligence.

In future operation that Second Artillery is involved, the battlefield situation rapidly changes, campaign progression and rhythm are increasingly fast with respect to campaign commands, and the timeliness of decision-making becomes more prominent. The information flow at the battlefield increases rapidly and it can increase the impact on the variables involved in command decisions. This increases the uncertainty of decision-making. All these will no doubt present higher demands for campaign command measures. The past mechanized and automated command measures are unable to adapt to the requirements of future operations. We need highly automated and intelligent command measures.

The application of intelligent command measures will prompt the campaign command of Second Artillery developing toward the direction of simple, quick, and high efficiency. Campaign decision-making is the core of campaign command. If there is no correct decision-making, there will be no correct command and we cannot even talk about

simple, fast, and highly efficient command. In future operation, campaign decision-making will be restricted by many objective factors, for example, are the intelligence and information timely and accurate? How is the complexity of terrains at operational area? How are the weather conditions during the operation? How is the urgency of time? How are the assisting capabilities of the neighboring forces? What would happen during accidental situation when the forces are organizing operational actions? In order to implement correct command, we should implement scientific, reasonable, and timely decision-making on these objective factors. If we adopt intelligent command measures, we can resolve this problem nicely. [end of page 81] Using intelligent command measures we can accomplish a series of command procedures, such as, collection of intelligence, judging on a situation, making up decision, formulating plans, and issuing orders with high efficiency. They also implement automatic deduction, induction, efficiency analysis, and prediction on the battlefield situation. They provide campaign commander scientific assistance on decision-making and fully automatic control over the battlefield so that the commander can firmly grasp the initiative of the battlefield. This way, we can meet the requirements of simplicity, quickness, and high efficiency.

VI. Participating in a Joint Operation Will Make Campaign Actions Pay More Attention to the Coordination between Various Armed Services

In future campaign operations of Second Artillery, it will mainly appear in the style of participating in a joint operation. It will become an indispensable main forces in future joint operation. It will express crucial functions. The chances for Second Artillery in implementing an operation independently or participating in combined operation will become less and less. At the present, Second Artillery possesses a certain premise and basis in participating in joint operation.

1. Development of Weapons and Equipment and Strengthening of Operational Capabilities of Second Artillery Has Laid the Material Foundation

After years of development, weapons and equipment of Second Artillery include strategic and campaign missile series of nuclear and conventional, solid and liquid fuel, the short, middle and long-distance linked up, and mobile and fixed position firing. At the same time, it is partially equipped with ground-to-ground cruise missiles and advanced electronic warfare equipment. It has also established C³I systems that allow mutual links and communications between the entire military. The operational capability of Second Artillery have developed and formed force systems including nuclear missiles, conventional missiles, nuclear warhead installation and inspection capability, cruise missiles, electronic warfare, and many other operational support forces. All these have no doubt become the strong material basis for Second Artillery to participate in a joint operation.

2. In-depth Operational Trainings and Exercises of Second Artillery Have Laid Implementation Foundation

Despite the fact that Second Artillery has not involved in actual combat since its establishment, it has held many trainings and exercises similar to actual combat. Especially in the recent years, **[end ofpage 82]** Second Artillery has actively participated in large exercises, which carried the nature of joint operations, such as “Magic Sword - 95,”¹ “Joint 96,” “Joint 2000” and “Joint 2002.” Through these exercises, Second Artillery has accumulated some implementation experiences from these joint operations.

3. Rich Military Theoretical Research of Second Artillery Has Laid Theoretical Foundation

In Recent years, in order to adjust to the requirements of future joint operation, we have strengthened and deepened the theoretical research of Second Artillery in participating in joint operations. It allows the synchronized theoretical research and mutual elevation on campaign theory by Second Artillery and the entire military. This is particularly true that during the research process of the joint firepower strike campaigns by the entire military, Second Artillery has achieved some feasible theoretical results.

If Second Artillery participates in a joint operation, campaign activities will pay more attention to the coordination between various armed services. The highlight of a joint operation is the close coordination between various armed services. If there is no coordination, there will be no joint operation. Therefore, when involved in future joint operation, we require the campaign commander of Second Artillery realizing two changes.

1) With Respect to Action Guidance, We Should Change the Past Concept of Independent Operation and Strengthen the Consciousness of Initiative for Coordination

Commander of Second Artillery not only must pay attention to elevate the capabilities of independent action but also must pay attention to the capability of coordinating with other armed services. In order to adjust to the requirements of future joint operations, Second Artillery must strengthen the consciousness of taking initiative for coordination and establish the concept of combining forces in winning victory.

¹ Translator’s note: On Page 6, there is mentioning of “Magic Arrow” of 1995. He wonders whether it was a printing error since the Chinese pronunciations “sword” and “arrow” “Jian” are the same.

2) With Respect to Operational Actions, We Should Change the Concept of Only Paying Attention to Internal Coordination within the Armed Service but Paying More Attention to Coordination between Various Armed Services

Coordination between Second Artillery campaign corps and other armed services is an important guarantee of forming the operational capabilities of Second Artillery. In future joint operations, there are many armed services participating in the operations. The battlefield situation is changing so much that the coordination with other armed services by Second Artillery will be very complex. From the perspective of the contents of coordination, they have the firepower coordination with other armed services, but also coordination in intelligence, electronic warfare, and campaign defense. We also have coordination between military deterrence and between campaign operations; coordination between Second Artillery nuclear counterattack [end ofpage 83] forces and the nuclear forces of other armed services, and coordination between conventional missile forces of Second Artillery and conventional forces of other armed services. From the perspective of coordination space, the battlefield of Second Artillery is a three-dimensional compounded battlefield with multi-dimensional space. The range of battlefield involves many domains of land, sea, air, space, electromagnetic, and network space. Campaign coordination must be organized in the wide multi-dimensional space. Objectively it requires the commander of Second Artillery and other command institutions to cover the coordination range over the related domains of operational activities.

VII. Core Status of Implementing Long-Distance Precision Missile Strikes and Firepower Application Will Become More Prominent

Due to the transition from industrial era to information era, operational measures also start to develop toward the direction of large-scale operation to long-distance precision operation. Precision operation is the objective requirements of the intense development of military technology and weapons and equipment. It is also the developmental trend of Second Artillery campaign operations. Just like the chairman Jiang of the Military Commission indicated, “The continuous ‘Desert Fox’ actions of 1990 Gulf War and most recent NATO’s, with the U.S. as the leading country, armed intervention of Yugoslavian Republics used precision missiles in implementing middle-distance strikes. It has become an important operational pattern of modern warfare.” The missile forces of Second Artillery as a long-distance firepower strike forces of our military will be the main body of our military’s future long-distance precision strike forces. This is determined by the characteristics of our missiles. The “Firepower Arm” of the missile is long. Campaign and tactical missile range can cover more than hundred and thousands of kilometers. Strategic nuclear missiles have the range reaching more than ten thousand kilometers. Due to the development of control and guidance technology and navigation position technique of warhead, Second Artillery missiles have elevated their strike precision non-stop. At the same time, due to the command control systems of Second Artillery developed toward the direction of automation and intelligent, it will provide strong command coordination support to the precision strikes of Second Artillery. Therefore, future [end ofpage 84] campaign operation of Second Artillery will be long-distance precision strikes. If we want to implement missile long-distance precision

strikes, the status of firepower applications will become more prominent. This is because the missile firepower applications are the core and key of Second Artillery campaign operations. The main issues that the missile firepower applications will solve, such as, the issues of selection of strike targets, organization of operational positions, distribution of missile firepower, determining the opportunity of strikes, and determining the destruction effects, are the premise conditions of implementing missile long-distance precision strikes. Several recent localized warfare have verified this point. In particular, despite the large quantify, very mixed models, and varieties of firing methods of precision missiles used by NATO group in the 1999 War of Kosovo, they had achieved precision applications. This was benefited by the scientific application of firepower.

When implementing campaign planning, they achieved scientific division of campaign phases. They used “Five Ring Targeting Theory” in finely selecting targets of strikes. In formulating firepower planning, they reasonably divided striking turns and scientifically calculated the waves of strikes based on operational requirements. On the evaluation of striking effects, NATO’s space reconnaissance satellites, high altitude reconnaissance aircraft, and unmanned reconnaissance aircraft would immediately implement aerial video taping of the strike target after each round of precision strikes. Thereafter they would implement analysis and evaluation on the bombing effects. The command center would be based on the evaluation results to determine the need for further attacks to the targets or revise the operational plan. This way, they would elevate further the precision of missile firepower strikes. From this, we can see whether we can scientifically apply missile firepower is the premise and key of whether we can effectively implement missiles’ long-distance precision strikes.

VIII. Facing Enemy’s Plural Threats, Campaigns Will Be Developed toward the Direction of Integrated Offense and Defense

Due to the important status of missile forces, they will be listed as the targets of first strike in future operations. Thus, their survival will face serious threats and the threats have the characteristics of pluralism.

1. Measures of Threats Have Many Forms

The tough enemy possesses multiple measures of threats, including advanced reconnaissance and monitoring [end of page 85], long-distance precision firepower strikes, and absolute superior information strikes capabilities. They have made the survival of our command institutions facing grave threats.

2. Threat Domains Are Multi-Dimensional

The enemy threats are not only from air, ground, and sea but also from space, electromagnetic, and network space. They have made us losing the offensive and defensive capabilities.

The trends for Second Artillery campaigns are developing toward the direction of integrated defense and offense. The so-called integrated offense and defense refers to campaign activities of Second Artillery possessing the same nature of offense and defense. In defense, it is full of offense. In offense, it also has defense. Offense and defense are fused as one and they are closely matched and mutually supplementing each other. When organizing campaign operations in the future, we should first do well on the preparations for protection by adopting necessary protective measures. In organizing protection, we should create favorable conditions for later missile strikes. While we pay attention to using offense to supplement defense, we should use protection to support the smooth implementation of missile strikes. Under the informationized conditions, due to Second Artillery possessing high mobility, especially possessing the capabilities of implementing precision and concentrated long-distance firepower strikes, it makes the tendency of the campaign offensive and defensive activities mutually interweaving and fused in one more apparent. However, due to the current high degree of firepower development, it makes the defensive operation of Second Artillery campaign operations having the increased proportion.

When in attacks, we strive to be as sudden and intense in attacking the enemy. At the same time, we should defend against the enemy's sudden attacks or counterattacks at all time. During the operational process, offense and defense can be coexistent and they can be frequently alternated. The past offensive and defensive postures with relative stability and possessing phases are no longer present. For example, the operational actions, such as, electronic offense and defense, air raids and counter-air raids, mobility and counter-mobility, attack and counterattack, airborne and counter-airborne overlap and blend on time and space will be gradually increased. Therefore, we demand the forces not only should possess both offense and defense operational capabilities but also can timely transform offense and defense. When in an offense, it should do the defense well. When in defense, it can take the initiative in making offense. The forces can implement the integrated offense and defense if they possess such abilities. They can even win campaign victory. Under the informationized conditions, Second Artillery campaign actions must possess integrated offense and defense, which can adapt to the needs of winning future operations. **[end of page 86]**

Chapter 4

Elements of Second Artillery Campaigns and their influence on Campaigns

The elements of Second Artillery campaigns constitute a requisite factor in the formation of Second Artillery, representing an essential component in the system of campaign theory. The objective in studying the Secondary Artillery campaign elements would include the revelation of its position and function during campaign progress, in addition to the existing, natural and inevitable link between them, thus providing superior guidance towards campaign practice, leading to the grasping of campaign victory.

Campaign elements would include not only the requisite objective conditions of campaign formation, but also such subjective conditions that influence the origination, development and conclusion of campaign. Therefore, an analysis of campaign elements should be conducted from a viewpoint of winning campaigns by seizing the most important conditions that affect the progress and outcome of campaigns. It can be seen that not only are such objective campaign conditions as campaign strength, battlefield space and campaign time being considered as campaign elements, but also campaign command, campaign information and campaign support, etc. would also belong to the category of campaign elements. Campaign command is a key-point subjective factor in deciding campaign outcome, having its foundation rooted on such objective conditions as campaign strength, battlefield space and campaign time, etc.; campaign information and campaign support are essential inherent factors that influence the outcome of campaigns.

Section 1. Second Artillery Campaign Strength and its Influence on Campaigns

Second Artillery campaign strength is a general designation for the various strengths **[end of page 87]** in executing Second Artillery campaign mission. It mainly includes the two portions of membership and attachment, representing the best integration between man and weaponry in a general sense, constituting one of the objective elements of Second Artillery. Among the three Second Artillery campaign elements, campaign strength is an activating objective element that is considered the most dynamic, predominantly creative and of prime importance.

I. The Characteristics of Second Artillery Campaign Strength

The clear evidence of Second Artillery campaign strength is decided upon by the quality of weaponry of the Second Artillery missile forces. Since Second Artillery is burdened with the difficult task entrusted by supreme command of “Double deterrence, double operations”, besides possessing the common features shared by other armed services strength, it also exhibits unique characteristics that embody the special features of the conventional and nuclear missile forces, including as follows: The multi-variant disposition of campaign strength; the hierarchical character of campaign strength; the integrated nature of campaign strength, etc.

1. The Multi-Variant Disposition

It is evident that Second Artillery campaign strength is restrained by the quality standard of weaponry. The substantial content of information within weaponry systems, large numbers of support elements and the expansive cooperative magnitude have together manifested the multi-variant disposition of campaign strength elements. From the standpoint of the nature of Second Artillery campaign strength, there exist the strengths of Second Artillery nuclear counterstriking strength and Second Artillery conventional missile striking strength. Since nuclear counterstriking strength represents the main body of Second Artillery operational strength, it is burdened with the strategic campaign task of antinuclear deterrence and nuclear counterstrike; since conventional missile striking force represents an important component within Second Artillery campaign strength, it is an indispensable long-range striking force in a joint operation, being the “Assassin’s Mace” weapon of general headquarters. From the viewpoint of principal relationship, Second Artillery campaign strength is consisted of missile forces, equipment inspecting forces and other major operational strength entrusted with the main operational mission; additionally there are also operational support strength, logistic safeguard strength, equipment support strength, etc. that center on the task of accomplishing the main body operational mission. From the standpoint of taking on the task, there are firepower striking forces, **[end of page 88]** conventional and nuclear deterrent strengths that bear the offensive operational mission; being responsible for operational domain defense and aerial resistance, there are affiliated and attached surface defense, electronic confrontation and firepower intercepting forces against aerial targets; additionally there are offensive operations, deterrent actions and various types of reinforcing support

strength within defensive operations, etc. All these multi-variant strengths have together formed the Second Artillery campaign strength system.

2. The Hierarchical Character

Overall speaking, while engaging in different formats of campaign, the magnitude of force scale of Second Artillery campaign strengths would also be different, differentiated in general according to two levels: the first is high echelon campaign large formation strength; the second is the basic campaign large formation strength. The high echelon campaign large formation strength represents the force scale when Second Artillery organizes the command of two or more missile bases in executing strategic campaign missions; the basic campaign large formation strength represents the force scale of the campaign strength within the missile bases (warhead bases) organizational command formation while executing campaign missions. The difference in force scale of campaign has determined the fact that the Second Artillery command authority is also dissimilar. Moreover, in creating an advantageous campaign posture, the Second Artillery conventional missile strike forces would be differentiated into three groups according to differing mission responsibility, as follows: first, the basic strike group, representing the campaign strength responsible for the major missile strike missions; second, the reserve strike group, representing the campaign commander's operational strength and master reserve force for reinforcing the major directions and crucial stages during the progress of campaign; third, the support group refers to the various supporting forces and defense strength that ensure a smooth execution of campaign mission by the basic and reserve strike groups. The Second Artillery nuclear deterrent campaign strength is also divided into three groups and one formation according to varying missions borne, as follows: First, the maiden strike group; second, the subsequent strike group; third, the support group; and fourth, the campaign reserve formation. This differentiation is made according to the special circumstances of a low number of missile nuclear weapon, high destructive capability and prudent utilization, etc. Since the division of groups is appropriated with the aim of facilitating a smooth execution of missions, while a group is not an independent entity [end of page 89], no group leader has been assigned, allowing it to perform the campaign operation under the consolidated command of the campaign regiment. Only by way of a strict hierarchical differentiation could the duties be clearly defined and the command relationship be rationalized, thereby facilitating an agile capitalization of the various strengths in order to fulfill the overall campaign objective.

3. The Integrated Nature

Within the important mission of "Double deterrence, double operations" borne by Second Artillery, the "Double deterrence" refers to the joint conduction of nuclear and conventional deterrence by mutually complementing strengths in order to achieve the optimum deterrence effect. Although the arrival of nuclear warfare may temporarily be not forthcoming, nuclear deterrence would generally persist, allowing future localized warfare, particularly Second Artillery campaigns fought under informationalized conditions, to consist mainly of conventional missile strike operations conducted under nuclear deterrence conditions. The deterrence function performed by the nuclear missile

forces would fuse into one entity together with conventional missile strike operations by mutually interweaving with each other to fully bring into play the double deterrent functions of Second Artillery. The integrated nature of campaign strength is concretely manifested as follows: First, it is the inseparable nature of the strengths of its warhead and body. An integral strike effect with a united warhead and body could only be achieved by a close-knit cooperation between the missile forces and the equipment inspection forces while the high effectiveness of the warhead must be launched via high quality long-range missile bodies. Second, it is the nature of being united in forming a complete set exhibited by operational strengths and support strengths. In order for missile weaponry to realize optimum operational benefit in long range strikes, main body campaign actions must be tightly organized and centered in order to execute the various supports in a timely fashion. Any one support assignment that could not keep abreast with the flow or any segment developing problems would possibly affect a smooth execution of the missile strike. Third, it is the coordination between the principal operational strength, attached strengths and supporting strengths. This coordination is mainly reflected in firepower coordination, when the principal strength of Second Artillery is required to closely cooperate with the armed services strengths according to the conventional missile strike campaign guidance thoughts, allowing for advance proper utilization of conventional missile firepower, thus creating a good battlefield environment for the armed services strengths to make the most of their firepower. During defensive operations, closely cooperate with the attached surface-to-air missile forces, artillery units, and early warning radar strength in order to provide the armed services air defense strength with intelligence relevant to the theatres of war in a timely manner, proposing defense needs towards the defense strength within the war zone; **[end of page 90]** the attached air defense units should closely coordinate with the supporting air defense strengths, in order to guarantee the creation of a meticulous intercepting firepower network over the sky above important targets and during prime operational actions, thereby ensuring the security of the sky, surface and electromagnetic environment within the theatres of war. Fourth, it is the identity of conventional and nuclear operational strengths with conventional and nuclear deterrent strengths. The nuclear and conventional missile forces of Second Artillery are responsible for the difficult task of “Double deterrence, double operations.” The nuclear missiles forces represent the nuclear shield for maintaining national security and upholding a major power status, depicting the main body of our nation’s nuclear counterattack strength; during joint operations, due to their agile application and the relatively less restrictive conditions, conventional missiles would bear the responsibility in important missions that include conventional deterrence and conventional missile strikes, representing the main force during joint operations. Therefore, nuclear and conventional missile forces are not only effective deterrence strengths, but also indispensable in long-range firepower strikes. During campaign progress, the “Assassin’s Mace” function could be brought fully into play only when both the nuclear and conventional missile forces are employed in synthesized utilization, organically matching, allowing deterrence and practical warfare to mutually blend together, while the capitalization effect of nuclear and conventional weapons would mutually augment each other, closely cooperating with the various armed services strengths.

II. The Influence of Second Artillery Campaign Strength on Campaigns

Factors that pose decisive influence on Second Artillery campaigns would include the quantity and quality of the personnel and weaponry within the Secondary Artillery campaign strength, the scientific standard of the authorized strength system, organization and management standard, synthesized support capability, etc.

1. The Quality Rating of Campaign Strength Affects the Effective Bringing into Play of the Campaign Operational strength

The campaign operational strength of Second Artillery represents a synthesis of campaign command capability, campaign strike capability and comprehensive support potential. Additionally, campaign command control and coordinative capability would be directly affected by the quality of campaign strength. Since its quality rating [end of page 91] is related to the quality of intelligence gathering and processing, scheming and policy making, planning and organizing, in addition to automated command control, it inevitably would affect the progress and outcome of campaign operations. Campaign firepower striking strength would include the destructive capability of missile firepower against targets, missile defense penetration ability, and firepower maneuverability, etc. Since it represents the core of the second Artillery campaign operational ability, whether commanders and their commanding mechanisms could scientifically plan the use of firepower by agilely capitalizing on operational methods would directly affect the result of the campaign synthesized firepower strikes. Comprehensive supportive ability refers to the provision of various supporting strengths to ensure Second Artillery campaign regiment a secure and smooth execution of their campaign missions. Other factors that would gravely influence the smooth execution of campaign deterrence, missile strikes and defensive operations would include the following: Under the conditions of healthy support forces (or detachments) system of authorized strength, whether fixed-point supporting ability of an organized fixed launching pattern could be secured in accordance with the operational target, the forces characteristics, battlefield environment, etc.; the accompanying supporting ability of maneuvering operations, and supporting ability in other formats.

2. The Magnitude of Campaign Strength would affect the Determination of the Campaign Operational Objective

In organizing the execution of either nuclear counterattack or conventional strike campaigns, the determination of its campaign objective by Second Artillery must be in line with the quantitative and qualitative standards of the campaign strength. The potency of the Second Artillery campaign strength would depend on whether the missile forces are composite and well-matched, and whether there are sufficient quantities of high-quality weaponry equipment. Without the matching sustenance of the various types of support strengths and information operational forces, it would be impossible to realize the campaign operational objective because the missile forces would be unable to organize normal launchings. If there were a deficiency in the quantity of missile weaponry, then the strikes would be limited with respect to targets, thereby allowing for the achievement

of only limited operational objectives. If the missile's hit accuracy is low, coupled with inferior reliability, then it could only strike targets in line with its functionality, levying great restrictions on the determination of the campaign operational objectives. Therefore, campaign operational objectives could only be determined according to the magnitude of the Second Artillery campaign strength. An objective determined overly high **[end of page 92]** would render its realization difficult, while one that is determined too low would not be able to allow it to fully bring into play the function of its strength, thereby restricting the result of campaign operations.

3. The Magnitude of Maneuverable and Defensive Abilities of Campaign Strength would affect the fully Bringing into Play of the "Assassin's Mace" Function

Campaign maneuvering ability refers the capability of the nuclear and conventional missile forces of Second Artillery in organizing the execution of troop and weaponry displacement for the sake of accomplishing certain specific campaign objective. Defensive ability refers to the capability of adopting a series of measures and actions aimed at ensuring the security of weaponry equipment and personnel of Second Artillery in the operational bases within the theatres of war. The magnitude of its ability is directly related to the survival and counter attack ability of the campaign strengths. According to the PLA's active defense strategic policy, the execution of nuclear strength is a counter attack operation of letting one's opponent start hitting and then get the better of him. If our own survival could not be ensured, then there would be no strength to strike back, severely weakening its value for existence and unable to bring into play the functions of nuclear deterrence and nuclear revenge. If conventional missile forces do not exhibit relatively strong maneuverability and defensive abilities, it would be relegated to a position of taking a beating under the condition of firepower attack outside of strong enemy defensive zones, enemy's preemptive measures and counter control attacks, severely affecting the ability of bringing into play the function of the "Assassin's Mace" effect.

Section 2. Second Artillery Battlefield and its Influence on Campaigns

Second Artillery battlefield refers to the space affected by the personnel and weaponry of Second Artillery while engaging the enemy during its execution of campaign operational actions. This is a complex battlefield of an integration of multiple links composed of surface battlefield, maritime battlefield, aerial battlefield, special battlefield and electromagnetic battlefield. In line with modern technology, particularly advancement in missile defense technology, the entire flight duration of missile weaponry would be subject to the enemy's interception and annihilation. **[end of page 93]** Therefore, special domain delineated by the flight paths of missile weaponry and the electromagnetic realm would be crowded with fierce confrontation, becoming the organic portion of the Second Artillery campaign battlefield. The Second Artillery campaign battlefield is no longer the traditional Second Artillery theatre of war (our side's surface domain for action of the forces). With respect to Second Artillery, regardless of whether one takes as a starting point the smooth execution of nuclear counterattack and conventional missile strike campaign, or the study in the Second Artillery campaign fundamental theory, the Second

Artillery campaign battlefield should be conscientiously and in-depth researched. Cognition of the Second Artillery campaign battlefield characteristics, seizure of the basic circumstances of battlefield elements, analysis of the influence posed by the various types of battlefield elements towards Second Artillery campaign, planning of the various preparatory works of campaign battlefield would all constitute important components in Second Artillery's thorough investigation of campaign battlefield.

I. Second Artillery Campaign Battlefield Characteristics

Compared with other armed services, the spatial domain involved by the Second Artillery actions exhibits a distinct particularity. Grasping Second Artillery's campaign battlefield characteristics represents the foundation for its cognition, the only way towards seizing the initiative in battlefield preparation, and also the precondition for effectively capitalizing on battlefield environment to conquer the enemy.

1. The Pre-established Nature

Since campaign operation is a dynamic process, its battlefield parameters are generally difficult to determine before the end of campaign; however, due to its own particularity and the relatively high pre-established status, following the determination of campaign planning, the Second Artillery campaign battlefield parameters are fundamentally delimited. First of all, there is a tightly close relationship between battlefield parameters and weaponry shooting range. Since Second Artillery employs missile weaponry in executing its campaign operations, and even though the battlefield parameters would change according to the different weapons chosen, its maximum parameters would hardly exceed [end of page 94] the average of the shooting range of its weaponry and mobilization distance, exhibiting a relatively fixed characteristic property, allowing the battlefield parameters to be quite easily inferred as long as weaponry has been determined. Secondly, operational positions restrict the action spatial domain of the campaign regiments. Position-reliant operations constitute the most distinguishing feature of missile weaponry, not only would intercontinental ballistic missiles be unable to be launched without launching silos, but also the conventional missile forces, equipped with maneuverable operational capabilities, would find it difficult to fulfill its mission once it has left its prepared position. Therefore, not only is the Second Artillery operational battlefield an important component, it represents a fundamental element within the Second Artillery operational system. Since the "Run", "Attack", "Defend", and "Resist" actions conducted by Second Artillery forces could hardly deviate from its reliable support, most of the actions of the campaign regiments are executed within the established operational domain. Therefore, the Second Artillery campaign battlefield is a relatively fixed spatial domain, exhibiting a rather strong sense of pre-establishment, quite unlike other armed services that require selection according to circumstances.

2. The Complexity Nature

The Second Artillery campaign battlefield is a complex battlefield of an integration of multiple links, with its parameters involving surface, maritime, aerial, spatial and electromagnetic domains, objectively creating a very complex battlefield environment, resulting in the Second Artillery campaign being subjected to various types of restraint and restrictions from different domains and directions. First of all, geographical conditions pose important influence towards Second Artillery campaigns. Rivers, lakes, network of streams and rice fields would cause inconvenience in traffic that creates obstacles against the mobility of the troops. The highways, railroads, culverts and bridges would often be destroyed by the enemy during wartime that creates obstructions in the front and severance in the rear for our armored vehicles, making it difficult to advance or retreat. The rolling hills and valleys would greatly affect the nuclear explosion's killing and wounding effects of its shock waves, ray radiation and radioactive contamination. Secondly, the designation of various types of safety zones has brought about numerous restrictions towards Second Artillery in its campaign planning. The so-called safety zone refers to the delimitation of zones to provide safety and security within the domain covered by the flight paths of missile weaponry extending over our own sovereign land and that of our friendly neighbors. It can be divided into the launching position safety zones, first area safety zone, **[end of page 95]** missile flight path safety zones, wreckage safety zones and final area safety zones, etc. In order to ensure that these safety zones would not pose adverse influence towards Second Artillery campaign actions, numerous restrictions have been imposed upon the campaign planning endeavors. Thirdly, the complex and ever-changing electromagnetic environment would cause the command communication to encounter definite difficulties. Due to the fact that the missile forces represent our execution of deployment within this vast and deep space covered by the campaign in a manner of a minute focused concentration within a greater dispersed endeavor, it has allowed the electromagnetic environment in the battlefield to become complicated and multi-changing. The cause in this respect is attributed to the fact that the greater the depth, the more would be the electromagnetic signals, allowing an inter-weaving of various types of civilian and military electromagnetic signals during wartime. In another respect, within the parameters of the flight paths of the missiles, the high concentration of complex signals is caused by a corresponding concentration of different frequencies and systems' electromagnetic radiation with sources traceable to telemetry, nuclear explosion detection, guidance, communication, reconnaissance and early warning, etc. This complex and multi-changing electromagnetic environment would no doubt magnify the difficulty in differentiating our enemy's signals from our own. In addition, during wartime the enemy's reconnaissance, interference, sabotage would together render some definite impediment for the timely, confidential and smooth transmission of our command signals.

3. The Exposure Factor

Being an important component of the Second Artillery campaign battlefield, the missile positions represent essential peacetime venue for the storage, management of weaponry and forces training, fundamental element for the creation of the forces' battle

effectiveness, and an important support during wartime for the operational actions and survival shelter. As a basic element of the Second Artillery operational system, the missile positions doubtlessly exhibit a decisive and pivotal function towards the organization and execution of Second Artillery campaigns; however, due to the fact that the battle is fought while basing on the support of stationary positions, the exposure symptom is relatively significant for Second Artillery in the campaign battlefield, allowing the base establishment to face an extremely severe challenge. First of all, the extensive employment of spatial military high-tech reconnaissance measures has allowed the missile forces with operations that rely on the support of fixed bases to be easily discovered by the enemy. At present, in the sky and space above our country, not only have Western countries deployed many types of military reconnaissance satellites, but also the reconnaissance activities are quite incessant. Spinning in different orbits, these satellites create a spatial reconnaissance system that is full-dimensional, full-space-time, high-performance and multi-purpose against us, **[end of page 96]** while exhibiting a very high surface resolving power. Under such strict surveillance, our missile forces operations that rely on the support of positions would be easily discovered by the enemy due to the large size of the targets and vastness of its parameters. Secondly, the extensive deployment of long-range precision attack weaponry has made it easy for the enemy to destroy our missile positions that are stationary in position. Since massive employment of precision guided weaponry has become a prime characteristic of modern day high tech localized warfare, these technically advanced weaponry with high impact/hit accuracy and magnanimous destructive power would no doubt pose a rigorous challenge against the safety and security of our battlefield installations.

4. The Dispersal Nature

For the sake of increasing survivability, the deployment format adopted by Second Artillery is one of integral dispersal and localized concentration. Within the deployment inside operational positions, an apparent non-regulatory characteristic could be spotted in that long and short ranges coexist together, while sparseness and concentration go hand-in-hand, allowing the launching grounds to witness groups of “Point-group” type of deployment having the technical positions and positions of readiness as the point basis. Moreover, in line with nonstop advancement in various types of maneuverable weaponry, the zone-striding and large-parameter type of maneuverable ability continues to upgrade, allowing the battlefield posture to further develop towards the direction of non-linearization. The rapid advancement in military technology has prompted the long-range battle ability of the forces to reinforce continuously, rendering the situation such that within the future battlefields, both sides would not be able to enjoy the so-called “Safe rear” provision. On one hand, since our missile weaponry possesses intercontinental attack capability, we can at any moment attack any far-away target of the enemy; however, on the other hand, our missile forces will at all times be subjected to the enemy’s all-dimensional threat that would include long-range raids, air-borne destruction, electronic interference and network attack. Therefore, the Second Artillery campaign battlefield shall no longer exhibit any operational front that entertains offensive and defensive confrontations, and instead would exhibit a non-linear posture that would be “Even more spacious, even more irregular”.

5. The Expansive Character

Not only has the Second Artillery campaign battlefield involve visible geographical space, **[end of page 97]** it also involves the invisible electromagnetic space. Since it includes not only objective natural environment, but also man-made social environment, the feature of its complicated structure and its restraining function towards missile weaponry operations have resolved the many aspects of inevitable battlefield preparation that mandates a relatively lengthy preparatory cycle. Of utter importance to battlefield preparation would be the resolution of such significant issues that directly affects the operational effectiveness of missile weaponry as whether the base installations are compatible as a set, whether the overall layout is logical. Since operational position installation itself exhibits such features as numerous set-compatibility elements and vastness in numbers, such quantities of elements without a specific preparatory cycle would render the achievement rather difficult. Since missile weaponry belongs to the non-direct aiming type of weaponry, its operational application would rely to a large extent to target termination and pre-war target preparation. Without an accurate and meticulous target preparation, it would be similar to aimlessly and fruitlessly shooting at random, hardly able to achieve the operational mission. Moreover, the process of target preparation ranging from intelligence gathering to target reorganization, before going through practical inspection would altogether require a rather lengthy cycle. Since the Second Artillery campaign action is restrained by such factors a weather conditions, electromagnetic environment and various types of safety zones, therefore, pre-war corresponding preparation must be executed. These preparations would include the execution of first and last zone weather forecast, battlefield communicational installation establishment, cognition and grasping of the major flight paths in the sky and space above the theatres of war. Besides these, it would also be necessary to delve deep into understanding aspects pertaining to the politics, finance, culture, public order and security maintenance, folk customs, public feeling, religion, war supporting potential, etc. All of these matters have vividly reflected the marked special features of numerous elements and long cycles involved with Second Artillery campaign battlefield preparation.

II. Second Artillery Campaign Battlefield's Influence on Campaigns

Similar to other battlefields, the Second Artillery campaign battlefield is composed of many fundamental elements, creating significant influence towards Second Artillery campaign from different sides. A conscientious research and analysis conducted on these influential factors would not only be an execution of the fundamental support of battlefield preparation, but also an important premise to an active capitalization of the battlefield in wrestling Second Artillery campaign victory. **[end of page 98]**

1. The Influence on Campaign Deployment

First of all, since complicated topographical environment would restrain the selection of missile positions, a demand is made in that the disposed stations must be correspondingly voluminous. Simultaneously, while executing engineering constructions in the positions, considerations must be made to make use of the shielding and protective functions of

favorable topographical conditions in order to optimally upgrade the survivability of the positions. Secondly, the attack target's geographical position constitutes a direct support for the execution of campaign deployment. Since the attack target represents the basic element of a surface battlefield, its geographical position would directly affect the Second Artillery campaign deployment. The requirement behind the disposition of the launching positions within the theatres of war is that its distance from the target should be less than the maximum range of its missiles because only the execution of this type of deployment could we ensure that the missile striking firepower could cover the target area. Moreover, the traffic conditions and financial status, etc. within the theatres of war would also pose very significant influence towards Second Artillery campaign deployment.

2. Influence on Campaign Command

Execution of a stable, continuous and non-stop command represents the basic demand of modern day campaign, while a stable command would also require the support of reliable communicational measures. The Second Artillery communicational measures would mainly include wired, wireless, relay, satellite, scattering, optical fiber and messenger service communications, etc. Nevertheless, the operational special features of a vast battlefield and frequent mobilization have rendered wired communication difficult in complying with the demands of Second Artillery campaign command, allowing the command communicational measure selection to favor wireless communication, in particular short-wave communication. Unfortunately, the effect of short-wave communication is very easily affected by spatial battlefield elements. When the sun's sun-spot and solar flare should suddenly become active, the electron density within the ionosphere would be enhanced, increasing its absorption function towards electric wave, decreasing the energy reflected to the earth's surface by the electric waves, creating changes in the transmission path for short-wave and energy expenditure, manifested as a drift and weakening of the signals, at even suddenly breaking off altogether. Moreover, the cosmic ray, celestial elective wave, [end of page 99] particle flux, meteoric stream and manmade celestial scraps (also referred to as space trash), etc. in space would also bring about different degrees of influence towards the operation of military communicational satellites, thereby affecting the stability of the Second Artillery campaign command.

3. The Influence on Campaign Actions

Battlefield environment would also pose significant influence on the Second Artillery campaign actions. Traffic and weather conditions affect the Second Artillery campaign maneuverability; topographical conditions affect the Second Artillery campaign camouflage; wind direction and speed affect the lift-off of missiles; air temperature affects the filling of missile fuel; electromagnetic environment affects the Second Artillery campaign information operation; adverse meteorological conditions such as rainfall, snowfall, dense fog, thunderstorm and lighting affect the storage, transportation, launching and trajectory of missile weaponry, as easily observed phenomena. Besides, adverse meteorological conditions could drastically decrease the attack result of the enemy's precision guided weaponry, thus facilitating our organization of campaign

defense actions. The various natural physical phenomena would interfere with the normal operation of missile weaponry, affecting penetration assignments.

4. The Influence on Campaign Supports

With respect to geodesy support, high mountains and cityscapes that surround the positions would create obstacles for overall visual viewing parameters. Reflections from rivers, lakes, water reservoirs, etc. during measurement survey would generate horizontal refractive deviation, thus affecting the survey precision. The high tension wiring surrounding the positions would create interference towards the precision survey equipments, disallowing them the privilege of maintaining an optimum operating posture. With regard to communicational support, on one hand, the various types of up-and-down rolling complicated topography would create isolation and interference towards the communicational electric waves, affecting the quality and efficiency of communication. On the other hand, regional communicational main lines and facilities would provide convenient conditions towards the forces' communicational liaison. With respect to engineering support, on one hand the destruction during wartime of the positions, roads, bridges within the battlefield would greatly magnify the productivity and difficulty of the assignment of engineering support; while on the other hand, **[end of page 100]** the magnanimous support and assistance from the regional government and the masses would become a potent replenishment of our wartime engineering support. Moreover, within the theatres of war, the financial potential, mechanical maintenance capability, loading and unloading transportation capability, medical first-aid ability, in addition to the quantity and quality of the population, would all constitute extremely direct influence towards the logistics, loading skill support and personnel replenishment.

5. The Influence on Attack Results

There exists a very close relationship between the attack results of missile weaponry and the geographical conditions within battlefields. Firstly, let us consider the influence on the impact/hit accuracy of missile weaponry. During the initial stage of the initiative flight portion, the missiles are subjected to rather substantial influence from atmospheric pressure, temperature, relative humidity, wind and other meteorological conditions. Changes in atmospheric pressure would affect the thrust of the rocket engine and atmospheric resistance, thus affecting the speed and range of the missiles, resulting in deviations in the coordinates of the landing site. Since wind would affect the motion of the warhead in the corresponding horizontal direction, a tail wind would allow the horizontal distance of the landing site to err on the far side, overshooting the target; while a head wind would provide the contrary, and a side wind would create a directional deviation for the missile flight path, resulting in a lateral deviation for the landing site of the warhead. Moreover, atmospheric temperature, atmospheric pressure, relative humidity and air resistance, etc. would generate magnanimous effect towards the impact/hit accuracy of the warhead. Secondly, let us consider the influence on the kill/wound destructive effect of the missile weaponry. Topographical conditions inside the target zone such as hilly terrain would obviously reduce the kill/wound destructive function of a nuclear explosion, while forestry would also be able to greatly weaken the

various kill/wound capability of nuclear explosion. Cloud layer and ice/snow surface would also affect the effect of emission of light, while meteorological conditions would also directly affect the degree of radioactive contamination and the spread of the contaminated zones. Due to atmospheric absorption, the magnitude of the initial stage nuclear radioactive radiation would rapidly weaken in line with increases in distance.
[end of page 101]

Section 3. Second Artillery Campaign Time and its Influence on Campaigns

The Second Artillery campaign time is a collective term for the time segment and moment within Second Artillery campaign actions, representing one of the campaign objective elements. Together with campaign battlefield, a campaign time space is created. Since campaign strength motions within campaign time space, it would lose its applicatory foundation once it should leave the campaign time space strength; therefore, campaign strength is inseparable from campaign time. Only by way of an in-depth research into campaign time and its characteristics, delving deep into understanding the influence of campaign time over campaign actions, could one expect to effectively control campaign time in the complicated and multi-changing battlefield and fight for grasping the campaign initiative.

I. The Characteristics of Campaign Time

1. The Orderly Nature

The orderly nature of Second Artillery campaign time is decided upon by the nature of the weaponry employed by Second Artillery. Since missile weaponry system is complicated, with obvious restraint imposed by technology, it must be necessary to strictly abide by its echelon to orderly complete such key tactical actions as the missile body transference, warhead transport, technology testing, warhead and body connection, occupying positions, missile lift off, vertical testing, ignition launching, etc. before allowing them to be deployed for wartime utilization. Therefore, every time spot and time segment within campaign time must be logically determined according to preset procedure. Regardless of whether it is missile technical preparation time or the characteristic time within each campaign stage, advancement must exhibit a regular pattern, disallowing even the slightest free rein casual efforts or actions according to one's discretion.

2. The Phase-Differentiation Nature

The phase-differentiation nature of campaign time is manifested in the stage division of campaign time, **[end of page 102]** basically determining the regular pattern of tempo of campaign actions. Within the entire continuous time of Second Artillery campaign, the overall objective of campaign is divided into several stages for completion in accordance to the objective demands of campaign development and the developmental progress, allowing every stage to mutually connect, organically cooperate, scientifically control the

time and tempo, to simultaneously and scientifically arrange the sequence for several matters according to the importance and urgency in a logical allocation, identifying the logic connection and cause-result relationship between matters, taking into consideration the linkage between matters and the developmental regular pattern, allowing the dominant matter to lead in the second important matter, fighting for minimum time wastage in order to gain optimum operational benefit.

3. The Constancy Nature

Second Artillery campaign is a continuously executing process of sustained development. The various actions within the campaign would create a wholesome, sustained process according to specific regular pattern and procedure and in line with the extension of time. Operating under high tech conditions, and since the Second Artillery campaign overall sustained duration is not allowed to be overly long, therefore, the sustained duration of every stage in the campaign and the various jobs in the various stages must comply with demands of high tech weaponry deployed with a fast tempo, continuously executing very punctually, adaptable to the special features of missile weaponry's all-weather and all-time sustained operation, thereby upgrading manifold the missile forces' time utilization coefficient.

II. The Influence of Campaign Time on Second Artillery Campaigns

Since campaign time restrains campaign development, the different patterns of campaign of the Second Artillery would not necessarily pose the same demands on campaign time. A campaign action process would be greatly affected by whether the utilization of campaign time is considered scientific or not. Since Second Artillery campaign is a continuous execution extending to great depth, full domain, all dimensional, fierce and intense environment, the campaign battlefield circumstance is extremely complex, with battlefield posture drastically changing, campaign progress and sustained duration greatly reduced, [end of page 103] with an upgrading in the quick-decision nature of campaign. The influence of campaign time on campaigns is being manifested in numerous aspects.

1. The Influence on the Length of the Course of Campaigns

Campaign course is a process of campaign execution. In general it refers to the span in time and space undergone by the campaign actions. Since high technology has been extensively applied to missile weaponry, allowing its flying speed to be measured in units of Mach, the obstacles to a concentrated utilization created by a scattered deployment of Second Artillery campaign strengths have almost passed out of existence. Although the arm of missile firepower has been extended tremendously, allowing campaign operations to accomplish magnanimous results within a few scores of minutes and even in less than a score of minutes, and that the campaign execution duration has been shortened by a substantial margin; nevertheless, due to the high content of missile weaponry technology, the systems are complicated with slow reactionary speed, thus severely restricting the campaign preparatory time. There is a close interrelationship between reactionary speed

of missile weaponry, technical preparatory time for warheads and missile bodies, time for occupying launching positions and times for vertical testing, fuel filling, target sight setting, adjustment of sight setting, pre-launch inspections, etc. The length of the above time durations would depend on such factors as the standard of peacetime precautionary alertness, military quality of personnel, reliability of weaponry systems, degree of automation and launching patterns, etc. of the missile forces. It can be said here that the duration length of campaign preparatory time is the key to deciding the progress of Second Artillery campaigns. Simultaneously, the times for assessing attack results, equipment withdrawal and position displacement would also pose definite influence on the campaign progress.

2. The Influence on Campaign Planning Efficiency

Second Artillery campaign planning represents a process for executing a policy decision making with scientific strategy towards campaign operations according to superior's intent. Since it involves such important issues as the decision on whether or not to fight, when to fight, attack what, how many, attack efficiency, etc, the planning efficiency is the key to campaign success, a manifestation of command ability, thought ability and strategic standard. Additional issues that would affect the progress and outcome of campaigns would include whether favorable opportunity for operations is grasped, whether campaign initiative has been seized, and whether survivability of missile strengths [end of page 105] and effective counterattack could be ensured.

Notwithstanding, the planning efficiency of Second Artillery mainly depends on the speed and quality of the provision of policy support. Since Second Artillery is bearing the difficult task of "Double deterrence, double operations", campaign operational actions should involve a logical planning and scientific policy in order to attain a union between the art of commanding and policy support of the commanding officers, a union of qualitative and quantitative analysis. Generally speaking, many efforts are accomplished on the policy support system by way of precise calculation, including attack target selection, determination of sight setting, quantity of missiles deployment, strengths allocation, attack effect forecast, etc. Therefore, the time required by campaign commanding officers in providing policy support and the quality of policy are key points that also affect the campaign planning efficiency.

3. The Influence on the Bringing into Play of the Operational Ability

Operational ability is also referred to as fighting power, which is the ability of armed forces in executing their operational missions. It is integrally decided upon by factors such as the quantity and quality of personnel and weaponry equipment, the authorized strength system and its scientific standard, the standard of organized command and management, the strength of various support logistics, etc. When Second Artillery organizes campaign operations under modern high tech conditions, in view of short and pressing time duration, significant demand is made towards personnel quality, the modernized standard of weaponry equipment and the union of the two subject matters. In order to ensure an integral operational ability while maintaining an optimum posture from beginning to end, creating a loose and comfortable environment for campaign actions,

and providing even more effective time for the smooth execution of campaigns, the following issues would have to be dealt with: Adapting to the integral operation, whether re-combining forces and operational grouping could be executed speedily; whether the missile forces could speedily react to a state of being exposed; whether operational supports could from beginning to end center on the speedy execution of missile strike while being closely compatible with the main body campaign action; whether logistics support could magnanimously reduce the time resources expended by long range transference; whether equipment support could ensure that the front would have reserve supply, speedy multi-mode transportation, adjustments within zones under emergency situations, technical personnel to execute on-site checking, pre-war established advance deliberation and preventive defense, speedy investigation whenever problems should arise, reinforcing battlefield emergency repair strengths, pre-establishing a policy for total exchange of parts that are prone to damage, establishing effective tactical measures to compensate insufficiencies in weaponry equipment technology, etc. **[end of page 105]** All of the issues discussed above would directly affect the effective bringing into play of the campaign operational ability.

Section 4. Second Artillery Campaign Command and its Influence on Campaigns

Second Artillery campaign command represents actions involving strategy planning and dispatch initiation executed by campaign commanding officers and their commanding mechanisms towards the operational actions of their forces for the sake of achieving a specific objective. It is one of the most important subjective factors of Second Artillery campaign. The verdict of the correctness of command directly affects the progress and outcome of campaigns.

I. The Characteristics of Campaign Command

Since the Second Artillery campaign commanding officers and their commanding mechanisms represent the main body of command, the attached forces stand for the command object. The campaign objectives determined and command activities executed by this command possess significant characteristics that are subordinate, confrontational, hazardous, meticulous and deliberate, and dynamic.

1. The Subordinate Characteristic

In view of the fact that regardless of whether Second Artillery is organizing campaign operations or deterrent actions, the national political interest will be profoundly affected, campaign command must strictly comply with the strategic and political strategy demands, according to which the campaign objectives, strength application and attack opportunities, etc. should be determined. Therefore, in organizing command on campaign actions, Second Artillery commanders and their commanding mechanisms must “Talk politics”, self-consciously and organically consolidate campaign objectives with political objectives, complying unconditionally with the demands of political interest. **[end of page 106]**

2. The Confrontational Characteristic

During future high tech localized warfare, Second Artillery will confront powerful enemies in operations. On one hand, every possible means would be engaged to deploy missile weaponry to “annihilate the enemy”, fully bringing into play the function of the “Assassin’s Mace”; simultaneously, effective methods should be enlisted to “Conserve our own” limited resources in missile strength, in order to ensure sufficient retaliatory strength. Therefore, when Second Artillery campaign command engages the enemy in executing “Wisdom”, “Courage” and “Strength” contests, the confrontation would be very intensely fierce.

3. The Hazardous Characteristic

Since Second Artillery is a type of non-contact firepower strike action, campaign command is organized and executed after having made forecast on the strike effect according to superior’s intent and under the support of specific intelligence information. Due to the fact that the battlefield circumstances are ever-changing, targets being perplexingly complicated, while the damage report after striking the targets are unavailable directly via visual assessment, in addition to the many unpredictable facts that would affect the strike result, therefore, there exists a significant amount of risk and hazard in whether the campaign objectives could be achieved in accordance with the superior’s intent.

4. The Meticulous and Deliberate Characteristic

Since the application of Second Artillery missile strengths would involve the overall situation that includes missile weaponry and in particular nuclear missile weaponry with profound and far-reaching consequences, the applicatory authority should be highly centralized. Due to the weaponry’s significant content of high technology with a hefty price tag, efforts must be made to “Acquire initial tempo-grade fortune-telling before careful and scrupulous execution,” conducting precision calculations before launching each and every missile in order to strive for optimum attack result. Therefore, organizing planning should exhibit the characteristics of being meticulous, deliberate, detailed and thorough. **[end of page 107]**

5. The Dynamic Characteristic

“Soldier has no invariable impetus, water has no unchanging form,” is an idiom representing an objective reflection towards the multiple changing character of matters. Since Second Artillery organizes operations under high tech conditions, circumstances are complex and ever-changing, resulting in inevitable non-stop adjustments on both sides being made towards one’s own countermeasure endeavor. Second Artillery campaign command must provide advance preparation to formulate a predetermined policy to deal with various circumstances, actively pursuing the status of “Enemy

changes and we change”, but “Enemy changes before we change,” in order to increase the assurance of victory.

II. The Influence of Campaign Command on Second Artillery Campaign

Since campaign command represents the most important subjective element among campaign factors, it exerts a decisive influence on the progress and outcome of campaigns.

1. The Quality of Campaign Command Main Body Affects the Campaign Organizing and Commanding Ability

The ability to organize command refers to the battlefield controlling and coordinating ability of the campaign commanders and their commanding mechanisms in executing command. During future operations under brand new command environment, the quality of the command main body of Second Artillery exerts specific influence on the ability to organize command. Therefore, in order to effectively control and coordinate campaign operational actions, campaign commanders and staff officers of their commanding mechanisms must possess the following five abilities: First, it is the grasping of the ability of knowledge. American futurist “Tuo Fu Le” 托夫勒 (possibly Alvin Toffler) has pointed that knowledge could help gain victory in or prevent war. A commander could become a qualified one by arming himself with the supreme achievement and brand new technological knowledge of human cultural development. Second, it is the scientific planning and management ability. The 21st century is an age of a union of intelligence and technology, exhibiting a special feature of digitalization. Since precise quantitative calculation and objective quantitative analysis are united together, it will become the code of conduct for Second Artillery campaign commanding officers in executing situation determination, [end of page 108] deterrence analysis and policy actions. Third, it is an enriched imaginative ability. From the standpoint of certain meaning, commanding Second Artillery campaign operations is in fact a foresight. Away from imagination, a foresight would not be able to expect any idealistic result. Only by way of possessing a rich imaginative ability would the campaign commanders be able to combine the loose pieces into an integral whole, to convert a flat two-dimensional model into a three-dimensional one, to restore abstract concepts and theories into an image that is more closer to reality, from which various operational abilities could be ingeniously combined to optimally bring into play all the operational resource potentials. Four, it is the ability to unite man and machine. The so-called dispersed informationalization refers to brainpower plus computer. The commanders’ obsolete method of relying on rulers and pencils to work on flat diagrams will be replaced by and substituted with the pattern of system software operated with mouse and keyboard on multi-media computers. For the sake of realizing a union between man and machine, the commanders are required to grasp multiple armed services command vocational work, be thoroughly acquainted with an integration of command elements and be proficient in the skills of manipulating the command system, in addition to being adept in discovering new issues and possessing the ability to resolve such issues. Five, it is the ability to comply with joint command. Joint operational command ability refers to the centralized manifestation of the commanders’

“Failing on the verge of success” in future battlefield. It is by no means a simple pile-up of multiple armed services’ vocational work, but an organic union of such entities. Second Artillery campaign commanders can expect to comply with the needs of future integral operations by realizing a changeover from combined operational command to joined operational command, a transmutation from an experience format towards a knowledge model.

2. Campaign Command Method Affects the Overall Operational Efficiency of Campaign Strength

Command mode refers to the command methods and form executed by commanders and their commanding mechanisms towards the forces under their jurisdiction. Since a specific form and a specific content are interrelated, command mode, command policy and its practical actions penetrate the entire operational process, generating a profound influence on the progress and outcome of operation. Once the command mode has been determined, the allocation of command duties among the various hierarchies within the command system would be correspondingly determined. With respect to similar weaponry equipment, **[end of page 109]** similar operational objective, and basically similar topographical and meteorological conditions, the adoption of different modes to command operations would often generate dissimilar operational efficiencies. A correct command mode would ensure that the bringing into play of the integral operational efficiency of campaign strength to be normal; on the contrary, a questionable command mode might cause the bringing into play of the integral operational efficiency of campaign strength to be abnormal, while the operational results obtainable would range from insignificance to utter failure. During joint operation, since the Second Artillery operational strength composition is complex, complete with diverse operational patterns, while cooperation between inside and outside is also complicated, it is necessary to flexibly select an appropriate command mode according to the nature of the operational actions to not only ensure a centralized consolidated command over the missile forces by Central Military Commission and the joint operational headquarters, but also facilitate the bringing into play of the activeness and initiative of the various hierarchies of command of the missile forces, thereby upgrading command efficiency, leading to the smooth accomplishment of the operational mission bestowed by the superior. Under the situation of a fast changing battlefield circumstance, the selection and determination of command mode executed by commanders and their commanding mechanisms must center on elevating the operational command efficiency in accordance with the operational command principle, operational composition, mission nature and order of priority, nature and deployment of the forces, operational stage, operational object, target and other circumstances, taking as a basis the bringing into play of the integral joint strength of the various forces within the organization, giving play to and seizing the special skills of the forces.

3. Campaign Command Measures Affect the Command Policy Efficiency

The few localized warfare since the Persian Gulf War have demonstrated that automatic control and artificial intelligence within the category of high technology have become the

developmental foundation for all future weaponry technological equipment, allowing the C⁴ISR system having intelligence policy as core to become the major operational measure within future campaign command. Whoever should exhibit superiority in intelligence content would be able to magnanimously elevate the command policy efficiency, thus grasping the initiative in future battlefields. Command systems having high intelligence content are capable of assisting commanders in executing scientific policies. In line with the development in thinking process science, decision-making science, cognitive science, upgrading in the mechanical self-learn function, in addition to the generation of a neural net, a new generation of computers, the intelligence of C⁴ISR will enter into an even higher developmental echelon. **[end of page 110]** It can unite together the creativity, intelligence and wisdom of the commanders with the logic of computers, amalgamate together static state historical experience with dynamic system analysis, measures and calculation, merging together the discretionary character and scientific nature of policy making, in addition to digitalizing and format-conforming of military command knowledge and operational experience. Moreover, in accordance with the battlefield posture, it can execute automated deduction, induction, inference and predetermination, leading to the creation of many operational plans, in addition to understanding the language of commanders and staff officers, adaptive to their thinking mode and working habits, assisting commanders to make comparisons of the various advance proposals according to the practical situation, and in a short few minutes and even a few seconds time, assessing the situation, be resolute and rapidly select the optimum plan for serve as reference for the commanders. Therefore, intellectual command measures urge commanders to make use of the synthesized analytical processing towards the various reconnaissance intelligence to grasp the overall battlefield situation in a timely manner, mutually connecting together in executing sufficient appraisal, making a correct assessment of the situation, discarding subjectivity, one-sidedness, arriving at a more integral, accurate and scientific standard. Moreover, optimally utilize quantitative thinking modes to resolve issues, realizing the mutual intellectual augmentation between man and machine, genuinely effectuating the employment of machine intelligence to extend the human intellectuality, thereby upgrading the efficiency of command policy making.

Section 5. Second Artillery Campaign Information and its Influence on Campaigns

Campaign information is a collective term for the various types of military intelligence and news applied to campaign operations. It is a military resource of equal importance to combat effectiveness. The three significant elements that create information are information source, information refuge and information channel. Information originates from information source, summed up and put in a nutshell in information refuge. Information channel acts as the bridge for traffic between information source and information refuge, while the breadth and holding capacity of information channel would be decisive on the flow volume of information. Since all information represents a reflection of information source, its value is decided upon by the processing and capitalization of information by information refuge. Since Second Artillery is a high tech force, **[end of page 111]** its weaponry equipment and operational actions exhibit a significant amount of faith and dependence on information, such as target information,

reconnaissance intelligence information, geodesic information, all principal information regarding missiles, meteorological information, weapon technological function information, etc. Without the above information combat strength could not be generated, thus propelling information to become an important factor that affects the outcome of campaigns.

I. The Characteristics of Campaign Information

Second Artillery campaign information exhibits clearly evident characteristics.

1. The Supportive Characteristic

Regardless of whether Second Artillery is involved with nuclear counterattack campaign or conventional strike campaign, the domain involved by its campaign operations would be vast. With the passage of time, the situation regarding our enemies and ourselves would be continuously changing, including the non-stop renovation and development of weaponry equipment, campaign strength, operational thoughts, operational modes, operational actions and operational methods, while there is an incessant increase in corresponding information, creating a situation whereby changes in circumstance would be boundless, thus allowing campaign information to expand in a limitless fashion.

During Second Artillery campaign operations, due to the missile weaponry's feature of being able to attack over-the-horizon targets, a reliance on the enemy's situation and target information has been decidedly established. On one hand, without the support of information, missile weaponry would become deaf and blind; missile weaponry could fully bring into play a powerful combat strength only through an organic union of information with weaponry platform, allowing it to act with something definite in view, thus achieving an optimum strike efficiency. On the other hand, if the guiding, strategy planning personnel and organized execution mechanisms of campaigns would fully utilize and effectively control the obtained information to allow campaign command to be established on a foundation of accurate assessment of the numerous information details concerning the enemy situation, then it would be possible to attain the status of being quick at seeing and hearing, working out splendid plans to win victories in battles a thousand miles away, leading to deciding the outcome of campaigns from a thousand miles distance. Therefore, information in fact is regarded as the "Multiplier" of combat strengths generated by missile weaponry. **[end of page 112]**

2. The Infiltrative Characteristic

The scope of meanings and implications of information is extensive, including language, wordings, symbols, numerals, drawings, electromagnetic waves, sound, color, light, aroma, the sound and movement of things in this world and even the universe, the behavior of mankind and trend of thoughts, all being able to be employed to express information. Therefore, information exists and appears everywhere. In view of the fact that the source of Second Artillery campaign information is extensively vast, exhibiting

different natures with non-identical functions, the task of extracting from them some valuable information would require the processing of a large quantity of information collected, through inductive summation, synthesis, or by way of refinement and condensation. Since information is capable of infiltrating into every aspect or system of Second Artillery campaign, when the missile weaponry system is being infiltrated, the nature of weaponry would change, allowing it to become information weaponry; when it infiltrates the command policy support system, it could become the basis for a supplementary policy; when it infiltrates the automated command system, it would become its important component; when it infiltrates the operational efficiency assessment system, it could fully bring into play the important function of coordinating operational actions.

3. The Guiding Characteristic

Since information is the basis for campaign policy decision, the timeliness and accuracy of information exert some definite influence on the correctness of policy, thereby leading directly to the eventual outcome of campaign operations. Second Artillery campaign operations are executed against opponents as far away as hundreds and even thousands of kilometers. When compared with face-to-face contact operations, the battlefield transparency would be inferior, and it would be more difficult to obtain opponent's information. Therefore, the policy making for Second Artillery campaigns should only be done under circumstances of information superiority, allowing for a full capitalization of accurate information obtained in a timely fashion before laying down a correct conviction in creating favorable conditions for the grasping of campaign victory. Contrarily speaking, laying down an erroneous conviction that is based on wrong information would result in failure in campaigns. From the standpoint of certain meaning, Second Artillery campaign operations represent strategic confrontations established on an information foundation, **[end of page 113]** reflecting either the truth or fakeness of battlefield situation information, thus exhibiting a very strong guiding characteristic towards campaign outcomes.

4. The Time Effectiveness Characteristic

During modern day warfare, with the tempo of its progress accelerated, operational opportunity becomes a fleeting moment. Second Artillery campaign policy must be formulated under extremely limited conditions during wartime preparatory time. Therefore, the demand on the timeliness of information is very high. According to the demands of campaign planning, only by way of timely and accurate provision of the latest information could the achievement of desired operational results be ensured. Since obsolete old information is a type of useless information, it could only result in an erroneous assessment of the campaign policy, leading even to campaign failure. Henceforth, with the passage of time the value of information obtained would become less and less, allowing only information with a strong time effectiveness characteristic to boast an every-increasing value.

II. The Influence of Campaign Information on Second Artillery Campaign

Campaign information represents an important premise to organizing and planning campaigns.

1. Influence on Campaign Command and Organization of Cooperation

Due to the fact that Second Artillery exhibits a very strong strategic character, highly concentrated and consolidated command and control must be executed in order to accurately implement the superior's strategic intent, thereby accomplishing the operational objective bestowed by the superior. Regarding the efficiency of this type of concentrated and consolidated command system, on one hand it relies on the support of information resources, while on the other hand it depends on the effectiveness of information processing and transmission. Without a rich information resource, there would be no foundation for policy; while without a highly efficient and reliable information processing, transmission measures, then it would be far from being an effective command control. Thus it can be said that campaign information is a decisive factor that affects campaign command organization. **[end of page 114]** Second Artillery campaign cooperation involves a vast array of factors with a complex relationship and a strong time effectiveness characteristic. The result of cooperation organization mainly depends on the control of cooperative information and the degree of utilization.

Particularly during joint campaigns, the cooperation between Second Artillery and the army, navy, air force, armed police, militia, and related regional departments, large amount of information with respect to reconnaissance intelligence, target, strengths, defense and other aspects is required to facilitate scientific formulation of cooperative planning, closely and tightly organize cooperative actions, coordinating a synchronized attack at the enemy. Incomplete information and untimely processing or transmission of information would seriously affect the result of campaign command and cooperation, while only by way of obtaining a comprehensive and reliable information could one expect to be able to devise strategy at headquarters and command at will.

2. Influence on the Fight for Campaign Initiative

Second Artillery nuclear counterattack campaign exhibits a strong strategic character, magnanimously affecting the overall situation of war. Since according to the PLA predetermined strategic guiding principle, it is a general case that a nuclear counterattack would be executed after the PLA suffers a nuclear attack by the enemy, therefore, the issue of how to "Let one's opponent start hitting and then get the better of him" in war and fight for the campaign initiative represents the key to grasping campaign victory. During the process of fighting for the nuclear counterattack campaign initiative, campaign information such as the sign of an enemy strike, satellite serial reconnaissance cycle, strategic target activity, strategic weaponry technological function, the defense ability of the PLA nuclear strengths, and nuclear counterattack operational ability, etc. exhibit significant influence on the assurance of survivability, determination of counterattack opportunity, attack target and quantity of nuclear weaponry deployed, etc.

During Second Artillery conventional missile strike campaign, the key to fighting for the campaign initiative lies in the persistent fighting for controlling the enemy in advance, because only by executing an attack before the enemy could one expect to fully bring into play the “Assassin’s Mace” function of conventional missile strengths. Under the modern day high tech conditions, without timely, accurate and reliable information support and definite information superiority, it would be almost impossible for the conventional missile forces to obtain the advantage of being able to strike first. Moreover, in utilizing conventional missiles strength against future operational opponents, no absolute superiority could be ascertained, while only under the premise of grasping information superiority could the campaign initiative be obtainable, leading to an increase in the possibility of victory. **[end of page 115]**

3. Restraints on Bringing into Play the Effectiveness of Campaign Operations

Since Second Artillery is a branch of strategic campaign strength with a significant content of high technology, while in line with digitalization of weaponry that increasingly promoted the command’s automation and the complexity of support, its reliance on information is becoming more intensified. From the development of missile weaponry functions to communication and command control, from reconnaissance early-warning to intelligence processing, and from operational planning and management to operational policy decision making, high effectiveness could be achieved only under the support of a large quantity of relevant information. Take for example the guidance system of missile weaponry, advancement has been realized from singular inertia guidance towards the direction of compound guidance, because an accurate hit at the target would not be possible without precise information provided by satellite guidance system. Within a command control system with an ever-increasing degree of automation, the bringing into play of the effectiveness of the reconnaissance system and the intelligence processing system, being support carrier of transmission and information processing, would be subject to the strict restraint of information. Since information procured would serve as a basis for operational planning, management and policy decision making, the timeliness, comprehensiveness and reliability of information would directly affect the correctness and effectiveness of the policy formulated. It can be observed that besides affecting the speedy reactionary ability of the missile forces, campaign information would also influence weaponry’s strike ability and penetration capability, affecting the effort of bringing into play of the integral operational effectiveness of the forces.

Section 6. Second Artillery Campaign Support and Its Influence on Campaigns

Since Second Artillery campaign support is an important component of the combat ability of the missile forces, its support actions and support effectiveness directly affect the progress and outcome of Second Artillery campaigns, propelling the position and function of campaign support within the organization of execution process of Second Artillery campaigns to be of extreme prominence. **[end of page 116]**

I. The Characteristic of Campaign Support

Since the technological nature of Second Artillery weaponry equipment is pronounced, its demands towards support are significant, particularly when participating in joint operations under informationalized conditions, allowing campaign support to exhibit a clearly evident characteristic.

1. The Complex Nature

The complexity nature of Second Artillery campaign support is mainly manifested in the following three aspects: First, it is the complexity of the support content. Macroscopically speaking, it contains the four main contents of campaign operational support, campaign logistics support, campaign equipment support and campaign political work.

Microscopically speaking, the various major categories of support is further divided into several concrete supports, for example, the campaign operational support is differentiated into nine concrete support entities including the following: Reconnaissance intelligence support, target support, data computation support, communication support, protective sheltering against nuclear, biological and chemical weaponry, engineering support, campaign camouflage and meteorological support, drafting and drawing support, etc. Campaign logistics is divided into financial budget support, material resource support, transportation support, guard service support, and ordinary equipment technological support, etc. Campaign equipment support is divided into weaponry equipment support, campaign technology support and base technological logistics support, etc. Second, there are multifold support modes and methods. Due to the fact that there are many types and models of Second Artillery missile weaponry, operational patterns encompassing the regularized operations that depend on fixed bases and also the mobile operations within a zone or those that stride zonal demarcations, allowing campaign support to boast not only joint service support of ordinary equipment, but also autonomous support of special equipment. In addition to planned support, there would be impromptu support; besides fixed support, there would also be mobile support; in addition to parts-changing support, there would be maintenance support. Third, it involves the technical function of support. Not only is there a high content of technology with complicated operations, the Second Artillery support equipment's support exhibit a high degree of accuracy and precision. In particular, the issue of whether the precision of survey, computation support complies with the demands of attack result would command a significant influence. **[end of page 117]**

2. The Time Effectiveness Characteristic

Due to its hefty collection of campaign strength weaponry equipment, massive bulk volume, difficulty in big scale equipment maneuvers and clearly evident exposure factor, the campaign operational actions of Second Artillery must be executed rapidly and under concealment. Simultaneously, due to the strict restriction imposed by political and diplomatic struggles, the fight, cease fire, retreat and run phases of Second Artillery campaigns must comply with the demands of the overall situation, rendering a strong sense of uncertainty to operations. Due to the distinction of the function of bringing into

play the campaign strength, Second Artillery becomes the target for the enemy's key-point attack; coupled with the harsh battlefield environment, the wear and tear rate of weaponry equipment increases, demanding that the missile forces be equipped with the ability to rapidly re-engage in operations. This requirement invariably means that campaign support should exhibit a very strong characteristic of time-effectiveness, allowing it to provide accurate and reliable reconnaissance intelligence in a timely manner according to the needs of campaign operations, providing rapid replenishment of equipment resources, speedy organization of communicational contact, quick establishment of operational positions on a rush basis, provision of timely and accurate ballistic firepower data, rapid repair of damaged instruments and timely assessment of attack results, etc.

3. The Confrontational Characteristic

Since future warfare will be three-dimensional operations executed in multi-dimensional space, campaign support represents the life-line in holding together the main strength in maintaining its action of fully bringing into play the combat strength, while the operation will be executed, as in the past, amidst fierce confrontations. Regardless of whether it involves nuclear missile forces assigned in the strategic rear or conventional missile forces deployed towards the battle front, the numerous elements within campaign support such as base engineering, traffic hub, communicational center, intelligence processing center, material instrument stockpile depot, etc. are all prime targets for enemy attack. Therefore, during the process of survivability assurance and executing support actions, it would be necessary also to organize protective operational actions, reconnaissance and counter-intelligence, interference and counter-interference, annihilation and anti-annihilation combats that penetrate campaign operations from beginning to end. **[end of page 118]**

II. The Influence of Campaign Support towards Second Artillery Campaigns

Since Second Artillery campaign support represents an important component of the Second Artillery's combat strength, its influence on campaign is multifold.

1. The Influence on Command Policy Decision

Since Second Artillery campaign commanders and their commanding mechanisms accurately assess situations and correctly determine conviction while executing command actions, its reliance on the support ability in intelligence gathering and information processing is significant, allowing the various supports to exhibit a decisive influence on planning campaign actions. During the process of firepower planning, key issues that are closely related to operational actions must be resolved, such as fight with what models of weaponry? Fight against what? Where to fight? Fight with how many? How to fight? What result would be generated after the attack? etc. Among these issues, the one about "Fight against what?" would be decided upon by target information provided by target support, besides the superior's intent. Issues such as "Fight with what models of

weaponry?” and “Fight with how many?” would mainly be decided upon by the strike ability of different models of missile weaponry. Issues such as “Where to fight?” and “How to fight?” would chiefly be decided upon by the information provided by geodesic and missile-related data support. Therefore, whether the information provided by the various supports is accurate, timely, reliable or not are factors that pose significant influence on the correctness and time-effectiveness of command policy decision making, thus deciding also the eventual benefits of missile strikes.

2. The Influence on Operational Potential

The bringing into play of the operational ability of Second Artillery campaign would call for not only the provision of advanced main weaponry, but also the comprehensive sustenance of campaign support. In other words, since a solitary missile weapon has no operational potential, only when there is a total set-compatible union between the main weaponry with support equipment, coupled with a close-knit concerted coordination between operational actions and support actions, could one expect to witness an integral operational potential. For example, information provided by reconnaissance intelligence and target support represents the fundamental basis for the execution of a scientific policy decision. **[end of page 119]** The relevant parameters provided by geodesic and missile data support is the premise to the execution of the process of sighting and accurately hitting the target. The operational positions provided by engineering support would serve as the backing for missile launchings. The timely provision of operational material and equipment by logistics and equipment support would provide the material foundation for ensuring the execution of operational actions by the forces and the recuperation of operational potential after being attacked. Therefore, whether the various supports could fully satisfy the operational needs of the missile forces in a timely manner, and whether support actions and operational actions could coordinate their efforts would be factors that gravely influence the progress and outcome of Second Artillery campaigns.

3. The Influence towards Campaign Actions

Since Second Artillery campaign actions represents an integral action created by the operational actions and support actions, the operational actions of the missile forces would be unable to proceed smoothly without a close concerted coordination with the support actions. Due to the fact that the disposition of Second Artillery forces is dispersed in a poor environment, coupled with hefty support difficulty, thus easily affected by natural or human factors that would result in a phenomenon of the support failing to deliver and the support system itself becoming out-of-order, the operational actions of the missile forces would most definitely be affected. As a singular example, the mobility of the missile forces would be under the influence of the traffic conditions and transportation ability. Since missile weaponry is a complicated system of many highly integrated technologies, undetermined factors would become more numerous with increasing complexity accorded the system. Once a certain component part should develop malfunction, the normal bringing into play of the integral function of the system would be affected, and the equipment technological support and maintenance support would be incapable of effectively resolving these issues. The function of the massive and

easily exposed weaponry system would be seriously damaged after being attacked by the enemy, with a correspondingly significant decrease in operational effectiveness, while the effective camouflage support should be able to minimize the loss and create favorable conditions for the smooth execution of campaign operations. Strong and powerful electronic confrontation would enable the missile weaponry to become “Tigers with wings added”, increasing the missile’s probability of being reliable, while modernized communicational measures have altered the traditional command mode and method, allowing the efficiency of command operations to increase many folds, thereby providing an important assurance towards grasping campaign victory. **[end of page 120]**

Chapter 5

Guiding Thoughts and Principles of Second Artillery Campaigns

The guiding thoughts and basic principles of Second Artillery campaigns are the core of theoretical research into Second Artillery campaigns. Campaign guiding thoughts are the summarized amalgamation of the basic principles of campaigns. Campaign principles are then the specific reflection (from all different angles) of campaign guiding thoughts.

Section 1. Guiding Thoughts of Second Artillery Campaigns

The guiding thoughts of Second Artillery campaigns are the high-level summaries of the rules that guide Second Artillery campaigns per the objective realities posed during military combat under informationalized conditions. They are the focused reflections of all campaign principles, and are thus the essential basis and norm for preparing and executing campaigns. The establishment of guiding thoughts for Second Artillery campaigns possesses extremely important theoretical and practical significance. From a theoretical perspective, these are the core theories that play a primary role in leading and impacting other secondary theories amidst the entire theoretical system underpinning the study of Second Artillery campaigns. At the same time, these guiding thoughts play an important role in driving campaign theory (within the parameters of a specific historical period) to ever deeper layers thereby improving the theoretical system of Second Artillery campaigns. Guiding principles are situated at the core of the curriculum of the study of Second Artillery campaigns, and play a primary role in this curriculum. Guiding thoughts of Second Artillery campaigns essentially answer questions pertaining to how to fight future campaigns, as well as the problem of the operational concepts that campaign commanders should establish under modern conditions.

Practically speaking, the guiding thoughts of Second Artillery campaigns are the amalgamated reflection of Second Artillery campaign principles and requirements, and are the overall principles **[end of page 121]** and overall directions that guide Second Artillery campaign operations. These are also the general basis for the conduct of unit operations and training. Correct guiding thoughts for Second Artillery campaigns possess extremely important practical significance in unifying the underlying thinking for Second Artillery campaign operations, guiding campaign training, regulating the research, development and production of Second Artillery weapons and equipment, and especially implementing future Second Artillery campaigns.

I. Establishing the Basis for Second Artillery Campaign Guiding Thoughts

The establishment of Second Artillery campaign guiding thoughts must be based upon the military strategic principles of the Central Military Commission, the basic guiding thoughts of Chinese military campaigns, the characteristics and rules of Second Artillery campaigns, the developing trends of future warfare and the practical campaign experience of Second Artillery.

1. Military Commission Military Strategic Principles

Military strategy is formulated based upon the characteristics of the state, its foreign policy and the strategic international configuration etc., and moreover is given additional expression through military strategic principles. Military strategic principles are the basic starting points for military combat preparations, military unit development and engaging in warfare. Second Artillery campaigns are a portion of war, and are thus constrained by military strategic principles. Therefore, the promulgation of guiding thoughts for Second Artillery campaigns must be founded upon military strategic principles, and unswervingly put into practice the requirements military strategic principles: guiding thoughts for Second Artillery campaigns absolutely cannot abandon or violate military strategic principles.

In future wars, our military will be guided by the strategic principles of “active defense,” at the core of which is actively taking the initiative to annihilate the enemy, but it also requires positional combat [**“lizubentu”, 立足本土**] and employing counter strikes against the enemy [**“houfazhiren”, 后发制人**]. During future informationalized warfare, Second Artillery will carry out the twin duties of “dual deterrence and dual combat” [**“shuangchongweishe, shuangchongzuo zhan”, 双重威慑, 双重作战**] as stipulated by the Military Commission. The Second Artillery will operate in either nuclear or nuclear threat conditions. Nuclear forces are not just the powerful backup forces supporting conventional forces, they must moreover be prepared at any time to execute a nuclear counter attack under life and death conditions.

Conventional missile units are important forces that are thrust into combat first during informationalized warfare, and are used to attack important enemy targets. Therefore, it is necessary to first “pin-down the enemy”² and then gain the initiative.

The promulgation of Second Artillery **[end of page 122]** campaign guiding thoughts must be conscious of active defense and seizing the initiative to strike enemy contents [**“neirong”, 内容**]. Moreover, this type of strike must aim at the focus of the campaign,

² Translator’s note: believe there is a misprint here, as the Chinese here is “jizhidi”, 机制敌 meaning “to machine the enemy” which makes no sense.

thereby impacting everything by striking one point, and paying a small price to achieve a large victory.

2. The Basic Guiding Thoughts of the People's Liberation Army

The People's Liberation Army's basic campaign guiding thought of "overall operations and focused strikes" [**zhengti zuozhan, zhongdian daji**], **整体作战, 重点打击**] is the common guiding thought for all types of campaigns for the entire military. Overall operations [**zhengti zuozhan**], **整体作战**] require Second Artillery campaign commanders to clearly ascertain (from a higher perspective) the position and role of Second Artillery forces amidst forces of various armed forces services. From this perspective, they must organically integrate the key elements in achieving victory (i.e., campaign forces, operational methods, battlefield space and time etc.) and combine all campaign elements into a set in order to achieve overall superiority.

Focused strikes require Second Artillery campaign commanders to profoundly analyze and understand the campaign, to correctly grasp the focal point of the strike target, time and forces, and to pay careful attention to the art of command in order to achieve campaign victory at a relatively small price. The establishment of Second Artillery campaign guiding thoughts must not merely carry out the basic guiding thoughts of the People's Liberation Army, but must moreover highlight the combat characteristics of missile units, and create a high degree of consonance between the two.

3. The Characteristics and Rules of Second Artillery Campaigns

The guiding thoughts for Second Artillery campaigns act as the overall guidance for organizing and executing Second Artillery campaigns, and are built upon the mastery of foundations of (and a detailed summary of the guiding rules of) Second Artillery campaigns. The Second Artillery is a vital strategic and campaign strike force directly at the disposal of the Commander – in – Chief. The long-range warfare capability of guided missile munitions to be utilized is strong, the response time is fast, and the ability of these weapons to breakthrough defenses is relatively great and yields good strike results. All of the aforementioned give them the ability to repeatedly wound the enemy, and by doing so speed-up the progress of the campaign and benefit the achievement of strategic goals.

On the other hand, Second Artillery combat bases are relatively fixed, the volume of weapons and equipment is great, and the quantity [**end of page 123**] of weapons and equipment is many. These characteristics are quite visible, leaving Second Artillery forces extremely exposed. Therefore, the establishment of Second Artillery campaign guiding thoughts must be accomplished bearing these objective facts in mind, and be advantageous to demonstrating the strengths of guided missile units.

4. The Developing Trends of Future Warfare

Because campaign guiding thoughts develop along with the development of warfare, Second Artillery campaign guiding thoughts must reflect the developing trends in future warfare. From the perspective of several recent limited wars, the developing trend in future warfare highlights and reflects four aspects. First, the depth of campaign actions is becoming even deeper, and the trend towards “lineless” warfare is becoming increasingly clear. Second, the multidimensionality of campaign action is becoming even more pronounced; future warfare action will see the simultaneous or successive launch of action in land, sea, air, space, electromagnetic and other fields. Third, the strength of campaign actions is growing even greater as both sides use long-range precision firepower to repeatedly and heavily wound the enemy. Moreover, both our and our enemy’s ability to sustain combat capability and ability to give logistics support and reinforcement have seen a relatively great increase in strength. Fourth, the “overallness” [“zhengtixing”, 整体性] of campaign actions has grown stronger; victory in warfare has grown more reliant on the unity of coordination of all key elements in the campaign and thereby realizing overall combat capability.

We must grievously strike the enemy, attack his key links and important components. Once the enemy has been paralyzed and annihilated, we then will then finally have achieved the basic route to defeating the enemy. Second Artillery campaign guiding thoughts should fully reflect the developing trends in future Second Artillery campaigns. Second Artillery should (per these developing trends) grasp the main contradictions and vital points of conjunction that constrain and impact the development of campaigns, and correctly establish campaign guiding thoughts.

5. Second Artillery’s Practical Campaign Experience

The establishment of Second Artillery campaign guiding thoughts must be rooted in the practical campaign experiences of the Second Artillery because theory cannot be separated from its practical foundations. If reality is ignored in promulgating or mechanically copying guiding thoughts, then these guiding thoughts will lead to failure when they are put into practice. The United States military’s “joint combat” thought is thusly promulgated on the foundations of its summarized past experiences **[end of page 124]**. Even though Second Artillery has never seen real combat, it nonetheless has accumulated substantial and valuable practical experience over several decades of development and training, including exercises under conditions that closely resemble real warfare. Therefore, Second Artillery should continue to build upon its past practical experience, draw from the real combat experiences and advanced thinking of foreign militaries, and integrate these together with developing trends in future warfare to promulgate campaign guiding thoughts that suit modern combat necessities.

II. The Implications of Second Artillery Campaign Guiding Thoughts

In accordance with our military's new era strategic principles and basic campaign guiding thoughts, based upon the realities of Second Artillery units, and with an eye towards future combat duties and battlefield environments, the guiding thought of Second Artillery campaigns is "Integrate deterrence and warfare, and focused strikes" [**"shezhan jiehe, zhongdian daji"**, 摄战结合，重点打击].

"Integrate deterrence and warfare and focused strikes" is the campaign guiding thought for Second Artillery, and is the general principle and general requirement put forth as guidance to Second Artillery from a macro perspective. It both fulfills the requirements of the general characteristics of Second Artillery campaigns, and also reveals the basic rule for setting the overall guidance of Second Artillery campaigns.

"Integrate deterrence and warfare" means that when preparing and executing Second Artillery campaigns, campaign deterrence activities and the realities of guided missile strike operations must be organically integrated to form an overall combat capability, and thus is a guiding thought that strives to achieve the greatest benefit at the smallest price. The integrated thought of deterrence and warfare mainly emphasizes the need to have consciousness of campaign deterrence and combat consciousness of proactively taking the initiative in striking the enemy per campaign combat concepts.

The key to fulfilling the thought of "integrated deterrence and warfare" while leading campaign operations is as follows: both fully completing preparations for guided missile strikes, and at the same time striving to subdue the enemy without combat based upon campaign deterrence thought. These two parts are tightly interrelated; only by first improving the real campaign warfighting capability can campaign deterrence truly be meaningful.

Focused strikes refers to the guiding thought that focuses guided missile striking power on the main campaign axis at the key time, and heavily striking targets critical to the enemy's ability to sustain his combat system [end of page 125] thereby paralyzing him. This guiding thought is thus at the core of executing the campaign, and is the main path for achieving victory in the campaign. Focused strikes thought mainly emphasizes that the concept of campaign operations must be conscious of both the focal point and proactively taking the initiative to strike the enemy's vital targets. The key points of carrying out focused strikes thought while leading campaign operations are: making correct judgments as to focal point strike targets, and utilizing forces in a focused manner against critical enemy targets. The two key points are tightly interrelated. Correctly selecting the targets for striking the focal point is a precondition for carrying out focused strikes thought. Only by first correctly selecting strike targets can striking the focal point have any significance. Furthermore (and to the second key point), massing guided missile strike forces to build superiority and then executing focused strikes against vital enemy targets is the starting point for carrying out focused strikes thought. Only by first determinedly shredding vital enemy targets can we then push the entire campaign to resolution.

When carrying out campaign guiding thoughts, commanders should grasp the following several problems and questions.

1. Correctly Handling the Relationship Between Deterrence and Actual Warfare

Deterrence and actual warfare are a mutually intertwined, mutually coexistent, similarly conditioned and tightly integrated organic whole. Actual warfare capability is a precondition for campaign deterrence. The Second Artillery is our military's main firepower strike force engaged in offensive operations; its role is to mass and use guided missile munitions to strike important strategic targets vital to the enemy's campaign. Without this ability to seize the initiative and proactively strike the enemy with guided missiles, campaign deterrence then would lose its significance. Therefore, when Second Artillery is carrying out its campaign guiding thoughts, it must correctly handle the relationship between actual warfare and deterrence as the two are mutually coexistent, and cannot be considered individually.

2. Correctly Handling the Relationship Between Initiative and Passivity

Our military's strategic principle of active defense is clear. In the early period of a future war under informationalized conditions, our military will frequently find itself inferior to enemy forces. For this reason, it is necessary to correctly deal with the relationship between initiative and passivity. At a strategic level, it is necessary to focus on counter strikes against the enemy [**“houfazhiren”, 后发制人**]. But, in terms of campaign guidance, it is necessary to establish both proactive offense and offensive combat thought. On the one hand, it is necessary to emphasize the integration of warfare and deterrence, and focused strikes. On the other hand, it is necessary to respond flexibly, and emphasize first pinning down the enemy [**“jizhi”, 机制敌**] and striving to seize the initiative, and seeking to go on the offensive by integration of the offensive and the defensive as the enemy hits his targets and we hit our targets. We absolutely cannot hide without fighting, **[end of page 126]** and defend without counterattacking. We cannot deal with the enemy passively.

3. Correctly Handling the Relationship Between the Overall and the Local

When carrying out Second Artillery campaign guiding thoughts, it is necessary to correctly handle the relationship between the overall and local. That which is “local” is part of the “overall”. When grasping hold of the local situation, do not forget the overall situation, as keeping watch over the overall situation is key to using our forces. Without a proper grasp of the local situation, it then becomes impossible to correctly put forth campaign directives, and moreover is impossible to command the campaign overall.

The Second Artillery's “focused strikes” campaign guiding thought at its core means massing force to strike vital enemy targets. These so-called vital targets mainly refer to those targets with an important impact on the overall campaign and campaign outcomes. To accomplish this, it is necessary to take the view from the overall strategic situation to

master the campaign, grasp the overall situation, correctly select targets, and mass forces to constitute focused strike superiority and thereby advance the development of the overall campaign situation. While simultaneously watching over the local situation, it also is necessary to keep an eye on those segments previously not part of the campaign focus so as to be able to at appropriate time change and highlight focal points as the campaign evolves and changes. Thus, grasping the focal points of the local situations will benefit the progress of the overall campaign situation.

4. Correctly Handling the Relationship Between Strong and Weak

Strong and weak are united by contradiction. Within strength there is weakness, and within weakness there is strength. Under the right circumstances the strong and the weak can change positions. In comparison to strong enemies and for a long time to come, our military's weapons and equipment (regardless if we speak from a qualitative or quantitative perspective) will persist in being inferior; the fact of our relative inferiority has determined that we must use our weakness to attack strength. Second Artillery campaign guiding thoughts will have to be promulgated consistent with the fact of our relative weakness in weapons and equipment versus our enemies. This campaign guiding thoughts finds its starting point in the pre-condition that the enemy is relatively strong, and the Second Artillery must seek this enemy superiority to achieve victory.

First, focused strikes may augment our insufficient guided missile munitions by massing forces locally and using them in a limited and mass fashion, thus constituting superiority locally. Next, striking in a focused manner may destroy the internal integrated structure of the strong enemy's campaign forces, and in so doing weaken his operational system. Aside from his advanced weapons and equipment, a strong enemy is powerful to a high degree due to the integrated internal infrastructure of his campaign forces [end of page 127]. If we are able to mass our forces and execute asymmetrical strikes [translator's note, the text uses “jianjie”/ 间接 meaning “indirect”, but the author likely means “asymmetrical”] against enemy targets, destroying key segments of his integrated architecture, and severing the links between his campaign components will paralyze his integrated combat system. This will cause the enemy to lose his ability to conduct integrated operations, thus facilitating the defeat of the strong by the weak and creating conditions beneficial to China's final victory.

Section 2. Second Artillery Campaign Principles

The basic principles of Second Artillery campaigns refer to the basic rules of conduct for Second Artillery campaign actions, and are also the specific reflection of campaign guiding thoughts. To a certain extent, they reveal the basic rules and true nature of Second Artillery combat.

Basic campaign principles are the expression of campaign guiding thoughts from different sides. Basic campaign principles are derived from practice. They are both higher than practice in that from an overall perspective they gather up and summarize the

rules of the internal workings of campaign actions, and are also utilized to guide campaigns. The promulgation of campaign operational arts and methods are generally based upon principles; they revolve around principles and unfold from them. Campaign commanders can gain an understanding of the basic rules of campaign combat by studying and recognizing campaign principles, and through such study deeply research all sorts of operational arts and methods and with energy and initiative command campaign actions. Correctly establishing campaign principles does not merely facilitate Second Artillery campaign commanders in understanding campaign rules and laying down the foundations for scientifically correct thought in executing nuclear counterstrike campaigns and conventional guided missile strikes, but also has extremely important real significance in unifying campaign thoughts, deepening the research into campaign theory and guiding Second Artillery campaign training and operations.

I. Establishing Basis Points for Second Artillery Campaign Principles

Second Artillery campaign principles can only be established on the foundation of scientific theories and objective necessities in order to play a practical role in guiding campaigns. Therefore, Second [end of page 128] Artillery campaign principles must completely reflect all aspects of guiding a campaign towards achieving victory, and finding its basis points.

1. Fully Reflect the Basic Intentions of Second Artillery Campaign Guiding Thoughts

Campaign guiding thoughts are the focused reflection of campaign principles. Without campaign guiding thoughts, campaign principles are without effect. Campaign principles are specific reflections of Second Artillery campaign guiding thoughts. Therefore, when establishing Second Artillery campaign principles, the basic intentions of campaign guiding thoughts must be served and fully reflected.

2. Fully Reflect the Various Facets of Second Artillery Campaign Basic Requirements

Second Artillery campaign principles completely and from all angles review and reveal the basic rules for all stages of Second Artillery campaigns such as campaign command, coordination, operational arts, and support etc. Amongst the contents of these actions are shared conditions and mutual roles; they are closely related. Therefore, when establishing Second Artillery campaign principles, the basic requirements of the entire course of events of Second Artillery campaigns must be reflected, and thus facilitate ubiquitous command in implementing Second Artillery campaigns and mastery of all of its events. At the same time, one must be careful to prioritize items and not be overwhelmed by examining everything, and thereby completely grasp those many aspects of that reflect the essential laws of the campaign, highlight focal points, and upon this basis make a pithy summary.

3. Principles Must be Relatively Purposeful and Operable

The purposefulness of campaign principles is materialized along two facets. The first facet is geared towards combating a relatively powerful enemy. The principle of “taking strict protection” [**“yanmifanghu”, 严密防护**] was promulgated with the purpose of combating a strong enemy. A strong enemy places emphasis on joint combat: combat operations will be launched simultaneously on the land and sea, and in the air, space and electromagnetic venues as well. A strong enemy emphasizes surprise penetration strikes, and defeating the enemy through pre-emption: combat actions may **[end of page 129]** commence at a moment that we least expect. A strong enemy emphasizes the principle of ‘decapitation;’ our guided missiles bases and command systems will become the primary targets of enemy strikes. Therefore, we must use all sorts of effective methods in order to take strict protection.

The second facet is geared towards the campaign organization. Campaign principles are not general military principles, but instead reflect the unique laws of the campaign organizational logic governing Second Artillery operations. The principles of combat and warfare also evidence singularity; however, various specific tactical principles also reflect universal laws.

The operability of campaign principles is also evidenced on two facets. First, campaign principles must conform to the realities of Second Artillery operations. The abandonment of Second Artillery realities and seeking profound “new principles” will not merely fail to establish campaign principles, but will moreover court failure in real wartime situations. Therefore, seeking truth from facts must be the foundation for setting campaign principles based on all aspects of objective the realities governing Second Artillery campaigns.

The facet of operability is that the principles must be universally suitable. Campaign principles are solely for the purpose of guiding specific campaign actions. They both are born of practice and higher than practice; they are both abstractions and summaries of shared laws that govern nuclear counter strike campaigns and conventional guided missile strike campaigns. The various operational arts and methods of these two types of campaigns are also based upon campaign principles; campaign principles are their starting point, and are thus highly operable.

II. The Details of Second Artillery Campaign Principles

Per Second Artillery campaign guiding thoughts, Second Artillery campaign characteristics are combined in order to put forth basic campaign principles.

1. Unified Command

Unified command is a basic requirement for achieving victory in Second Artillery campaigns. Second Artillery campaigns are generally commanded jointly by higher

echelon officers, and are organized and executed by Second Artillery campaign commanders and their command apparatus. Organizing Second Artillery campaigns requires correctly understanding **[end of page 130]** the intents of superior officers, unerringly carrying out their orders, establishing a complete campaign command system, clarifying command relationships and responsibilities, formulating campaign plans in a unified manner, employing campaign forces in a unified manner, commanding campaign actions in a unified manner, fully demonstrating the initiative of the campaign commander, commanding the campaign decisively, and assuring the smooth execution of the campaign.

Second Artillery guided missile units are important strategic assault forces, and their combat actions are very influential on the overall strategic situation and the state's political and diplomatic situation. Only by first putting into practice a high degree of unified command can overall power be demonstrated and put at the service of national strategy. Unified command first must be unified around the strategic intents of the Commander in Chief. In nuclear counter strike campaigns (regardless of whether they are large or small in scale), the authority to decide major questions resides with the Commander in Chief, but the specific command remains with the Second Artillery command mechanism and organization. Conventional guided missile assault campaigns are usually executed under the unified command of the joint campaign command organization. All commanders irrespective of rank must execute campaign deployments, implement campaign concealment, execute campaign support, organize campaign coordination and execute guided missile strikes and other combat actions per the unified plan in order to assure that guided missile units and other combat forces build an overall superiority.

2. Advanced Preparation

Advanced preparation is an important segment of organizing and implementing Second Artillery campaigns. Forming up Second Artillery guided missile weapons and equipment is complex, and combat preparation time is long; thus, the complexities and difficulties necessitate these campaigns be organized and implemented based upon advanced preparation. It is necessary to complete the preparation of intelligence materials, the preparation of operational plans, the preparation of combat bases, the preparation of weapons and equipment, as well as the stockpiling of combat materials and training and education in preparation for combat. Completing the command network and other corresponding near-war preparations are also required.

Advanced preparation refers to guided missile units completing all combat preparation work during peace time, and completing all preparation work per combat preparation rules during the campaign preparation period in order to avoid fighting wars unprepared or uncertain. The singularity of guided missile munitions **[end of page 131]** drives the relatively long duration of the combat preparation period; on the other hand, the guided missile assault period is short. Therefore, the amount of preparatory work relative to the amount of work required during actual combat is large. We intend to take the enemy by surprise, and attack him when unprepared; the enemy intends to do the same to us. Only

by being completely prepared can we deny the enemy any opportunity for victory, and fulfill the requirements for following orders from one command, taking the initiative, acting jointly and combined and striking precisely.

There are many facets to guided missile unit preparations. These facets include preparing combat readiness thought, combat plans, and the battlefield, as well as preparing weapons, equipment and material. There is also the preparation of combat theory, and preparation of appropriate training and combat readiness exercises etc.

3. Meticulous Planning

Meticulous planning is crucial to organizing and carrying out Second Artillery campaigns. Second Artillery campaigns directly influence the progress and the outcome of warfare. From the perspective of the overall war, Second Artillery commanders must seriously analyze our and the enemy's status as well as the battlefield environment. They must correctly understand their superior officers' intentions, meticulously strategize counter nuclear deterrence action plans, correctly make campaign decisions, carefully plan campaign actions, scientifically predict campaign trends, grasp the fulcrum of the campaign, and strive to pay the smallest price to achieve campaign objectives.

Meticulous planning refers to all key campaign elements (such as commanders, weapons and equipment, operational bases, command systems and combat support etc.) completing full advanced preparations and sustaining a high degree of combat readiness based on careful planning. It refers to all combat elements constituting an organic whole while at the same time possessing the ability to independently complete their combat duties under various complex and difficult circumstances. It refers to combat elements being able to face changing circumstances without being shaken, and always remaining calm and composed.

Second Artillery campaign matters impact overall strategic situation. This combined with the fact that Second Artillery combat duration is short whilst the preparation period is long requires that the Second Artillery remain free from risks, precise and dependable. This in turn means that Second Artillery campaign operations must be meticulously planned. Weapons and equipment must be assembled and in stock, and must be in good order. Combat base installations must be complete, and must meet the needs for both defense and offense. Command system security must be dependable, and must be able to sustain commanders' ability to maintain order at all times. Combat support measures must conform to reality **[end of page 132]**, and must fulfill the main force's combat requirements. Operational plans must be complete and in good order, and possess multiple options. All personnel must be in possession of good political and military natures, and must possess an unrelenting and constantly prepared mentality.

4. Integrated Deterrence and Warfare

Integrated deterrence and warfare is the basic requirement for organizing and carrying out Second Artillery campaign deterrence. Second Artillery campaign deterrent actions refer in the first place to the use of conventional guided missile munitions against the enemy for the purpose of conventional deterrence. In the second place, they refer to using strategic nuclear weapons to conduct counter-strike nuclear deterrence against a nuclear-armed state using the threat of nuclear arms against China.

The main type of future limited warfare will see conventional guided missile combat under conditions of nuclear deterrence: deterrence and actual warfare will exist simultaneously, and each will benefit the other. Dual deterrence must be based upon dependable real combat capability. It also relies on an appropriate scale of force, well functioning weapons and equipment, training commanders to possess the appropriate elements, a reasonably broad command system, orderly and efficient control methods, and rapid and precise information systems etc. The aforementioned are all of the basic conditions for the Second Artillery to execute effective campaign deterrence. Only when deterrence and real warfare constitute an organic whole can successful campaign deterrence actions achieve the greatest effect.

5. Take Strict Protection

Taking strict protection refers to measures for improving the survivability of Second Artillery campaign forces. In order for campaign defense operations to be carried out from beginning to end by Second Artillery forces, it is necessary to complete defensive operation plans, establish a complete defensive system, reinforce and strengthen defensive installations, make use of concealment and camouflage measures, organize effective defensive operational actions, the ability to immediately deal with the aftermath of strikes, and to the greatest extent possible preserve and recover combat capability.

Second Artillery units not only must emphasize active offense, but must also pay attention to taking strict protection and organically integrating offensive and defensive campaign actions. During enemy offensives, it is necessary to defend against enemy combat actions against our counter-forces. When organizing a defense against enemy surprise attack or moreover when dealing **[end of page 133]** with the aftermath of these strikes, it is necessary to prepare to execute guided missile assaults against the enemy.

Attacks are then able to precisely and in a timely fashion destroy key enemy targets; defenses are then sufficient to defend against all sorts of enemy precision strikes and electronic interference, and thereby to the greatest extent possible preserve our guided missile assault forces. Moreover, Second Artillery will be capable of completing its guided missile assault duties under varied and harsh conditions. Guided missile units must become prepared for both offense and defense in order to reduce to the smallest extent possible being affected by threats from the enemy, risky ground, a shortage of personnel and lost equipment and remain an assault force focused on the offensive.

6. Centralized Employment

The focused employment of forces and weapons is a basic Second Artillery method for constituting campaign superiority. In order to fully demonstrate the combat effectiveness of guided missile munitions, it is necessary to centralize the employment of campaign forces, assemble units in a suitable fashion, perfect firepower plans, mass superior forces and weapons along the main axis at the key moment, assault the enemy's vital campaign and strategic targets, ensure efficiency in striking targets and realize campaign objectives.

Centralized employment refers to the centralized planning and use of the forces and firepower of Second Artillery units based upon unified campaign. Along the main campaign axis and at the key moment in the campaign, superior firepower is massed at the right moment, the strengths of guided missile units (such as long distance attack and assault capabilities and stealthiness) are demonstrated, and form a composite force against the striking the enemy. Only through centralized employment can we assure the effectiveness of defenses against sudden enemy attacks, and fully demonstrate the effectiveness of our firepower; from these we will achieve our goal of a rapid war decided rapidly.

7. Rapid Response

Rapid response is a key part in the Second Artillery seizing the initiative. Modern campaigns transform rapidly, and opportunities in war are fleeting; we must based upon the intents of superior officers and battlefield conditions fully demonstrated the subjective ability of commanders at all levels to seize the initiative, rapidly grasp opportunities in war **[end of page 134]**, rapidly make campaign decisions, rapidly organize and launch campaigns, and rapidly undertake guided missiles assaults. When in the course of war unexpected and complex situations or major changes occur, campaign commanders must correctly grasp as a precondition the intents of superior officers, and then rapidly and decisively deploy.

Rapid response is reflected in the ability to rapidly scatter and conceal forces upon discerning the signs of enemy assaults, the ability to rapidly deal with the aftermath of enemy assaults and then recover combat capability, the ability to complete all preparations upon receiving operational orders and then correctly and in a timely fashion achieving campaign duties. Rapid response is a characteristic of modern warfare, and a new requirement brought to the fore by the advance of science and technology and its impact on military actions. During Second Artillery campaign operations, we cannot evince a fixed mode in the use of forces or firepower, nor in the use and changes of military basis. Only by rapid response and nimble use, will we be able to adapt to continually changing battlefield circumstances. Only then will we facilitate capable and subjective guidance in conforming to the multiple changes in objective reality and contest for campaign initiative.

8. Close Coordination

Close coordination is an important element in demonstrating overall combat superiority during Second Artillery campaigns. When Second Artillery joins joint campaigns, it must (per the coordinated plans of superior officers) focus on the main campaign actions and execute its main duties as a campaign force. It must take the initiative in proper coordination with other armed branches. When Second Artillery independently undertake campaigns, all guided missile bases must amongst themselves organize coordination centered around the guided missile base executing the main combat duties, guided missile bases and munitions bases amongst themselves should organize coordination with guided missile bases at the core, and launching units and support units should amongst themselves organize coordination with launching units at the core. Regardless of whether Second Artillery units are participating in joint campaigns or independently undertaking campaigns, they must always establish a whole in concept, go forth endeavoring for overall benefit, tightly coordinate, and lend mutual support.

Close coordination requires Second Artillery campaign commanders and command organs to position themselves at the strategic heights, and from the perspective of overall warfare see the campaign, and from the overall perspective of the campaign grasp **[end of page 135]** specific actions. Systems engineering and scientific methods must be used to solve and deal with problems. Commanders must jointly plan and consult, and always have the overall situation on their minds. This all must be done in order to establish good coordination amongst internal units within Second Artillery such as launching units, technical measurement and testing units, combat support units, logistical support units and equipment support units. When striking targets or in the process of compiling target lists, Second Artillery commanders must coordinate with Air Force and Navy bomber forces and other mobile units. When undertaking campaign movements, it is necessary to coordinate with other mobile units. Throughout combat operations, it is necessary to coordinate with air defense forces. It is also necessary coordinate operations with electronic warfare units, communications units, armored units, engineering units, counter-chemical warfare units and local armed forces.

I. Comprehensive Support

Comprehensive support is an important element in smoothly executing Second Artillery campaigns. Second Artillery combat deployments are dispersed leading to a high degree of difficulty in support; therefore, a complete and comprehensive support system must be established in order to constitute a complete support capability. This requires closely organized plans and meticulously organized support. Overall plans taking in all factors must be made, and focal points of support must be highlighted. Support forces must be suitably employed, and self-support capabilities must be strengthened. Comprehensively and aptly engaging in campaign support will display the roles of our military combat campaign support system and local auxiliary forces.

Comprehensive support requires all support plans to constitutes a complete set and that systemized and complete plan be tightly organized in order to assure that our support

tasks come to fruition. This requires, per the characteristics of guided missile assault campaigns in high technology warfare, meticulous organization and comprehensive support per the necessities of combat operations and with an eye towards the most difficult circumstances.

Alongside the ceaseless development of technology and equipment, the level of difficulty of Second Artillery campaign support has increased. Not only have the needs of support increased, but the requirements are now higher. Therefore, whether or not the support system is completely effective and whether or not support tasks are comprehensive and timely will directly impact the smooth execution of campaign duties.

Second Artillery campaign support can be divided into campaign combat support, campaign logistical support and campaign equipment support. Comprehensive support must require the establishment of a multi-tiered campaign system. It requires suitably using various support forces and focusing on support focal points [end of page 136]. It requires using local forces and materials to demonstrate the superiority of socialized [“shehuihua”, 社会化] support. At the same time that robust and varied support systems are being established, it is necessary to emphasize strengthening all units’ ability to support themselves in order to assure that in wartime all support duties are smoothly carried out.

J. Demonstrate Superiority in Political Work

Demonstrating superiority in political work is an important guarantor in achieving victory in Second Artillery campaigns. Political work is a positive tradition of the People’s Liberation Army, and is a magical weapon as we overcome the enemy and achieve victory. To guarantee a high degree of centralization and unity of units participating in the campaign, it is necessary to hold fast to the party’s absolute leadership of military units, and adhere to and carry out the orders and instructions of superior officers. Deepening the conduct of patriotic and revolutionary education and establishing confidence in the need for bold strikes to achieve victory are necessary for the exhibition of combat bravery, fearless sacrifice and other positive attributes necessary for the conduct of operations. Championing military democracy is needed to drive creativity in campaign operational arts. Launching political offensives dissipates the enemy’s will to fight. Strengthening the unity amongst all military units as well as between the military and the government, and the military and the people will demonstrate the power of people’s war. [end of page 137]

Chapter 6

Second Artillery Campaign Forces

Second Artillery is an armed services force that utilizes guided missiles and cruise missiles as its main weapons for carrying out long-distance firepower assault missions. During future joint combat operations Second Artillery will not merely act as the main force in providing nuclear deterrence and nuclear counter-strike power, but will also act as the backbone force in conventional firepower assaults. The impact of its actions on the progress and outcome of combat operations will be great.

Section 1. The Missions of Second Artillery Campaign Forces

During future combat operations, the essential mission to be born by the Second Artillery will be “dual deterrence and dual combat operations.” This mission means that nuclear missile forces will mainly be responsible for nuclear deterrence and nuclear counter strike missions, and conventional guided missile forces in future joint combat operations will mainly be responsible for undertaking conventional deterrence and long distance firepower strike missions against the enemy. Second Artillery is the trump card [“sashoujian”, 撒手锏] for winning future localized wars under informationalized conditions. Specifically speaking, Second Artillery forces shall be responsible for the following duties in future joint combat operations.

I. Organizing and Implementing Conventional Guided Missile Assault Operations

Implementing conventional guided missile assaults is the main mission of guided missile units that will participate in joint combat operations; conventional guided missile units are the People’s Liberation Army’s backbone force in executing long-range firepower strike duties. Conventional guided missile units possess the ability to strike several targets in either mass or dispersed firepower assaults; during future joint combat operations conventional missile units will fall under the unified command of the joint combat command headquarters. These conventional guided missile units will proactively and stealthily undertake firepower assaults against important targets deep in the enemy’s interior and thereby either destroy [end of page 138] or paralyze enemy strategic and campaign targets, disrupt his combat support system, and shock him politically and mentally. All of the aforementioned will create conditions for seizing battlefield initiative. The focal points of conventional guided missile assaults are the enemy’s strategic and campaign command nodes, guided missile bases, air force bases, naval

bases, strategic reserve units and other vital targets that will heavily influence combat actions.

II. Organizing and Executing Nuclear Deterrence and Nuclear Counter-strike Actions

Second Artillery nuclear missile units are the People's Liberation Army's main force for carrying out nuclear deterrent, counter-nuclear deterrent and nuclear counter-strike duties; organizing and executing nuclear deterrent and counter-nuclear deterrent actions are central duties for nuclear missile units during joint campaigns. These units aim mainly to fully demonstrate their role in nuclear deterrence and prevent the war from moving towards widening or spreading, and to deter the enemy from initiating nuclear war, and thereby controlling the war by keeping it localized, limited and bearable in scope.

Organizing and executing nuclear deterrence and counter nuclear deterrence activities should hold firm to the principles of continuous deterrence [**“quanchengweishe”, 全程威慑**] and tensing and relaxing in turns [**“zhangchiyoudu”, 张弛有度**], and use stratagems to get the upper hand [**“yimouzhisheng”, 以谋制胜**]. Units should adhere to the principles of “advanced preparation and rapid response,” “unify command and centralize to build power” [**“tongyizhihui, jizhongzaoshi”, 统一指挥, 集中造势**] “integrate the nuclear and the conventional, and undertake joint actions,” “give tit for tat and advance and retreat in turns,” and “master key segments and use stratagems to achieve victory.” Campaigns must fully utilize the singular nuclear deterrent power of nuclear missile units by demonstrating substance while building power [**“shixingzaoshi”, 示形造势**], and hide one's weaknesses while showing strength: this will shock and fear the enemy to the greatest extent, and effectively contain hostilities and keep them from spreading and escalating.

III. Cooperating with Combat Forces from Other Armed Services to Execute Operations

Per the progress of operations and the developments on the battlefield, guided missile units participating in joint operations shall coordinate the implementation of combat duties with other armed services' combat forces [**end of page 139**].

1. Cooperating with Electronic Warfare Regiments in Achieving Joint Operations Electromagnetic Supremacy

Guided missile units cooperating with electronic warfare regiments in achieving electromagnetic supremacy mainly means organizing conventional firepower missions against the enemy's vital electronic targets in order to destroy these through firepower. Because the People's Liberation Army's electronic warfare forces are limited, achieving electromagnetic supremacy in wartime necessarily will rely on the support of conventional guided missile firepower. The main targets of such assaults are the enemy's

command, communications and coordination networks, the enemy's combat command and control system, the enemy's battlefield surveillance network and electronic reconnaissance network, and the enemy's precision weapons' guidance systems and his electronic jamming forces etc.

2. Cooperating with Air Force Combat Forces to Achieve Joint Operations Air Supremacy

In general, Air Force units will be the featured forces in achieving air supremacy during joint combat operations; Second Artillery conventional guided missile forces will cooperate closely by pinning-down enemy ground forces or annihilating the enemy in the air. Cooperating with Air Force campaign forces to achieve campaign air supremacy necessitates striking targets and assaulting these in order as combat operations commence in close coordination with Air Force units under the unified command of the joint combat command organization. Assault targets mainly include important enemy air force bases and airfields, radar installations, anti-air defense systems, communications systems, and command center etc.

3. Cooperating with Naval Combat Forces to Achieve Joint Operations Command of the Sea

Achieving command of the seas in joint operations is generally centered around naval units; Second Artillery conventional guided missile forces generally cooperate closely to achieve this through executing focused naval blockades and bombardments. When coordinating with naval campaign forces in achieving command of the seas, Second Artillery conventional guided missile forces will mainly be acting per the unified plans of the joint operations command headquarters. Coordination will occur as required by naval operations, and will include missions such as establishing a firepower blockade zone in a specified area of the sea in order to restrict **[end of page 140]** the movements of enemy naval forces, or to compel enemy aircraft carrier battle groups to either flee a war zone or approach an area of the sea to threaten us (or even directly enter into combat), and at the right time we will then utilize our guided missile firepower to execute deterrence strikes against the enemy. The main targets of these assaults are enemy naval air bases, key port exits and entrances, and large-scale enemy surface or submarine forces.

4. Cooperating with Army Combat Forces to Implement Land Operations

Second Artillery conventional guided missile forces coordinating with land forces in undertaking combat operations mainly means destroying the main targets within the enemy's defensive zone, weakening enemy defense forces and preventing enemy actions in order to prepare positive battlefield environments for our land forces. Guided missile strike main targets are important battlements, guided missile firing positions, and command organizations and command nodes in the enemy's defensive depths. Second Artillery conventional guided missile forces will also assault important enemy regiments and traffic nodes, and destroy rear bases and supply systems. By doing this, Second

Artillery will create conditions beneficial to amphibious forces smoothly securing beach heads and land forces executing offensive operations.

Section II Composition of Second Artillery Campaign Forces

The composition of Second Artillery forces will be determined by wartime necessities, and based upon the system of organization for Second Artillery Forces. Just as campaign types differ, different force compositions are needed to fulfill the requirements of corresponding combat duties.

I. The System of Organization for Second Artillery Campaign Forces

Researching the make-up of the Second Artillery Campaign force system of organization mainly reveals the key constituent elements participating in Second Artillery campaign forces as well as the general rules for their organizational form. Different in nature and duties from other main elements within the organizational system of Second Artillery forces are the Second Artillery Reserve Forces. These are temporarily subordinate to the Second Artillery service branch, and support [end of page 141] the People's Armed Police, People's militia and the remainder of the five sub-components in conducting defensive operations.

1. The Internal Organizational Structure of Second Artillery Campaign Forces

The internal organizational structure of Second Artillery campaign forces can be divided into nuclear missile units, nuclear weapon inspection units, conventional guided missile units and specialized units and elements. Nuclear missile units (based upon the effective ranges of their weapons) can be further divided into intercontinental missile units, long-range missile units, medium range missile units and intermediate (“zhongjin”, 中近) range missile units etc. Conventional guided missile units are a new force amongst Second Artillery missile units, and are divided based on trajectory modes into ground to ground guided missile units and cruise missile units.

Specialized units and elements can also be divided into defensive operations units (elements) and support units (elements). Defensive operations units include electronic warfare units, and based upon developments there also may be ground defense units, computer network combat units, psychological combat units, and Second Artillery space combat units etc. Support units (elements) are the product of the Second Artillery's specialized weapons; their scope is relatively large and their structure is unwieldy and complex. Support units (elements) can be sub-divided per support type into combat support units (elements), logistical support units (elements), and equipment support units (elements) etc.

All of the abovementioned are the main subjects that endeavor to implement the Second Artillery's “dual deterrence and dual combat” mission, and as such are the main forces in

undertaking nuclear deterrence and counter nuclear deterrence missions, as well as nuclear counter strike and conventional guided missile assaults.

2. Second Artillery Reserve Forces

Second Artillery reserve forces are made up of missile unit commanders and technical officers who have retired from active service and have met age requirements, and moreover who possess a strong national defense consciousness as well as those Second Artillery officers with corresponding knowledge of guided missile units, outstanding retired soldiers selected to serve in the reserve force, high-level academy graduates, specialized cadres from the People's Armed Police and the People's Military, as well as cadres and professional technical personnel from non-military departments who meet reservist criteria and grass roots level militia personnel and other registered reserve personnel. **[end of page 142]**.

The employment of reserve forces should fit with the entity's specialty, and should be suitably constituted per the principles of self-sufficiency and massing close to home localities. Under the unified strategic plan of the Second Artillery campaign command organizations, reserve forces will be massed or dispersed amongst combat operations per the rear command post and in unified coordination with assigned command organizations. They are an important component of Second Artillery campaign forces.

3. Forces Temporarily Subordinate to the Second Artillery Armed Service

Forces temporarily subordinate to the Second Artillery armed service are those component forces and armaments under the control of superior commanding officers that can temporarily and in short-order placed under the command and disposal of the Second Artillery. After these component forces have completed their missions, they can immediately be returned to their original units within the organizational system. The scale of temporarily subordinate units is to be set by the joint command headquarters per the amount of Second Artillery forces participating in joint combat operations. Air forces generally include air force anti-aircraft units, mid and low altitude guided missile units and cooperating air defense early warning radar units etc. Land units generally include ground combat units and component support units (elements).

Forces temporarily subordinate to the Second Artillery armed service generally should bear two important duties. The first of these duties is war zone defense; the second of these duties is component comprehensive support.

4. People's Armed Police Units and People's Militia Forces that Support Second Artillery Campaign Combat Operations

People's Armed Police units that support Second Artillery campaign combat operations are mainly responsible for the defense of important, focal point targets such as material storage depots, fuel storage depots, ammunition dumps, key bridges and assembly points.

Second Artillery should issue defense instructions to these units, and clarify the nature of the defensive target, the duties and key segments. The temporarily subordinate unit should per these defensive instructions adjust their police forces, tightly deploy to control and fortify defenses, and strictly guard against the emergence of problems at the highlighted targets. Second Artillery personnel stationed at the highlighted targets should proactively cooperate and provide all support in order to create an [end of page 143] auspicious defensive environment at the highlighted target for the People's Armed Police units.

People's Militia forces are important to the Second Artillery as it undertakes its campaign missions. Its personnel are many, and are familiar with local conditions as they are dispersed throughout all war zones. They can mobilize many civilian machines and equipment, reinforcements, and logistical support transportation etc. People's Militia forces must cooperate with People's Armed Police forces on key point defense, and cooperate with Second Artillery logistical forces for logistical transport. Second Artillery must coordinate the above with local government, and use the massive forces at the disposal of the People's Military that are near key defensive targets in order to defend against treachery and espionage, as well as to undertake duties to provide security during missile unit actions and maintain social stability.

II. The Basis for the Composition of Second Artillery Campaign Forces

The composition of Second Artillery campaign forces should be founded upon the peacetime composition system, and satisfy the necessities of operational duties. It should be correspondingly unified with the joint command system of organization, with an eye towards facilitating integrated command. The composition should be suitable for the hardships of the battlefield environment, and should satisfy the special requirements of Second Artillery weapons and equipment. The composition should satisfy the requirement that campaign corps be able to independently fulfill campaign missions, and should facilitate command and coordination within the campaign corp. It should be beneficial to improving all forces' overall combat capability and combat coordination capability. The compositions should facilitate the organization of emergency exercises as war approaches, and facilitate ease of organizing all needed urgent support etc.

1. The Requirements of Combat Duties

Second Artillery conventional guided missile units participating in joint operations are mainly responsible for preemptive strike missions against the enemy; moreover these types of firepower assault actions will continue throughout the progress of the campaign. Second Artillery nuclear missile units are the main forces involved in nuclear counter strikes, and are mainly responsible for important nuclear deterrent and counter nuclear deterrent duties during joint campaigns. Nuclear counterstrike campaigns are under the direct campaign of the Commander in Chief.

Second Artillery shall execute **[end of page 144]** in the order of importance to the campaign its different missions. Second Artillery conventional guided missile strike forces shall be divided into the basic assault group and the reserve assault group. Per their duties in the areas of either combat or support, Second Artillery campaign forces will be divided into assault forces and support forces. Differentiating per organization and structure during conventional guided missile campaigns is beneficial to massing crack conventional guided missile forces in the first strike period. It is also beneficial to sustaining the continuity of the firepower assaults.

During nuclear counter strike operations, dividing nuclear counter strike forces between the first strike group, the follow-on strike group, and support group and reserve units is beneficial to utilizing reserve strike forces as an important weight in containing an escalation in nuclear warfare.

The centralized composition of support forces is beneficial to focusing limited support for focused support, and assuring that the main axis and important segments of combat actions are smoothly executed. It is also beneficial to the timely execution of various force adjustments and reinforcements per mission necessities.

2. Joint Command System of Organization

Second Artillery nuclear and conventional guided missile forces are generally used under joint campaign circumstances. Therefore, the establishment of Second Artillery's nuclear and conventional guided missile units' wartime command system of organization must satisfy the requirements of war time joint command systems of organization. The construction of the corresponding system of organization for Second Artillery command must satisfy the requirements of the joint command system of organization in order to suit the needs of coordinating operations amongst all armed services.

The goals of consistent coordination with the joint command system of organization are as follows. First, with consistency in the command system of organization from top to bottom, all elements will dovetail together and thus bring about order in command. Next, functional divides will appear as a tiered organization from a vertical perspective, making it possible under special circumstances to supersede levels of command. Finally, mutual relationships become extremely clear, making it easier to clearly exercise command and control and effective coordination in the complex and constantly changing environment of the battlefield. Only through the organic dovetailing of joint campaign command systems of organization and Second Artillery system of command organizations from top to bottom will the People's Liberation Army be able to achieve the organic unity of campaign command. Constructing the Second Artillery campaign corps system of organization under the joint command system of organization, as well as scientifically composing Second Artillery campaign forces, will satisfy the basic needs of integrating joint operations **[end of page 145]**.

3. Peacetime Authorized Establishment System of Organization

Second Artillery guided missile units must fulfill the necessity of being able to rapidly move to a war footing; they must use their peacetime authorized establishment system of organization as a foundation for building the operative mechanisms allowing them to in adjust rapidly and transform with agility in to fulfill their requirement to, at the onset of hostilities and after a short preparation period, execute combat operations. Second Artillery guided missile units display two types of operations modes: fixed and mobile. Regardless of whether they are involved in fixed operations or mobile operations, firing positions are always prepared in advance, guided missile assaults are mainly carried out in pre-selected combat zones. Basic battlefield preparations in peacetime will lead to realizing great results during wartime. Guided missile bases are the basic campaign corps, and are also the basic campaign units for organizing peacetime campaign training. Therefore, using the peacetime authorized establishment system of organization as a basis and scientifically constructing the wartime system of organization satisfies the requirements of integrating peace and war and the duty to rapidly transform in times of war. This is also the most obvious characteristic of Second Artillery nuclear counter strike campaign force composition.

4. Unit Combat Capability

From the perspective of weapon capability, harassment strikes during conventional guided missile strikes should employ low-precision, low yield missiles. However, when undertaking destructive strike, high-precision and high yield conventional warheads and high quality guided missiles should be employed. From the perspective of scope of firepower, regardless of whether one is discussing nuclear guided missile units or conventional guided missile unit, only by massing crack units against the enemy to execute massed firepower precision strikes will these units repeatedly damage targets, and achieve pre-determined strategic and campaign goals.

From the perspective of responsibility over campaign duties, nimbly compose combat forces per combat capability, and pay attention to conserving strength, and using forces in a focused manner. Scientifically compose limited guided missile units and demonstrate superiority in mutual assistance per combat capabilities in order to demonstrate the overall effectiveness of guided missile units, support units and defensive units within the composed corps. Therefore, combat capability is the foundation of campaign composition, and only by suitable combining main battle forces, defensive forces and support forces can the People's Liberation Army then [end of page 146] realize the effect of the value of the whole being greater than the sum of the parts "capability multiplier."

III. The Mode of Composition of Campaign Forces

The composition of Second Artillery campaign forces refers to the constitution, distribution and combination of campaign forces, and is the combination of foundational units ["buduijianzhidanwei", 部队建制单位], personnel, weapons and equipment into

an organic whole per pre-determined requirements. The forces within the composition generally include the forces of subordinate and temporarily subordinate units.

The composition of Second Artillery forces is determined by the system of organization for participating Second Artillery forces, campaign scale, campaign nature, campaign duties, campaign mode and combat environment etc. Per the necessities of campaign operations, these are generally unified and combined into a campaign corps. When undertaking nuclear counterstrike campaigns, Second Artillery forces (per the scale of the nuclear counter strike campaign) can be unified and combined into either of two structures. The first of these is the counter nuclear strike campaign advanced corps consisting of two or more missile bases and warhead bases combined. The second of these is the nuclear counter strike basic corps, consisting of a single executing missile base. Generally, when conventional guided missile units participate in joint campaigns they unify and combine under the command of the joint campaign command headquarters into a conventional guided missile assault group. Under special circumstances, they may also combine to become a conventional guided missile assault campaign corps, and independently or in cooperation with other armed services undertake campaign operations.

Section 3. Second Artillery Campaign Force Subgroups

Second Artillery campaign force subgroups are assembled as a campaign force per the enemy situation, mission, orders, forces and weapons. Generally, campaign operational groups or combat corps are divided into three large force groups [**”daliliangqun”, 三大力量群**]. These groups are the basic assault group, the reserve assault group and the support group.

Groups are delineated for the convenience of campaign planners; there is no group leader. The basic assault group is the main operational force, and the reserve assault force is the force kept in reserve to undertake campaign duties. Support forces are established for “the group:” when main forces and reserve forces [**end of page 147**] undertake guided missile firepower assaults, they centralize their employment of limited support forces, and then group together and centralize combat support, logistical support and equipment support forces. This support group is a highlighted focus of the command organization’s unified planning and coordination in order to satisfy all of the support requirements for the campaign.

I. Conventional Guided Missile Assault Campaign Force Subgroups

Conventional guided missile campaign assault forces are generally assembled into guided missile assault groups, and moreover are subdivided into several groups per operational necessities.

1. The Basic Assault Group [“qun”, 群]

The basic assault group is a force composed of several conventional guided missile brigades, an electronic warfare unit (element), and a defensive operations unit and others. Conventional guided missile brigades can be appropriately reinforced per operational necessities; missile base operational support elements directly reinforce these brigades in order to improve the ability of these missile brigades to respond rapidly. The number of conventional guided missile brigades assembled should be suitably set per the operational mission and the unit's overall operational capability.

Electronic warfare units are important forces for operating under informationalized conditions. The operations of the aforementioned units from beginning to end are centered around guided missile assaults and the conduct of other guided missile unit operational actions. In wartime and per the unified strategic planning of the joint command headquarters, the focus should be on reinforcing electronic warfare and network warfare forces. In special circumstances, electronic warfare units under the unified command of the joint command headquarters can independently undertake information combat missions. Defense forces should be deployed and allocated in a unified manner by the joint command headquarters, and Second Artillery will put forth its defense requirements.

2. Reserve Assault Group

The allocation of the reserve assault group's strength and scale should be set by the campaign commander per the potential developments in the overall campaign for the purpose of sustaining beneficial battlefield conditions, and maintaining a continuous grip on battlefield initiative. In disadvantageous circumstances, these groups can be rapidly adjusted to revive and then sustain [end of page 148] beneficial circumstances. The quantity of conventional guided missile brigades within the reserve assault group should be flexibly set per the combat axis, combat intensity, the possible duration of the campaign and other elements. Reserve assault forces generally are set at approximately 1/3rd of the size of the basic assault group forces. The electronic warfare forces and defensive operational forces within the reserve assault group are set per the lowest needs of conventional guided missile combat units.

C. Support Group

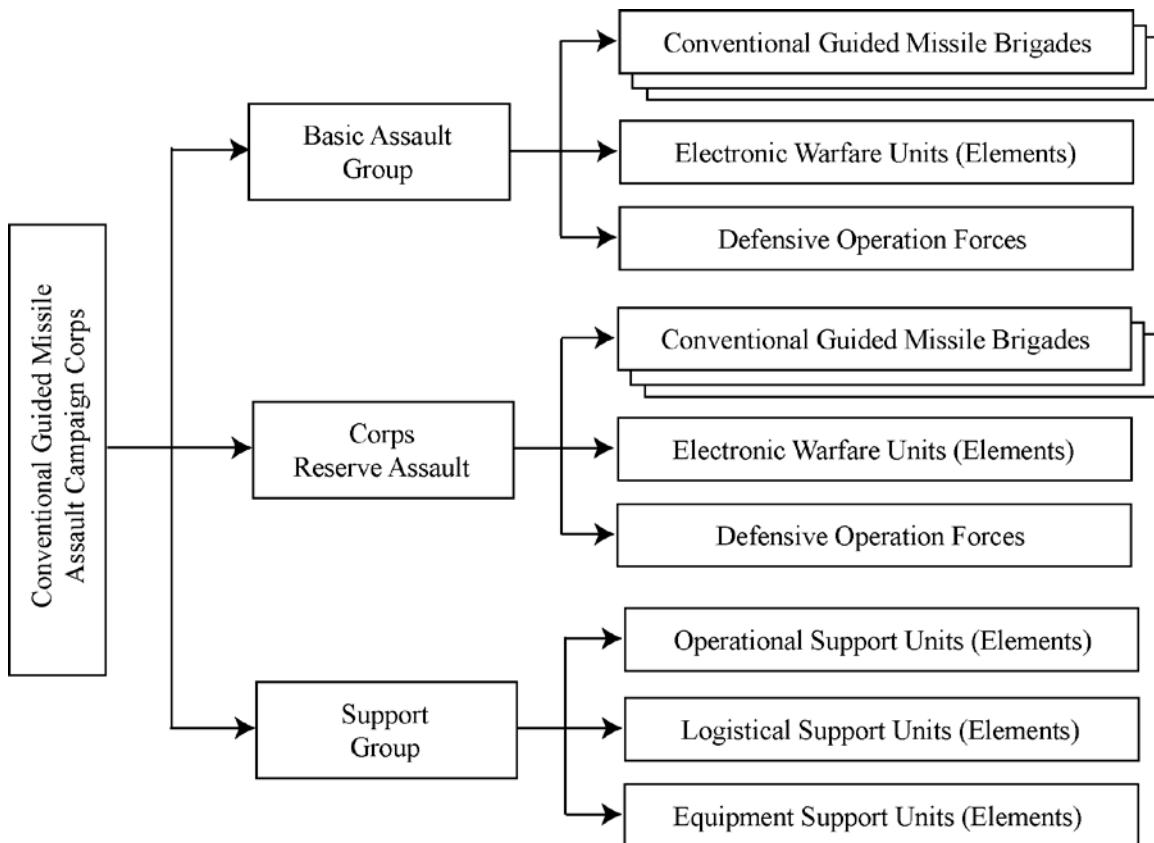


Figure 6-1 The composition of conventional guided missile campaign forces

Support groups are forces that aim to assure that Second Artillery Campaign corps smoothly undertake campaign missions by providing at a suitable time various supportive measures and undertaking corresponding actions. These groups mainly include operational support forces, logistical support forces, and equipment support forces etc. Support [end of page 149] groups mainly refer to the subordinate support forces to both the Second Artillery and guided missile bases. Per operational needs, these should also include reinforced support forces. Support groups generally do not include support forces subordinate to guided missile brigades.

II. Nuclear Counter Strike Campaign Force Subgroups

Second Artillery nuclear counter strike campaign forces generally act as corps made up of several groups

1. The Basic Assault Group

The basic assault group is made up of several nuclear missile brigades, a weapons testing regiment, an electronic warfare unit and a defensive operations force. The scale of basic assault groups should benefit the achievement of campaign goals as set forth by the Commander in Chief's strategic intents. The basic assault force should possess strong

combat capability, be fully outfitted, and possess weapons with ranges that meet nuclear counter strike necessities, and moreover be able to assure first strike effectiveness. Electronic warfare forces and defense forces should be set per the scope of the basic assault force.

2. Reserve Assault Force

The make up of the reserve assault group is identical to that of the basic assault group; however, its operational capability is weaker than that of the basic assault group. It is mainly responsible for bolstering strike missions. However, in comparison to conventional guided missile assault forces, nuclear counter strike reserve assault forces should hold back reserve forces in order to meet the needs of a counter punch against the enemy. The scale of electronic warfare forces and defense forces should be set per the scale of the basic assault group.

3. Support Group

The support group is the force that in a timely manner provides all support measures and undertakes corresponding actions to assure that the Second Artillery nuclear counter campaign corps smoothly **[end of page 150]** executes its campaign missions. These measures and actions mainly include: operational support forces, logistical support forces, and equipment support forces etc. Support groups are generally made up of support forces subordinate to Second Artillery and its guided missile bases (warhead bases). Per operational necessities, these groups should also include reinforced support forces. Support groups generally do not include support forces subordinate to guided missile brigades.

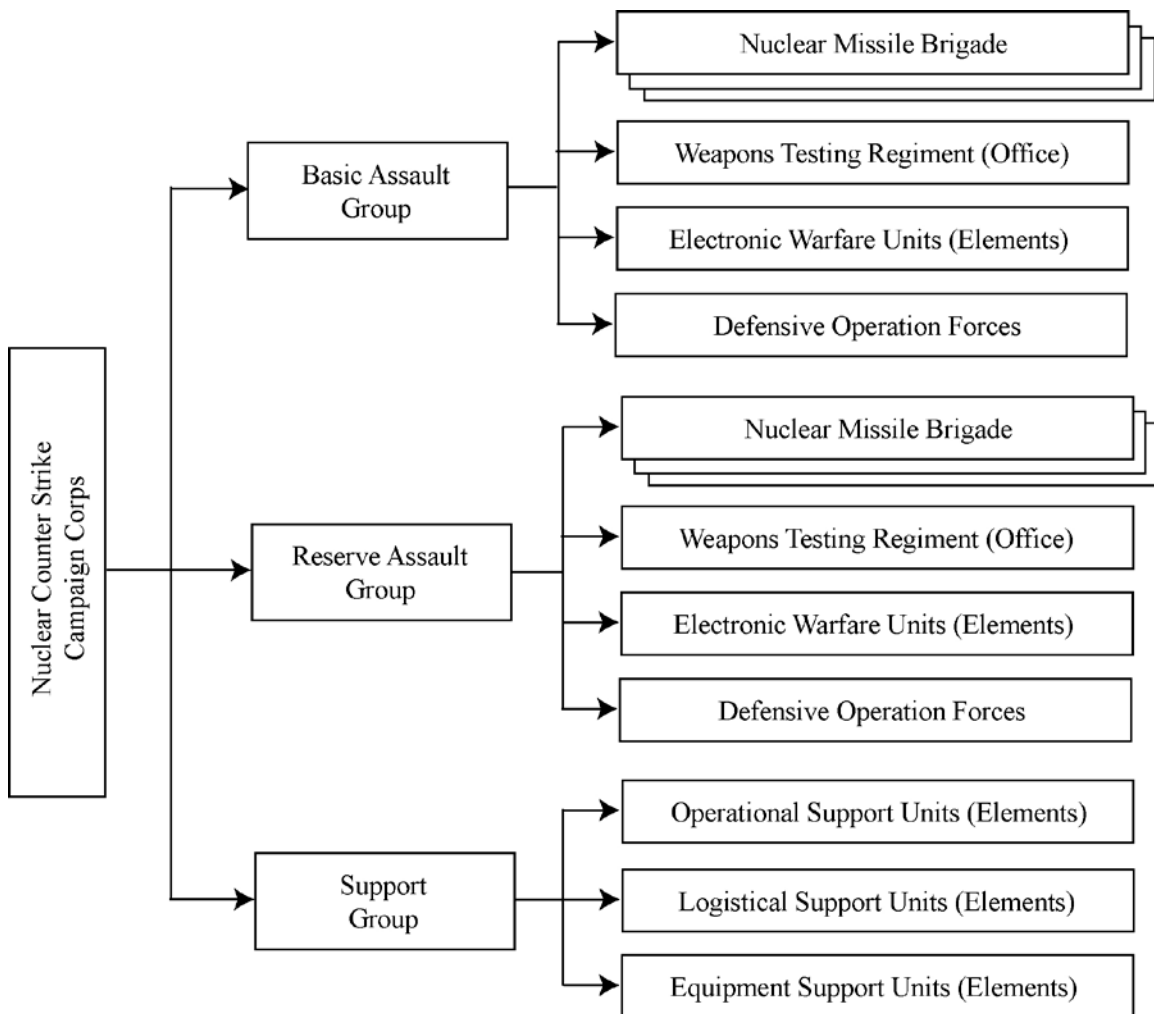


Figure 6-2 Nuclear Counter Strike Campaign Force Subgroups [end of page 151]

Chapter 7

Second Artillery Campaign Command

The Second Artillery campaign command refers to the organizational and leadership activities of the second artillery campaign commander and the command organ vis-à-vis the campaign activities of the Second Artillery nuclear missile units or those of the conventional missile units. It is based on the strategic intents of the supreme command or those of the joint command as well as the enemy's and our respective basic postures. The correctness of campaign command is directly related to the campaign's success or failure. The in-depth study of the Second Artillery campaign command issues has extremely important implications for the ability to fully carry out the advantages of the Second Artillery nuclear and conventional missile units, and for the improvement of the Second Artillery's operational capability.

Section 1. Second Artillery Campaign Command's Missions, Characteristics and Basic Requirements

The Second Artillery campaign command bears formidable missions; due to the special nature of command, there are special requirements placed upon campaign command.

I. The Missions of Campaign Command

The Second Artillery campaign command's basic mission is: Based on the upper echelon's intents and the enemy's and our basic situations, unify campaign planning and organization, correctly employ subordinate and complementary campaign forces; using objectivity as the basis, flexibly apply operational methods, fully carrying out subjective activity, and strive to pay the smallest prices to obtain the greatest operational benefits. Its specific missions are: **[end of page 152]**

1. Understand the Upper Echelon's Intents, Propose Usage Recommendations

The campaign commander and the command organ, after receiving the upper echelon's advanced order, must correctly comprehend the upper echelon's intents; continuously acquire strategic reconnaissance intelligence information; analyze and study the enemy's situation, our situation and the battlefield situation; and organize the units to be in a

constant state of sound readiness. In addition, based on the requirements and the capabilities of the Second Artillery campaign activities and defensive operations, [the campaign commander and the command organ] propose usage recommendations for nuclear and conventional missile units at the appropriate time, and engage in tightly secured organization of campaign readiness.

2. Determine Campaign Concepts [fangzhen方针], Select Advanced Operational Plan

The campaign commander and the command organ should, based on the upper echelon's intents, in combination with the missions of the missile units and the objective reality, determine the campaign concept promptly, and clearly ascertain all the regulatory contents of the campaign concepts. Using the Second Artillery campaign concepts as the basis, in combination with the existing battlefield posture, [the campaign commander and the command organ should] compare multiple advanced plans, analyze the tradeoffs, scientifically select or revise the advanced operational plan, [finally] forming the operational proposal [**fangan**方案].

3. Formulate Campaign Plan, Issue Operational Order

The campaign commander and the command organ must, based on the selected operational proposal, employ computer technology and various automated means, adopt scientific methods, rapidly and accurately formulate the campaign plan, forecast the development of the campaign, conceptualize multiple contingency plans, so as to facilitate the rapid revision of the original campaign plan. After receiving the operational order issued by the upper echelon, [the campaign commander and the command organ must] issue the operational order to the tactical formations at the appropriate time.

4. Maintain Favorable Posture, Organize Campaign Coordination

To ensure that the operational forces maintain the favorable campaign posture, the campaign commander should [**end of page 153**] closely organize campaign coordination during the organization of missile strike. Campaign coordination includes two types of situations, internal and external. Internally it is necessary to soundly organize the coordination between missile base and missile base; [between] missile base and warhead base; [between] missile units and equipment inspection units; [between] operational units and operational units; [between] operational units and support units. Externally it is necessary to soundly organize the firepower coordination between the missile units and all the armed services and service arms; the coordination between the defense strength and the support defense strength [**zhiyuan fangwei liliang**支援防卫力量]; the coordination between the safeguard strength [**baozhang liliang**保障力量] and the support safeguard strength [**zhiyuan baozhang liliang**支援保障力量], etc.

5. Adjust Plan as Appropriate, Control the Course of the Campaign

The campaign commander and the command organ must closely observe and effectively adjust control over the campaign's course. Implementing the campaign plan is the first step in organizing and commanding the campaign. Although one has engaged in the overall planning of all aspects of the campaign, it is not done once and for all; it is not immutable. One should, during the course of implementing campaign, based on changes in the battlefield situation, continuously supplement and perfect the original proposal or have a new understanding of the original proposal, so that the campaign commander will continuously adapt to new situations. When new favorable opportunities appear, one should have the courage to break through the established state of thinking, and revise the original plan in accordance with the battlefield situation.

II. Characteristics of Campaign Command

The Second Artillery is the country's important strategic strength; campaign command is also a very important command echelon in operational command. The Second Artillery campaign command, when compared with the generally defined operational command, aside from possessing operational command's general meanings, also possesses Second Artillery's inherent special nature, which is manifested in the following areas.

1. Pertains to the Overall Strategic Situation, Highly Centralized Command

Missile weapons are long-range attack weapons, missile nuclear weapons, in particular, are strategic [end of page 154] weapons; [they] can cross oceans to assault the enemy state's in-depth, major strategic targets, directly achieving campaign objectives of the strategic nature, even directly achieving strategic objectives. Therefore, Second Artillery campaigns, regardless of the scopes of the activities, all possess their strategic nature, and will directly impact the course and outcome of the war. Their success or failure concerns the larger situations of national political, military, diplomatic struggles, and matters for the security and the fate of the nation. The roles and functions of the missile units are extremely prominent; the command authority for nuclear missile forces, in particular, must be highly concentrated. Chiefly, major questions like the targets for strike, the timing for counter-attack (or assault), and the level of damage, must be decided by the supreme command. When the Second Artillery participates in joint operations, the operational applications of conventional missile units have large impact on the overall campaign situation; therefore, major questions that pertain to the overall campaign situation, like target allocation, division of strike waves, and the timing for the initial wave of assault, must be determined by the joint command or directly determined by the supreme command, in accordance with the supreme command's intents. The Second Artillery campaign commander must be extremely strict, extremely accurately in the execution of the upper echelon's orders and directives, and fully carry out his initiative, zeal, and creativity, engage in thorough planning within the regulated limit of authority, earnestly organize the campaign, so as to ensure that the upper echelon's strategic intents are implemented and executed.

2. Complex Weapon Systems, Strong Technical Limitation

Missile weapons are high technology weapons with complex technology, and large degree of difficulty with respect to system accessorization; thus, the Second Artillery campaign command is clearly constrained by the missile weapon system's technical standard and state. Before launch the missile weapon must undergo strict technical inspection; some links cannot be skipped over, the instruments onboard the missile weapon as well as the ground testing equipment are constrained by their own technical functions, and every testing content, order, and timing has strict requirements. They cannot take place earlier than required, but they also cannot be delayed; even more so the order cannot be reversed. Regardless of whether the breakdown appears in the operational weapon system or in the support system, it will affect the course of the operation. The technical constraints of the weapon system guarantee the Second Artillery campaign command's strong stylization; it is thus necessary to strictly implement it according to order. Because during the local war under informationized conditions **[end of page 155]** the electronic jamming factors increase, and the weapon systems, intelligence systems and the command systems are easily jammed, how to manage accidents and special situations, how to resolve technical difficulties, etc., present very high demands on the campaign commander's command ability, adaptability, and professional standard.

3. The Operational Disposition is Dispersed, Coordination and Control is Difficult

The selection of the missile unit's operational area and position are usually determined in advance based on the operational mission and weapon performance of the [missile] unit; in addition, the necessary battlefield construction is engaged. The targets for strike are also strategic or campaign targets that were determined in advance. Because the role and function of the missile unit are extremely prominent, it is also the focus of enemy assault; therefore, the unit is required to be in dispersed disposition to ensure that one nuclear missile will be unable to simultaneously damage two nuclear missile operational positions; on the other hand, due to the dispersed disposition, the span of the area is large, which makes it relatively difficult to conduct wartime command and control.

4. Harsh Battlefield Environment, Increases in the Level of Command Difficulty

Local wars under informationized conditions involve sharp situational changes, increases in the pace of the operational course, and rapid changes in the operational patterns. On the vast battlefield, the opposing sides will engage in intense battle around the seizure of battlefield dominance. At the same time, the missile unit is the object of the enemy's major strike in war; targets like the Second Artillery command staff, communication center, operational position, central depository [**zhongxinku**中心库] will become the initial targets for the enemy's precision weapon strike. In particular, raids by nuclear, biological, chemical weapons will make the battlefield environment unusually harsh, the level of difficulty to maintain command stability, security, high efficiency is extremely great, and the command and control mission extremely formidable. **[end of page 156]**

III. Campaign Command's Basic Requirements

The Second Artillery campaign command's basic requirements are put forward in accordance with the Second Artillery campaign command's objective law, and in combination with the missile forces' operational realities, they mainly include:

1. Know the Enemy and Know Yourself

The Second Artillery implements campaign operation in local wars under informationized conditions; it engages in counter-fire with the opponent in non-contact situations. Campaign defense is the premise for the Second Artillery's conduct of counter-fire; the missile force, other than being subjected to the enemy's nuclear threats, will also be under the close surveillance of the enemy's reconnaissance satellites, and may be subjected to attack by precision-guided weapons, information warfare weapons, etc., which are carried by the enemy's airborne weapons. Therefore, the campaign commander must fully utilize various intelligence reconnaissance means, grasp the enemy situation without interruption throughout the course of the operation, and do a good job of counter-surveillance and anti-jamming, concealment and camouflage; verify the targets, do a good job of target support; to the greatest extent possible understand thoroughly our situation, the ally's situation, and the battlefield situation, as well as the time that we can utilize and situations like politics, economics, diplomacy, and society that are relevant to the operational activities.

2. Keep an Eye on the Overall Situation

The core of this fundamental requirement is scheming the course of the campaign, and scheming the overall situation of the campaign. The campaign commander should concentrate the main energies, keeping an eye on and resolving the major issues that arise during the course of the operation. The Second Artillery's carrying out of the nuclear counter-strike operation concerns the overall state of the nation's political, economic, and military struggles, and the major decisions for the major issues must be determined by the supreme command; the conventional missile's reaction is flexible, it strikes with high precision, possesses strong penetration capability, and it is the main means for implementing the campaign's in-depth fire assault. In the joint campaign's initial operation and critical time, one often employs conventional missiles to implement fire assault, causing damages and sabotage to the enemy's important targets **[end of page 157]**, imposing powerful psychological pressure on the enemy, causing the enemy's operational resolution to waver, creating a sound battlefield environment for the other armed services' and service arms' operations, and directly affecting and changing the course and outcome of the campaign.

3. Centralization and Unification

[In] the Second Artillery's participation in the joint operation, the initial wave of missile use will affect the campaign's course and outcome. In the carrying out of the operational

mission, it is necessary to closely coordinate with the other armed services and service arms. Especially with respect to deciding on major issues like the campaign objectives, the timing of the campaign launch, the targets for strike, the number of assault waves, it is necessary to engage in unified strategizing, mutual compensation for advantages [youshi hubu 优势互补], and the centralized conduct of decision-making. During the course of implementing the campaign, one must be extremely strict and extremely accurate in following the upper echelon's order, accurately grasp the opportunities and the focus of the campaign, and centralize the control of the use of the campaign's firepower, so that the various units and various strengths will form an overall operational combined strength. The campaign large formation centralizes planning and centralizes the organization of the command of the campaign operations.

4. Stability and Reliability

The core of this requirement is the adoption of multiple measures to ensure the implementation of stable, uninterrupted command. Because the Second Artillery campaign operation is implemented under nuclear conditions or conditions of nuclear threat, the missile unit is also the enemy's first target for strike; the situation will be unusually complex, the environment extremely harsh, and stabilizing command will be extremely difficult. Stabilizing command concerns whether the operational orders of the supreme command or [those of] the joint command headquarters can be successfully implemented; stabilizing command will matter for whether the operational forces will be able to quickly recover operational capability after succumbing to raids; stabilizing command concerns whether the campaign commander and the command staff can timely and accurately understand the troops' damage situation and make timely adjustments to the operational disposition, etc. Therefore, the campaign commander and the command organ must employ multiple means and flexibly adopt multiple modes to ensure that stable and reliable command can be implemented under any condition. [end of page 158]

5. Agility and High Efficiency

In the Second Artillery campaign operation under informationized conditions, the battlefield situation is fast changing, the favorable combat opportunities are fleeting, and the operational forms change rapidly. Therefore, there is special emphasis on the time efficiency of command. In one respect, the missile unit's operational readiness time is longer, the operational implementation time is relatively short, and during campaign implementation, the amount of information obtained by the command system increases several times and even dozens of times; yet, the time that can be provided to the commander to make decisions is extremely limited. In another respect, the operational area for the conventional missile strike campaign is large, the disposition is dispersed, the distance for maneuvering is far, the depth is relatively shallow, the battlefield environment is harsh, and the exposed factors are many, making it easy for the [operation] to succumb to raids by the enemy's diverse weapons. Therefore, it is necessary to utilize multiple types of communication networks, multiple types of modernized command systems, multiple types of communication means, multiple types of command modes, implement command decision-making that is proposal-based [zhihui

juece fanganhua指挥决策方案化], information coding [xingxi daimahua信息代码化], and means automation [shouduan zidonghua手段自动化]; on the basis of maintaining uninterrupted communication networking, reduce communication time to the greatest extent possible. In the unfavorable posture in which the enemy is strong and we are weak, the enemy is dominant and we are at a disadvantage, [we must] carry on our military's superior tradition, have a foothold in the Second Artillery reality, fully carry out the subjective initiative, enthusiasm, and creativity, and realize agile and highly efficient command.

Section 2. The Second Artillery Campaign Command System

The Second Artillery campaign command system refers to the organic entity that possesses the function of organizing command; [this system] is constituted in a certain organizational form by elements such as the main command body, the object of command, the command means. The organizational form of the command system is determined by the participating strengths' constitution, functions, command means, and requirements for campaign command. Whether the command system is scientific and rational will directly affect the carrying out of command efficacy. [end of page 159]

I. Campaign Command System

The command system refers to the organizational installations, functional divisions and the inter-relationships among the echelons that pertain to operational command. The rational command system is the basic condition for ensuring highly efficient and orderly implementation of operational command. In future operations, the Second Artillery, in order to complete the nuclear and conventional [units'] mission of "dual deterrence, dual operation" [shuangchong weishe, shuangchong zuozhan双重威慑, 双重作战], ordinarily establishes the campaign command system of "nuclear and conventional [units] as one entity, dual-track command" [hechang yiti, shuangxian zhihui核常一体, 双向指挥].

Establishing the Second Artillery command system must involve the consideration of the following main factors:

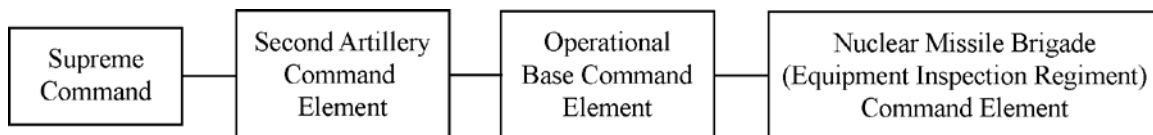
First, future joint campaigns are usually conventional local wars under nuclear deterrence conditions; therefore, [they will] necessarily involve the Second Artillery nuclear missile unit's deterrence activities. Because the nuclear missile unit's command authority is highly centralized, major issues should be directly decided by the supreme command; joint campaign command organizations ordinarily do not engage in command over Second Artillery nuclear missile units.

Second, conventional missile unit's operational command has its own special characteristics; in future joint campaigns, [it] is the force to be applied in the initial operation. In order to fully carry out the conventional missile's "trump card" effect, it is necessary to flexibly determine the command system [so as] to implement correct

command. On the one hand, the conventional missile unit's operational process is complex, the [missile] models are different from each other, the demand for support is high, and the degree of command difficulty is great; it is [thus] necessary to have the Second Artillery's command organizations at the top echelon engage in command. On the other hand, the quantity of conventional missiles is limited; during peacetime they are scattered among multiple missile bases, during wartime, through cross-theater maneuvering, multiple conventional missile units will be concentrated in the main direction, [thus] relying on one single missile base to implement operational command over all participating conventional missile units is unrealistic. In particular, when engaged in coordinated operations with all the armed services and service arms, having the Second Artillery [engaged in cross-theater maneuvers] is also unfavorable for achieving a certain level of firepower intensity and damage requirements within a specified time period. Therefore, it is necessary, under the joint campaign command organ, to establish the conventional missile group command, which is the specific responsibility of the Second Artillery, so as to implement unified command over the Second Artillery conventional missile units in the joint campaign. [end of page 160]

Third, nuclear-conventional dual-track command system [**hechang shuangxian zhihui tizhi**核常双向指挥体制] is favorable for the joint campaign command to engage in single-track command over all participation conventional forces, favorable for the Second Artillery campaign commander and the participating armed services' and service arms' campaign commanders to coordinate as one in the implementation of coordinated operations, [thus] carrying out, to the greatest extent possible, the overall operational benefits. [It is also] favorable for the Second Artillery, in accordance with the highest supreme command's strategic intents, to implement centralized command and strict control over the nuclear missile units; [it is also] favorable for the carrying out of the Second Artillery's nuclear and conventional missile units' dual functions. In addition, that system mainly relies on the existing organization, does not involve large magnitude of adjustment to the existing system, the peacetime-wartime transition cycle is short, and is thus favorable for the Second Artillery's stability and development.

The nuclear missile units' command system:



The conventional missile units' command system:



The Second Artillery conventional missile campaign large formation is usually under the command of the joint campaign command organ; however, under special circumstances it may also be under the direct command of the supreme command.

Its command relationship is displayed in the following diagram. [end of page 161]

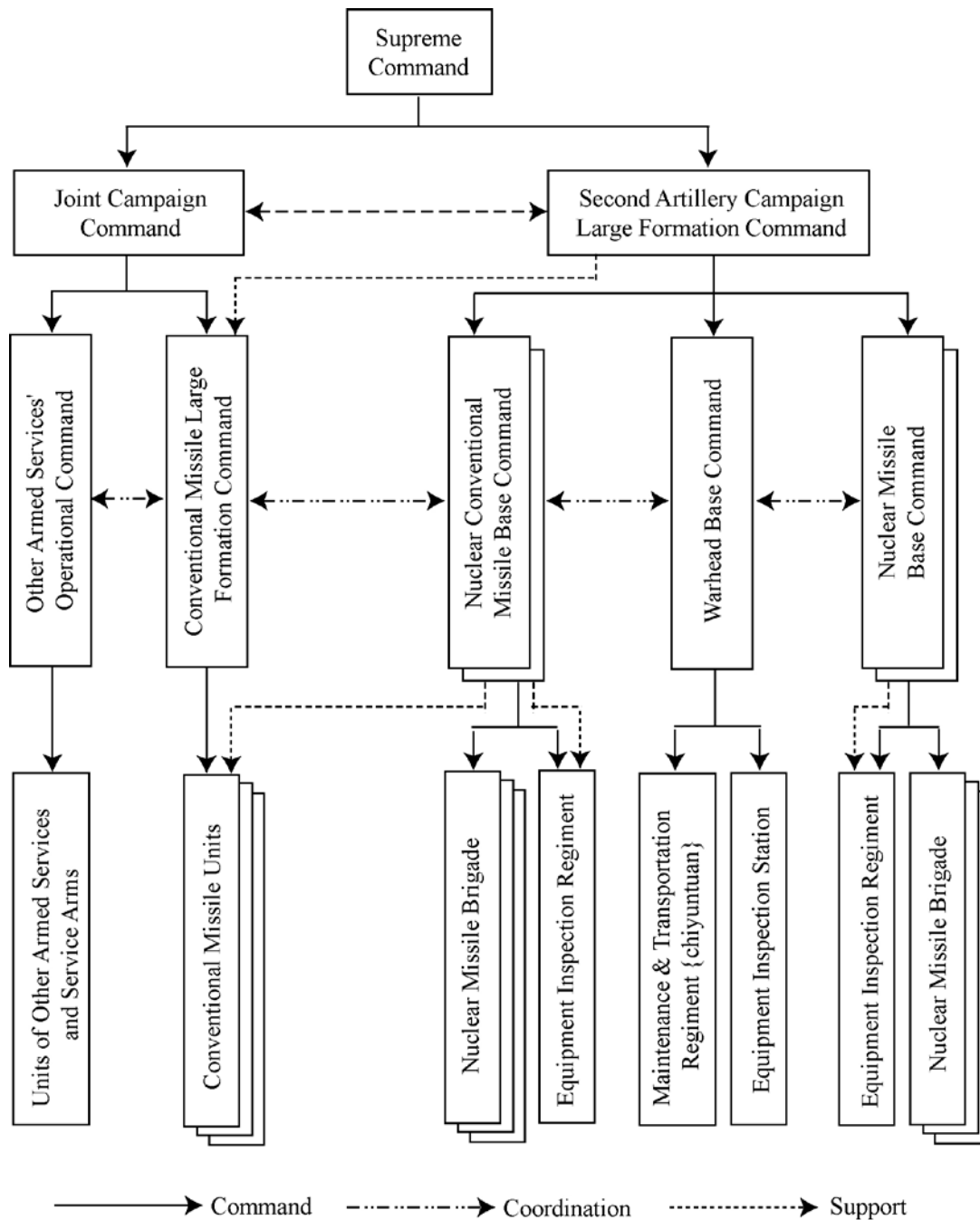


Figure 7-1 Relational diagram of the Second Artillery's participation in the joint campaign command

II. Campaign Command Institution

The campaign command institution is the military's "cerebrum," it is the campaign operation's nerve center; it is the work venue that engages in the scientific grouping of the campaign commander, the command organ and the relevant support units (or elements) as well as the various command communication equipment, and their rational allocation, [so as] to ensure the smoothness of command, coordination. The forms of campaign command institution are the command posts of various types. In order to adapt to the operational needs, each echelon in the Second Artillery should establish multiple types of command posts. [end of page 162]

1. Types and Functions of the Command Posts

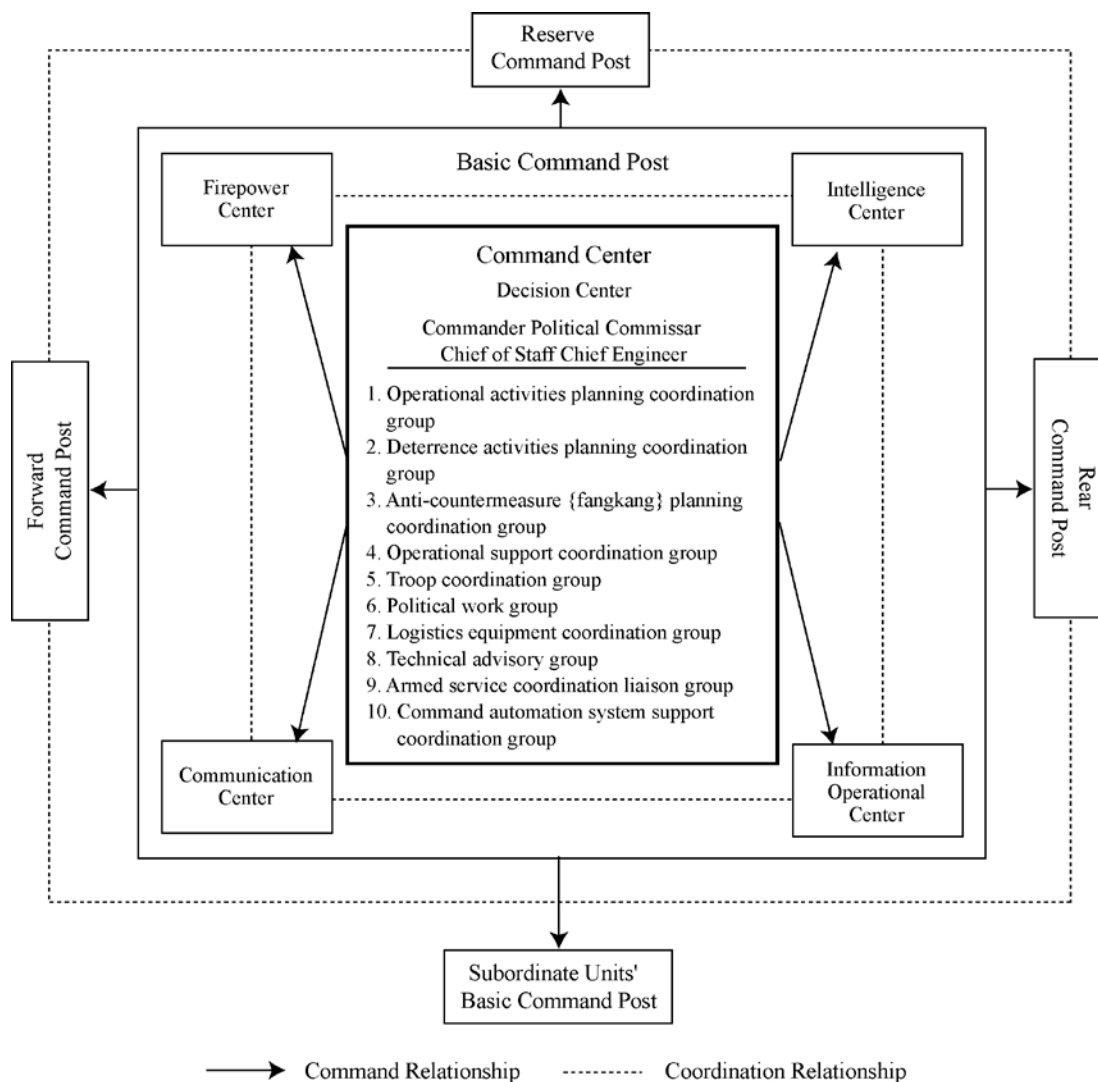


Figure 7-2 Diagram of the Second Artillery's various types of command post groupings, organization, and internal relationships

The Second Artillery's campaign large formation usually establishes the basic command post, the reserve command post and the rear command post; when necessary it can also install forward (direction) command post or other command institutions. The constitution of each type of command post should be rationally determined in accordance with the command missions and possibilities. **[end of page 163]** The basic command post is usually constituted by the command center, the intelligence center, the communication center, the electronic warfare center, the firepower center, etc. The grouping, organization and internal relationships of each type of command post are displayed as indicated in the following diagram.

Basic command post. [It] is the main command institution that engages in the unified command of the campaign operational activities, [it] is the center for implementing command; [it is] usually composed of the chief leading officer, the chief of staff, the headquarters' relevant personnel, the relevant personnel in the political department, logistical department, equipment department as well as those in the subordinate and support units, and the command automation system or the communication system.

Its basic functions are: master changes in the enemy's and our respective postures and the operational intentions of the enemy's long-range strike force; carry out and execute the supreme command's or the joint campaign command's intents, strictly execute its orders and directives; in accordance with the campaign commander's decision, draw up and report the campaign plans; in accordance with the campaign's development, timely issue various orders and directives; organize the units to engage in campaign readiness, timely inspect and report the readiness situation; vigorously organize campaign coordination; command the units to carry out the operational activities, effectively implement battlefield control, and timely report the operational situation; organize the command over campaign defense, manage the consequences from raids, and restore operational capability; after the conclusion of the campaign timely report the campaign's key findings and detailed findings, etc.

Reserve command post. [It] is the reserve command institution that is prepared to take the place of the basic command post in the implementation of command; when the basic command post succumbs to raids and transfers to the command post **[zhuanjing]**, or when necessary, [the reserve command post] takes over its command. [It is] usually composed of the deputy leading officer, the deputy chief of staff and the relevant personnel in the headquarters, the political department, the logistical department, the equipment department and the command automation system or the communication system.

Its basic functions are: master the basic command post's command progress as well as the units' progress in the conduct of campaign operational readiness and implementation; when problems are discovered, make timely recommendations to the basic command post; assist the basic command post to organize campaign coordination; when the basic command post succumbs to raids and before its command functions are restored, or for other reasons, [the reserve command post] replaces it to implement campaign command.

Rear command post. [It is] the command institution for unifying the command over logistical support, equipment support, war mobilization and rear defense. **[end of page 164]** Ordinarily a deputy leading officer serves as the commander, with the logistical department as the main entity. [It is] composed of the relevant personnel in the headquarters, the political department, the logistical department and the local frontline support organizations as well as the necessary command automation system or the communication system.

Its basic functions are: accept the basic command post's directives, master the comprehensive situation for campaign logistical support; organize command logistical organs, units (or elements) to implement campaign logistical support; organize the coordination of campaign logistical support; and organize equipment support, organize wartime troop mobilization as well as organize command rear defense, etc.

Forward (direction) command post. [It is] the auxiliary command institution established to strengthen the main campaign direction's command. [It] mainly assists the basic command post to implement command. [It is] usually composed of the deputy leading officer and the top staff personnel as well as the command automation system or the communication system. [Its] established position is determined based on the situation at hand.

Its basic functions are: maintain liaison with the basic command post; assist the basic command post to command the operational activities of the units in that direction; when the basic command post succumbs to attack, and before its command functions are restored, [the forward command post] communicates and liaises with the upper echelon, and in accordance with its orders, directives, continues to implement command and other activities over units in that direction.

2. Establishment and Transfer of Command Posts

The Second Artillery campaign command post is usually established underground, which possesses fortified defense facilities; during wartime the command team in alert condition enters the command post at the appropriate time to implement command. In order to improve the campaign command system's survivability and maintain uninterrupted command, in the future mobile command posts should be established, such as airborne, vehicle-mounted command posts, etc. [This is done] so as to coordinate with the underground command post for command implementation.

When organizing the implementation of nuclear counter-strike campaign, the Second Artillery adheres to the supreme command's order and enters into level three alert condition; the first command team finishes preparations for entering the basic command post **[end of page 165]** [while] the other two command teams uphold daily work. While the base's first command team completes preparations for transferring to the command post, the second team upholds daily work. Entering level two alert condition, the Second Artillery's first team enters the basic command post, and the second and third teams complete preparations for entering the reserve command post and the rear command post.

The base's first team enters the basic command post and the second team completes preparations for entering the reserve command post. After entering level one alert condition, the Second Artillery's second and third command teams enter the reserve command post and the rear command post separately. The base's second team enters the reserve command post, and at this time, the command personnel is on duty around-the-clock and can receive operational missions at any time.

When organizing the implementation of conventional missile strike campaign, one should, based on the situation at hand, establish at the appropriate time the basic command post, the reserve command post, the rear command post and the forward command post.

The campaign command posts' transfer is a complex operational activity; [it] will affect the command system's stability and orderliness. Therefore, when organizing command post transfers, the upper and lower echelons' command posts as well as the various command posts at the same echelon should engage in close coordination. Under ordinary circumstances, the command posts at the upper and lower echelons conduct transfers at different times. [With respect to] the timing of the transfers, one ordinarily selects [the periods] during operational intervals or during operational readiness phases, and makes forecasts about new situations that may appear during the time of transfer, and provide corresponding countermeasures.

III. Campaign Command Automation System

The automated command system is, in the command system, the "human-machine" system that adopts the combination of electronic computer-centered technologies/equipment and command, technical personnel, to implement command control over the units and the weapons. It comprehensively applies modern scientific theories and technical equipment, closely combines command, control, communication, intelligence, to form a multi-function unified system. The three critical links for realizing command automation are: it is necessary to possess accurate and timely intelligence detection and comprehensive analysis system; responsive **[end of page 166]** decision-making command institution; and reliable, speedy, secure long-distance information transmission system.

The Second Artillery campaign commander and his command organ must, in accordance with the wartime needs and on the basis of the command automation system built during peacetime, organize and establish campaign automation system that is structurally rational, stable and reliable, [and which possesses] strong survivability. Its structure is usually a network system that centers on the computer, and is connected as one entity with the communication network, electronic storage, situational management, display equipment and various information terminals. Making the differentiation from [the angle of the] campaign intelligence and command information process, the main constitution of the command automation system is displayed in the following diagram.

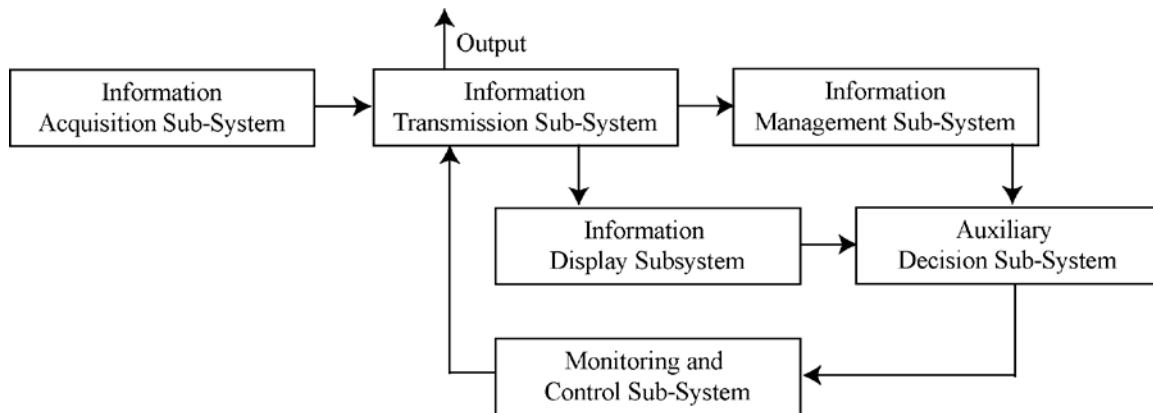


Figure 7-3 Constitution of the automated command system

The information acquisition sub-system is made up of aeronautical surveillance, aviation surveillance, ground surveillance, and other sub-systems. It is the sensory inspection system that directly senses various types of intelligence [and it] is responsible for collecting various types of intelligence information.

The information transmission sub-system, which is the communication system, is the command automation system's sensory network; [it] is the link and the bridge that connects the command centers and information terminals at each echelon. **[end of page 167]**

The information management sub-system is the electronic computer system with the central data processing computer as the core and is composed of multiple types of equipment and computer software. [It is] mainly responsible for rapid processing of intelligence information.

The information display sub-system is composed of communication control instruments, computers, and large-screen display equipment, graphic storage, etc.

The auxiliary decision-making sub-system, which is constituted by the computer center, the data storage, and the military expert and operational simulation systems, is the system used to assist the commander's decision-making.

The monitoring and control sub-system is mainly constituted by the commander and the command workstation. It is employed to assist the commander in making decisions, issuing orders, and implementing command. It can also be used to change the working state of the command automation system and monitor its operational situation.

Based on the command post's structure, the command automation system can, according to the command elements, establish the command sub-system, the surveillance

intelligence sub-system, the communication sub-system, the electronic warfare sub-system, the firepower planning sub-system, the weapon monitoring and control sub-system, the equipment support sub-system, the logistical support sub-system, etc.

Section 3. The Second Artillery Campaign Command Activity

The Second Artillery campaign command activity is the ideational and behavioral activity that is conducted by the Second Artillery campaign commander and his command staff during the course of campaign command for the purpose of achieving the campaign objectives. It includes the mastery of situations, operations decision-making, planning and organization, force organization, battlefield and time control, etc. The campaign command activity determines and constrains the campaign activity, and the campaign command activity directly affects the course and outcome of the campaign. Therefore, studying campaign command should involve studying campaign command activity. [end of page 168]

I. Mastery of the Situations

The mastery of the situations is the campaign command activity's priority link. It permeates campaign command from the beginning until the end; [it] affects every aspect of campaign command. The comprehensive collection and accurate analysis and assessment of the situations are the premise for correctly establishing resolution. The campaign commander and his command organ, after receiving the campaign mission, should correctly comprehend the upper echelon's intents and clearly establish the current echelon's mission. [They should] rapidly organize the collection of intelligence information data that are relevant to the campaign operation, and, based on the mastered intelligence information and employing the method of combining quantitative and qualitative analyses, analyze the enemy's situation, our situation, terrain, climate, and other battlefield situations, and produce the assessments. [They should] accurately assess the enemy's operational intentions, understand and master the enemy's operational characteristics and our military's operational capability, and analyze the battlefield environment's impact on the enemy's and our respective operational activities.

Intelligence information collection must be strongly targeted in nature, realistic and reliable and continuous and uninterrupted; [one must] correctly analyze favorable conditions and unfavorable factors and their impact on the campaign activity so as to ensure that the operations decision-making is scientific and accurate. Important situations and assessments and conclusions that are obtained should be promptly reported to the upper echelon.

II. Strategizing and Decision-making

Strategizing and decision-making is the process in which the campaign commander conducts campaign operations scheming and design from the perspective of the overall situation; [it] is an intermediary link that transforms the campaign mission issued by the

upper echelon into campaign reality. The basic characteristic of strategizing and decision-making is creative, ideational activity.

1. The Contents of Strategizing and Decision-making

Strategizing and decision-making is the core of command; strategizing is the basis for decision-making; and the commander's correct decision-making is based on scientific strategizing. The Second Artillery's campaign strategizing [end of page 169] and decision-making mainly center around major issues like what is the objective of the campaign, whether to fight, who to strike, where to strike, when to strike, how to strike, what to strike, and propose campaign goals; the selection of operational directions; the determination of the campaign targets; the selection of the operational areas and the general operational time; the study of the operational methods; the division of operational phases; and the determination of operational disposition and proposals for coordination and complementarities, and other contents.

2. The Procedures and Methods for Campaign Strategizing and Decision-making

1) Grasp the Basis

Grasping the basis of campaign design [chouhua筹划] is the prerequisite for implementing the correct design. The basis for campaign design mainly involves four aspects: the conditions of the enemy's situation, our situation, and the battlefield environment, and the campaign mission. The purposes of grasping the basis are first, ensure that campaign design is built on reliable objective foundations so that the subjective guidance will match the objective reality; two, ensure that the scheming [mouhua谋划] in the process of campaign design is comprehensive so as to facilitate the comprehensive consideration of issues from every different angle; and three, ensure that campaign design is targeted in nature, mainly targeting situations like the mission, the enemy's situation, our situation and the battlefield when engaged in scheming.

2) Macro Conception

Scheming from the macro perspective is to plan the campaign from the height of the overall situation. Mao Zedong pointed out: "[For] the person who commands the entire situation, the most important [thing] is to place his attention on taking care of the war's overall situation." Viewing from the relationship between campaign and war, war is the overall situation and campaign is local; therefore, only by proceeding from the war's overall situation can one correctly design the campaign. Macro planning should be based on the joint campaign's general guidelines, revolve around the campaign's general intention, propose specific campaign guiding thoughts, design [sheji设计] the campaign general framework from the macro perspective, and then design [chouhua筹划] the specific contents.

3) Focus Design

When designing [**chouhua**筹划] the campaign, there are many elements that require design; it is necessary to proceed from different angles and different [**end of page 170**] levels to engage in design [**chouhua**筹划]. Different forms of campaign have their own special nature, therefore, one should engage in scheming according to different forms of campaign. Every form of campaign is further divided into different campaign phases, different campaign phases also have different specific emphases; therefore, one [should] engage in design after dividing the campaign into different phases. Each phase is constituted by several types of different specific activities; the missile units should engage in campaign design with the general logic of using firepower assault, with campaign deterrence activity as the main entity, complementing information operations and campaign mobility, and mutual support of campaign and support [**baozhang**保障], so as to satisfy the demand for general design and highlighting key points.

4) Forecasting the Course

In order to propose correct campaign concepts, one should engage in serious analysis of the uncertain factors in the campaign's process of development, forecast the developments and changes in the enemy's and our respective situations, conceptualize the battlefield posture for every phase, as well as the new situations, new problems that may arise; based on the forecast for the pattern of campaign development, [one can facilitate the] revelation of [the campaign's] guiding law. Therefore, in the design of campaign, it is necessary to engage in comprehensive forecast of the various changes that may take place throughout the entire course of campaign, get a handle on the key point of forecasting the enemy's situation, propose conceptualizations of countermeasures, so as to facilitate the control over the enemy's activities, seize the campaign initiative, so that the campaign will develop according to the pre-designed [**sheji**设计] course.

5) Determination of the Campaign Concept [**fangzhen**方针]

The campaign concept is the campaign's basic intention and the macro conceptualization that is established to realize that intention; [it] is the fundamental basis for organizing campaign. The Second Artillery's campaign concept is often determined by the upper echelon or is determined by the joint research of the upper echelon and the Second Artillery campaign commander. It can also be proposed by the Second Artillery command in accordance with the operational mission assigned by the upper echelon and the study of the operational intents, and submitted to the upper echelon for approval. The campaign commander, when determining the campaign concept, should have profound understanding of the upper echelon's intents; analyze comprehensively the impact that the enemy's situation, our situation, the ally's situation, the battlefield environment as well as political, diplomatic factors may have on the campaign; get a good handle on [**end of page 171**] the campaign's core emphases and key links; and propose the basic countermeasures for achieving the campaign objectives. The campaign concept is the

key to attaining victory in the campaign; [thus, it] must be accurate, concise, and possesses clear guidance quality

The main contents of the campaign concept include: campaign intention, campaign direction, campaign goal, force employment, main operational method, campaign steps and the time of engagement, etc.

6) Determine the Proposal

Usually after the determination of the campaign concept the campaign commander will begin to select the optimal operational proposal and forecast the various means for achieving the pre-determined objective. Once the initial conceptualization is formed, one should immediately unify the thinking and form the operational proposal. The operational proposal is the embryonic form of the leader's resolution, it is also the basic outline of the campaign plan. One should, on the basis of scientifically assessing various objective situations, in accordance with the upper echelon's campaign intention and the main mission that one may assume, determine the main goals that the campaign is required to achieve, as well as the specific objectives that should be determined for the realization of the goal. In addition, one should analyze, resolve, or transform the contradiction between the objectives and the limiting factors, study in depth the various advance plans for achieving the determined objectives, finally determining the rational operational proposal. The main contents of the campaign operational proposal usually include: the assessment and conclusion about the enemy's situation, the campaign goals, the targets for strike, the main operational methods, the campaign disposition, the time limit for completing campaign readiness, etc.

There are usually three modes for proposing the operational proposal: the first is to engage in the revision of the selected operational proposal in combination with the battlefield reality; the second is to summarize the rational factors in each advance plan to form the new proposal; the third is when every advance plan lacks reference value, one can re-conceive and formulate new proposals. When drawing up the operational proposals, one must, in accordance with the upper echelon's intents, focus on the most complex and most difficult situations to form the operational proposal. In addition, one should use forms like texts, tables, and important graphs to store the operational proposal in the computer database to facilitate its use at any time.

7) Establish the Campaign Resolution

The campaign commander should, in accordance with the determined initial proposal, immediately establish the campaign resolution. The campaign resolution must correspond to the upper echelon's intents, ensuring that the campaign activities will closely complement the political and diplomatic struggles. **[end of page 172]**

Campaign resolution usually includes contents like the campaign intentions and operational methods, the main operational direction and area, the campaign disposition,

campaign support, the installation of the command post, the time limit for completing campaign readiness, and the time for launching the campaign.

The determination of the campaign intention must be based on the campaign intent, the campaign mission, the enemy's and our respective situations, and the battlefield environment. The determination of the targets for strike must be in accordance with the campaign's overall needs, selecting the vital targets that are favorable for achieving the campaign goal. The determination of campaign disposition must be focused on forming the overall operational capability and creating favorable postures so as to facilitate the centralization of strengths in the main direction and at the critical time, and to facilitate command coordination. The determination of the campaign operational method must be based on the campaign posture and the proportion of strength between the enemy and us, [and permits us to] fully carry out [our] advantage. The determination of the time limit for completing campaign readiness must be focused on the campaign's overall situation, make every effort to maintain relatively great time flexibility, [and permits us to] quickly achieve campaign's element of surprise.

3. The Requirements for Campaign Strategizing [yunchou运筹] and Decision-making

1) Master the Information, Remove the False and Keep the True

The collection of information should be fully systematic, truthful and reliable, continuous and uninterrupted; and the processing and treatment should possess a strong targeted nature, so as to satisfy the needs of command decision-making.

2) Resourceful and Decisive, Repeated Proof

Strategizing and scheming is a highly complex thought activity; it needs super intelligence capability and uninterrupted and repetitive thinking activities. Therefore, the commander must, based on the mastered battlefield information, adopt scientific methods to engage in deduction and assessment, conceptualize multiple types of proposals, and engage in repeated proof of every type of proposal, [finally] selecting the best one among them.

3) Draw from All Useful Ideas, Strive for Perfection

Drawing from all useful ideas is a superior tradition in our military's campaign design [chouhua筹划]. Scientific campaign design cannot be separated from the drawing from all useful ideas. The campaign commander has the leading function in the entire [course of] campaign design, [end of page 173] but the talent and thinking of one person or several individuals are limited. It is necessary to be adept at carrying out and utilizing collective wisdom, and correctly design the campaign under the premise of differentiating the scope of the level of secrecy. During the course of campaign design, arbitrariness in dealing with a minor link or technical issue, which causes assessment errors, can often produce negative effects on the entire campaign or on important campaign activities.

Therefore, the campaign commander must strengthen the collective consciousness, and be adept at listening and absorbing the opinions from every area. This is the indispensably important link in [the process] of meticulous design.

III. Planning and Organizing Campaigns

The planning and organization of campaign is a series of advance arrangements conducted by the campaign commander and his command organ for [the purpose of] implementing the campaign operation.

1. Draw Up the Campaign Plan

The campaign plan is the concrete manifestation of the Second Artillery campaign large formation commander's campaign resolution; [it] is the basis for organizing the command of the campaign operational activities. Therefore, the formulation of the campaign plan is the most important work item in the Second Artillery campaign command organ's campaign preparation.

1) Contents of the Campaign Plan

The campaign plan generally includes the campaign operational activity's overall plan, the campaign operational activity's branch plan, and the campaign support plan, etc.

i. The Campaign Operational Activity's Overall Plan

The Second Artillery's campaign operational activity's overall plan is the arrangement of the Second Artillery's campaign operational activity from the overall perspective. It is the general guiding program [**zhidao gangling**指导纲领] for the Second Artillery's campaign operational activity and the fundamental basis for implementing command; at the same time, it is also the fundamental basis for formulating the Second Artillery's campaign operational activity's branch plan. Its contents mainly include [**end of page 174**]: situational assessment and conclusion; upper echelon's intent and current echelon's mission; the participating units' organization, disposition, and mission differentiation; situational anticipation and action proposal for every phase; items involving campaign coordination; organizing command; the campaign's start and end time, and the time limit for completing readiness, etc.

ii. The Campaign Operational Activity's Branch Plan

The Second Artillery campaign operational activity's branch plan is the indispensably important component in the Second Artillery campaign operational activity; [it] is the concretization of the Second Artillery campaign operational activity's overall plan in a certain aspect of the operational activity; [it] is the specific manifestation of the leader's resolution in a certain operational activity. It is the concrete arrangement and consideration that target a certain operational activity. From the perspective of the

overall structure of the campaign operational activity plan, it is the supplement to and the detailing of the campaign operational activity's overall plan. The Second Artillery campaign operational activity's branch plan usually includes: counter-reconnaissance plan, campaign firepower plan, campaign mobility plan, information operation plan, campaign deterrence plan, rear defense plan, etc.

iii. Campaign Support Plan

The Second Artillery's campaign support plan is an important component of the Second Artillery's campaign operational plan. [It] is the advance arrangement of the various support items to ensure the participating units' successful carrying out of the campaign mission; [it] is the fundamental basis for organizing, implementing, and inspecting campaign support. Campaign support includes a series of concrete plans, such as: intelligence and reconnaissance support plan, communication support plan, engineering support plan, campaign camouflage plan, transportation support plan, the support plan for protecting against nuclear, chemical, [biological] weapons, meteorological and hydrological support plan, logistical support plan, equipment support plan, and political work plan, etc.

2) The Procedure for Drawing Up [the Campaign Plan]

When formulating the campaign operational plan, one should usually do so in accordance with the following procedure:

i. Earnestly Comprehend the Upper Echelon's Intent

First, it is necessary to deeply comprehend the supreme command's or the joint campaign command organ's strategic **[end of page 175]** intention; the mission that may be borne by the Second Artillery, the time limit for completing the mission, and the various demands on the carrying out of the campaign; as well as the joint campaign's larger context. Next, it is necessary to deeply understand the joint campaign large formation commander's resolution as well as the Second Artillery's mission and operational targets. When it is necessary to deeply understand the relevant situation, one should take the initiative to request instruction from the joint campaign large formation leader and the command organ.

ii. Analyze and Study Various Types of Situations

It is necessary to earnestly analyze and study deeply situations like the enemy's situation, our situation, the ally's situation, and the battlefield environment. Among them, with respect to the analysis and the study of the enemy's situation, one should be based on the various types of data on the enemy's situation that were acquired through various types of reconnaissance means, and combine the mastered enemy operational characteristics operational principles, operational patterns, as well as the current posture. One should stress assessing the enemy's operational intention, force organization, action time,

operational disposition, operational capability, operational focus, operational strengths and weaknesses, as well as the ally support and emergency response capability, etc. that the enemy may receive during the operation. With respect to analyzing and studying our situation, the main [focus] is on analyzing the political-military quality of our participating forces, the training standard, weapon and technical equipment's quantity and quality, support conditions, as well as survivability and local support capability, etc. With respect to the analysis and the study of the battlefield environment, the main [focus] is on analyzing the theater's various conditions, such as terrain, hydrology, meteorology, resources, humanity, and religion in terms of their impact on the Second Artillery's campaign operation. Through the analysis and study of situation in every area, one can correctly assess the favorable factors and the unfavorable factors, so as to allow us to carry out the favor factors, avoid and reduce the effects of unfavorable factors, [allowing us] to use our strengths to strike at the enemy's shortcomings.

iii. Conceptualize Various Operational Activities

It is necessary to engage in operational conceptualization one by one in accordance with the pre-determined campaign phase. First, conduct assessment of the possible posture for every campaign phase; subsequently, engage in detailization of the participating units' missions; and then determine the operational proposal for each phase. This is an important link in the planning activity. Due to the complex nature of the Second Artillery campaign operational activity under informationized conditions, when conceptualizing various operational activities, one should be solidly planted in the most complex, **[end of page 176]** and most difficult situations, draw up various types of emergency proposals, [so as to] achieve full preparedness [**youbei wuhuan**有备无患]. After the proposal is determined, it is necessary to engage in feasibility proof and operational simulation for every type of proposal, so that it possesses very strong scientific quality and practicality. Generally speaking, with respect to the basic proposal and the campaign's first phase operational proposal, [it is best] to be as detailed and concrete as possible; for reserve proposal and follow-up phases' operational activity, one can be somewhat sketchy.

d. Formulate Operational Planning Documents

After conceptualizing various operational activities and determining the basic operational proposal, one can formulate the pre-determined operational proposal into the campaign operational planning document. When the situation is urgent and there is not enough time to produce the document, one can take the plan's relevant contents and mark them on the work diagram or record them on the audio/videotape. The campaign operational planning documents can be drawn up as tables, diagrams, or as text descriptions, or adopt the computer multimedia technology to produce audio/videotape like planning document that combines diagrams and texts and direct visual images.

e. Repeatedly Revise and Perfect the Plan

After the Second Artillery campaign large formation completes the drawing up of the draft campaign operational plan, [it] should, based on the situation at hand, engaged in repeated study and revision either on the diagram or on the computer. During the course of revision, when time, resources, and security conditions permit, one can engage in simulation and demonstration on the computer so as to examine its feasibility and discover problems. Through repeated revisions one can ensure that the plan will even more match the objective reality. After the campaign operational plan was revised, one should immediately submit it to the upper echelon's campaign command institution for review and approval. During the course of review and approval, if opinions for major revisions are proposed, the campaign large formation's leader should immediately organize revision and perfection until a plan that can be implemented is formed.

3) Requirements for Drawing Up [the Campaign Plan]

In order to ensure that the formulated campaign operational plan matches the objective reality and possesses operability, the following requirements are placed on the drawing up of the campaign plan:

i. Comprehensive and Systematic [end of page 177]

Comprehensive and systematic [means] that when drawing up the campaign plan, it is necessary to correctly, comprehensively, and systematically reflect the reality of the Second Artillery campaign; with respect to the campaign activities, [this] requirement possesses a very strong standardization quality. Whether the campaign plan can truthfully, comprehensively, and systematically reflect the battlefield's objective reality is not only an important standard for measuring the plan's scientific [nature], it is also the key to whether the plan can guide the campaign activities. First, it is necessary to comprehensively master and correctly analyze and assess various situations such that the operational plan corresponds to the battlefield's objective reality. Next, it is necessary to scientifically forecast the battlefield situation's development and changes and do a good job with respect to dynamic decision-making [**dongtai juece**动态决策]. Although the battlefield situation in the Second Artillery campaign under informationized conditions is complex and dynamic, with tremendous uncertainties, but this does not mean that there is no observable pattern; it also does not mean that there is no detectable clue. If one wants to adapt to the battlefield form's numerous transformations so that one will always retain the initiative, then one should have a very strong foresight quality prior to the campaign's planning and organization.

ii. Thorough and Accurate

Being thorough and accurate means that when drawing up the campaign plan, one should be very meticulous and extremely accurate so as to satisfy the operational needs. First, it is necessary to thoroughly and accurately carry out the upper echelon's intents, accurately

realize the campaign commander's intents and decisions in the campaign plan, so as to prevent subjectivity and lack of balance. Next, the textual expressions in the campaign plan must be accurate; there can be no ambiguity. With respect to the various regulations on the participating units' operational areas, operational activities, operational time, operational coordination, campaign support, etc., it is necessary to make every effort to use appropriate terms, clear meanings, and correct data so as to prevent the rise of misunderstanding and even errors among the units during execution.

iii. Coordination and Order

The Second Artillery campaign's battlefield situation is complex and changeable; therefore, there are even higher demands placed on the Second Artillery campaign plan's coordinated and orderly quality. First, when drawing up the campaign plan, it is necessary to, based on the enemy's and our respective objective situations as well as probable developments and changes, fully consider the campaign's various activities, correctly analyze various campaign elements, and with respect to the campaign's **[end of page 178]** activities throughout and during each phase engage in coordinated and orderly arrangements. Next, when drawing up the campaign plan, not only must there be a campaign operational overall plan, there must also be various concrete action plans for the campaign and the campaign support plan, so as to form the complete campaign operational planning system.

d. Highlight the Key Points

Highlighting the key points means that with respect to the main operational direction, the important operational phases, as well as the critical operational activities, one should have detailed plans for implementation. Although the contents involved in the campaign operational plan are numerous, but it is necessary to highlight the key points. At the same time, one should also make arrangements for the other operational phases, operational directions, and operational activities, but this plan is sketchier. When highlighting the key points, one should handle correctly the relationships between the primary and the secondary, and between the key points and the general points. While highlighting the key points, it is also necessary to consider the battlefield situation's probability; requiring campaign planning to engage in anticipation of various situations, plan multiple action proposals, so that the [campaign plan] will maintain a certain flexibility.

e. Pay Attention to Time Efficiency [shixiao时效]

The Second Artillery's recognition process does not exist only in the process of the drawing up the campaign plan, it also exists in the campaign planning implementation phase. This is because during the course of campaign operation, situations constantly develop and change; situations that do not allow one to follow the pre-war pre-determined campaign plan in implementing the operation occur frequently. Therefore, the time efficiency quality becomes an important issue in the drawing up of the campaign

plan. During the course of executing the Second Artillery campaign plan, it is necessary to engage in continuous adjustments and revisions according to the developments and changes in the enemy's and our situations. When major changes arise from the battlefield situation, it is necessary to make new assessments based on the new situation. Under the premise of not violating the upper echelon's general intentions, it is necessary to make adjustments, supplements, and even revisions to the original plan at the appropriate time so that the objective guidance will correspond to the changed objective reality. [end of page 179]

2. Determine the Campaign Disposition

The Second Artillery campaign disposition is the conduct of the division of mission and operational grouping with respect to the campaign strengths, as well as the concrete allocation of every operational grouping, etc., for the purpose of implementing campaign operation. Campaign strength grouping should be determined in accordance with factors such as the campaign goals, missions, distribution of positions, target situations, as well as the quantity and quality of forces and weapons that are organized within the campaign. At the same time, it is necessary to consider the Second Artillery campaign activities' unifying quality, the operational activities' overall quality, the campaign support's qualities of timelines, complexity, and diversity, and the dispersal quality of the operational positions, etc., so that the campaign strength's grouping adapts to the campaign operation. In general, it is possible to group several assault groups, and matching quantities of campaign support force aggregates, campaign reserve units, as well as warhead units (or elements).

The allocation of the operational positions should be based on the upper echelon's intents and the missile weapons' range, as well as requirements like the stability of the position and its ability to facilitate concealment and mobility; it should be conducted in advance. Every support strength should be allocated based on the principle of dispersal, concealment, easy for maneuvering, favorable for combining [forces], capable of fully carrying out the effectiveness of each type of weapon, and fulfilling the support mission.

The Second Artillery conventional missile units adopt the mobile operational mode, but the launch positions are usually pre-installed or constructed prior to the operation, which means that the distribution of the positions is relatively permanent; therefore, change to the campaign disposition [**bushu**部署] is relatively minor. However, as the battlefield situation changes, the disposition must be continuously adjusted, always employing the favorable disposition to maintain the initiative. Usually, the disposition [**bushu**部署] mode of "fewer in the front and more in the rear, light in the front and heavy in the rear" is adopted. In terms of specific methods, disposition [**bushu**部署] is conducted in three steps [**tici**梯次]. In the first step the disposition is located in the launch position area, and is allocated with direct firepower assault units that centers on the multi-functional launch vehicles. In the second step, the disposition is located in the operational area's central storage zone and missile transfer station area, and is allocated with technical support units that center on horizon testing [**shuiping ceshi**水平测试] and missile transport equipment

[**feidan yunshu zhuangbei**飞弹运输装备]. The third step is the units' peacetime disposition area, and is allocated with the follow-up support units [**houxu zhiyuan budui**后续支援部队]. In terms of concrete implementation, the "four combinations" must be achieved, which are [**end of page 180**] the combination of tactics and techniques so that the disposition is scientific and rational; the combination of terrain and fortifications, meaning the full utilization of various favorable conditions so that the enemy reconnaissance cannot accurately assess our force's dispositional situation; the combination of permanent disposition and mobile disposition, making advanced considerations regarding the adjustment proposal in the course of the follow-up operation; and the combination of the Second Artillery disposition and the theater disposition so as to meet the overall requirements of joint operation, thus facilitating coordination with neighboring units and obtaining support and cover from units belonging to other armed services and service arms.

3. Organize Various Support Items

The campaign support items, modes, and support levels are determined by the needs of different Second Artillery campaign forms. The extent of the support capability directly affects the campaign commander's resolution and constrains the campaign operational activities. Therefore, thorough, comprehensive, and appropriately timed organization of various support items is extremely important for achieving campaign victory. When organizing campaign operations, the campaign commander and his command organ must immediately issue the campaign support instructions. Each relevant department within the command organ should, based on the campaign commander's instructions and the troops' actual situations, formulate concrete campaign support plans, then organize the troops to realize them after the leader reviews and approves them.

When organizing various support items, one should achieve the goal of matching campaign resolution and closely complementing the campaign activities. In addition, it is necessary to immediately understand and master the contents and the state of progress for each support item, paying special attention to those support items that have important impact on the campaign activities. One should proceed from the most difficult and most complex situations, draw up multiple support advance plans, so as to achieve the goal of advanced preparations and timely support. Moreover, it is necessary to strictly control the timing of employment for the reserve support strength and the relevant support means. On the one hand, it is necessary to carry out the functions of the professional support units (or elements); on the other hand, it is necessary to pay attention to mobilizing the initiative of all participating units, so that professional support is combined with mass-quality support, thereby fully carrying out the power of overall support. It is also necessary to make every effort to obtain complementary and support efforts from the fraternal units [**xiongdi budui**兄弟部队], the neighboring forces, and the local strengths. [**end of page 181**]

4. Organize Maneuvering Deployment [zhankai展开]

With respect to Second Artillery units with mobility, especially conventional missile units, during peacetime only small quantities of units will be allocated in pre-determined operational areas for emergency use, and the main operational units will be allocated in areas outside the operational areas that are transportation accessible. Prior to war, only missile units that bear the mission of conducting fire assault and small quantities of support units (or elements) will be allocated in the concealed tunnels within the operational areas, while the remaining units will be positioned in concealed areas that are far from the theater, thereby reducing the overall exposed forces. During the war is when forward maneuvering deployment is conducted at the appropriate time.

When organizing maneuvering deployment, the first thing to do is to strengthen the control over important sections and positions [**buwei**部位]. In the strategic sections in the areas of maneuver, such as the main bridges, the transportation hubs, and the sections that are easily raided and damaged by the enemy, crack command teams should be dispatched to implement locational command [**dingdian zhihui**定点指挥], coordinate troop activities, and ensure the units' successful passage. Second, multiple types of command and communication means must be adopted so as to maintain inter-connection. Based on the reality of the conventional missile units, when organizing area maneuvering deployment, one should adopt multiple types of command and communication means. Other than employing the units' existing communication means, one should also fully utilize the local communication equipment or employ human beings to engage in oral transmission of the upper echelon's instructions, notify the follow-up units about the situations, and coordinate troop activities. Third, command coordination must be done well. One must promptly notify the complementary and subordinate air defense and ground defense units about the time, modes, routes, key defensive areas, signal regulations for troop maneuvering and relevant demands, so as to ensure that the conventional missile units and their complementary and subordinate units act in coordination and uniformity. Fourth, situations that may appear in area maneuver must be decisively managed. During the course of organizing the units in area maneuver, it is possible to encounter multiple difficulties and complex situations. The campaign commander must be resolute and decisive, and flexibly implement the correct command. When the units are subjected to air raids, one should promptly select the favorable terrains, engage in dispersal and concealment, and vigorously organize anti-air firing. When the roads for maneuver are damaged, when they can be repaired within a short time, [the units] should [**end of page 182**] immediately organize repair and continue maneuvering according to plan. When the roads are blocked or cut off and maneuvering cannot be implemented according to plan, the campaign commander should decisively change the maneuvering routes to ensure the timely completion of the area maneuvering deployment mission.

IV. Control and Coordinate Campaign Activities

During the command activity, one shall encounter many complex situations. During the course of organizing the command over campaign operations, the control and coordination of campaign activities should continue without interruption.

1. Battlefield Control

Battlefield control is the command activity that controls the battlefield's situational development. The control of the battlefield is campaign command's basic function, which is the employment of favorable battlefield posture to affect and drive the battlefield situation toward the direction that favors oneself, leading to the achievement of campaign victory. The objects of Second Artillery campaign battlefield control are many, the contents are many and diverse, and situational changes are rapid; therefore, one should grasp the key points and conduct it promptly and effectively.

1) Collect Battlefield Information

During campaign command activities, one should, without interruption, collect battlefield information, which mainly include: enemy's situation, our situation, allies' situation, as well as natural situations. Using the C³I system as the primary means, with the manual means as the auxiliaries, the collected intelligence undergoes processing and treatment so as to provide basis for the commander to track and engage in decision-making in real time.

2) Real-Time Tracking and Decision-making

The campaign commander and his command organ must promptly, accurately, comprehensively, and continuously master the campaign battlefield situation's development and changes. This mainly involves changes to the advance assault targets and the effects of the strike on assaulted targets; changes to the enemy's force organization and disposition, and operational activities; the operational progress, the positions of the subordinated units and neighboring forces as well as the casualty and loss situations; and changes to the operational area's terrain, meteorology, hydrology, and social conditions as well as their **[end of page 183]** impact on the operational activities and the state of implementing the coordinated plan. [For all these things, one must engage in] real-time tracking and decision-making.

3) Prompt Control and Coordination

It is necessary to firmly master the campaign focus and strengthen the command over critical campaign links. When necessary, direct command must be implemented. The Second Artillery campaign's critical links usually refer to the initial missile assault and the missile assault against important targets that affect the campaign's overall situation. One should concentrate the elite strengths on the critical links, master the progress of the

critical links at all times, and organize and coordinate other operational strengths to support and complement the critical links. Once the coordinated relationship is sabotaged, or when new situations arise, one should immediately make adjustments and establish new coordinated relationships.

4) Grasp the Changes and Link-Ups in Each Campaign Phase

It is necessary to foresee changes to the battlefield posture, control the campaign tempo, grasp the campaign progress, and meticulously organize the campaign phases' changes and link-ups, so as to drive the campaign situation to develop in the favorable direction. When it is not possible to implement campaign phase changes according to the advance plan, it is necessary to promptly report the situation to the upper echelon, and re-capture the timing for campaign phase changes.

5) Correctly Utilize the Reserve Units

When organizing campaign, it is necessary to scientifically forecast the campaign's development, establish reserve units that can adapt to the campaign mission, clarify the campaign reserve units' missions, strictly control the use of the reserve units, and organize them to engage in simultaneous operational readiness with the units bearing the primary mission, so as to facilitate rapid replacement or direct assumption of the operational mission.

6) Weapon System Safety Control

One should implement safety control with respect to the weapon system. One should strictly adhere to the weapon system safety control regulations, strictly control changes to the missile readiness level, strictly control the missile weapon system's technical state, strictly control the missile launch authorization directive, and ensure the launch safety of the missile weapon system. At the same time, one must strengthen security consciousness, and strictly adhere to the security regulations and adopt effective measures. One must strictly control password messages' need-to-know range [**zhimi fanwei**知密范围], strictly manage [**end of page 184**] operational messages and other carriers of secret, strictly prevent the loss and security leak of operational information during the course of transmission, thereby ensuring the campaign command's security and safety.

2. Time Control

The control over campaign time is primarily the mastery of and constraint on the campaign activities' time flow. The goal of campaign time control is to ensure that the campaign is implemented according to plan. When the situation changes, adjusted control is made at the appropriate time to maintain campaign initiative. From the technical standpoint, campaign time control includes the network method, the form

method [**biaogefa**表格法], the time-distance method [**shijufa**时距法], the flowchart, etc. There are also multiple measures from the standpoint of campaign command.

1) Optimize Campaign Flow, Control Critical Work

To engage in orderly listing of the command activities according to time flow is the order and steps for the campaign activities' various items and their implementation. In order to improve command efficacy, it is necessary to scientifically control the critical links in the command network. Controlling the time of the critical routers [**xianlu**线路] basically implies the control of the course of the campaign, which also means the mastery of the key to controlling campaign time. Therefore, the campaign commander and the command organ should place their energies on controlling the critical routers, and engage in prioritize resource support for them. As time moves forward, secondary critical work may be transformed to become the critical work in a certain phase. The campaign commander should maintain flexibility of response to changes, adjust the time sequence for the work flow at the appropriate time, so as to ensure the continuation and coordinated development of the campaign activities.

Next is changing the organizational mode. Under the condition of not affecting the campaign activities, one can transform the series work [**chuanxing gongzuo**串向工作] in the command network into parallel work or work that is inter-connected. Through flexible and diverse modes, the time for campaign activities can be place on reserve, so as to address the rise of sudden situations. The campaign commander should master the appropriate reserve units and deploy them in the main direction or during important times at the critical opportunities so as to change the ratio of the enemy's and our strengths, thereby achieving the goal of shortening the campaign continuous time.

2) Strictly Act According to the Campaign's Planned Time [end of page 185]

The campaign plan is the fundamental basis for organizing command over campaign operations. Its operational activities must be implemented in strict adherence to the regulated campaign time stipulated in the plan. Controlling the campaign time can be divided between controlling planned time and controlling random time, with controlling planned time serving as the main entity. To realize effective control, the campaign plan must correspond to the objective reality, the campaign time must be scientific and rational to the greatest extent possible, so as to ensure the basic match between the campaign activities and anticipations.

3) Capture the Combat Opportunities at the Appropriate time, Take the Campaign Initiative

Combat opportunity capture is a critical link in the campaign time control. In order to promptly capture the combat opportunity and take the campaign initiative, the campaign commander must firstly, on the fast changing battlefield, be fully prepared and grasp the opening combat opportunity. The focus of preparations is battlefield selection and

technical preparation. The premise for grasping the opening combat opportunity is familiarization with the missile units' state of readiness as well as the state of readiness for the coordinated armed services' strengths, and the state of readiness for every support element as well as the enemy's situational development, etc. When the conventional missile units implement the opening strike, they must launch attack before the enemy acts, strive to destroy the enemy's missile before they are launched, suppress the enemy's aircrafts before they take off, cut off the bridges before the reserve strengths pass over them, paralyze the missile defense system before the missiles are intercepted, etc. The missile units' initial operation will affect the campaign's overall situation, it is thus necessary to carefully select the opening operational opportunity. The opening operation's targets for firepower application must be rational and the operational missions must be appropriate. The opening operation must be initiated, using effective initial round of strike to support the armed services' follow-up operations.

Second, one must coolly observe the battle situation's development and capture the campaign's turning points. The course of missile unit campaign possesses obvious phase quality. Every phase has a transition point, and this is the campaign's critical point. Therefore, it is necessary to carefully select the opportunity for transition. During joint operations, changes in campaign forms, the application of campaign operational methods, adjustments to the operational activities, etc. should all be conducted during carefully selected favorable opportunities. When facing emergency situations, the campaign commander should immediately adopt adjustment and control measures to prevent losing control over the troops, so as to be freed from the reactionary situation.

Third, adapt to the demands of joint operations and control the operational tempo. The speed of the operational progress, the size of the force scale, **[end of page 186]**, assault time, as well as the intensity of firepower and division of strike waves, etc. should all satisfy the demands for engaging in coordinated operations with other armed services. The effective control of the operational tempo is favorable for the full carrying out of the three armed services' overall operational efficacy. Controlling the operational tempo requires controlling the missile launch time, adjust the concentration and strength of the firepower application, engage in campaign phase changes at the appropriate time, employ reserve strengths well, limit the enemy's freedom of actions, etc. All of these are effective methods for controlling the operational tempo.

4) Improve Means of Command, Increase Command Efficiency

Improve the means of command has become one of the most effective paths toward raising command efficacy, and taking and utilizing the campaign time. Operational command in the 21st century will be the automated command with the informationized C⁴ISR system playing the "lead role." The campaign commander and his command organ must combine the traditional methods with the modern means of command; combine wired transmission with wireless transmission; and combine permanent liaison with mobile communication. They must synthesize the application of multiple means so as to raise campaign command's consecutive quality, stability, and reliability, and focus development on automated command. The Second Artillery missile units should make

every effort to develop an integrated command system that can provide real-time target intelligence, rapid and accurate positioning, missile launch control, and rapid detection of the effects of the strike.

Chapter 8

Second Artillery Campaigns Coordination

Coordination refers to coordination and cooperation of actions of various operational forces according to a certain coordination plan. This will form a combined strength of various operational forces and various measures within a certain operational time and space. Organizing Second Artillery campaigns coordination is an important guarantee of forming Second Artillery operational capabilities. It is an important issue that needs to be resolved by Second Artillery's participation in a joint operation. The true nature of campaign coordination is that the actions of Second Artillery campaign corps are based on the unified intention of upper-level in implementing coordination and cooperation with other armed services and various armed forces participating in the operation. The commander of Second Artillery campaigns must be strictly based on the coordination plan, campaign phases, operational directions, mission classifications, times of attacks, and battlefield divisions to do well on the mutual cooperation of operational actions between Second Artillery and other forces, between Second Artillery and various neighboring campaign forces, regional forces, and militia, that are operating together. They should all implement unified coordination. They should form an entirety at the five dimensions of land, sea, air, space, and electromagnetic so that it can express optimal operational effectiveness.

Section 1. Characteristics and Requirements of Second Artillery Campaigns Coordination

In a joint operation under informationized conditions, there are many forces participating in the operation. The battlefield situation is complex and with many changes. The intelligence and firepower coordination missions are heavy. The coordination is related to many professions. The overall nature of operational actions has strong nature of connection, so that Second Artillery campaigns coordination possesses very obvious characteristics. It presents many special requirements to coordination. **[end ofpage 188]**

I. Characteristics of Campaign Coordination

When missile forces engage in an operation under the background of joint campaign, aside of possessing universal characteristics of various armed services, they also possess very apparent unique characteristics.

1. Many Forces Participating in Joint Operation, which Makes Coordination and Organization Very Complex

When Second Artillery organizes campaign operation under a joint campaign background, there are numerous objects of coordination and the contents of coordination are complex. From the perspective of coordination objects, there are external coordination of missile forces with the forces of army, navy, air force, local armed forces, and militia. There are coordination between the missile forces and other missile forces and the missile forces with support forces. There are coordination between the nuclear counterattack forces of Second Artillery and nuclear counterattack forces of other armed services. There are coordination between the conventional missile forces and long distance attack forces of various armed services. From the perspective of coordination contents, there are forces coordination and firepower coordination. There are coordination between intelligence, electromagnetic, and defense. There are airspace and transportation coordination. There are coordination in offensive operation and defensive coordination during the operation countering the enemy and preventing us from losing the operation. There are military deterrence coordination and campaign operation coordination. Any misstep in coordination with its objects can impact on the expression of entire operational capabilities.

At the same time, due to wide application of high tech weapons and equipment, the operation of missile forces not only include the campaign patterns of conventional missile attack operations and nuclear counterattack operations but also include actions of electronic warfare, campaign defense, and campaign deterrence. Many patterns and actions interweaved and implemented at the multiple-dimension battlefields of land, sea, air, space, and electromagnetic for the same objective. This makes the traditional front line and rear area with no clear borderline. The operational area and related space range is very wide. Battlefield concept is expanding from form to formless direction. Therefore, the factors of Second Artillery campaign coordination are increasing non-stop.

In recent years, due to the development of military technology, especially the missile technology, Second Artillery is equipped with increasing number of missile models non-stop. **[end ofpage 189]** It has various models of nuclear missiles but also many models of conventional missiles. We have ballistic missiles but also have cruise missiles. We have long-distance intercontinental missiles but also the middle-distance missiles. Therefore, the operational coordination between various models missile forces, not only relates to strengths, time, and battlefield space but also relates to mission classification, strike intensities, attack patterns, and models' deployment and distribution. This makes the organization of mutual cooperation and coordination of various forces for unified actions very complex.

2. Operational Missions Change Frequently, which Makes Overall Coordination Difficult

Second Artillery often implements an operation under informationized conditions. Battlefield situation is rapidly changing. It is often possible that the operational missions will change. Due to the changes of missions, the coordination factors also change non-stop. This will cause corresponding changes in coordination relations of various campaign corps of the armed services at land area, air area, sea area, time area, operational actions, and combined supports. Due to the differences of status and functions of Second Artillery campaign corps with different campaign patterns, when it is implementing the missions of attacks, the weapon models used are different. The methods of firepower strikes are different. The main coordination contents will change non-stop in the coordination of other armed services firepower at land, sea, air, and electromagnetic fields. Moreover, missile forces are the first targets for the enemy to implement soft kills and injuries and hard destructions. They are likely to use long-distance precision weapons to attack the command institutions of missile forces' operational coordination. They are also likely to use high intensity electronic warfare to implement jamming and destructions against the nervous systems of coordination, such as, coordination communications networks and other nodes. This will increase the difficulty of achieving overall coordination during the operation by Second Artillery in campaign coordination.

3. Rhythm of Campaign Actions Is Fast. It Has High Demands for Real Time Coordination

Second Artillery participates in a joint operation under informationized conditions, the missile forces and weapons have quick mobilities, quick reactions long firepower attacking distances and **[end ofpage 190]** quick campaign action rhythm. Various operational measures are mutually interweaving. The offense and defense are mutually relying on each other. It will make operational actions appearing very intricate and complex. Battlefield situation appears to be complicated and confusing. It has fast changing style. Various operational actions will widely apply high tech weapons and equipment. Command, control, communications, reconnaissance, monitoring, positioning and precision strikes will be integrated as one. Therefore, the coordination and cooperation of missile strikes and the operations of various armed services at time and space must be scientific and with natures of precision and timeliness. This is

particularly true for the operational actions of conventional missile forces in coordinating aerial attacks, ground attacks, or blockades at sea. All these operational actions need to be coordinated with slightest difference in time. This can prevent the mistaken injuries by firepower and firepower omission. Under the circumstances of complex, quick changing, and quick rhythm, whether the missile forces can grasp the operational opportunities and timely organize and coordinate actions of various operational forces is the key for the missile forces to express its functions in a joint operation.

4. Battlefield Situation Changes Rapidly. It Makes Maintenance of Stable Coordination Difficult

Second Artillery participates in a joint campaign operation under informationized conditions, the battlefield situation changes rapidly and it possesses high degree of instability. Random incidents can happen at any time. Uncontrollable factors have multiplied compared with the past. Coordination relations are easily unglued. The discords or destructions of campaign coordination relations will render every operational factor to mutually separated and isolated. This will lower the effectiveness of the overall operation. At the same time, the opponents in future campaign actions will regard information warfare as the focal points. They will pay attention to use various measures from multiple directions to destroy the enemy's operational coordination and let the campaign actions to have discords. The combined functions of these factors will make the difficulty of maintaining the stability of joint campaign coordination greatly increase. Command institutions of missile forces and coordination links are the focal point targets of the enemy's electronic jamming and first precision strikes. Therefore, coordination mechanism of Second Artillery campaign corps faces the threats from various sources. If the missile forces coordination wants to adjust to the quick changing situation, it must possess timeliness and stability in defending against various jamming and precision strikes so that it can elevate the overall operational effectiveness of the missile forces. [end of page 191]

II. Requirements of Campaign Coordination

Due to the complexity of Second Artillery campaign coordination relations, it has presented some special requirements to campaign coordination.

1. Standing on the Footing of the Entire Situation in Making Overall Planning

Standing on the footing of the entire situation refers to, while implementing campaign coordination by the campaign commander and his command institution, we should start from the entire situation and whole process. We should assure the coordination actions benefit the entire operational situation and process. It means that we should surround unified operational intention and unified the coordination plan. We should start from the entire operational situation and process and implement macroscopic coordination and control over various operational forces participating in the operation. We should also closely surround the realization of the total operational objectives in implementing

coordination. We should stand on the footing of the entire situation in making overall planning. This is the first principle of missile forces. The campaign commander and his command institution should surround the entire situation of the campaign, implement total planning and unify consideration for key factors, such as, various forces coordinating with Second Artillery, campaign patterns, operational areas, and attacking methods.

1) Surround the Total Campaign Missions

We should implement the planning as a whole and make arrangement of various campaign actions during the entire process of campaign. Not only we should scientifically plan well on operational actions of every Second Artillery forces participating in the operation but must ensure organic cooperation of the campaign actions of various armed services participating in the operation. This is for the sake of achieving coordination actions for the entire situation.

2) Use Campaign Actions as the Main Thread

We should meticulously implement the firepower coordination plan. Through scientific classification of missions, we should reasonably use the forces and plan as a whole on firepower. We should also correctly plan the actions and adopt effective methods so various actions of the participating forces can be uniformly coordinated as a whole.

3) Coordination Hierarchy Should Be Explicit

Campaign commander and his command institution mainly should organize well its macroscopic planning as a whole and based on the new coordination plan to process well with focal points on the coordination relations of various campaign directions, various main operational patterns, and main campaign actions. **[end ofpage 192]** Brigade commander and his command institution must organize well on tactical coordination with total efforts to ensure the organic cooperation of every force (or element.)

4) Clearly Define Main Relations of Coordination and Principal and Subordinate Relations

Every level of missile forces must clearly define the status of each level within the coordination systems. During different operational phases, the adoption of operational actions and the missions to be accomplished, and the relations of these actions and other operational forces should also be clearly defined.

5) Coordination Disciplines Must Be Clearly Defined

In order to maintain continuity and the wholeness of coordination, the commander of missile forces must strictly follow the coordination disciplines. He should maintain the coordination relations regulated in the coordination plan and maintain the stability of

coordination with diligence. At the same time, he should request the subordinating and the attached forces (or elements) not to change the coordination relations without authorization. They should strictly accomplish their missions according to the coordination plan. They should maintain the wholeness and effectiveness of the internal coordination of the missile forces. In joint operations, they should actively and with initiative in paying attention to do well on the unified coordination of campaign actions with other main campaign corps.

2. Grasps the Joints and Makes the Focal Points Prominent

Grasping the joints refer to that fact that we should clearly define the issues and actions that possess great impacts on the development of campaign operation while in organizing and implementing the coordination. We should synthesize the analysis on various factors that impact on various coordination joints and practically adopt proper measures. Making the focal points prominent refers to that fact that we should implement diligent analysis on various factors in the campaign process based on the requirements of campaign development. We should grasp well on the objects, opportunities, areas, measures, and methods of coordination. We should clearly define the principal and subordinate, classify the weights, grasp the joints, and organize coordination by surrounding the campaign operational focal points. The missile forces have strong nature of sequence, many restrictive factors, numerous coordination items, and high requirements. When Second Artillery is organizing campaign coordination, it should surround the main forces in organizing coordination from the perspective of forces application. We should place main energy on the coordination of main coordination objects. With respect to organization and implementation, we should regard the main campaign [end of page 193] patterns and campaign actions as the focal points. We should, with focal points, make sure the first warhead will successfully explode and at the time of last missile firing that it will not cause mistaken injuries or firepower omission. With respect to operational space, we should regard the safety coordination of the air space of missile flight paths as the focal point. We should timely inform the air arms of the air force about the situation. We should ensure the safety of the firing areas and corresponding air areas. At the same time, during the operational process, the campaign commander and his institution must be good at grasping focal point issues based on the changing battlefield situation in implementing coordination at every phase of the campaign and at every key moments of transformation and link-up of operational patterns.

3. Planned Coordination Is the Main Method and Flexibly Respond to Emergencies

Second Artillery missile forces usually use planned coordination as the main method. At the same time, it can flexibly respond to emergencies due to the quick changing campaign rhythm based on campaign progression and the requirements of the joint command post. They can organize random coordination timely. Aiming at the different characteristics, contents, and the situation suitable for the occasions of planned and random coordination, they can effectively combine the planned and random coordination. Planned coordination is the main method refers to the need of meticulously formulate

coordination plan with other armed services and forces participating in the operation. When the battlefield situation does not have fundamental changes, we should firmly implement the coordination plan already formulated. We should not change the coordination plan at will while supervising and inspecting the subordinating and attached forces in implementing the plan.

Missile forces have very complex weapons and equipment systems with high technical nature. The operational preparations will take relatively longer time. There are more reliance on the technical people and facilities at the positions. Therefore, in order to ensure the effectiveness of coordination, aside from formulating a comprehensive and meticulous coordination plan, we should treat technical personnel as the focal points, weapon systems as the basis, and positions' facilities as reliance in implementing full preparations. This way, the weapons systems are maintained in good conditions from the start to the end and will lay foundation for implementing planned coordination. However, due to the fact that campaign coordination plan mainly is formulated at the campaign preparation phase, it possesses the nature of planning in advance. It is difficult to accurately grasp all the possible changes that can appear during the campaign progression. It can only aim at the entire situation and at the focal points issues that are most likely to appear. **[end of page 194]** It can implement macroscopic and principled normalization on coordination actions. At war time, we should implement non-stop predictions and judgments on campaign development. We should implement non-stop revisions of the coordination plan to guarantee the timeliness and effectiveness of the coordination plan. We should also implement organized random coordination based on the changes of battlefield situation. Flexibly responding to emergencies is to base on the changed situation to start from what is beneficial in accomplishing the objective of total operational effectiveness by implementing random coordination. In achieving coordination plan, we should make the best use of the situation and flexibly organize random coordination with initiative.

Planned coordination is the main method and responds to emergencies with flexibility is the two sides of contradictions and uniformity. Planning is not necessarily mechanical and rigid and does not know how to be flexible. Flexibility is not to do things as one likes. It is not blind action without planning. For this, we should elevate the accuracy of pre-war prediction. We should formulate several optional action plans. We should do our best to contain the range of flexibility within the category of anticipation. We should strive for initiative. We should establish coordination on coordination relations and regulate coordination contents. Planning should leave adequate rooms so that it leaves more action space for random coordination. We should pay close attention to the development of operational situation. Correct prediction must have matters for random coordination. We should also strive to have random coordination with as much planned nature as possible, which will increase the mastery of achieving effective coordination.

4. Tightly Organize and Ensure Continuity

Second Artillery campaigns coordination has wide range, rich contents, and complex relations. Operational positions are relatively fixed. Weapon systems have very apparent

characteristics, thus, there is great exposure factor. The deployment are highly dispersed, thus the communications and command chains are easily interrupted. Campaign coordination can be easily destroyed. Campaign commander and his command institution must be based on maintaining concentrated planning, unified coordination, and strict coordination disciplines of the forces participating in the operation to adopt effective measures in maintaining the uninterrupted coordination. They should tightly organize and assure the continuity.

1) Establish Highly Effective Coordination Organization

At every command center, we should build campaign coordination institution that is attended by relevant personnel of various armed services. These people are responsible for formulating the coordination plan and supervising its implementation **[end of page 195]**; assisting the commander at every level in timely adjusting or recovering the destroyed coordination, and responsible for looking after the random coordination. Second Artillery campaign corps must send coordination and liaison teams to every campaign corps with coordination relations in guaranteeing implementing the coordination plan and orderly execution of random coordination.

2) Establish Stable Coordination Communications

Joint operation campaign command institution will unify the organization of coordination communications. It will rely on the area communication systems in implementing information coordination. However, due to the relative weakness of communication systems, it is very easily becoming paralyzed due to the fact that nodes can be easily destroyed. Therefore, between the missile forces and coordinated operational forces and between the forces participating in operation within Second Artillery, we must establish corresponding coordination communications speciality in guaranteeing the smooth and uninterrupted communications.

3) Establish Effective Mechanism for Negotiations, Supervisions, and Adjustments

No matter planned coordination or random coordination, the formulations, implementations, and adjustments of campaign coordination must go through adequate negotiations, so that each force can implement the coordination according to the negotiated plan. At the same time, campaign commander and his command institution must timely grasp and report the situation of implementation by the coordinated forces through various channels. They will diligently accomplish the missions regulated by the coordination plan. After the coordination mechanism is destroyed, they should adopt measures in quickly restoring the coordination mechanism. When the situation changes suddenly or the original plan cannot be continuously implemented, they should timely adjust the plan and organize new coordination based on new circumstances or upper-level determination.

5. Obey to the Whole Situation and Coordinate with Initiative

Obey to the whole situation and coordinate with initiative refer to the coordination actions of the missile forces. They must start from the whole situation in a joint operation. It obeys and services the whole situation of a joint operation and actively organizing every coordination objects with initiative and correctly handling the relations between every coordinated object. Obeying the whole situation and cooperate with initiative is the basis for correctly implementing the coordination. This is because coordination plan prior to the operation is the prediction and judgment on the developmental trends of a campaign. It is formulated from the requirements of the entire situation of a campaign. It cannot possibly match completely with the realistic battlefield situation. **[end ofpage 196]** This is particularly true for the campaign operation under the informationized conditions. Once there are big changes of battlefield situation and the pre-operational predictions, every force participating in operation must follow the big situation and coordinate with initiative.

The coordination principles of obeying the whole situation and coordinating with initiative require the missile forces establishing a whole situation concept, strengthening overall consciousness, and following strict coordination disciplines. Based on the realistic battlefield situation, they should start from the overall situation and positively handle well on coordination relations with initiative. When the battlefield situation has not changed much, they should be strictly based on the regulated contents and requirements of the plan to implement coordination. When missile forces are the main coordination forces, they should stand on the footing of the whole situation and express the main leading functions of coordination. When Second Artillery is at an assisting and cooperating status, it requires paying more attention to the whole situation and actively coordinate with the main leading armed service with initiative to accomplish the campaign operational missions. When the coordination has discords or has suffered destructions, it should fully express subjective dynamism and strengthens its horizontal contact with the forces of other armed services based on the total campaign intention and operational objectives. Under the guidance of the commander of upper-level and his command institution, it should implement mutual coordination and cooperation with initiative. It should, adjust, restore, or rebuild the coordination mechanism and harmonious coordination relations as quickly as possible.

Section 2. Contents of Second Artillery Campaigns Coordination

Conventional missile forces working in coordination with army, navy, and air force in campaign operations are important operational actions of joint campaign. From generalized perspective, there is coordination with forces of various armed services. There is also internal coordination of the missile forces. No matter it is coordination with various armed services or internal coordination within Second Artillery, its coordination contents include: mutual coordination relations, coordination missions handled, concrete coordination items, classification of operational time and space, actions of every force, and methods of coordination. **[end ofpage 197]**

I. Coordination between Second Artillery Campaign Corps and Forces of Other Armed Services

Coordination between Second Artillery and forces of other armed services mainly refers to the coordination between the forces of every armed service. In general, based on the coordination plan formulated by joint campaign command post is to organize coordination surrounding the campaign patterns and main operational actions. The contents of coordination mainly include: coordination of Second Artillery and the forces of other armed forces in such areas as attacking targets, opportunities, trajectories, and flight paths. They also include coordination of Second Artillery and the forces of other armed services in areas of air security, ground defense, and aerial transportation of badly needed materials. They also include coordination between upper-level institutions or neighboring forces at such areas as, intelligence, target data, establishment of communications lines, and sharing of resources. During the coordination process, Second Artillery mainly is relying on upper-level coordination plan and instructions in actively implementing effective coordination. It will timely notify the neighboring forces on relevant information so that they can achieve unified overall coordination. Therefore, campaign commander and his command institution must accurately handle upper-level intention and coordination plan and make clear of the operational forces' action times, operational duration, operational areas, and target distributions and timely notify relevant armed services on such information as, firing times, missile deflections, and trajectory parameters. Moreover, in order to increase mutual cooperation, based on the coordinated operational plan of joint operational command post, it should timely dispatch liaison teams or liaison representatives to relevant units. Their responsibilities are to provide the missile forces' relevant situation to relevant units. At the same time, they should give feedback to friendly forces with regard to relevant situation, report or exchange battlefield information, and use firepower as the main method in implementing effective coordination.

Conventional missile forces in coordinating with armed services' campaign operations must be based on coordinating operational missions in timely grasping the battlefield dynamic intelligence information. They should strictly implement coordination plan and clearly define coordination missions, opportunities, measures, and requirements. They uniformly regulate coordination disciplines, actively and with initiative to closely cooperate, and ensure the unified coordination of operational actions. Conventional missile forces coordinating with various armed services in a joint campaign to implement campaign operation must use **[end of page 198]** planned coordination as the main method and random coordination as the supplement. Coordination contents must clearly define the focal points of such areas as, operational directions and land (or sea) areas, missions and the degree of target destructions, forces used, firing times and sequences, firing waves and time intervals, position defense, logistic support, intelligence and meteorology support, and coordination communications on relevant regulations and requirements.

1. Coordination with Air Force Campaign Corps

Main contents of coordination with air force campaign corps include: missions and firepower link-up, coordination of air control, coordination of air area protection, aerial transportation assistance, and sharing of information on reconnaissance intelligence.

In a coordinated operation with the air arms of air force, the conventional missile forces should pay focal point attention to the impacts on the targets that our air arms are implementing the aerial attacks. First, we implement attack to the enemy so that they will not recover their operational capabilities within a short time. It guarantees our air arms to obtain local and total aerial supremacy with minimal cost. Therefore, the main contents of coordination are: scientifically classify operational missions with the air arms of air force participating in the operation, opportunities for firepower effective link-up, and the extent that each has destroyed the targets. The requirements for the fighter aviation forces of air force focal point protection include every level of Second Artillery command posts, missile forces, and operational positions. Due to the limited capabilities of missile forces on self warning and aerial protection, thus, while strengthening the concealment of truth and displaying the falsehood and in mobile operations, it should implement close coordination with the air arms of air force, ground-to-air missile forces, anti-aircraft arms, and radar forces. They should stop the enemy raids outside the area of protection. It requires the air force transports to timely ship Second Artillery forward command posts, technical personnel, and urgently needed special equipment. It requires that after air force reconnaissance had detected the enemy raid intelligence, it should timely notify the conventional missile forces. At the same time, Second Artillery campaign corps should also timely notify air force on relevant intelligence of the targets.

[end ofpage 199]

2. Coordination with Naval Campaign Corps

When implementing planned coordination with the naval campaign corps, we should scientifically classify operational missions and the requirements on target destructions and to an optimal degree express the firepower superiority of each service.

In implementing coordination with the naval meteorology department, we should let the naval campaign corps provide timely the meteorology information of the sea areas and target areas. This will provide campaign commander some basis for making campaign decisions. When coordinating operations with the navy, the naval intelligence department should timely notify the enemy ship activities on the results obtained by its reconnaissance to Second Artillery campaign corps. It should also timely notify naval actions to Second Artillery so that it can provide some basis for the campaign commander to make firepower attack determinations. When implementing coordinated sea blockade with the navy, they should draw sea areas that are banned to sail, key passages of the sealed off areas, and draw the blockaded areas for missile firepower. The naval fleet must be responsible to blockade the sealed off areas. The firepower blockaded areas of the conventional missile forces must be effectively linked with naval fleet to ensure optimal blockade effects with minimal forces and firepower.

Second Artillery command post, naval advance command post, and the navy at the war zone must establish specialized coordination.

3. Coordination with Army Campaign Corps

Coordination with the army tactical missile forces must be scientifically classified operational missions and distribute the targets of attacks. Conventional missile firepower and long-distance firepower of the war zone must be effectively linked. This will form reasonable and mutually supplementing firepower system disposition, which will express firepower superiority of various forces to the optimal degree.

While coordinating with ground operational forces, we should be based on the requirements of army campaign corps to attack pre-determined important targets in order to achieve effective assistance to the attacking forces on the ground. With respect to the coordination with the logistic department of war zone, we should be based on **[end of page 200]** the operational deployment, quantify of forces, weapons readiness, and technical preparations of the missile forces to present military requirements and commonly used material support requirements of the forces. Based on the changing situation at the battlefield, we should timely provide logistic support. While we implement coordination with ground defensive forces dispatched by the war zone, prior to Second Artillery forces moving into positions, we should clearly define defensive missions of the areas, where the command posts of the forces responsible for war zone and Second Artillery forces are located to ensure the operational safety of Second Artillery forces. When coordinating with the attached air defense forces at war zone, we should be based on coordination plan and enter the deployed area according to schedule to ensure the air safety of the war zone and Second Artillery command posts. The command of air defense forces will still be implemented based on the original air defense command systems. The missile forces should timely notify the air defense forces on the times of missile firing.

4. Coordination with Local Armed Forces

Technical positions of missile forces, positions of readiness, and firing positions are focal point targets. Usually they are deployed in the depth of the territory, distributed widely, with multiple points, long lines, and most of them are deployed at mountains or hill areas far away from towns and cities. They rely on their own strengths and the strengths of the attached armed services, which will be difficult to accomplish the defensive missions of the wide operational areas. Therefore, we should have close coordination with the local armed forces and fully express the superiority of people's war. We should combine the points and surfaces and provide comprehensive protection to ensure the absolute safety of various important targets in the war zone.

II. Internal Coordination of Second Artillery Campaign Corps

Internal coordination of Second Artillery campaign corps mainly includes coordination between missile bases and other missile bases, missile bases and warhead bases, missile forces and support forces, and missile forces and defensive forces. **[end ofpage 201]**

1. Coordination between Missile Bases and Other Missile Bases

Internal coordination of Second Artillery is mainly referring to coordination of nuclear counterattack firepower between missile bases and other missile bases during the nuclear counterattack campaigns. In conventional missile attack campaigns, the coordination between the conventional missile forces of each missile base mainly is organizing target classification and firepower link-up. The contents of coordination are usually defined in the operational plan. When the powerful enemy implements military interference or nuclear threats, we should make focal point coordination between each base and the actions of nuclear and conventional missile forces. We should coordinate to establish the posture of double deterrence. In forming joint operational organization, we regard the coordination of the conventional missile firepower strikes and conventional deterrence actions as the focal points. We will implement firepower strikes and conventional deterrence to the powerful enemy. We will use nuclear strength to implement nuclear defense deterrence to the enemy and serve our nation's political and diplomatic struggles.

2. Coordination between Missile Bases and Warhead Bases

When Second Artillery implements a larger-scale nuclear defense campaign, due to the limited warhead stockpiles at missile bases at peace time, we should provide qualified warheads to missile bases from warhead bases. This will ensure the smooth implementation of nuclear defense campaign of the missile bases. During coordination, missile bases and warhead bases must timely transfer and hand over qualified warheads. Warhead bases providing qualified warheads not only should not impact on the accomplishment of nuclear defense attack operational missions of missile bases but also should avoid nuclear material or warheads underwent checks are ready at the firing positions for too long.

3. Coordination between Missile Forces and Support Forces

Coordination between missile forces and support forces mainly includes coordination between missile forces and every operational support factor, between missile forces and logistic support factors, and between missile forces and equipment protection. Each support **[end ofpage 202]** strength must be closely surrounding the accomplishment of main missions of the missile forces. In order to elevate reaction time of missile forces, every kind of support strength must be based on the operational flow to effectively arrange the sequence; make the focal points to stand out, and provide comprehensive support. Campaign implementation phase must make parts of operational support and equipment technical support stand out to ensure good surviving environment for the

operational strength. The operational support factors must arrive at the positions in time and technical conditions of the missiles must be good to ensure timely firing.

4. Coordination between Missile Forces and Defensive Forces

Coordination between missile forces and defensive forces mainly include the defensive coordination of important joints, such as, electronic defense between missile forces and electronic warfare forces at the operational areas; electronic jamming on the targets in the air, and missile penetrations. It includes coordination between the actions of missile forces and forces conducting hiding the truth and displaying the falsehood in camouflages, feigned activities, and deceptions. It includes the coordination of air defense between missile forces and the attached and assisting air defense forces. It also includes the coordination between the missile forces and the subordinating, attached, and assisting forces on ground warning and between the resisting forces. Coordination of defense must be implemented under the unified planning as a whole under the joint campaign command post. The defense of important targets such as, the center warehouse, firing positions, command posts, and missile forces in the operational areas of missile forces must be incorporated into war zone defensive systems. Second Artillery must provide defensive requirements. Initiative of counterattack must be implemented with war zone defensive forces as the main forces.

Section 3. Procedures and Methods of Second Artillery Campaigns Coordination

Coordination between Second Artillery missile forces and other armed services mainly is the coordination of missile firepower. Coordination actions must be tightly organized and implemented under the unified planning of the joint command post. Procedures and methods of coordination must be coordinated with the joint operational command and coordination system of organization, measures, and relations. They should be strictly based on the instructions of the joint campaign command [end of page 203] post and operational procedures of Second Artillery missile forces in implementing every coordination item. Through coordination contents of operational missions, attacking targets, attacking times, and attacking methods, they should realize the objective of implementing effective attacks. The internal coordination is uniformly organized by Second Artillery campaign command institution.

I. Coordination Procedures

1. Formulating Coordination Plan

Campaign coordination is operational coordination actions with high degree of cooperation. Missile forces and other armed service forces are different in operational preparation time, attacking capabilities, implementing methods, and battlefield requirements. If there is no meticulous planning and implementing adequate preparations prior to the operation, it cannot achieve close cooperation and uniformed coordination in operational actions. Therefore, prior to an operation, we should implement scientific

organization and formulate meticulous coordination plan. Coordination plan is formulated by the operational department of missile forces after receiving the coordination instructions from the joint operational command post. Formulating coordination plan can adopt such forms as map-annotated type, table type, network diagram type, or writing annotated type. Main contents of coordination include: classification of operational phases, situation that can appear in each phase, mission of each force, action sequences and methods, coordination methods, coordination command, coordination requirements, every support item in coordination, and when coordination is destroyed the procedures and methods of restoring it. Moreover, in the process of formulating a coordination plan, we should start from possible developmental situation of the battlefield. We should come up with several optional plans in dealing with the ever changing battlefield situation.

2. Establish Coordination Organization

Second Artillery missile forces must establish a coordination organization of its own at the basic command post, which consists of relevant personnel from all forces participating in the operation. It is responsible for supervising **[end of page 204]** the implementation of the coordination plan. It assists campaign commander to adjust or restore the damaged coordination mechanism in a timely fashion. Missile forces must mutually dispatch coordination liaison teams with other operational forces that have coordination relations. This is to guarantee the smooth implementation of coordination plan and implement effective coordination.

3. Link up Coordination Communications

Missile forces must establish unified coordination communications with other operational forces and the coordination special unit within the missile forces. Coordination communications are established based on the coordination relations. They are used to support the coordination of operational actions. Its main missions are: report timely the situation to coordination objects and provide intelligence to indicate targets and recognitions of friendly and enemy forces. Coordination communications mainly include: between the missile forces' basic or advance command posts and the corresponding command posts of various armed services. They should establish relay in the military lines or establish long conversation lines by relying on the local communications facilities, telephone hotlines, radio coordination communications special unit, and satellite communications relay lines.

4. Implement Coordination Control

Coordination between the missile forces and various armed services must be based on coordination plan and relevant instructions in timely implementing the negotiations in forming action plan that every force of coordination must follow. Every force of coordination must be based on the items negotiated in strengthening coordination control. Campaign commander and his command institution must timely grasp coordination plan and implement it through various channels. They should master with focal points on

every operational group (or direction,) the firepower coordination requirements between different attacking waves and the coordination between the missile forces and other armed services, coordination with militia, missile bases, warhead bases, support forces, air defense forces, ground defense forces, electronic warfare forces, and between strategic advance warning and aerial monitoring. They should supervise them to accomplish each mission item with diligence based on the unified plan. When coordination suffered destructions, they should timely adopt measures to restore it. When battlefield situation changes suddenly [end ofpage 205] or upper-level changes the decisions so that the original plan cannot be continuously implemented, the campaign commander and his command institution must be based on upper-level instructions to timely adjust the coordination plan and reorganize a new coordination.

II. Campaign Coordination Forms and Methods

1. Coordination Forms

1) Planned Coordination

Based on planned coordination refers to the implementation of coordination between Second Artillery and other armed services based on the formulated plan that was prepared in advance. Based on planned coordination must surround the total intention and possible operational missions of the joint campaign. While planning operational actions of Second Artillery, under the sponsorship of the joint campaign commander, the commanders of various armed services will negotiate together and use the joint campaign plan as the basis in forming the coordination plan that can be beneficial for expressing the superiority of various armed services and for joint campaign commander and his command institution to adjust and control the campaign progression. After the campaign gets underway, if operational situation does not emerge with grave accident, they should strictly follow the coordination plan in implementation. Following campaign development and the adjustment and changes of operational plan, the coordination plan must also make corresponding revision to ensure effectiveness of operational coordination.

2) Random Coordination

Random coordination refers to the implementation of coordination with other armed services based on concrete situation of the battlefield when Second Artillery encounters big changes at the battlefield and the original coordination plan is difficult to continue. The forces participating in a joint operation are many and battlefield situation is changing rapidly. No matter how meticulous the coordination planning and how reasonable the selection of targets, classification of missions, and operational timing, unexpected and sudden incidents can lead to difficulties in implementing the coordination plan that was prepared in advance. At the same time, during the campaign progression, there is the possibility that previously uncertain targets can emerge. At that time, we need to quickly adjust the coordination plan and reorganize our targets. [end ofpage 206] They have to

implement random coordination. Random coordination not only is an important form of coordinated operation but is also an indispensable supplement to the planned coordination.

2. Coordination Methods

1) Coordination According to Phases

Joint operation has longer duration and the progression is hard to control. Second Artillery should maintain close coordination with various armed services under unified coordination of the joint campaign command post, based on campaign plan, and on operational requirements of different campaign phases. Coordination according to phases must classify the entire process of operation into several big phases or steps. We should clearly define the coordination missions and regulate coordination contents and forces at each phase for the missile forces, other armed service forces, and attached forces (or elements.) Second Artillery must scientifically distribute the forces used in each phase to ensure the intensity of firepower attacks at important phases. This is to express the “Assassin’s Mace” function of the missile forces. During the implementation of campaign process, they should fully negotiate with various armed services in the coordinated operation. They should present different coordination requirements aiming at different campaign phases. They should formulate practical and feasible coordination plan based on battlefield situation to effectively control the campaign rhythm.

2) Coordination According to Missions

Through reasonable classification of operational missions, they should implement coordination based on the sequence of accomplishing the missions. Conventional missile forces in a coordinated operation with various armed services, usually implement coordination through clearly defining the targets of attacks and the degree of target destructions. It is based on campaign mission requirements and on the total quantity of targets of attacks based on the requirements of joint campaign commander. The reasonable distribution of the targets of attacks is also based on the operational capabilities of various armed services and the characteristics of the targets. When implementing joint attacks to the same target, through the analysis of the systematic nature of the target and its vulnerabilities, they should negotiate with various armed services in the coordinated attacks. They should classify their own sub-targets and the degree of destruction of these sub-targets. They should formulate coordination plan with regard to attacking timing and firepower link-up **[end of page 207]** in ensuring the accomplishment of campaign missions.

3) Coordination According to Time and Space

This is to implement coordination control on operational timing, duration, and sequence by the missile forces and other armed services. Adopting this coordination has greater nature of taking initiative. The organization of coordination is simpler. There is

relatively less dependence on communications support. Adopting the coordination form according to time, it has more stringent requirements on the forces' actions. If there is slight deviation, it can cause confusion of coordination. If it is coordination according to space, it organizes coordination reasonably on different areas and directions by the operational actions of the forces of various armed services. They will closely coordinate and assist at operational space. If it is the coordination according to time and space at the same time, it should scientifically regulate operational time and space. It should be based on operational requirements and operational capabilities, forms of actions, and the missions to be achieved by the forces of various armed services. It should be reasonably defined the directions (or positions) of expansion, actions areas (or altitudes) and the deadlines of starting and accomplishing certain operational phases (or times.) This is to prevent mutual "Crashing." While at the time of organizing well on campaign coordination, we should also pay attention to tactical coordination. **[end ofpage 208]**

Chapter 9

Second Artillery Campaign Support

Second Artillery campaign support represents a collective term for the various support measures and the corresponding actions conducted by Second Artillery campaign corps to achieve a smooth execution of campaign missions. Campaign support includes campaign operational support, campaign logistics support, campaign equipment support and campaign political works, etc.

Section 1. Second Artillery Campaign Operational Support

Second Artillery campaign operational support is a collective term for a series of assurance-procuring type of measures and actions integrally planned and organizationally executed by the campaign corps command mechanism for the sake of accruing the security of Second Artillery campaign corps and the smooth execution of campaign

operational missions. Being an important component of Second Artillery campaign support, its major contents would include the following nine categories: Reconnaissance intelligence support, target support, data and computational support, communicational support, shelter and protection against nuclear, biological and chemical weaponry, engineering support, campaign camouflage, meteorological support, surveying and mapping support, etc. Since the organization of campaign operation support is an important assignment of the campaign corps commanders and commanding mechanisms, it is generally organized and executed by the campaign corps commanding mechanisms after the commanders have proposed relevant support principles and requirements according to superior's intent and the campaign missions. Since campaign operational support represents an essential factor in forming the campaign strengths, organizing an effective campaign operational support would exhibit a very significant meaning towards the overall upgrading of the operational ability of Second Artillery campaign corps, leading to a secured and smooth execution of the campaign missions. [end of page 209]

I. Features and Requirements of Campaign Operational Support

Under informationalized conditions, the parameters of campaign operation support are continually expanding, with increasingly arduous missions and gradual broadening of the scope of its contents, non-ceasing elevation in the demands for overall wholesomeness and time-effectiveness, allowing the confrontational and technological characteristics to become more prominent, thus making the job of organizing assignments extremely complicated. Therefore, the strengthening of campaign operational support endeavors has become a powerful measure in ensuring campaign victory.

1. Features of Campaign Operational Support

1) Numerous Support Categories with Lofty Requirements and Difficult Missions

Since Second Artillery bears the "Double deterrence, double operations" mission, its execution of nuclear counterattack campaigns would normally be conducted under nuclear conditions. Although conventional missile strike campaigns are normally executed under the backdrop of a joint campaign; however, operations in the major directions would certainly encounter powerful enemies equipped with massive nuclear weaponry, thus rendering nuclear deterrence unavoidable. Since the environment would be adverse for operations fought under nuclear or nuclear deterrence conditions, the organization and execution of campaign operational support would constitute a very difficult mission. On one hand, campaign operational support would be able to create operational ability by assuring that a synthesized support is executed by reconnaissance intelligence early warning, missile observation, surveying and mapping of attack results, target intelligence, communicational transmission, data computation, meteorological observation, ground surveying and mapping, engineering protection, campaign camouflage, battlefield chemical defense, etc. Moreover, with respect to these contents of support, due to the numerousness in variety, height in technological content and astuteness in requirements, satisfaction could be achieved only by way of an unequivocal definition of the requirements, meticulous organization and provision of a timely,

accurate and reliable support, thereby earnestly assuring quality according to the operational mission bestowed. On the other hand, since campaign operational support penetrates the entire campaign process, campaign operational support should sustain a non-ceasing, multi-frontal guarantee of a smooth campaign execution, not only during the process of campaign, but also before and after campaign execution.

In view of the onerous mission and multiple content of campaign operational support, **[end of page 210]** the maintenance of the integral characteristic of operational support during the organization of campaign operational support is pronouncedly more important. Since every category of operational support would exhibit its own superiority and limitations, a solitary reliance on certain support strength and measures would not be able to accomplish the complex campaign operational support missions, requiring the addition of mutual augmentation to bring into play the integral function of operational support.

2) High Technological Content of Missile Weaponry Intensifies its Reliance on Operational Support

During a joint campaign fought under informationalized conditions, in line with the non-stop upgrading of the technological standard of weaponry equipment, the integral benefit demands of campaigns become increasingly significant. On one hand, since operational actions rely on operational support, it cannot abandon operational support for a single moment. On the other hand, the prerequisite of reliable support strengths become mandatory in bringing into play the operational effectiveness of the large amount of informationalized weaponry equipment in the battlefields. Issues such as whether the missile weaponry system could operate normally, whether the target could be hit accurately and whether the battlefield environment complies with the missile launching conditions, etc. reliance on the contribution of operational support is certain; in other words, missile weaponry systems would not be able to bring into play its deserved functions. A wholesome system could only be created by allowing missile weaponry and operational support to work with regularity and thoroughness under a consolidated plan organization, according to the objective law of campaign operations and the intent of the campaign commanders. Therefore, during organization of campaign actions, campaign operational missions can be accomplished only when the missile launching forces (or elements), the various specialized forces (or elements) and the various departments would all make a concerted effort to closely coordinate and cooperate in creating an integral entity according to the consolidated planning and organization of the campaign commanders.

3) Difficult Organizational and Coordinative Support Actions due to a Highly Dispersed Campaign Disposition

Since missile positions represent key targets for enemy attack, for the sake of increasing survivability, from bases to operational positions, the disposition is highly dispersed in the vast sovereign territory, allowing distances ranging from hundreds to over a thousand kilometers between bases, handing Second Artillery a special feature of multiple points in a vast scale. Therefore, extreme difficulty is brought upon the organization and

coordination of support actions, in particular the communicational support and engineering support. Besides the requisite of **[end of page 211]** a self creation of a massive and complex communicational network and the possession of a powerful engineering corps (or detachment), the full support of the national communicational network and regional engineering support strengths during wartime is needed, thus propelling the difficulty level to a new prominence.

4) Significant Difficulty in Support during Execution within a Fiercely Confrontational Environment

In line with the increasing exacerbation of confrontations between both sides within modern day campaign operations, the campaign operational support system has also manifested a very fierce confrontational character, attacking and destroying the opponent's operational support system, thus becoming an important item in the contents of campaign operations. Since operational support and operational actions mutually blend together, the differentiation between the two becomes weakened, with ill-defined borders with mutual infiltration, allowing operational support actions to exhibit a stronger combating nature, greatly increasing the difficulty of support.

It can be said that pure operational support actions have basically passed out of existence, allowing the various operational support actions and particularly intelligence support, communicational support, camouflage feigning and other contents to highly fuse together with operational actions, while some have actually become an important content of operational actions themselves. Therefore, operational support would simultaneously bear the two missions of support and counter-support, or the so-called "Service" and "Confrontation", allowing both support actions and operational actions to become highly integrated, thereby posing difficulty in differentiating between the two entities. In order to execute timely and reliable operational support, well-concealed and incessant counter-support must be executed to combat the enemy's support system, doing everything possible to sabotage and weaken the opponent's support strengths.

During future joint campaigns, due to superiority versus inferiority and deviations in technological standards within the weaponry equipments of our enemy and ourselves, operational support systems will be under the all time-space, all- directional and multiple-domain deterrence and sabotage by the enemy blessed with information superiority, thus creating some magnanimously prominent issues. Since at present the resolution of numerous defense measures of the PLA's missile forces is drawing a total blank, therefore, in the many aspects of reconnaissance intelligence, air defense, communicational support, etc., there exist out-of-control factors such as difficulties in intelligence gathering, severance in communicational liaison, malfunctioning of control systems, and ineffectiveness in support equipment, etc. that could possibly materialize. We must therefore fully assimilate the teachings from experience gained from a few recent localized warfare, **[end of page 212]** besides reinforcing technological research and the adoption of effective confrontational measures, we must optimally adopt multifarious support measures, including some that may appear obsolete but are effective

traditional measures when employed, in order to satisfy the requirements of supporting operations.

2. Requirements of Campaign Operational Support

A strict organization of campaign operational support according to the features and the fundamental law of campaign operational support of Second Artillery would pose some basic demands as follows:

1) Well-conceived Planning with Pre-determined Preparation

This represents the fundamental demands of Second Artillery campaign operational support, decided upon by the features of Second Artillery campaigns. Since Second Artillery is the nuclear missile forces and conventional missile forces under the direct leadership of the commander –in-chief, it represents the important strength behind realizing the active defense strategic policy of the PLA in restraining the enemy's launching of a nuclear warfare. Regardless of whether it involves the execution of a nuclear counterattack campaign or a conventional missile attack campaign, the attack target directly affects the overall situation of the warfare or campaign. Therefore, when organizing campaign operational support, it must incur well-conceived planning and pre-determined preparations, extensively gathering relevant information before the war started, predicting probable responsibility in the support mission. According to the standards and demands of an alert posture, restrain the various support policies (and pre-determined ones), executing focused training and preparation, in order to elevate the ability of complying with and contingency capability. Restraining policies (and pre-determined ones) should be complete sets, with considerations given to the synthesized utilization of the various support strengths, while support measures should be concrete and satisfy the operational requirements, thereby facilitating a speedy provision of support during wartime.

2) Timely, Reliable and Speedy Reaction

Due to the accelerated tempo of modern day campaigns, the timeliness element of support has become the important factor in upgrading command efficiency, reinforcing the speedy reactionary ability and defense capability of the forces. The timeliness of support refers to the speed of gathering, transmission and processing of intelligence, maintenance of a smoothness in command and cooperation, while every support measures must fight for every second without losing a single opportunity **[end of page 213]** in a timely process of bringing into play its function within the campaign tempo. The reliability of support refers to the truth of intelligence gathered, accuracy in the transmission of the various information, various support measures being regarded as substantial and effective, thus ensuring the bringing into play of the supporting function. Reinforcing the timeliness and reliability of campaign operational support represents a crux in the smooth completion of operational support. During a high tech warfare, with fierce combats in reconnaissance and counter reconnaissance, fraud and anti-fraud operations, the inaccuracy level of intelligence is on the rise; sabotage and anti-sabotage

combat are very fierce, with support exhibiting a strong continuity and repetitive nature, with greater requirements posed on quality; hefty expenditure in human and material resources, coupled with difficulties encountered in the replenishment process, a reliable support has become more pronouncedly significant. In order to achieve a timely and reliable support, it is mandatory that on the foundation of adopting measures for upgrading the personnel quality and equipment functions of the support strengths, to logically differentiate and utilize the support strengths according to campaign developmental needs, to rapidly react and agilely execute, providing effective support without losing the opportune moment, inspect support results in a timely manner, collecting support feedbacks to regulate supporting methods and support key points in a timely fashion, thereby satisfying the campaign operational requirements.

3) Take the Whole Situation into Account and Plan Accordingly, Support Key Points

The strength disposition of Second Artillery campaign has multiple points in a vast scale, with different models of weaponry, coupled with relatively hefty differences in environmental conditions and multifarious campaign modes, making it necessary to give overall considerations towards taking care of the requirements of the integral system instead of a certain aspect of campaign during execution of campaign operational support, in order to conduct a comprehensive support while avoiding inability to attend to all one's troubles, properly looking after the front, flanks and depth of the battlefield space. With respect to time, campaigns must be implemented from beginning to end, properly do well in continuous and incessant support. Nevertheless, a comprehensive support does not imply an average utilization of support strengths without regard to primary and secondary conductions, because the different directions and districts, different stages and time segments, diverse formations (or forces) etc. of campaign would not pose the same demands towards campaign support. Therefore, while taking the entire situation into account, the key segments should be grasped in order to execute a comprehensive support with emphasis on key points. Campaign commanders should base on the campaign missions, enemy's situation, battlefield conditions and support strengths to predict the probably progress of campaign, taking the whole situation into consideration in executing an overall planning, **[end of page 214]** differentiating the order of priority, giving prominence to key-point support strengths, logically organizing and deploying the various types of support strengths, focusing the main strength towards supporting operational actions that exhibit sizeable significance towards the overall campaign, rendering priority support towards the major battlefields, main directions and zones, key-point segments and forces entrusted with executing the chief mission, in order to ensure the completion of key-point missions. Simultaneously, give concurrent considerations towards the needs of other regions, other segments and other forces, thereby allowing the support work to bring into play optimum effectiveness towards the overall campaign. Moreover, dealing with accidental circumstances in a timely manner within the complex, ever-changing battlefield environment would also require some specific reserve support strengths to reinforce speedy support and sustain the support strengths.

4) Ensure Survivability, Sustain Stability

Campaign operational support must actively adopt protective measures to reinforce the survivability of the support system. Survival and support represent the two aspects of a single issue, with the former being the conditions and foundation, while the latter represents the objective and result. Since support would not be able to do anything at all without survival, survival has become the prerequisite condition towards striving for the support initiative. A wounded support strength that is prevented from recovering in a timely manner by the support measures of sabotage would renegade the sustenance of a non-ceasing support as simply empty talk. Therefore, the reinforcement of the survivability and regenerative capability of operational support systems would constitute an issue that must be resolved before organizing and executing operational support. Only by way of a tight and close organization and the simultaneous utilization of various measures could a non-ceasing campaign command and a sustained stability in campaign actions be ensured.

5) Close Cooperation, Integral Support

Second Artillery campaign actions involve a vast scope, with numerous directly and indirectly participating forces, miscellaneous assortment of campaign operational support items with difficult missions, making it impossible to rely solely on a singular support strength and measure to accomplish the support mission. For example, the provision of strategic target information data, roads and bridges support works, etc. would all require the support of relevant sources before completion could be expected. Simultaneously, since the various support assignments within the Second Artillery campaign operational support system would also exhibit an interdependency and a strict orderliness nature, only by way of organizing a close and tight cooperation on the inside and outside of a Second Artillery support system, [end of page 215] executing an integral support, could the campaign operational requirements be met.

II. Contents of Campaign Operational Support

1. Reconnaissance Intelligence Support

Second Artillery campaign reconnaissance intelligence support refers to the measures adopted for the provision of relevant intelligence to the various commanders in the hierarchy in their timely and correct affirmation of operational determination and commanding operations. The fundamental missions of campaign reconnaissance intelligence support would include the following: Timely and accurately collection of intelligence required by campaign operations, regarding the enemy situation as prime concern and including aspects such as topography, meteorology, politics, economy, etc., providing conditions towards the campaign commanders in their cognition of the battlefield environment, assessment of the situation, determination affirmation, battlefield posture seizure and the organization of other supports. The basic requirements of a campaign reconnaissance intelligence support would include integral utilization and

manufacturing products for peacetime and wartime use, multifarious measures, real-time support, glove-in-hand close cooperation, intelligence sharing. When organizing the execution of reconnaissance intelligence support, issues along the following aspects should be grasped while giving prominence to key points:

1) Establishment of a Healthy Integrated Reconnaissance Joint System

Plan as a whole in utilizing the various reconnaissance strengths and measures, creating an all-dimensional, multi-domain reconnaissance network. Reconnaissance against the enemy's campaign and strategic in-depth situations would be organized by campaign commanding mechanisms. It mainly involves the utilization of reconnaissance strengths that possesses long-range reconnaissance surveillance ability and some specialty reconnaissance capability within the composition of campaign, in addition to submitting request to superiors for reconnaissance assistance according to need. Ascertain while giving prominence to key-point situations such as the enemy's hidden operational potential, attempts, in-depth dispositions, utilization preparation of prime high-tech weaponry and information operational preparation, etc.

2) Consolidated Centralized Intelligence Processing

Campaign commanding mechanisms should make use of the intelligence center in consolidating and centralizing intelligence gathered from various sources, focusing the processing procedure; conduct a synthesized analysis, checking, verification and corroboration, quickly assessing its reliability level and usage value, allowing campaign commanders to propose policy basis and circulating a notice to relevant forces in a timely manner, **[end of page 216]** important intelligence would be transmitted on a "Report as collected" basis, with unchecked and unverified intelligence being labeled as such, requiring investigation at the same time as reporting. Transmission and processing of intelligence should fully utilize automated measures, thus upgrading the time-effectiveness of intelligence work.

3) Strengthen Reconnaissance towards Operational Results

Campaign commanding mechanisms should utilize various measures to ascertain while giving prominence to key points the enemy's command control, reconnaissance early warning, replenishment support system, in addition to the degree of damage after suffering attack by our side in airfields, harbors, high tech weaponry and assembly districts of large number of force groups, thus providing reliable intelligence towards grasping the campaign progress and organizing campaign actions.

2. Target Support

Second Artillery campaign target support refers to the actions executed for providing accurate and reliable target information towards the formulation of a firepower plan. The Second Artillery target reorganization work is an important fundamental work. During

peacetime, it would be the responsibility of the commanding mechanism's intelligence department and corresponding research mechanisms, while during wartime it would be the responsibility of the target elements within the basic command posts. The fundamental missions of target support would include: Gathering, target reorganization resultant information, real-time provision of target developmental information. The requirements of target support would include: precise positioning, complete elements, a significant directedness, accurate and reliable. When organizing target support, issues along the following aspects should be grasped while giving prominence to the key points:

1) Established preparation, Gather Target Reorganization Information

Strategic, campaign target resultant information represents a long-term fundamental war preparatory work of Second Artillery. It is necessary to complete a comprehensive preparation during peacetime, checking and verifying before the war while gathering target reorganization material. During peacetime the General Staff operational forces would directly lead, organizing General Staff second department, third department, communicational department, fourth department, surveying and mapping department, meteorological department and other units to join up with the Air Force, Navy and relevant departments of Second Artillery to jointly complete the list. Key point peacetime work for Second Artillery would include mainly the execution with directedness of intelligence gathering, reorganization and reserve storage against the enemy's national strategic targets. **[end of page 217]** In particular, execute reorganization and establish data files for various types of targets against the enemy's cities and important industrial sectors, petroleum, steel, traffic hub, etc. and other potentially strategic targets. Target materials required by conventional missile attack campaigns should be, in joint force with relevant intelligence departments during peacetime, collected, classified, reorganized and stored in preparation for wartime usage, in particular materials concerning the enemy air force bases, airfields, naval bases, harbors, missile positions, command centers, traffic hubs, energy facilities, etc. should be gathered while giving prominence towards the key points. Information regarding aircraft carriers and large number force groups should be gathered on a real time basis. While these materials should be well prepared before the war, the gathering and reorganizing of target materials should be executed continuously and incessantly.

2) Real-Time Reconnaissance, Revision and Supplementation of Target Results

During the process of executing campaign operations, the Second Artillery intelligence department should comply with the operational missions and instructions from the campaign commanders to formulate or revise target support planning in a timely manner, issuing target support instructions, organizing target support cooperation and communicational liaison, ready to receive real-time target intelligence information provided by superior, theatres of war and the various armed services. Utilizing various measures, closely and tightly organize the gathering of real-time target intelligence, providing the enemy target's action intelligence in a timely manner. Relying on military reconnaissance satellites plus domestic and foreign remote sensing satellites, in addition to establishing satellite reconnaissance target image information processing systems,

gather the latest target data on a timely fashion, executing supplementation, revision, completing target gathering, discernment, analysis and processing works towards target results in data bank.

3) Wartime Timely Provision of Accurate Target Information would comply with the Needs of Campaign Planning and Policy Making

During wartime, the target dynamic changing situation should be grasped in a timely manner. After a missile strike, conduct timely reconnaissance and assessment towards the target damage result, the suddenness and orderliness of nuclear counterattack campaign operations, putting a requirement that target support should be speedy and timely, otherwise an opportunity for combat could be bungled, leading to losses beyond estimation and calculation. Regarding cruise missiles and their corresponding warhead types, further dynamic target real-time intelligence is needed. Therefore, target support should actively adopt various measures and multiple channels to gather information, because only a speedy provision of such would the operational requirements be complied with. **[end of page 218]**

3. Data and Trajectory Computational Support

The Second Artillery campaign data and trajectory computational support represents computational measures adopted for obtaining data concerning the launching, flight and initiation of missile weaponry. The fundamental missions of data and trajectory computational support would include the following: Provide data for controlling missile launching, flight and warhead initiation in completing a missile strike, proving trajectory related information, accomplishing the computational mission in special situations, and providing computational information relevant to missile strikes. The requirements of data and trajectory computational support would include that it is timely, effective, accurate, reliable and continuous with no stoppage. In organizing an execution of data and trajectory computational support, the following issues should be grasped and given prominence to:

1) Close and Tight Organization, Comprehensive Support

During the process of organizing support, effective measures should be adopted in a timely fashion according to the situation changes in data and trajectory computational support. Every echelon of the data computation managing department should closely and tightly organize, conduct the duties in strict compliance with the service regulations of data and trajectory computation, reinforcing the management over the utilization of information, data and diskettes, putting an end to the various types of incidences involving loss of confidential secrets.

2) Close Cooperation, Timely Support

Since data computational facts involve various special fields such as firepower planning, target, control, sighting, checkout testing, launching, geodesy and meteorology, etc., it poses very lofty requirements towards mutual data transmission. The data computational element should closely cooperate with other elements, adopting multiple measures to ensure a timely, reliable, secured and smooth completion of the data computational support missions.

3) Give Prominence to Key Points, Effective Support

Campaign command mechanisms should give prominence to key points in properly grasping the various echelons of departments in charge of data computation, collecting geodesic surveying results on the missile positions, the fundamental parameters and testing parameters of missile weaponry, leading to an establishment of a position point-to-point data bank and missile weaponry relevant data bank. **[end of page 219]** Second Artillery operations should comply with relevant stipulations as per Second Artillery Firepower Planning Work Regulations, reporting relevant information material to the operational department of the Joint Chief of Staff, while simultaneously sending duplicates to operational bases for safe-keeping in sealed capsules.

4. Communicational Support

Second Artillery campaign communicational support represents the measures adopted by Second Artillery in executing campaign operational missions of establishing a reliable communicational liaison. The fundamental missions of campaign communicational support would include the following: Establish and maintain communicational liaison between the upper and lower echelons, between cooperative forces (or elements) and regional relevant mechanisms; within the campaign form, organize the execution of command, cooperation, warning reporting, intelligence sharing, nuclear safety control, missile observation, nuclear explosion detection (or observation) and equipment, logistics support communication; establishment and management of operational command automation systems; management of communicational facilities and electromagnetic frequency of operational regions; organize the execution of military mail service, etc. The basic demands of campaign communicational support would include speed, accuracy, confidentiality and non-stop continuity. When organizing the execution of communicational support, give prominence to key points in grasping issues as per the following aspects:

1) Reliance on Present, Prepared Facility, Integral Support

Fully utilize and consolidate the coordination of every available communicational facility, network within limited operational space including Second Artillery, theatres of war, post and telecommunications, public security, armed police, etc. Using present communicational facilities of Second Artillery and the theatres of war as support, and

with the supplementary assistance of regional civilian communicational facilities, organically unite the backbone function of the military communicational strengths with the potential strengths of the regional communicational personnel and material resources. In accordance with the needs of campaign command and campaign disposition, create a campaign communicational support system that has a crisscrossing penetrating pattern, multi-path roundabout format, multi-functional capability, thereby ensuring a stable, smooth, reliable and secured campaign command.

2) Multi-dimensional Composition, Three-dimensional Group Network

In compliance with campaign operational requirements, organically unite together the various communicational measures on the ground, underground, in the sky and space, **[end of page 220]** creating a highly automated communicational support system that is hierarchical, multi-measure, mutual union of wire and wireless facilities, while mutually augmenting with remedies, thereby ensuring blockade-free communication during every segments of campaign operations and under any circumstance.

3) Multi-echelon Internet, Surpass Direct Connection

Complying with the needs of campaign command, adopt a method that combines one that is in accordance with operational directions with one according to operational regions, organize a multi-echelon interconnected wireless communicational network and command dispatch communicational network, allowing missile forces in the same operational regions and along the same directions to fuse together into one communicational network, breaking up the traditional format of stepwise organizing communicational network according to subordination relation, agilely utilizing several communicational measures, directly establishing a reliability surpassing that of multi-echelon long-range direct communication, ensuring the execution of command according to echelon, while assuring supreme command and Second Artillery the execution of a vertical control, thereby conducting a surpassing-the-echelon type of command.

4) Anti-destruction and Anti-interference, Counter Reconnaissance and Theft Prevention

Targeting against the double threat of nuclear and conventional “Hard” annihilation and “Soft” sabotage confronting the communicational systems, and for the sake of reinforcing the survivability of communicational systems, in addition to preventing the loss of communicational confidentiality and ensuring the normal execution of campaign communicational systems, adopt various communicational support methods such as anti-destruction methods, communicational electronic defensive methods and communicational secrecy maintaining methods, etc., conducting communicational confrontation with the enemy, thereby ensuring an effective transmission of information. With respect to communicational anti-destruction, adopt various methods such as “Use sheltering engineering systems in anti-destruction, use mobility reserve communicational strengths in anti-destruction, employ canopy-frame type of network structure in anti-destruction, utilize a union of numerous communicational measures in anti-destruction,

use electromagnetic protection measures in anti-destruction, utilize the cooperative support of the mass in anti-destruction, etc.” With respect to electromagnetic defense, adopt methods such as hiding the truth and revealing the fraudulent, electromagnetic take-over, remote letter-posting, optimally organized network, counter supremacy with supremacy, etc. With respect to communicational maintenance of secrecy, adopt information confidentiality, transmission secrecy and facility confidentiality, etc.

5) Optimization Measures, Emergency Passage Assurance

Since optimization possesses an anti-nuclear function communicational measures, establish an emergency communicational system **[end of page 221]** for the sole purpose of assuring the minimum limitation for support towards campaign operations under nuclear conditions, absolutely guaranteeing that under such harsh nuclear reality the supreme command and campaign command mechanisms would still be able to execute effective command.

5. Defense against Nuclear, Biological and Chemical Weaponry

Defense against nuclear, chemical and biological weaponry represents defense measures adopted for avoiding or lowering the kill, wound and sabotage administered by the enemy’s nuclear, chemical and biological weaponry against our personnel and weaponry equipment, with an objective of optimally reduce casualty while maintaining the combat strength of the forces and the survivability of important targets. The basic missions in defense against nuclear, chemical and biological weaponry would include the following: Understanding the disposition situation of the nuclear, chemical and biological weaponry, ascertaining the enemy’s air-raid intention, sign, and assessing possible effects created by against the missile forces operational actions; tightly and closely organizing observation reporting service, delivering warning signals in a timely manner, organizing forces to execute defense; speedily ascertaining the enemy’s attack situation, deal with attacked aftermath in a timely fashion, thereby optimally recover operational ability. The fundamental demands of defense against nuclear, chemical and biological weaponry would include the following: Active preparation, speedy reaction, concentrated strengths, support key points, combining a plain crowd with specialists, forming an integral defense. When organizing the execution of defense against nuclear, chemical and biological weaponry, the following issues pertaining to several aspects should be grasped while giving prominence to the key points:

1) Establish Close and Tight Observation and Reporting System, Issuance of Warning Signals in a Timely Manner

Campaign commanders and commanding mechanisms should base on the defense strength and defense equipment in establishing an observation and reporting system that integrates the top with the bottom echelons, the masses and the specialists and the military with civilians, in order to discover signs of the enemy’s deployment of nuclear, chemical and biological weaponry in a timely manner, issuing warning signals at the opportune moment. Observation and reporting systems should possess relatively

powerful abilities in countering the enemy's electronic interference and firepower annihilation, thus assuring that the command system could continue to operate stably and reliably after being attacked. The stipulations for warning signals should be consolidated, concise, clearly defined and easy to remember. All communicational implements should have the priority of issuing defense warning against the enemy's nuclear, chemical and biological weaponry attacks. **[end of page 222]**

2) Fully and Properly Deal with Defense Preparations

Defense against nuclear, chemical and biological weaponry is a synthesized defense measure with very strong technological and masses characters. Only when defense preparations have been fully and properly dealt with, in addition to utilizing correct defense methods, could one expect to be calm when encountering danger, and be able to handle at will. Henceforth, an in-depth deployment after serious considerations would be advisable, generally requiring properly dealing with defense education; establish various healthy defense organizations, differentiate missions and deploy specialty support strengths while giving prominence to key points, executing the collection, manufacture, supply and stockpiling of defense instruments; construct various types of covering and hiding defense works, perfect the defense and livelihood facilities of defense works, in particular reinforce the defense preparations for important targets such as commanding posts, weaponry and weaponry equipment, goods, materials and instruments, foodstuff, water source, etc.; extensively unfold imminent battle defense trainings having masse defense as its prime, realistically grasp correct and effective defense technique. Simultaneously, the forces' mobilization, disposition and important operational actions should fully capitalize on the topography and meteorological conditions, disperse disposition, cover and hide actions, thereby avoiding or reducing losses due to the enemy's nuclear, chemical and biological weaponry attacks.

3) Speedy Ascertainment and Timely Dispel Attack Aftermath Misgivings, Execution of Correct Command on the Forces' Actions within the Affected Areas

After being attacked by the enemy's nuclear, chemical and biological weaponry, the campaign corps should rapidly ascertain the affected and damaged regions, parameters and degree of damage, reporting in a timely fashion to superior and send circular to the military and civilians in the theatres of war; rapidly resume operational command and cooperation, adjusting operational disposition in the proper moment, while adopting effective defense measures to continue executing the operational mission; organize rescue, urgent repair, fire-fighting and wash and decontamination, executing health quarantine, adopting every conceivably effective measures to speedily dispel attack aftermath consequences, optimally revive and maintain the operational ability of the forces.

6. Engineering Support

Second Artillery engineering support represents engineering measures undertaken to support the missile forces in a smooth execution of their campaign missions. **[end of**

page 223] Its objective is to provide the missile forces with working conditions mandated by operations and defense, upgrading the survivability, maneuverability, nuclear counterattack ability and conventional missile counter-strike capability of the missile forces in localized warfare under informationalized conditions. The fundamental missions of engineering support would include the following: Centering on campaign objectives and nuclear counterattack, conventional missile forces and defense operational actions, multi-purposely employ within theatres of war various engineering measures to reinforce, urgently repair missile positions and traffic engineering measures; construct emergency launching positions and campaign defense service; execute campaign engineering camouflage; employ engineering measures to dispel attack aftermath consequences caused by nuclear, chemical and biological weaponry. The basic requirements of engineering support would include a comprehensive program, dual utilization of peacetime and wartime, integral coordination, prominence awarded the key points, unity between the military and the people, union of masse and specialists. When organizing engineering support, the issues concerning the following aspects should be given prominence to:

1) Careful and Well-concealed Organization of Battlefield Engineering Reconnaissance

Only by way of knowing the ropes of battlefield engineering could a speedy organization of wartime engineering support be accomplished. Campaign commanding mechanisms should tightly and closely organize an engineering corps to conduct reconnaissance on relevant engineering measures within the theatres of war, clarifying engineering intelligence and related information needed for the implementation of engineering support. It should include the PLA's engineering facilities structure, resistance potential, etc. in addition to civilian engineering facilities that could be of service, the structure of the enemy's position systems, service structural features, the situation concerning barrier/obstacle match system and other engineering facilities. In particular it must be understood fully about the major operational directions, the attack targets within the main operational regions, roads (or waterways), bridges, ferries (or harbors), airfields and related geology (or topography), hydrological situations, etc. Conscientious research should be conducted towards the engineering intelligence information obtained, implementing synthetical and analytical assessments, proposing support suggestions, thereby providing a basis for the commanders in their determination of conviction and organizing engineering support.

2) Consolidated Organization, Integral Planning

Organically unite together all the engineering support strengths, the time, space and measures of engineering support activities within the entire operational theatre of war according to the features of campaign engineering strengths and engineering support, implement a consolidated planning and utilization to optimally bring into play the integral functions. **[end of page 224]** With respect to the command system, establish a consolidated engineering support command mechanism that complies with the requirements of Second Artillery campaign, creating an unobstructed command channel;

with respect to support disposition, giving prominence to key points deploy the engineering support strengths within the battlefields by centering on the campaign progress, targeting against the various campaign stages and features of diverse campaign modes; with respect to the utilization of engineering support strengths, attain the status of a unity of the military and the people, consolidated planning and synthesized utilization; with respect to the structure of the engineering system, implement entire distribution (or allocation), systematic program and establish an offense cum defense engineering system having the main body engineering as its backbone while uniting various set-forming engineering endeavors in accordance with the needs of campaign actions.

3) Establish Mobilization Engineering Support System

For supporting the forces' execution of frequent battlefield maneuvers, campaign commanding mechanisms should closely and tightly coordinate the strengths of regional traffic department and the militia in conducting mobility support while delegating the engineering corps as its backbone. On the foundation of trunk roads (or turnpikes) within the theatres of war, quickly construct short-cut routes, U-turn routings, simple scaffolding bridges in creating a crisscrossing-road traffic network; upgrade the passage thoroughness of existing roads by reinforcing and repairing engineering service; support a multi-directional maneuverability for the forces by eliminating in a timely manner the various natural and man-made obstacles on the mobilization routings.

7. Campaign Camouflage

Second Artillery campaign camouflage represents a synthesized hide-the-truth and show-the-fraudulent measures employed by the various reconnaissance services of the Second Artillery forces in concealing themselves or in deceiving and mesmerizing the enemy. The objective involves masking the truth while displaying the fraudulent, creating an illusion for the enemy, thus obstructing their reconnaissance and attack attempts. The basic missions of campaign camouflage would include the following: Conceal the campaign attempts, deceive and mesmerize the enemy in providing a secured environment for the smooth implementation of the campaign missions. It would include a planned utilization of various camouflage measures and instruments in conducting camouflage against troop disposition, position disposition and troop actions; establish fake targets such as fraudulent positions, deceptive equipments, etc., executing feign mobilization, feign electronic actions, and feign launching, etc. The fundamental requirements of campaign camouflage would include the following: **[end of page 225]** Taking off from the overall needs of campaign, consolidate planning and organize execution; synthesized employment of various types of measures, systems, coordination, imaging and true to life; reinforce the discriminatory nature, having a definite object in view (or purpose); reinforce supervision, inspection and management. When organizing the execution of campaign camouflage, issues pertaining to the following aspects should be grasped with prominence given to the key points:

1) Fully Utilize Natural Conditions, Agilely Utilize Various Measures to Conceal Oneself

Troop assembly, development, deployment in battle order, disposition alterations, engineering tasks, front delivery and rear transportation, etc. would all be suiting measures to different conditions according to time and place, fully capitalizing on topography, night darkness and inclement weather conditions to mask the execution of actions, in addition to utilizing mesmerizing color schemes, masking screens, smokescreen and other measures to lower the prominence of targets, altering the shapes of targets, dispelling various exposure signals in concealing the action schemes. Special attention must be given to reinforcing countermeasures against the enemy's radar, infrared, laser and other reconnaissance camouflage measures.

2) Install Bogus Targets, Construct Fake Positions, Deceive the Enemy

Campaign should unite together the actions of "Truth concealment" and "Fraudulent display" with plan in mind and according to plan, targeting against the enemy's feature of reliance on technological reconnaissance. Employ intuitive and simple camouflage material to construct and install fraudulent assembly regions, feign positions, fake commanding posts, bogus depots, etc. to disperse the enemy's concentration, erroneously attracting their troop strength and firepower while concealing our genuine disposition. Installation of bogus targets should comply with the basic requirements of campaign technological background and target nature, capable of avoiding the various technological reconnaissance employed by the enemy.

3) Fabricate Fraudulent Intelligence, Mesmerize the Enemy

In accordance with the campaign schemes and battlefield posture and targeted against the features of the enemy's commanders and the psychological state of the enemy soldiers, intentionally leak intelligence and spread bogus news, leading to the enemy committing mistakes in assessment and actions, while covering up our own genuine action attempts. Fraudulent intelligence must give expression to the importance factor of intelligence, catering to the psychology of the enemy, before accomplishing the objective of influencing the enemy's thoughts and policy decision. Simultaneously, it must mutually coordinate with actions, upgrading the sense of reality and degree of creditability, thus misleading the enemy into accepting the fraudulent as the truth.

4) Organize Various Feign Actions to Lure the Enemy [end of page 226]

Feign actions represent bogus military actions. By way of feign actions, feign images could be manufactured according to a plan and objective for the sake of attracting the enemy's attention in mobilizing its troop force while hiding our own schemes. Feign actions would include troop force and electronic false actions launching feign actions and other methods. Organizing feign actions requires the proper grasping of opportune moments according to the consolidated campaign scheme and the destined objectives,

mutually coordinating the feign actions with the genuine actions in order to strengthen the effect of deceiving the enemy.

5) Strict Camouflage Discipline

Since campaign camouflage involves a vast scale operation, a detailed and complex organization that emphasizes the integral effect, campaign corps must strictly formulate and abide by the camouflage discipline. Every force must implement camouflage according to a consolidated plan instead of going on one's own way. It must strictly stipulate the action time, routes and parameters for its personnel and vehicles; remove and erase the traces and tracks of its troop operation and actions, while maintaining the original ground appearance; enforce blackout on lighting, sound and radio; formulate communicational and secrecy regulations, etc. Moreover, it is also necessary to organize blockage of information among the militia and the masses, thus guarding against traitors and secret agents.

8. Meteorological Support

Second Artillery meteorological support represents measures adopted for the provision of meteorological intelligence needed by the execution of campaign operations and missions. It generally includes meteorological support within the missile launching zones and strategic target areas. The objective involves supporting the forces in their correct capitalization of the meteorological conditions, avoiding or reducing the danger of inclement weather towards missile weaponry, ground facilities and personnel, fully bringing into play the operational effectiveness of missile weaponry, thus smoothly accomplishing the missions. The fundamental missions of meteorological support would include the following: Provide the campaign commanders with weather report, forecast, warning of inclement weather and meteorological information regarding operational zones for their command policy decision making and campaign actions; provide the erosive parameters of missile re-entry into the atmosphere and weather conditions of target areas, weather information and nuclear explosion radioactive fallout forecast; propose at the proper time suggestions for adopting precautionary measures against inclement weather. **[end of page 227]** The basic requirements of meteorological support would include real time accuracy plus tight and close reliability. When organizing the execution of meteorological support, issues pertaining to the following aspect should be grasped with prominence given to the key points:

1) Establish a Comprehensive Meteorological Support System, Division of Work with Coordination of Effort and Strengthened Consultation

Second Artillery campaign corps commanding mechanisms should integrally organize a meteorological support force (or element) and regional meteorological stations and posts, creating a consolidated yet adaptive to individual needs within the meteorological intelligence network, implementing observation (or survey) according to the meteorological support plan, leading to a timely gathering of intelligence and information. The division of work in every meteorological station and post should

demonstrate a coordination of effort, mutually exchanging intelligence, strengthening consultation with each other, achieving the status of mutually complementary and profiting from intelligence, thus jointly perform a good job on campaign meteorological support.

2) Focus Main Strengths, Execute Support with Prominence given to the Key Points

Campaign Meteorological intelligence network should focus the main strengths in gathering meteorological stop-press bulletin and information along the major operational directions and important phases, in particular attention should be given towards grasping seriously disastrous weather, flood, glacial flood, freezing up of rivers and streams, etc., and to making timely reports to superiors while circulating a notice to subordinates and friendly neighbors. Support with prominence given to the key points should be rendered towards the troops (or force) responsible for the main operational missions, and the forces (or elements) that are gravely affected by meteorological and hydrological factors.

3) Unceasing Collection and Analysis of Meteorological Information, proposing Forecasts and Suggestions for Pursuing Advantages and Avoiding Disadvantages

Meteorological intelligence network should utilize the various observation (or survey) measures, in particular attention should be given towards the employment of remote metering, remote sensing and other advanced technology to widely open up intelligence sourcing, to comprehensively and unceasingly gather meteorological information needed by campaign, grasping its changes at all times, conscientiously executing analytical research, conducting correct assessment and estimation, thereby providing timely and reliable meteorological information and forecast for the campaign corps. Simultaneously, attention must be paid towards the changing meteorological situation, analyzing its influence towards the employment of certain important weaponry, assessing the probability of the enemy's partial influence on meteorology, proposing at a suitable time to campaign commanders and commanding mechanisms suggestions for capitalizing on the meteorological conditions and seriously calamitous weather to adopt preventive measures. **[end of page 228]**

4) Actively Engage the Enemy in Meteorological Combat

It is necessary to actively organize relevant strengths to intercept and decode the enemy's meteorological intelligence, in particular attention should be given towards the collection and grasping of intelligence indicating the probability of the enemy striving to affect partial or localized weather and hydrology, in order to facilitate guiding the missile forces in adopting the mandatory preventive measures. With respect to meteorological intelligence on our own side, adopt confidentiality measures to prevent the enemy from reconnoitering and utilizing, while allowing us to implement, when we see fit, feign actions on meteorological intelligence to mesmerize the enemy. Whenever conditions allow, we could manually affect localized weather and initiate a struggle with the enemy.

I. Surveying and Mapping Support

Second Artillery campaign surveying and mapping support represents a collective term for the adoption of various types of supporting measures in providing campaign operations with accurate and wholesome surveying and mapping material. The fundamental missions of surveying and mapping support would include the following: Provide campaign operations with accurate and wholesome geodesic material, support missile's accurate location and target hitting by accurately determining the coordinates, altitude, perpendicular deviation of the missile launching point; accurately determine the gravity acceleration within the launching positions, providing material on earth's gravitational field; jointly determine the locations for the facilities involved with missile observation and nuclear explosion survey; provide detailed maps on the pre-determined flight path of cruise missiles; provide the shape of the earth and geometric, physics data, target illustration and missile position map, topographical map, special subject illustrations and geodesic result material, etc. The basic demands of surveying and mapping support would include timeliness, accuracy, tight and close confidentiality and high efficiency. When organizing the execution of surveying and mapping support, issues pertaining to the following aspects should be grasped with prominence given to the key points:

1) Integrally Organize Surveying and Mapping Support Strengths, Creating a Highly Efficient, Close and Tight Campaign Surveying and Mapping Support System

Although campaign surveying and mapping support exhibits a relatively strong sense of being a special field, however, it involves rather extensive content and parameters; therefore, to smoothly accomplish the campaign surveying and mapping support missions, the campaign corps should mutually coordinate with the special-field technological strengths of the regional surveying and mapping department and compose a high-efficiency, close and tight surveying and mapping support system, in accordance with operational requirements while acknowledging the military special-field surveying and mapping support strengths as its prime subject. **[end of page 229]**

Under a consolidated organization by the campaign corps commanding mechanisms, clearly define a division of labor, initiate coordination, and earnestly completing the surveying and mapping support missions.

2) Conscientiously Do Well in the Job of Collecting, Reservation, Supply and Management of Various Maps, Surveying and Drawing Material and Instruments

Organize a survey system and collect various types of maps (including maritime and aviation maps, etc.), in addition to results and material concerning national grand locale and military control locale sites, investigate and sort out the data on theatre of wars' military geography, economical, military, political, meteorological, and topographical intelligence, and various types of terrains, in particular attention should be paid to collecting data on magnanimous changes in topography. According to the operational mission and superior's determination, clearly define the reserve quantities of the various

surveying and mapping material data and instrumentation, varieties and parameters, executing unceasing replenishment, supplementation and perfection, conducting revision and supplementation to localized regional topographical mappings, quickly recovering and rejuvenating sabotaged or destroyed national grand locale and military control locale sites. Provide campaign commanders, commanding mechanisms and the forces with the various needed material data in a timely manner, make use of and distribute war preparatory maps to the forces at the proper moment, reinforcing the management on surveying and mapping material data and instrumentation, paying attention to confidentiality, utilizing in accordance to stipulation and demands in properly organizing the requisition registration, retrieval and rearrangement service for maps and various material data, thus preventing losses and damages, in addition to making timely adjustment, replenishment of various maps surveying and mapping material adapt and instrumentation, supporting the requirements of a continuous and sustaining operation.

3) Reinforce Surveying and Mapping Support Technical Guidance towards the Forces

The surveying and mapping specialty department should organize strengths according to the realistic requirements of campaign operations to render technical guidance towards the forces, in particular organize proper guidance towards the forces' military geodesic imminent war training, paying special attention to their technical know-how in using the maps in unaccustomed complex terrains. Support and technical guidance should be executed with prominence given to the key points towards those forces responsible for the main missions. [end of page 230]

Section 2. Second Artillery Campaign Logistics Support

Second Artillery campaign logistics support is a collective term for the organization of various items of logistics service such as goods and material, transportation, guard service, technology, etc. for satisfying the Second Artillery campaign preparation and operational execution. Its major contents would include budget support, material support, transportation support, guard service support and ordinary equipment technology support, etc. It is an important component of Second Artillery campaign support, a materialistic foundation for the campaign actions, exhibiting a significant influence on the forces' operational ability, campaign command, campaign progress and outcome. Organizing a powerful logistics support would serve as an important assurance for reinforcing and upgrading the combat ability of Second Artillery in smoothly completing its campaign missions.

I. Features and Requirements of Campaign Logistics Support

1. Features of Campaign Logistics Support

Due to advancement in weaponry equipment and changes in modern day campaign operational features, profound changes have occurred in campaign logistics support missions, exhibiting many novel features as follows:

1) Operations under Nuclear Deterrence or Nuclear conditions, Logistics Survivability and Support Encounter Grave Difficulty

Since regardless of whether Second Artillery is executing nuclear counterattack or conventional missile attack campaign, the entire action would be conducted under nuclear deterrence or nuclear conditions, every element within the logistics support system, including facilities, material goods, equipment and logistics strengths, would be subjected to a severe amount of deterrence. Due to the extremely adverse logistics support environment, with such basic support facilities as roads and bridges being seriously destroyed, there is multifold increase in the expenditure rate of material goods required for operations, with the rescue mission on casualties becoming extremely arduous. In particular, during a conventional missile attack operation with a agile maneuverability and an expansive action parameter, **[end of page 231]** it is mandatory that an accompanying type of support be executed, making it a special type of support format. Hence, the support difficulty level is significantly high.

2) Highly Dispersed Operational Disposition, Logistics Support with Stalwart Independency

Since there is a high degree of dispersal in the operational disposition of Second Artillery campaigns, with distances over 1,000 kilometers between operational bases, campaign logistics must possess an independent support ability to adapt to the requirements of campaign corps autonomous operations. Every base should have sufficient material reserve in properly completing preparation for an independent support, with prominence given to key points such as bases and brigades (or regiments). Based on weaponry that the enemy might probably employ and our defensive strengths, estimate the types and quantities of material expenditure and conduct material reserve, pre-stocking medicine, instruments and sufficient transportation strengths. Due to the vast scope of base repair and replenishment endeavors, organize several specialty emergency rescue forces with special equipment, vehicle and general weaponry equipment, etc. properly equipped with mobile emergency repair facilities, endowed with the ability to dispatch emergency repair towards the positions at any moment. The initiative could only be seized when independent support preparations have been fully and properly conducted.

3) Integrally Combined Operation, Rigorous Requirements on Logistics Support

Second Artillery campaigns exhibit a strong sense of integrity or wholesomeness, a high demand for set-forming synthesis. Similar to operational support and equipment support, logistics support is an important segment of the set-forming synthesis of the weaponry system. Since any one of the segments of logistics, transport, material supply, guard service and technological support, ordinary equipment repair, etc. that could not keep up with the times would directly affect the progress and outcome of operations, therefore, the demands posed on logistics support are strenuous, requiring the completion of a comprehensive preparation. In accordance with the quantity of material delivered to the front, the number of casualties transferred to the rear and personnel transportation missions, etc., the transport department should formulate a highway transportation plan

and organize an execution according to the pre-determined policy. Whenever automobile transport ability should fall short, or when emergency transport should call for railroad and aerial transportation, application for assistance should be filed with superior logistics or the regional government. Hospitals at bases should establish several rescue organizations with relatively powerful technological strengths, readily prepared to dispatch to operational areas and execute emergency rescue work.

4) Mobile Operations with Frequent Switchover between Maneuver and Operation, Towering Requirements for Logistics Maneuver Support

When Second Artillery missile forces equipped with maneuverability executes a maneuver operation, **[end of page 232]**, due to serious deterrence of an enemy attack, it would be necessary to frequently alter operational positions, conducting maneuverable transfer. Therefore, since there will be a huge demand for various types of material goods, a tight scheduling with lofty requirements, logistics support should adapt to the needs of various types of mobile operations and execute a support with several modes, in particular the function of being an accompanying support during maneuvers conducted by the forces, etc.

2. Requirements of Campaign logistics Support

Features manifested in modern day campaign logistics have proposed even higher demands towards campaign logistics, as per the following:

1) Pay Attention to a Tight and Close Defense, Reserve Logistics Strengths

During a Second Artillery campaign, logistics strengths and operational forces generally constitute an integral disposition, with the rear zones together with facilities being ranked equal as an attack target by the enemy's long range attack weaponry, with calamitous results particularly when nuclear weaponry is deployed. In this regard, campaign logistics commanders must exhibit sufficient knowledge, fully and properly complete preparatory work and actively dealing with the aftermath results of having been attacked. Besides conducting patterns such as evacuation, sheltering, camouflage and maneuver to upgrade survivability, they must also construct logistics facilities with relatively sturdier defensive ability, thus reinforcing the capability to withstand an attack by the enemy's precision guided weaponry. Simultaneously, organize logistics guard strengths, coordinating operational forces to execute determined attack at the enemy that instituted harassing attack at our logistics actions via airborne and air-landing, in addition to small gangs of enemy special agents. Only by way of effectively preserving oneself could one be able to unceasingly execute logistics support under such harsh environment. The defense of campaign logistics support strengths should be conducted under the consolidated organized leadership of the campaign commanders and commanding mechanisms.

2) Abide by the Operational Determination, Organize Logistics Support

Second Artillery campaign logistics commanders should abide by the campaign operational intent, operational disposition, main operational direction and requirements towards logistics support, etc. in formulating logistics support policy and plan, scientifically planning and utilizing logistics strengths, tightly and closely supporting actions. It is also necessary to be able to at any time understand and grasp the operational intent of the campaign commanders and the demands towards logistics, **[end of page 233]** revising support plan and regulating support actions in a timely manner, thus allowing the execution of campaign logistics support to be mutually adaptable to campaign operational actions.

3) Advance Comprehensive Preparation, Foothold on An Independent Support

Since the campaign preparatory time is short for Second Artillery, and there are lofty requirements posed on logistics support, the work of logistics support is no doubt quite difficult. In order to satisfy the requirements of campaign logistics support while upgrading the speedy reactionary and sustained support ability of campaign logistics, an advance comprehensive preparation is mandatory. The more comprehensive the peacetime preparation, the more initiative-taking would be the imminent war logistics work would become. Therefore, campaign logistics should abide by the requirements of the operational pre-planning and the forces, fully utilizing peacetime preparatory time to construct and improve logistics facilities and defense engineering projects mandated by campaign operations. Reserve operational materials according to plan, unceasingly improve the battlefield environment, establishing logistics command automation systems and communicational network, in addition to determining a wholesome peacetime and wartime changeover organization command pre-determined policy and ascertain measures. On the foundation of peacetime preparations, during imminent war stage prominence must be given the completion of logistics mobilization, extended compilation of mobilization that supports the forces and renders mobilization expansion. Allow campaign logistics support to have the ability of independently accomplishing the support missions by a rapid adjustment, replenishment, emergency repair of material equipment, strengthen and repair, in addition to perfecting rear defense engineering endeavors. According to a pre-determined policy, unfold logistics mechanisms and forces to allow them the ability of independently accomplishing the support missions.

4) Focus Major Strengths, Support Operational Key Points

During a Second Artillery campaign, there are many units of logistics support with vast parameters, making it difficult for the limited logistics strengths to simultaneously satisfy all the needs of a full-dimensional support. In order to allow the limited logistics strengths to better bring into play its effectiveness, a well-thought-out plan must be organized, looking after the integral campaign, focusing the main strengths, giving priority to supporting the key points, while also looking after the needs of other aspects. Support the main operational directions and operational areas with prominence given to the key points, important operational phases and key-point opportune moments, in

addition to the forces responsible for bearing the nuclear counterattack operational missions. Therefore, during campaign operations, campaign logistics must grasp specific maneuverability missions support strengths, adjust support key points in a timely manner according to changes in the battlefield situation, allowing the key point forces, main battlefields and key segments to enjoy a comprehensive, timely and effective support.
[end of page 234]

5) Pay Attention to Integral Synthesis, Close Coordination and Cooperation

The integral nature of Second Artillery is pronounced, its mandatory operational material resource commands a wide variety in types, numerous in quantity, comprising ordinary material and special purpose material goods. Therefore, it is necessary to mobilize logistics strengths from different aspects according to a principle uniting unified supply with specialized supply, effectively organizing the various categories of logistics support. Campaign logistics should primarily organize its internal cooperation according to stipulations as per the logistics support plan, allowing the various logistics strengths to work in coordination. Furthermore, reinforce the external cooperation between theatres of war logistics and the regional relevant units. The main contents of cooperation would include the following: Military traffic transportation, encampment for the forces, supply of water and electricity, medical treatment offered to the rear, supply rations, ordinary equipment repair, petroleum products replenishment and other aspects. Logistics cooperation must achieve the status of having the leadership dovetailing the rank, the front linking up with the rear, every segment mutually linked together, enjoying a smooth obstacle-free relationship. Therefore, every echelon of logistics should set out from the integral campaign by taking the initiative to do well in the coordinative cooperation with every different aspect.

6) Strive for Nearby Aid, Give Prominence to Maneuverability Support

Since modern day campaign begins abruptly with a quick tempo, exhibiting large numbers of material expenditure and personnel casualty and losses, the demands for the timeliness factor extensive, stipulating that campaign logistics reaction should be extremely speedy and accurate, enabling the assembling of a magnanimous logistics strength within a short time to maintain same-step action with the forces, thereby supporting the operational necessities. Henceforth, it is mandatory to reinforce the foresightedness of logistics support, taking a lead in forecasting support missions, executing preparation, advancing from the most difficult and most complex situation, formulating various support policies, fully capitalizing on the automation measures, speeding up the transmission and feedback of information, while striving for executing nearby support towards units being supported. Execute synthesized utilization of various types of support measures, keeping an eye on things that facilitate the support forces in maneuver operations within vast parameters. Optimally reduce segments in support endeavors, deploy support mechanisms towards the front, ensuring mutually connection between separate support districts, maintaining relative stability, capable also of extensively executing maneuver support in line with campaign development, allowing the

forces to benefit from not only a timely logistics support during disposition, but also an unceasing logistics support during maneuver.

7) Persist in Diligence and Thriftiness, Upgrade Support Benefits [end of page 235]

Localized warfare fought under informationalized conditions and in particular nuclear conditions would pose increasingly pronounced reliance on support, while the structure of operational requirements also changes without ceasing, coupled with the significant relationship between logistics support organization and execution, the outcome of operations would be directly affected. Therefore, operational support benefits should be upgraded, regarding the savings in manpower and material expenditure as a criterion for sustaining operations, striving towards locating methods and paths that lead to high benefit logistics support. Since the technological content of missile weaponry is significant, while high production costs and lengthy manufacturing cycles help in generating extremely expensive price tags, greatly enhancing the virtue of optimally reducing expenditure in exchanging a relatively small price with maximum support benefit by way of reinforcing the battlefield logistics management. Therefore, logistics should pay attention to the consolidation of military benefit with economic benefit, while honoring a prerequisite of ensuring operational progress, reinforce the battlefield logistics management and logically employ manpower, material and financial resources in strictly executing the material expenditure criterion and replenishment norm, being very careful in reckoning, reducing wastage, thereby converting economic benefit into combat strengths for the forces.

8) Mobilize Social Strengths, Do Well in the Various Categories of Support

The Chinese people enjoy a glorious tradition of sustaining revolutionary warfare over a long period of time. During recent history, although there are significant changes in the logistics support content and support modes within modern day warfare, however, the reliance on the sustenance of the people's masses and the support strengths of the overall society continue to constitute an important principle of military logistics work. Making soldiers do the work of the people, giving considerations to both the soldiers and the people, consolidating the military and people into one entity, the social support format of dual utilization of peacetime and wartime would become the fundamental pattern for logistics under modern day conditions. Campaign logistics should take the initiative to make contact with the regional government and front-supporting mechanisms in negotiating matters concerning front supporting, fully bringing into play the superiority of the modern people's war, thereby accomplishing the arduous and strenuous logistics support missions.

II. The Content of Campaign Logistics Support

The basic duty of campaign logistics is the provision of direct or indirect materialistic support towards the weaponry equipment system of the personnel within the campaign corps. Its fundamental missions would include the following: [end of page 236] Fully

bring into play the functions of the various types of campaign logistics strengths, strengthen and reinforce the combat ability of the forces from the aspects of budget, material, sanitation, traffic transportation, etc., thus supporting the completion of the campaign missions.

1. Funds Support

Funds support refers to the execution of planning, allocation, replenishment and supply towards military budget. The central mission of budget support is financial support towards the smooth conduction of campaign actions. Its basic demands are: Logical allocation, support of key points, reinforcement of management, elevation of benefits, hard-working and thrifty, assurance of supply.

1) Funds Allocation and Withdrawal of Normal Budget

Implementing the various items of normal budgeting within the needs of campaigns should be based on the realistic strengths of supply and the supply norm, petitioning superiors for withdrawal and allocating funds to subordinates in a timely manner. Withdrawal petition and allocation in general should be dealt with through the national bank. Whenever national banks should be located at relatively long distance away from the operational areas of the forces, cash supply availability should be organized. During the process of campaign executions, logically stipulate its ready cash reserve quota and methods of replenishment according to the realistic needs of the various forces' cash expenditure, thereby maintaining certain specific funds supporting strength.

2) Operational Funds Support

The operational funds required during operations is generally based on the authorized strength forecast submitted by Second Artillery logistics to chief logistics for approval, generally based on the operational missions, campaign strength composition, sustained operational time period, war preparatory material stockpiling, and other situations. After being approved by the superiors, support would be conducted according to the budget organized funds support. When confronting emergency situations, Second Artillery campaign commanders could be allowed to approve acting payment responsibility, reporting to superiors while simultaneously issuing payments, absorbing such expense into the operational funds budget at a later stage.

Campaign operational funds should support the personnel's livelihood, rescue, rushed repair and transport of weaponry equipment with prominence given towards the key points. After the termination of campaign, check up on the accounts of military spending expenditure and report to superiors for final settlement of account. **[end of page 237]**

Forces under a base jurisdiction would be allocated with a specific amount of operational funds appropriation by the superiors in accordance with the operational missions borne by the forces, with payment being issued by the base commanders on the basis of

operational funds expenditure parameters and authority bestowed, submitting for reimbursement according to actual expenditure. Final funds revenue and expenditure accounts would be reported as a special subject at the end of the year or after the ending of the campaign. The supply of normal wartime normal funds, with the exception of some new stipulations, should continue to be executed according to peacetime regulations.

2. Material Resource Support

Campaign material resource support is a collective term representing the planning, reservation, management and supply of material resources required by Second Artillery. Its objective lies in the materialistic strengthening and upgrading of the combat strengths of the forces, ensuring the availability of their livelihood and operational needs. Its fundamental demands would include the following: Scientific planning, comprehensive preparation, all-round organization, grasping of the key points and the assurance of campaign mission completion.

1) Estimated Required Quantity of Campaign Material Resources

Before the war, campaign logistics commanding mechanisms should execute estimation on the types and quantities of main operational material resources needed by the implementation of campaign operations, providing a basis for the planning, reservation, replenishment and stipulations of expenditure quota of campaign material resources.

The parameters of the Second Artillery campaign material requirement quantity estimate would include mainly such materials with substantial expenditure and yet with statistics that are difficult to add up, such as fuel oil, rations, uniform and bedding, medical supplies, repair instrumentations, etc.

The basis for estimating campaign material needs would mainly include the following: The mission of this campaign, the participating force strength, probable duration, the supply criteria and expenditure regulations for the various types of material resource, etc. Methods of estimation would generally include the adoption of experience-guided calculated estimates, theoretical calculation, simulated estimation method, etc.

2) Material Resource Fund Raising

Campaign logistics commanding mechanisms should base on the quantity of campaign material requirement in actively executing fund raising. It should mainly adopt executing such patterns as considering supplying the rear as the prime target, conducting on-the-spot fund-raising as the supplementary target, in addition to supporting friendly neighboring forces, etc., **[end of page 238]** with elaborations as follows:

i. Rear Supply

This refers mainly to the supply executed by the Military Commission of the Communist Party Central Committee towards Second Artillery campaign logistics, and by Second Artillery logistics toward base logistics, from logistics elements towards base logistics, representing the major channel for campaign material resource planning. Due to the hefty material expenditure encountered in nuclear counterattack campaigns and extremely harsh battlefield environment, therefore, only by way of acknowledging rear supply as prime concern could comprehensive support be expected.

ii. On-the-spot Fund-raising

This refers to the self-conducted fund raising by subscribing towards the local region within theatres of war or in areas designated by the superiors. This fund-raising is in the form of commodities, mainly grain, foodstuff, fuel, daily necessities, etc. The advantages of this on-the-spot fund-raising is the saving time, lightening the pressure applied towards rear supply while satisfying the urgent needs of campaign operations. On-the-spot fund-raising must be sanctioned through regional government and strictly abide by relevant policy, looking after both the military and the people, in supporting the hidden potential of resources. Assistance should be rendered at the same time towards local region by doing a good job in production, fabrication and reserve, thereby ensuring the continuous and unceasing supply towards the forces.

iii. Troop Production

This refers to the forces unfolding various types of self-selected and self-controlled repair and recycling activities under the premise of not affecting operations and training, in order to enrich the material supplementation, improving livelihood and survival conditions for the forces. Organize factories for repair by re-matching component parts, repair shops for fabricating various types of alternate accessories for equipments, contributing as a measure towards supplementary supply.

3) Material Resource Reserve

Second Artillery campaign material reserve is divided into two classes of reserve, bases and Second Artillery, with the base reserve as the prime reserve. Each class of war preparation material reserve should implement according to the regulations as per Second Artillery War Preparatory Material Reserve Standards. The quantity of campaign material reserve would generally be executed in accordance with the reserve standards promulgated by the superior logistics commanding mechanisms, or by way of campaign logistics commanding mechanisms to propose an application for the approval of the superiors. The key point of campaign material reserve lies in the missile (or warheads) bases, with the fundamental demands towards base material reserve would include the following: Sufficient numbers, complete sets, superb functioning, stable and reliable,

ensuring that bases could rely on their own reserves during the first stages of operation, independently providing support. **[end of page 239]**

4) Material Resource Replenishment

Campaign logistics commanding mechanisms should abide by the requirements of the supply criteria, supply strengths and operational missions, in providing material supply towards the forces. It represents an important segment in material support. Towards those operational forces within fixed bases, fixed point supply is generally executed by base logistics depot (or oil depot). Towards mobile operational forces (or elements), the follow up force would execute accompanying supply. The concrete contents of material supply would include: nutritional foodstuff, beddings and uniform, medical supplies, fuel oil, repair instruments, raw material, electromechanical products, barracks material, transport vehicles and logistics equipment, etc. The major methods of material supply would include the following: Unite together the replenishment plan with replenishment applied for by subordinates, regarding replenishment plan as the prime factor; unite together front supply by superiors with subordinate allocation, regarding the front supply by superiors as the prime factor; unite together replenishment according to class with supersede class replenishment, regarding replenishment according to class as the prime factor; unite together rear supply with theatre of war fund-raising, regarding rear supply as the prime factor; whenever necessary, regulate, instigate and sow discord among units having supply relationship. (sic)

5) Material Management

Campaign material management would mainly include the safeguard, expenditure and control of campaign materials, with the key point being the management of material employed and brought by the forces and battlefield material retrieval. Effective measures should be adopted towards materials related to transport process and also materials in depot, reinforcing the management of such.

3. Guard Service Support

Campaign guard service support is the organization of guard service towards casualty, executing rescue and transport to the rear, representing a service activity in organizing campaign corps' sanitary anti-epidemic and protection. The fundamental missions of campaign guard service support would include the following: Organize and guide the forces in conducting sanitary protection and anti-epidemic undertakings; organize guard service strengths in assisting the forces' rescue, medical treatment and evacuation towards the casualty. Campaign guard service support must scientifically plan, closely and tightly organize in order to ensure the completion of the guard service support missions. **[end of page 240]**

1) Estimated Medical-related Depletion in Number

Depletion in number is a term referring to wartime force members who have lost their operational ability and leave the military for various reasons. Out of these, the “Medical-related depletion in number” refers to those casualty and sickened soldiers who require the guard service department’s evacuation for medical treatment and therefore leave active service. Campaign logistics commanding mechanisms should base on the commands’ estimate of campaign medical-related reduction in number and analyze the various factors that affect medical-related reduction, confirming an estimate on the medical-related reduction. The objective to that estimate mainly points to the provision of the formulation of a campaign guard service support plan and a basis for the logical application of the guard service strengths. The main content of that estimate comprises the reduction rate due to casualty and the reduction rate due to sickness. The basis for estimation mainly consists of forecasts on the forces being attacked and the sanitary situation surrounding the forces’ operational environment.

2) Organization of Medical Evacuation

The medical treatment and evacuation of the sick and wounded is being executed under a consolidated organization of the campaign logistics commanding mechanisms. This service is generally concretely organized and executed by the various echelons of rescue mechanisms towards the sick and wounded in accordance with the Hierarchical Rescue Principle. Timely medical rescue strengths should be reinforced towards the brigades (or regiments), in addition to grasping a specific amount of guard service mobilization strengths. The evacuation of the sick and wounded should adopt the patterns of hierarchical evacuation, stride-over hierarchical evacuation, specific evacuation, etc. Regarding superior’s front –reception as the prime factor, unite it with rear-transfer in organizing an execution.

Base hospital should organize for the fabrication of a field medical corps, being a branch of guard service mobility strength grasped by base logistics. Its main missions would include the following: Reinforce or take over the duty of brigade rescue post; responsibility for rescue mission on the casualty within nuclear weaponry kill/wound areas; finally, as a basis for expanding hospitals. Gradual increase in partial strength of the proper magnitude during wartime may unfold among base hospitals and brigade rescue post, bearing the mission of the treatment and transference of casualty. The rescue parameters of the field medical corps would include the following: When taking up the mission of early stage rescue, execute the rescue parameters of the brigade casualty post; When conducting rush rescue within nuclear kill/wound zones, its rescue parameters is equivalent to that of the rush rescue corps.

Upper echelon guard service department should either reinforce or extend medical rescue strengths to subordinates, offering active rescue towards the sick and wounded among the participating military, civilian engineering corps. **[end of page 241]**

3) Organize Campaign Sanitary Anti-epidemic Undertakings

Campaign logistics commanding mechanisms should base on the battlefield situation to organize sanitary reconnaissance in a timely manner, conducting sanitary propaganda education, formulating sanitary anti-epidemic measures, reinforcing battlefield sanitation management, improving battlefield sanitary conditions, prevention the development of various types of disease and in particular the communicable ones, thus ensuring the good health of personnel; whenever communicable disease is discovered, effective measures should be adopted in a timely manner in order to prevent its infesting spread into an epidemic, inducing reduction in the number due to sickness, thereby maintaining the combat strengths of the forces.

4) Organize Sanitary Protection

Campaign logistics commanding mechanisms should base on the sanitary protection plan in guiding the forces to execute sanitary protection knowledge education, conducting relevant nuclear, chemical and biological weaponry casualty rescue technique training; whenever the forces should encounter attacks by enemy using nuclear, chemical or biological weaponry, quickly dispatch nuclear casualty rescue squad to assist the forces in receiving and curing wounded personnel from the kill and injury area, and also contaminated ground, in addition to proposing suggestions for emergency medical treatments, identifying the category and function of the pharmaceutical preparation,, providing military medical guidance towards countering biological warfare.

4. Communications and Transportation Support

Communications and transportation support is a service activity when campaign logistics has utilized different transportation implements for transporting personnel and weaponry equipment material along the various types of communicational pathways in the campaign space. The fundamental missions of communications and transportation support would include the following: Logical organization, plan, utilization of various types of transportation strengths, timely transportation of personnel, weaponry equipment and material instruments, for satisfying operational requirement. Campaign logistics should fully bring into play the function of the integral support strengths of the military and the people, capitalizing on every available transportation tools to organize a joint-usage of a multi-pattern three-dimensional transportation, highways, railroads, and air freight transport, in addition to properly plan for a return transportation trip.

1) Railroad Transportation

Railroad transportation represents a major transportation mode for connecting the strategic rear with Second Artillery logistics mechanisms. When executing railroad transportation, base logistics should join up with relevant departments to accurately formulate an applicatory transportation plan for submitting to superiors, **[end of page 242]**, while organizing loading, unloading and escort services. The railroad transportation

plan within the parameters of the host theatre of war would have to be reported to that theatre of war for approval; regarding the special transportation and key point transportation outside of the parameters of the host theatre of war, a transportation plan would be formulated by base logistics and reported to Second Artillery logistics for approval. Campaign logistics should dispatch liaison personnel to reinforce the connection with railroad military transport department, grasping a timely cognition of the situation regarding the transport goods and operational status, in addition to issuing timely reporting towards the mechanisms and notifying the forces. When the force are conducting loading and unloading, campaign logistics should dispatch personnel to participate in the reconnaissance, inspect and repair railroad cars, linking up with reinforcing and stiffening instruments, lighting instruments and heating facilities, etc. in the loading and unloading zones. When the forces require transportation via the railroads, campaign logistics should meet up with headquarters in formulating a railroad transport plan, railroad cars loading and unloading plan and a transport support plan, etc.

2) Highway Transportation

Since the utilization of highways is an important mode of campaign transportation support, campaign logistics would mainly employ highway transportation to deliver materials to the various forces (or elements). When organizing highway transportation, it is necessary to focus the grasping of the transportation strengths of its class in utilizing a consolidated employment. In allocating the utilization of transport strengths, optimally abide by the organizational system in implementation. Conduct driving columns and teams, determine contact signals, closely and tightly organize security alert and camouflage, properly organize sky surveillance and sheltering preparation. Vehicles that pass through infected and contaminated road sections, both the personnel and vehicles should be decontaminated and disinfection. For facilitating a timely dispatch of vehicles on the move, cadres could be dispatched to the starting and ending points of the traffic hub in executing command according to need. When organizing night-time transportation, road reconnaissance should be reinforced, installing night-time signal identification, stipulating contact signals and reinforcing blackout enforcement.

3) Emergency Air Freight

When emergency air freight is employed as an auxiliary transport measure, general support is used to support the key points. Campaign logistics should base on the missions of frontal dispatch and evacuation to differentiate between primary and secondary, and degree of urgency, giving priority to supporting the key points with particular attention being paid towards reinforcing cooperation with air freight strengths, thereby strengthening the command dispatch of transportation. **[end of page 243]**

Section 3. Second Artillery Campaign Equipment Support

Second Artillery campaign equipment support refers to a collective term for actions for the service support rendered the requisite missile weaponry and set-forming facilities,

specialty instruments material and corresponding technology provided for Second Artillery in its execution of campaign operations under the consolidated leadership of the campaign commanding mechanism. It represents an important content of Second Artillery campaign support. Since missile weaponry equipment system commands the position of being the materialistic foundation of Second Artillery campaign operations, its support not only penetrates the entire process of Second Artillery campaign operation, but also its support result would directly affect and even decide the outcome of Second Artillery forces operations.

I. Features and Requirements of Campaign Equipment Support

Due to features of complex system and high technological content of the missile weaponry employed, the Second Artillery campaign exhibits a significant reliance on equipment support, therefore, it possess clearly visible features and proposes high standards in support demands.

1. Features of Campaign Equipment Support

In view of the complex structure of the missile weaponry itself, with features of high demand for set-forming requirement, in addition to some new features that appear under the conditions of fierce confrontation in the battlefields, changes occur in the strength, modes and methods of Second Artillery campaign equipment support, manifesting some new characteristics.

1) Numerous Support Items, Set-forming Nature is Significant, High Technological Content

In view of the fact that the entire system is composed of a few sub-systems of missile warheads and missiles bodies, ground facilities, operational positions, etc., involving a few scores of professional contingents, only by way of systematic set-forming could operational effectiveness be generated. [end of page 244] If any major equipment platform should develop problems, the integral operational action would be affected. If the weaponry equipment technological index should be ultra poor and out of tolerance, missile launching would be delayed and even leading to failure in launching, directly affecting the progress of the strike campaign. In order to ensure the accomplishment of the operational missions, a keen-witted and capable equipment support strength must be organized, strictly examine carefully to ensure that it is done according to standard, allowing any technical issue that might affect the operational ability of the forces to be resolved prior to launching.

2) Dispersed Disposition, Inconvenient Traffic, Grave Support Difficulty

Since the Second Artillery operational positions are dispersed across vast areas, operational zones are separated by a few thousand kilometers, with one singular group of positions generally dispersed within a parameter of a several thousands square

kilometers. Moreover, to increase survivability of the forces, operational positions are mostly established among high mountains and lofty hills with inconvenient traffic, with few passable roads, plentiful bridges, while mountainous regions are easily affected by inclement weather conditions, freshets roaring down from the mountains, ice and snow sealing off the mountains, etc., subjecting weaponry equipment support to a high degree of difficulty.

3) Multifold Equipment Dysfunction Mechanizations, Numerous and Diverse Support Content

During modern day campaigns, there are many types and patterns of mechanizations that generate dysfunctions and breakdowns in weaponry equipment, not only is the power of the traditional “Hard” sabotage becoming increasingly significant, but also the various novel types of “Soft” sabotage will generate many brand new sabotage mechanizations, such as control procedures in a state of chaos and becomes out of order, with data being swallowed by “Computer virus”, in addition to having the raw materials of weaponry equipment developing structural changes in their basic natures, etc. Simultaneously, when the two “Hard” and “Soft” types of sabotage mechanizations are mutually united together, the damage situation of weaponry equipment would be complicated and multifarious. Besides, since the structure of weaponry equipment is generally complex, precision and is often a compound entity of many high technologies, any equipment (or set of equipment) of missile weaponry will have a high degree of technological density. For example, cruise missile is a synthesized product of many high technologies such as micro-electronic technology, sensor technology, computer technology, signal processing technology, propulsion technology, etc.; therefore, executing support would involve a few scores and even hundreds of issues pertaining to high technology, making the difficulty in inspection survey and repair of damaged equipment to become increasingly significant, **[end of page 245]**

2. Requirements of Campaign Equipment Support

Operating under informationalized conditions, Second Artillery campaign operations would propose even higher demands, concretely manifested as follows:

1) Meticulous Planning, Ample Preparation

Since the equipment technological support of the missile forces exhibits an extensive content, high demands, vast parameters, strongly technologically inclined, disallowing even the least deviation, it is necessary to reinforce the meticulous nature of the plan. Hence, the equipment support mechanism and the forces (or elements) should be organized in a timely manner to tightly and closely formulate the equipment support plan, do well in the fund-raising (sic, request for allocation?) and stockpiling of equipment material, properly conduct the various works behind technological preparation and positions preparation, in addition to reinforcing the connection between the various functional departments and service department, taking the initiative to coordinate relevant matters, striving for the support of strengths from equipment, technology and repair, etc.

2) Make Overall Planning, Support Key Points

During a Second Artillery campaign operation, due to the employment of many types of missile weaponry, extensive equipment support work, equipment commanders should center on support key time segments, disposition of support strengths and other key point issues to unfold the various support works. Particular attention should be paid towards an overall planning that takes firepower units into consideration, placing equipment support key points at the center storehouse, giving prominence to the key points in missile unit tests, synthesized tests, warhead rest, data preparation, warhead attachment, fueling and air-filling and other segments. During equipment support organization, the main technical personnel, major supporting equipment and the majority of replacement parts should be concentrated into the center storehouse, giving priority to doing well in the equipment support work in center storehouse. Simultaneously, it is also necessary to do well in the preparation of launching ground technological support.

3) Stand Firm on Self Reliance, Strive for Support

The specialty nature of missile weaponry equipment has determined that equipment support would be a specialized support. Issues ranging from equipment, material to technological service would have to be resolved by Second Artillery itself. **[end of page 246]**. Therefore, the Second Artillery equipment department should earnestly reinforce a comprehensive establishment undertaking for its support strengths, including the following endeavors: Strengthen the equipment support system, nurture a technological backbone force that is “Overly hardened”, perfect equipment support measures, keep sufficient missiles, ground facilities and instruments in the arsenal, improve upon the equipment support modes, thus unceasingly reinforcing its inherent equipment support ability. Regarding items that are still missing in the forces or towards which it still lacks self-reliant ability, actively strive towards seizing the technical support of national scientific research and the industrial department, requesting the technical personnel of industrialists to execute final checking, repairing weaponry equipment seriously damaged during battle while providing key point spare parts, etc. In this connection, the aspect of preparatory work should be completed during peacetime, perfecting the wartime equipment mobilization system, establishing wartime mobilization and front-supporting mechanisms, formulating a plan for the technological strengths, facilities, requisition of civilian vehicles, machinery and related implements in wartime expropriated grounds.

4) Agile Utilization of Support Strengths and Support Modes

Since equipment support strengths command a complex structure with numerous segments and equally high demands towards support, a special requirement is posed against consolidation in command and close knit coordination. Commanders in every echelon should agilely utilize support strengths when organizing equipment support. A meticulous organization and a logical composition should be ensured towards the various support strengths, doing well in the “4 Unions”, as follows: The integration of the military and the people, fully bringing into play the power of the equipment technological support of the People’s war; the integration between support and joint service support,

reinforcing the foundation and basis of equipment technological support; the integration between the Second Artillery missile (or warhead) bases, the missile brigade (or equipment inspection regiment), allowing the different hierarchies to closely connect; the integration of the best in technology with the large group of commanders and fighting members, allowing equipment support to exhibit a widespread masse character, optimally bringing into play the integral support power. During execution of support, collect and analyze the equipment support situation in a timely fashion, dealing with various technical issues in the proper timing, meticulously organizing support while doing well in support coordination.

5) Ensure Proper Cooperative Effort, Bring into Play the Integral Support Superiority

Cooperative effort would mainly include the cooperation between such aspects as equipment support mechanisms and headquarters, logistics, front-supporting mechanisms, etc.; cooperation between equipment support elements and operational elements; [end of page 247] cooperation between the various support elements and weaponry equipment, in addition to transportation coordination of various material resources; coordination between front dispatching and evacuation, connection between the various transportation strengths and coordinated concerted action between the processes of loading and unloading, etc. cooperation with headquarters would mainly allow the grasping at all times of the replenishment, mixing and blending plans; communicational support and defense, etc. Coordination with logistics would mainly be the cooperation between highway transportation and railroad transportation plans, and cooperation between the various types of logistics material resources. Cooperation with front-supporting mechanisms mainly refers to the determination of the disposition if the front-supporting mechanisms, the strengths of regional material supply, transport, repair and storage, etc and supply modes. While executing cooperation, consolidate all planning effort, optimally bring into play the integral power of equipment supply strengths, executing support effectively, unceasingly and in a timely manner.

II. Contents of Campaign Equipment Support

The fundamental missions of Second Artillery campaign equipment support would include the maintenance of precautionary alertness level or sortie rate by operational equipment according to the determination of campaign commanders, ensuring weaponry equipment to maintain a sound posture when used during operations, allowing equipment to recover its equipment operational ability at optimal speed after being damaged. According to mechanism installation of the various classes of the equipment functional departments of the campaign corps, Second Artillery equipment support could be divided into weaponry equipment support, technological support and positions service support, etc. Each specialized service support should concretely organize the execution of its duty under the consolidated command of the campaign equipment support organization command mechanisms.

1. Weaponry Equipment Support

Weaponry equipment support refers to measures undertaken by the Second Artillery campaign corps, during its execution of campaign operations, in providing missile weaponry equipment, interchangeable equipment and spare parts with sound technological functions to ensure meeting the campaign operational needs of its forces. The fundamental missions of weaponry equipment support would include planning, fund-raising, stockpiling, supply, transport quantitative maintenance, etc. towards special weaponry and its site-forming ground facilities, propellant, transport tools, interchangeable equipment and repair spare parts (or spare components). **[end of page 248]**

1) Reserve Storage and Supply of Weaponry Equipment

The reserve storage and supply of weaponry equipment represents the provision of a total process support work, ranging from planning, order placement to quality checking before acceptance, for the use of the operational forces. It would generally include the reserve storage and supply of warheads, missile bodies, ground facilities, spare parts, propellants, interchangeable equipment, in addition to weaponry equipment regulation and replenishment, etc.

2) Maintenance of Weaponry Equipment

Weaponry equipment maintenance support carries out the three-tiered support system pertaining to Second Artillery, bases and missile brigades (or regiments). Its major missions would include the following: Organize the reserve storage and supply of missile weaponry equipment spare parts, maintenance equipment and quantitative measurement facilities. Organize missile weaponry equipment technical repair, guiding the forces in the correct utilization, maintenance and repair of weaponry equipment. Equipment maintenance should be based on the requirements of the campaign missions, executing general quantitative and qualitative inspection and repair towards participating equipment, allowing it to attain the stipulated intact condition; organize battlefield rush repair on war-damaged equipment, basing on the types and degree of damage of the war-damaged equipment and regarding the forces responsible for executing the main mission as key point, adopt a method that unite part-exchange repair and original piece repair, according to urgency priority execute orderly repair sequence that gives priority to major equipment to be followed by other equipment. Organize evacuation repair that mainly include emergency treatment given to weaponry equipment that could not be repaired on site followed by rapidly organizing evacuation.

3) Quantitative Measurement Appraisal of Specialty Equipment and Laboratory Testing on Propellants

The main missions of campaign weaponry equipment quantitative appraisal and laboratory testing of propellants would include the following: Organize the execution of

quantitative measurement and appraisal of missile weaponry system and other equipments, complete laboratory testing, analysis and timely authentication of propellants. The organization of campaign equipment quantitative measurement appraisal and propellant laboratory testing should be based on the needs of the campaign missions, organizing timely quantitative measurement support strengths to conduct quantitative measurement appraisal towards the various types of instruments and meters designed for ground testing, launching and sighting facilities, **[end of page 249]** organize and guide laboratory testing work on liquid propellants. According to the situation organize and guide flaw detection inspection, ensuring its achievement of the standard and requirements of operational usage.

4) Weaponry Equipment Management

Equipment management should base on the campaign missions and battlefield environment in formulating and perfecting an equipment management system, conducting supervision and urging towards inspection with plan on hand; giving prominence to key points in inspecting the situation of the maintenance, upkeep, caring and inspection works, with particular attention being paid to reinforcing moisture, sun, coldness, fire and sabotage resistance works under field operational conditions, to ensure that weaponry and equipment would stay in sound technical posture.

2. Campaign Technical Support

Campaign technical support refers to a series of technical measures adopted for assuring the smooth launching of missile weaponry and completing the strike missions. In view of the complexity of the technical equipment with multifold specialized categories employed by the missile forces, its operational ability exhibits a strong reliance on technology, technical works to a great extent restrains and determine the campaign tactical actions of the forces. Hence, the reactionary time for dealing with technical issues, quality and reliability would pose significant influence towards campaign commanders in their determination commitment. Campaign technical support practices the two-class support system pertaining to Second Artillery and missile bases, with the relationship between the two being a matter of guiding and being guided. The mission of Second Artillery campaign technical support would slant towards the plan aimed at the overall technical support and the allocation and usage of the technical support strengths, while bases would pay even more attention towards organizing the forces' technical support strengths in executing on-the-spot technical support, leaving the concrete portion to be the responsibility of the chief engineer of the equipment department in organizing technical personnel for its execution.

1) Technical Final Checking

Technical final testing refers to a series of actions during campaign operational process as follows: To ensure the reliability of the operational deployment of missile weaponry, the various classes of technical support mechanisms would organize professional and technical personnel to execute technical actions in the form of supervision, guidance,

assessment, examination and verification towards the important technical application, important sections and key point data with respect to the inspection and employment of weaponry equipment by the forces. **[end of page 250]** Technical final checking is a fundamental work of technical support, and is also an important action content of campaign technical support.

2) Technical Handling

Technical handling refers to situations that lead to affecting missiles inability to execute normal launchings, such as sudden changes in operational missions (including attack targets) and weaponry equipment developing malfunctions, meteorological conditions, etc. It would generally include advancement or delay in the time of launchings, changes in launching directions or targets, incomplete launchings, etc. Campaign equipment support strengths should base on various different situations that surfaced in formulating handling policies in order to correctly organize a course of action. Technical handling would generally be organized for execution according to the equipment technological support system. It is concretely conducted by chief engineers from the various echelons in the hierarchy in organizing the related technical strengths. Any technical issue that could not be handled by a particular class or echelon should be reported to superiors in a timely manner, requesting the handling or assistance in handling by superior technical strengths. Regarding serious technical issues that a particular echelon could not handle, timely report should be submitted to superiors while adopting specific emergency controlling measures to prevent the spreading of the malfunctioning cause or damaging other weaponry equipment. During the process of handling missile technical malfunctions, the various echelons should strictly abide by the operational norm and equipment utilization permissible authority, stressing request for reporting, forbidding hiding the truth or taking the liberty to disassemble or remodel the equipment, etc. The technical data, handling policy and handling conclusion of the technical handling process would be recorded on file, serving as a reference basis for the campaign operational weaponry equipment operating policy.

3) Supplementary Technical Policy

Supplementary technical policy employs the man-machine mutually alternating system to supplement the campaign equipment technical policy by utilizing computer technology to gain thorough understanding through comprehensive study of modern scientific theories and technical methods of command, management science, military operation research and human intelligence, etc. It mainly involves going by way of the man-machine system to conduct against the target quantitative, qualitative and synthesized (statistics, inference and simulation) analysis, executing assessment, forecast and optimization towards policy issues. **[end of page 251]** It is also possible to generate policy decisions through logical inference followed by assessment. Supplementary technical policy system (also named the man-machine mutually alternating system) is an important tool in the execution of campaign equipment support, capable of speedily collect, process, transmit, store and automatic retrieval of information and relevant intelligence information, etc. Since it is also capable of extricating equipment commanders and commanding mechanisms from

large volumes of routine and repetitive activities, it exhibits significant meaning towards equipment technical support in upgrading its timeliness, reliability and accuracy.

3. Position Technical Service Support

Since operational positions represent the fundamental basis for the execution of defense and operations by the forces, important prerequisite conditions for realizing the operational policy of “Close and tight defense, key-point counterattack” would include the assurance of normal operation for the various facilities and the maintenance of sound conditions for the fundamental installations within the position zones. The basic missions of position technical service support would include the proper management and safeguarding of positions suitable for conducting campaign missions by employing timely, reliable and effective support measures, thereby providing a sound battlefield environment for missile attack. This environment should include requisite conditions that mandate the suitability of the defense engineering internal setup for the survivability of personnel and their conduction of operational preparations, in addition to indispensable defense engineering external facilities that would be satisfactory for the execution of operations.

1) Position Material Support

Position material support refers to the execution of fund-raising, reserve storage and replenishment works on material resources such as water supply, fuel oil, installations, equipment and spare parts, etc. for the sake of ensuring a sound position environment. The fund raising of interchangeable material resources is relatively easy since there is an ample source, and should be resolved according to position requirements by relying on funding request applied towards superiors coupled with a small portion via self purchasing. Material reserve and storage and management should be able to ensure adequate quantity of reserve storage that would not only satisfy needs but also prevent overstocking wastage. Not only should the reserve and storage disposition and differentiation be logical, with assortment variety in types being comprehensive and form a complete set that conform to specifications, but it would also be necessary to give prominence to the key points in reserving and storing a quantity of key spare parts that are easily damaged and worn. In this way the enemy’s attack and sabotage could be resisted while the encroachment of natural disasters could be withstood. **[end of page 252]** The patterns of replenishing material resources would generally include considering the superior’s replenishment plan as prime factor and combined with replenishment in response to applications, regarding superior’s front-dispatching plan as prime factor while being combined with self-initiated ration drawing scheme, while under emergency situations it is allowable to execute regulation on supply and demand among the positions as a form of replenishment.

2) Position Facility Operation

Since positions represent the major grounds for the subsistence and operations of the Second Artillery campaign operational strengths, organizing the safeguard of the normal

operation of the facilities in the positions would constitute the most fundamental mission in position support. In ensuring the operation of position facilities, complete the facility maintenance mission on the water, wind and electrical systems in a timely manner in accordance with operational requirements, assuring the maintenance of the rate of good and intact conditions for the major facilities. Coordinate replenishment fuel oil supply with personnel and water consumption in the facilities (sic) in a timely fashion, ensuring the continuous steady supply of electricity, water in underground tunnels, reserving and storing sufficient defense equipment. Execute frequent inspections of tunnel ventilation, gas-particulate filtration and defense main door sealing tightness, properly conducting the position security warning and fire extinguishing works, establishing fire extinguishing organizations, ensuring the safety of the installations and weaponry equipment, instituting strict passage inspections at the tunnel entrance, closely controlling the entering and exiting of personnel and material, taking strict precautions against enemy sabotage, thereby ensuring the security of the facilities.

3) Position Facility Repair

Position facility repair refers to the organization of timely maintenance and replacement of position facilities, conducting rush repair towards damaged facilities, thus maintaining the sound state of position facilities. Reinforcing rush repair work towards position facilities, organizing emergency rush repair group to execute rush repair towards damaged or malfunctioning facilities, adopting parts replacement pattern under emergency situations would help to maintain the sound state of position facilities. Paying attention to supporting the normal operation of key point positions and important facilities, allowing repair engineering vehicles to be parked near positions in order to conduct timely mobile rush repair works. Under the circumstance of the position being damaged while under attack, organize in a timely manner position-management elements to conduct rush repair work towards damaged facilities, quickly recovering operational ability, thus ensuring a smooth execution of the campaign operation. [end of page 253]

Section 4. Second Artillery Political Work

Second Artillery political work represents the organization and unfolding of thought work and organizational work for the Second Artillery campaign corps in accordance with the basic features of campaign, ensuring the consolidated leadership of campaign corps Party committee towards campaign, strengthening and elevating operational ability, gaining campaign victory as the starting point and recognizing the participating forces as the main body. It is an important component of Second Artillery political work, representing the concrete realization of a series of policies, principles and contents of the PLA political work within Second Artillery campaigns.

I. Missions, Features and Requirements of Campaign Political Work

Campaign political work commands an integral nature, strong sense of politics and policy, expansive work-scope parameters and multifarious content. While serving to

directly realize the campaign objectives, it penetrates the entire campaign process, involving every hierarchy and domain of campaign. Under informationalized conditions, campaign confrontations are extremely fierce and cruel, with sudden violent changes in the battlefield environment, allowing the missions of political work to become even more arduous, organization of execution getting to be even more complex and difficult.

1. Missions of Campaign Political Work

The fundamental missions of campaign political work would include the following: Ensure the Party committee to assume leadership over the integral campaign, earnestly implementing the execution of superior's operational policy, orders and instructions, assuring the realization of superior's operational intent; ensure commanders to maintain a lofty morale throughout the entire campaign duration, thus upholding the belief that victory is guaranteed when there is a will to fight.; assuring a healthy, highly stable and consolidated organization for the campaign corps; ensuring a unity among the internal and external elements, creating an integral operational ability; launch a political offensive against the enemy, crumbling and demoralizing the enemy; properly deal with masse work within theatres of war, maintaining battlefield discipline, thereby ensuring a smooth completion of the campaign operational missions. **[end of page 254]** Concretely speaking, there are solid missions pertaining to the following aspects:

1) Conscientious Implementation of the Orders and Instructions of the Military Commission of the Communist Party Central Committee, Headquarters and Superiors

Not only is Second Artillery campaign operations fierce military battles that affect the overall war posture, it also pose substantial political influence, directly affecting the integral state of affairs of national military, politics, economy and diplomatic confrontations. Therefore, demands are made that the Second Artillery campaign operational actions should strengthen strategic cognition, political recognition and the integral concept of the officers and soldiers, ensuring the realization of the strategic policies of the Central authorities and Central Military Commission, allowing Second Artillery to operate throughout the overall strategic situation, representing the mission of prime importance in campaign political work. Under any circumstance the Second Artillery campaign corps and Party committee must absolutely be obedient to the overall strategic situation. The intent and determination of the Military Commission of the communist Party Central Committee should be recognized in depth, while determinedly abiding by the strategic intent plan of the Central Military Committee in organizing campaigns. Every aspect and stage of the campaign operation must be looked after, making overall planning by taking all factors into consideration, thus arriving at a comprehensive arrangement. Simultaneously, the center of gravity of the work must at all times be placed on the segment that poses the most influence on the overall situation of campaign. The fundamental missions of Second Artillery campaign political work would include educating, leading and guiding the numerous officers and men, under a grandiose backdrop of international and national strategies, to gain an in-depth cognition of the operational guiding policy, principle and the superior's orders and instructions of the Central Military Committee, reinforcing the forces' strategic cognition and overall

concept, thereby ensuring the implementation of the execution of the superior's orders and instructions. This indeed is the basic guarantee of grasping campaign victory.

2) In-depth Execution of Political Mobilization, Assurance of the Maintenance of Lofty Morale and Vigorous Fighting Will for the Campaign Commanders in Campaigns

One of the missions of campaign political work would be the ample bringing into play of the human factor, allowing participating officers and men to possess a strong will and a brave spirit, exhibiting a rich military knowledge and well versed with technical techniques, realizing an extensive and optimally sound union between commanders and missile weaponry, thus ensuring that the forces maintain from beginning to end an unyielding fighting ability. Basing on the operational posture, missions and the thought situation of the officers and men, properly deal the mobilization education with prejudice, **[end of page 255]** as per the following four elaborations:

i. Clearly Define the Nature and Meaning of Campaign Operations

Guide the forces in delving deep into executing education towards subordination to the overall interest while taking the whole situation into consideration, thus upholding the concept of “Coordinate efforts all over the country as on a single chessboard.”

ii. Clearly State the Expectations and Key Entrustment of the Central Military Committee towards Secondary Artillery Forces

Arouse the “Defy hardship and death” revolutionary spirit of the officers and men, allowing the participating officers and men to maintain from beginning to end a brave and indomitable sublime heroism, a revolutionary integrity of being brave in sacrificing one's own life for his country, while maintaining throughout a staunch willpower and firm will.

iii. Clearly Define the Situation, the Enemy's Missions and Situation, and the Requirements

Strictly abide by the various stipulations and plans, accomplishing the eight notable deeds of: A consolidated command, overall planning, integral action, strict organization of discipline, determined execution of orders, policy and the Three Main Rules of Discipline.

d. Clearly State Favorable Conditions and Unfavorable Factors

Targeting against the harsh operational environment and the feature of one's weak forces in confronting the enemy's strong forces, educate the officers and men fostering the spirit of sacrificing oneself for the country, reinforcing the sense of mission, a confidence in an assured victory with daringness to fight, thereby arousing enthusiasm in war participation. Ensure that mobilization education and propaganda instigation penetrate the

entire campaign process. Political mobilization education and propaganda arousal should adapt to the wartime features, adopting an agile and multifarious format, proposing brief but powerful slogans, giving the political propaganda instigating work soundness and effectiveness.

3) Fully Bring into Play the Functions of the Party Organizations, Ensuring the Execution of a Staunch and Powerful Leadership over the Forces

Adapting to the operational features of Second Artillery forces, establish a healthy Party organizations, improving and reinforcing the leadership of the Party. First of all, resolutely implement the leader's delegation of responsibility system under the group leadership consolidated by the Party committee; persist in upholding the Party committee's group discussion resolutions regarding great significant operational issues, fully bringing into play the core leadership of the Party Committee. Military and political leaders earnestly and responsibly grasp the workability of the various assignments according to resolutions of the Party Committee, daring to be decisive according to the situation in dealing with emergency circumstances, thus executing powerful command. Fully bring into play the battle-castle function of the Party branches and the pioneering model function of the Communist Party members, focusing companies into a staunch combat group. Launching from the need to accomplish campaign missions, regulate and substantiate the cadres, backbone units, researching towards the formulation of cadre augmentation policy, in addition to a mandate for a replacement policy towards chief officers above company hierarchy and technical posts. **[end of page 256]** The procedures of appointments and removals of cadres during operations should be simplified, allowing for the adoption of the "Appoint first and approval later" method whenever absolutely necessary, thus ensuring continuity in operational command. Attention should be paid towards training and nurturing cadres during operations, discovering and selecting various types of outstanding and youthful cadres.

4) Conscientious Completion of Work towards the Masses, Creation of a Sound Battlefield Environment

There are many aspects of Second Artillery campaigns that are inseparable with the support and cooperation of the regional government and the masses, such as vast parameters of the battlefield, long battle line, rush repair to the roads executed by the forces, erection of positions, transportation of weaponry, rescuing the wounded personnel and establishing standby shelter districts. The proper completion of the masses assignment should be regarded as an important content in battlefield establishment, in addition to being an important mission of the Second Artillery campaign political work, a mission that should be well gasped and one that is attached with magnanimous importance. Vigorously foster the PLA's good tradition of supporting the government and cherishing the people, bringing closer the relationship between the match-ups of "Military and political" with "Military and the people", actively fighting for the vigorous support of the regional government. Under the conditions of satisfying campaign operations, be optimally accommodating to the masses by self consciously safeguarding the masses interest. Strictly abide by the policy regulations and the masses discipline,

resolving new issues that surface during the process of campaigns in a timely manner, upholding the fine image of a mighty army and a civilized army.

5) Actively Unfold Political Offensive and Psychological Warfare, Crumbling and Demoralizing the Enemy

Warfare is not only a political and military confrontational action between both opposing sides, but also a contest in spirits, with a psychological confrontation between both opposing sides penetrating the operations from beginning to end. At home or abroad during past and present times, militarists have regarded the principle of “Psychological offense is the best of tactics” and attaining the status of an army that could “Use strategy to bend others without coming to conflict” as prime guiding principles in troop deployment. During localized warfare under informationalized conditions, psychological warfare has become a novel operational mode. During Second Artillery campaign operations, regardless of whether it is politically or militarily inclined, there would be generated intense deterrence effects against the enemy, and from a specific standpoint, the operation itself would carry a psychological factor. Therefore, every echelon should attach importance to researching psychological warfare issues, exploring the features and laws of Second Artillery psychological warfare, formulating an effective psychological warfare pre-determined policy, basing on situations of both sides of the conflict in formulating a detailed psychological warfare plan. **[end of page 257]** Under a superior’s consolidated organization, utilize various measures in unfolding a powerful political offensive and psychological warfare.

2. Features of Campaign Political Work

Second Artillery is a high tech force that is responsible for bearing the “Double deterrence, double operations” mission, highly strategic and policy-related in nature. Since generally the missile forces of second Artillery would execute operations in harsh environment, campaign political work would exhibit some distinct features.

1) Highly Strategic and Policy-related in Nature

Regardless of whether Second Artillery campaign is a nuclear counterattack campaign or a conventional missile attack campaign, the influence on the overall situation of operation would be substantial, even reaching the decisive functional level. Since the strategic nature and policy-related nature of campaign operations are significant, campaigns would be subjected to political, economical and diplomatic strict restraints. The Second Artillery campaign actions would include the two aspects of realistic warfare and deterrence, while missile attack targets would include the enemy’s deep seated political, military, economical and other strategic targets, therefore, It is distinctly apparent that military actions would be subject to the restraints of political factors. Campaign political work would have to not only consider the requirements of a military struggle, but also must launch from a strategic overall situation, after having weighed the advantages and disadvantages, gains and losses of political and diplomatic confrontations, followed by educating participating personnel in upgrading campaign actions to the cognition level of

a strategic overall situation. Hence, one must reinforce the strategic meaning and strategic thinking of political work in strengthening the forces' overall situational concept, attaining the status of a steadfast obedience towards orders, with everything being regarded as subjected to the command of Party Central and the Central Military Commission.

2) Harsh Operational Environment, Extensive Work Parameters and Contents

Since the Second Artillery missile forces, operational positions and command centers constitute key-point enemy attack targets, coupled with the arduous operational missions, a complex battlefield environment and highly dispersed force disposition, with communication being subjected to easy interference sabotage, in addition to the fact that command is easily being disrupted, all these conditions would bring about grave difficulties toward the organization of execution of campaign political work. Second Artillery campaign political work shall be launching its work under nuclear deterrence or under conditions of being attacked by nuclear, biological and chemical weaponry. **[end of page 258]** In an environment of difficulties and hardships, commanders of every hierarchy should not only step forward bravely in fully giving play to acting an exemplary role, but also allow the inherent potential that inspires the officers and men in their staunch operations to optimally mobilize the officers and men into war-participation in a manner that penetrates the entire process of campaign, inducing political work to organically infiltrate into the various military, logistics, equipment technological support and other works, thereby assuring the incessant continuity of political work at every hierarchy of campaign..

3) Quick Work Tempo, Binding Time-effectiveness, Arduous and Complex Organization of Execution

Since the initiation of Second Artillery campaign is usually sudden and with a quick tempo, the time used in executing political work is therefore very short, allowing the apparent contradiction between large volume of work and shortage of time to be extremely pronounced. Counting every minute and second in Second Artillery campaign operations, with political work preparation being pressed for time once campaign is launched, operational interval gap times would be extremely rare. Therefore, political work should possess scientific foresightedness in practically and optimally uniting together the reality of military confrontations (sic), propelling with prejudice the thought political work and organizational work as front runners. Since during the process of campaign operations, the forces are confronted at all times with unexpected issues, with opportune moments often appearing only as fleeting opportunities, therefore, the organizational execution of political work is extremely arduous and complex, thus demanding that political work must lose no time in seizing the opportune moment and executing agilely in order to be of service towards upgrading the combat ability of the forces.

3. Requirements of Campaign Political Work

Campaign political work should be able to achieve the following endeavors: In the aspects of politics, thoughts and organization, assure the absolute leadership of the Party Central and Central Military Commission, be resolutely obedient towards the consolidated command of Second Artillery campaign corps Party committee and the leaders, educate the officers and men in paying attention to the interest of the whole, actively do well in cooperation; formulate the various political works' pre-determined policies, elevating the ability to prepare for an eventuality or contingency; properly deal with political thought education, allowing the officers and men to maintain a sound psychological quality; utilizing informationalized technical tools that regard computers as their prime component, upgrade the political work efficiency and adapt to the requirements of campaign operations.

1) Launch from the Overall Campaign Situation, Reinforce the Policy Discipline Concept [end of page 259]

The Second Artillery campaign operations involve the overall situation of the operation. Commanders at each hierarchy should at all times maintain a clear political head and political acuteness, upgrading the self-consciousness in implementing the execution of Central Military Commission's orders and instructions. Take the whole situation into account and plan accordingly, meticulously plan and scheme, carefully formulate a political work plan so that the processes of decision making, instruction giving and request proposing would strictly abide by political discipline, rendering fervent unwavering trust towards the orders, instructions and thoughts promulgated by Central Military Commission, followed by firm and unshakable actions. Discipline must be strictly organized, ensuring that the individual be subordinate to an organization, the lower echelon be subordinate to a superior one, disallowing localized interest to damage the overall interest. Battlefield discipline must be strictly upheld, while forces should be educated in executing order and proclaim prohibitions, with every action being carried out according to orders from command.

2) Fully Bring into Play Subjective Enthusiasm, Exhibiting a Strong Meaning of Advance Forecast

Since Second Artillery campaign operations command a fast tempo and a short course, political work should adapt to these features. With foresightedness, properly conduct various aspects of preparation, resolving issues in advance, formulating policies in advance, carrying out work assignments in advance, earnestly and accurately feel out the thought regular patterns of the forces, thus grasping the initiative of work. Take into consideration the worst scenario, be prepared to confront the most complex situation, execute thought reflections on all possible realities that could appear during every stage and under various circumstances of the operation that the forces would encounter, every possible enemy sabotage and incidences involving loss and leakage of confidential secrecy, possible casualty and other issues related to political work, should all be issued forecasts in a stepped up pace in studying for planning countermeasures. Unfold work in

advance, be on active guard and on the lookout, strive to resolve issues during their sprouting stages; formulate various types of pre-determined well-conceived policies, allowing the immediate supply of the appropriate policy for selection once an issue should surface, dealing with the situation in good order and well arrangement, thereby ensuring a marked success for political work.

3) Abidance by Superior's Intent, Campaign Policy and Thought behind a Determined Consolidation of the Forces

Second Artillery campaign operations command a strong sense of integral wholesomeness, with lofty standard requirements. Therefore, political work must be based on superior's intent, campaign policy and determination, making overall plans and taking all factors into consideration, while grasping campaign key points and key nodes to allow the main vitality to focus from beginning to end on the most important and most decisive issues and key nodes in the overall campaign. **[end of page 260]** Work should infiltrate to every aspect and stage of campaign, resolving with coordination the various contradictions that surface between the participating forces, between the launching units and supporting units, between the forces and regional personnel, and between the army and the people, thus ensuring a smooth execution of campaign operational action.

4) Upgrade the Efficiency of Political Work, Ability for Speedy Contingency

Since operations under informationalized conditions would exhibit rapid changes in the battlefield environment and speedy operational actions with stringent time limitations for completing missions, political work would have to be conducted within the tense and fierce operational process or in the limited time gaps between combats, requiring an upgrade in quick contingency ability. With a style of action that reflects cognition of sayings such as "Time waits for no one" and "Carry out one's task with drive and sweep (or vigorously and effectively)" and a spirit of not being afraid of exhaustion in non-stop operations, fighting for every available second to resolve and deal with various types of thought situations, greatly simplifying procedures, reducing in-between segments, issuing short messages, calling for short meetings and conducting in short conversations, thus ensuring that wartime political work would be effective and fast. Self-consciously persist in upholding the combat ability standards, allowing thought political work to penetrate through every stage and segment of the campaign operations, unfolding in step with military and technological works, persist in uniting focused education with casual education, thereby uniting the resolution of ordinary issues with individual heart-to-heart talks in privacy. Unfolding work should be launched from reality, without muddling in procedure and format matters, thus reinforcing the infiltrating ability and directedness (or with prejudice in targeting special issues) of political work. Treating superiors and subordinates in an identical manner, dedicating all of one's energies to a cause, leading one's men in a charge (or being in the same van with the men), being in touch with reality, thinking true confessions, promoting genuine vigor, dealing with real matters, striving for solid results, allowing work to proceed on a straight line, converting the shapeless into visible forms, transforming political work into a combat strength that is visible, touchable and inseparable. Establish a political work advisory system network,

accelerate information transmission, reception, process speed, actively launching political work on the internet, thereby achieving a speedy reactionary standard that would allow resolutions to materialize without delay on the various political thought issues, thereby upgrading the speedy reactionary ability of campaign political work.

II. Organization and Execution of Campaign Political Work

Campaign political work under informationalized conditions would exhibit a high-caliber mission with multifarious contents, [end of page 261] involving broad parameters of concerns and penetrates every segment within the integral process of campaign operations. Against campaign political work, campaign corps Party committee and political mechanisms should integrally plan and conduct an overall disposition, give prominence to the key points, grasp the crux of the matter, guide and urge every Party committee, its political mechanisms and political work personnel to conscientiously organize the execution of various categories of political work, ensuring that political work would be able to fully bring into play its magnanimous functions in assuring victory in campaign.

1. Organized Leadership

Powerful organized leadership renders an important assurance towards campaign political work. Campaign corps should strengthen the establishment of the Party committee and political mechanisms, attaching importance to bringing into play the function of the political department, allowing campaign political work to become a powerful momentum behind accomplishing the campaign missions.

1) Composition of the Campaign Corps Party Committee

At the same time as the organization and establishment of the Second Artillery campaign corps the Party committee should also be organized and established, with its Party members being generally taken charge of by campaign corps military political leader and his headquarters, political department, logistics, equipment department responsible personnel and the military political commanders of every force, in addition to relevant leadership in operational areas. The composition of Party committee members must be submitted to superior Party committee for approval.

2) Leadership of Campaign Corps Party Committee over Campaigns

Second Artillery campaign operations have bestowed upon campaign corps Party committee glorious and arduous missions. Since campaign corps Party committee is the core of the consolidated leadership and unity of campaigns, it conducts a consolidate leadership towards the various strengths within campaigns and campaign operational composition. Significant issues that require discussions and decision by the Party committee would include the following: The overall conception of the implementation of the execution of orders and instructions from superior leaders and leading mechanisms in

addition to superior Party committee's resolution; campaign policy, principles and plan, plus the requirements, examination and approval associated with the completion of campaign missions; based on authority regulate the allocated equipping of the leading body in appointments and dismissals, rewards and punishment rendered the cadres; study and decide on other important issues that would involve the overall campaign.

Second Artillery campaign corps' leadership towards campaign executes the leader's delegation of responsibilities system under the group leadership of the Party committee. **[end of page 262]** As long as circumstance permits, every important issue should be discussed and decided upon by either the Party committee or the standing committee, before allowing the military political leader's organization of execution of his delegation of responsibility. During emergencies, the military political commander would have the authority of dealing the matter as the occasion requires, followed by submitting timely reports to the Party committee and superiors.

Second Artillery campaign corps should establish crack campaign political work mechanisms, composed mainly of the departments of organization, cadres, propaganda, guard service, group project and liaison, etc., representing an office mechanism of Party committee and a body in leading and guiding campaign political work, being responsible for the organized leadership over the integral campaign political work. The major responsibilities of Second Artillery campaign political work would include the following: Timely issuance of campaign political work instructions; tracking the leadership while grasping the situation; timely regulate the allocated equipping of the cadres, strengthening the Party organization; guide the unfolding of assignments to crumble the enemy; formulate wartime policy for reward and compensation works.

2. Fundamental Contents and Methods of Campaign Political Work

The realization of campaign political work missions must invariably go through the concrete political work contents. Since the content of campaign political work is extremely extensive, with many sub-contents mutually crisscrossing, the campaign corps Party committee and political mechanisms should concentrate their attention and work key nodes on the resolution of important issues that affect the overall campaign, thus ensuring the completion of the campaign missions.

1) Organize Propaganda Education and Political Mobilization

Second Artillery campaign corps Party committee and political bodies should base on the campaign missions, understand and recognize the thought tendency of the forces, Party group organization establishments and the social situation within the operational zones, study political work policies, issue timely campaign political work instructions towards subordinates, disposition political work missions, conduct logical group division and delegation of responsibility towards political mechanism personnel according to operational requirements, and formulate concrete work plans for each service department. Based on the features of campaign and fully utilizing every broadcasting media, guide the forces in conducting timely propaganda education and political mobilization. Political

mobilization should attach importance to clearly explaining to the forces the strategic intent of the Central Military Committee, **[end of page 263]** The concrete mission of the participating forces would be to clearly specify the favorable and unfavorable factors, launch mobilization education outline in a timely manner, allowing leaders of every hierarchy to delve deep into companies and on-the spot reality (sic), conducting concentrated mobilization towards the forces. Political mobilization must be launched from reality, giving prominence to the key points and at the same time taking care of the integral situation, regarding as key point the consolidation of the thoughts of the cadres in every hierarchy, particularly those leadership cadres. Political mobilization would be subject to suiting measures according to time and place, adopting agile and multifarious methods according to the operational environment, with the major method being the issuance of political mobilization ordinance or campaign mobilization instructions, calling various types of mobilization meetings, etc. It is necessary to guide the hierarchy in properly setting up casual education and an oath-taking rally to pledge mass effort and other activities such as “Throwing down the gauntlet and challenge to battle,” etc., render education in becoming lively and vivid, converting the objective of realizing campaign into the common will and self-conscious action of the commanders at large. The spirit of earnestly conveying the superior’s instructions clarifies the objective, mission and meaning of campaigns, reinforcing the commanders’ confidence in winning the battle as long as one dares to fight; contact with reality in executing education on patriotism, collectivism and revolutionary heroism, inspiring the commanders’ sense of responsibility in active operation and being brave in taking on heavy responsibilities; educate commanding officers in steadfastly upholding the overall conception, caring for the integral situation, initiating cooperation and close coordination, making concerted efforts in grasping campaign victory; guide the forces in learning and being obedient towards the Party’s nationality and religion policies, in addition to war-related international laws.

2) Properly Conduct Organization Work and Cadres Work

Understanding and grasping the establishment situation of the forces Party political organizations while basing on operational requirements, guide the forces in conducting timely regulations and organizing the strengthening of the Party political organizations, substantiating and recovering the Party political organizations of units that suffered heavy attack sabotage by the enemy; understand the thinking trend of the forces Party members and guide the forces in properly conduct Party member education.

It is necessary to fully bring into play the core leadership functions of the Party organization, the function the battle-stronghold and the pioneering model function of the Communist Party members. Steadfastly uphold the principle of democratic centralism and resolutely implement the leading cadre’s delegation of responsibility system, while simultaneously reinforce the guidance towards the communist youth league work, fully bringing into play the commando function of the communist youth league in campaign operations, thus ensuring the completion of the campaign missions. **[end of page 264]**

Understanding and grasping the situation of the cadre forces and basing on operational requirements and the features of the forces, allow for the holding of a concurrent post in military and politics optimization, cadres with superior organizational command talent would be promoted to critical posts, filling all the posts with upgraded personnel for the various hierarchy person in charge and cadres responsible for the key work missions, thus creating a staunch leadership core. Make clear and definite the deputy for each hierarchy cadre in charge, maintain from beginning to end that the leadership band in every echelon of the forces and cadre forces would be fully equipped and powerful, thereby ensuring the execution of an unceasing command over campaign.

3) Unfold Military Democracy and Render Meritorious Service Model-Setting Activities

This is an important measure for bringing into play the subjective enthusiasm and wisdom of the participating personnel, inspiring the combat enthusiasm of the forces. Unfold military democracy, upgrade the high sense of responsibility as the masters of the house for the officers and men at large, furthering the officers and men to fight for the interest of the people, the meaning of sacrificing in a fight for the consolidation of one's country and lofty thought boundaries, guiding the forces in extensively launching the "Render meritorious service model-setting" movement, thus creating a sound environment for fighting to become the first to grasp superiority.

Guide the forces in unfolding military democracy, adopt an agile pattern with multifarious modes, arouse the masses to make decisions, think of countermeasures, draw on collective wisdom and absorb all useful ideas, consolidate thinking, resolve operational difficult points and various dilemmas and problems encountered, fully arousing the masses, creatively utilizing the campaign principles and operational methods, making best use of the advantages and bypassing the disadvantages, bringing into play one's superiority, achieving the goal of "The inferior beating the superior" and "The weak subduing the strong". Simultaneously, it is necessary to analyze the enemy's strong and weak points, particularly weak links in the realm of thoughts, actively searching for operational methods to vanquish the enemy.

Organize and guide the forces in launching activities involving rewarding for meritorious services and creating a model-setting example. Since these activities plus Party joining invitation towards the line of fire or battle line are aimed at executing timely assessment, reporting, compiling and celebrating meritorious service rendered towards the units or individuals with outstanding performance during operations, conducting vigorous propaganda in giving wide publicity to the experience and deeds of these exemplary deed models, mobilizing the enthusiasm of the officers and men, arousing the revolutionary heroism spirit of the officers and men at large, maintaining the lofty morale and operational enthusiasm of the forces, it is necessary to conduct a timely summarization and spread the experience of the forces in unfolding democracy and the meritorious service model-setting activities.

4) Uphold the Battlefield Discipline [end of page 265]

In order to ensure a high degree of focused consolidation for the forces, guide the forces in launching battlefield disciplinary education so that they would strictly abide by the national law and the people and religion policies of the Party, in addition to military regulations, ordinances and related stipulations. Severe punishment according to law should be levied at those law and regulation breakers who cause damage to weaponry equipment, leaking classified confidential secrets, or fabricating rumors.

5) Intensify the Capitalization and Control of the News Media

The political mechanisms of Second Artillery campaign corps should intensify its capitalization and control of the news media, specifying a relevant department to be specifically responsible for achieving the status of “A centralized management by specialized departments.” Based on the requirements of politics, diplomacy and military confrontations, determine the policy, principles, unified propaganda statement, fully capitalize on the requirements of military combat in correctly conducting propaganda reporting; intensify news investigative examination, strictly preventing leakage of confidential secrets, and sternly forbidding negative propaganda coverage; adopt powerful measures to combat the enemy’s activities involving spreading rumors and distorting the facts, etc.

6) Organize Masses Work in Theatres of War

The Second Artillery campaign corps Party committee and political mechanisms should base on the features of localized warfare under informationalized conditions to implement the People’s war concept, guiding the forces to properly deal with the masses work among participating militia and within theatres of war, fully mobilizing the masses enthusiasm, especially the technical personnel support force, bringing into play the power of the People’s war under new situations; it is necessary to base on the thinking situation of the participating militia in proposing the missions and requirements of militia political work, upgrading the self-consciousness of the forces in properly executing the masses work. Guide the forces in cooperating with the regional Party political mechanisms in exposing the crime of the enemy in instigating warfare, strengthening confidence in a sure victory, thus reinforcing and supporting the responsibility and enthusiasm of campaign operations; guide the forces in assisting government in widespread and in-depth launching, while also organizing the masses in utilizing various patterns and methods to positively support and cooperate with the forces, anti-nuclear attack, anti-air raid, anti-airborne attack, anti-espionage and anti-special agent combats. Assist the regional government in organizing the masses in executing the mandatory evacuation transfer, guiding the forces in properly dealing with the masses work, in particular that of the participating militia, the political work of the masses, while the educational forces would strengthen the masses concept and political disciplinary concept, thereby ensuring that under any difficult and complicated circumstances, the glorious tradition of supporting the government and cherishing the people would be brought into play. **[end of page 266]**

7) Strengthen Security Guard Service

The Second Artillery campaign corps Party committee and political mechanisms should vigorously launch security guard service work and formulate anti-psychological warfare, anti-infiltration, anti-defection incitement, anti-leakage of secrecy and other measures. Promulgate timely security guard service instructions, proposing definite and concrete requirements. Strengthen investigative research into the social situation in theatres of war and also the enemy's situation, circulating a timely notice to the forces informing them of the situation; guide the forces in reinforcing anti-traitor secrecy confidentiality education, strictly keeping military secrets confidential, and launching anti-traitor and anti-special agent work with a nature aiming at the masses. Properly conduct with prominence given to the key points the internal political investigative examination and guard work, ensuring an absolute passing mark politically for personnel at key critical posts, assuring the security of chief officers and crux departments and those major actions, adopting decisive measures against those that go over to the enemy and turn traitor, and criminals who intentionally sabotage various military installations, thus purifying the forces, substantiating and upgrading the combat strengths of the forces; intensify revolutionary integrity education, exposing the enemy's fraudulent propaganda in a timely fashion, thus shattering the enemy's psychological warfare and defection incitement and open conspiracy; adopt various effective methods in executing a tit-for-tat struggle against the enemy's psychological warfare and defection inciting activities, thereby upgrading the psychological safeguarding and psychological attacking ability of the forces.

Second Artillery forces would be regarded from beginning as the important target for the enemy's intelligence leakage and sabotage (sic). Simultaneously, during the forces execution of mobilization operations, they encounter complex environment and antagonistic social situations. This has put a demand on our regarding the assurance of the purity of the forces and the security of their weaponry equipment and core secrets as significant political issues that involve the overall situation and that mandate seize holding in detail and in reality. Persist in advance prevention, achieving the status of "The four clarifications": Clarify the thinking political situation of every participating personnel; clarify the enemy and social situations of battlefield environment and the environs of positions; clarify insecurity factors that may surface against the forces and weak links; and clarify the channels and measures that the enemy would adopt under the new situations in infiltration and secrecy stealing against us. Towards the internal structure of the forces, it is necessary to delve deep in executing security confidentiality education, leading the officers and men to uphold the concept that security confidentiality is in fact the realization of the intent in safeguarding the overall situation, safeguarding victory and safeguarding the military commission, therefore, security education should be in-depth and down-to-earth, **[end of page 267]** positively unfolding advance thinking and defense actions, thus establishing a strict security post responsibility system; stringently and conscientiously conducting political investigative examination on personnel, grasping the thinking tendency of each personnel, discovering possible sprouting of debatable cases, thus ensuring political purity and reliability of the forces; strengthen the security guard work at commanding posts, operational positions, critical portions of weaponry equipment, etc., formulating and ascertaining security guard policies and

security post responsibility system; conduct a sealed-up type management toward the forces, tighten the various security disciplines and regulations, thereby assuring the absolute security of the core secrets. Regarding the external affiliation of the forces, conduct earnest investigation against the enemy situation within the launching zones, closely cooperate with the local public security mechanisms in preventing the sabotage and secret espionage by the enemy's special agents and criminal elements; during the forces' launching of mobilization and operations, traffic control must be implemented in coordination with the public security mechanisms to ensure a sound battlefield order.

8) Fortify the Political Work of the Forces at Critical Links and Key Points

Fortify political work at critical links, stringently checking on thoughts, technology and command, placing on crux postings such issues as assuring political thoughts being up to standard, consummate specialty technology, personnel with overly stiffened military qualities, achieving the status of linking work at selected spots with that within entire areas, giving prominence to the key points; reinforce the operational political work of crux forces, attaining the status of being timely, brief, powerful and unceasingly arousing operational enthusiasm; educate the forces in steadying emotion, impelling them to foster a style of continuous operation, fearless of fatigue and willingness to sacrifice; educate, lead and guide the forces in firming up the belief that daring to fight would guarantee victory, fully bringing into play the style that is steady, accurate, stern and meticulous, achieving the state of being scrupulous about every detail, leaving no hidden peril within weaponry equipment, founding a form basis for a successful launch, thus ensuring the completion of the operational missions. Second Artillery forces operation could be described as "One bomb (or missile) affects the entire situation", posing a significant responsibility meaning and tense combat atmosphere, allowing the officers and men to face up with magnanimous psychological pressure. Some comrades who are worried about a possible launching failure bungling up the operational opportunity might develop extreme emotional tenseness that would cause difficulty in their normal bringing into play of their operational technical standards. Targeting against the emotions existing among the forces such as apprehension and tension, earnestly deal with the thought work properly, nurturing officers and men to become extremely stern in demanding utmost accuracy, and commanding a style that dictates every order to be executed without fail, exhibiting a monolithic solidarity, a hand-in-glove cooperation, a concerted effort in gaining an upper hand, retaining the presence of mind in the face of disasters, **[end of page 268]** being firm and persistent, courageous and resolute, and retaining a style of daring to fight for assured victory, unfolding the education that advocates: "Believe in the functions of weaponry equipment, believe in your own operational standards, believe in the ability of technical personnel in guarding a pass", assisting the officers and men in converting their pressure into motivation, properly regulating the spiritual posture, upholding the confidence in "Assured victory with daringness to fight", thus achieving the status of bravery and steadiness, being bold but cautious, a guaranteed command and error-free operations.

9) Organize Campaign Summarization

After the end of campaigns, it is necessary to organize the forces in launching war assessment actions. Organize and guide the forces in reviewing the operational process, conscientiously summarizing the experience, investigating and searching for issues in order to facilitate repeat operations. Properly deal with works in evaluating achievements and making decisions on awards through discussions, conducting propaganda on model setting, commending and citing meritorious service, followed by organizing and calling victory celebratory meetings when deemed advisable. It is necessary to educate the forces on the concept of maintaining from beginning to end a lofty morale and a high degree of war preparedness, utilizing time gaps between combats to properly deal with rest and reorganization, in addition to training, allowing personnel and weaponry equipment to maintain a sound combat posture, prepared at any time to repeat the execution of a new operational mission.

10. Organize Aftermath Rehabilitation Work for the Personnel with Permanent Disability and Martyrs

With regard to the permanently disabled personnel, all out efforts should be made in conducting house-call medical treatment, meticulously tending and nursing in detail, doing the utmost in reducing their disability level and physiological suffering; it calls for expressions of sympathy with ardor towards them, patiently encouraging, leading and guiding them to correctly approach and handle the disability and life issues; it is necessary to adequately arrange and accommodate, positively taking the initiative in helping them to resolve realistic difficulties, doing the utmost to achieve the status of the “Three satisfactions” encompassing the country, forces and the disabled personnel; assist regional government in properly dealing with work in granting preferential treatment, comfort and compensation towards martyrs and their families. **[end of page 269]**

Chapter 10

Second Artillery Campaign Deterrence

Second Artillery campaign deterrence refers to a series of loud, armed activities in which Second Artillery campaign large formations, under unified planning, demonstrate their strength and reveal their potential in order to achieve specified strategic and campaign goals. Second Artillery campaign deterrence is an important component of the Second Artillery's dual missions of "deterrence and operations." The goal of campaign deterrence is to force an enemy to accept one's own will or to contain an enemy's hostile acts. Campaign large formations shoulder the task of deterrence. Once deterrence has lost its effectiveness, the campaign large formations can quickly transition to actual combat.

Section 1. Missions and Characteristics of Second Artillery Campaign Deterrence

Military deterrence is an important means of warfare. Campaign deterrence is an important mode in Second Artillery military applications. Fully understanding the status and roles of campaign deterrence and clarifying its missions and characteristics, will have important significance for bringing the laws of deterrence to light and for carrying out campaign deterrence.

I. The Status and Roles of Campaign Deterrence

The Second Artillery acts as an important long-range strike force. Its role in creating fear within an enemy's psychology cannot be underestimated. During the course of confrontation between us and an enemy, campaign deterrence activities act as an important component of Second Artillery campaigns. The status and roles of campaign deterrence activities in local wars under modern informationalized conditions are becoming more and more important. **[end of page 270]**

1. Campaign Deterrence is an Important Activity in Second Artillery Campaigns

Second Artillery campaign deterrence is carried out in peacetime, in pre-combat period, and during times of war. Local wars under informationalized conditions often begin with campaign deterrence, which forces one to accept certain conditions. When deterrence loses its effectiveness, the situation can transition into actual combat for the achievement of the pre-planned strategic goals. During the Gulf War, NATO and its allied countries, with the United States at their head, revealed the combined potential of their troop strength and, when the results of continually carrying out public opinion propaganda and warnings were not able to meet their pre-planned effectiveness, NATO and its allies subsequently transitioned to actual combat. The goals of Second Artillery campaign deterrence are to compel the enemy to accept the various conditions put forward by our side through the mode of intimidation. Its basic pattern goes from demonstrating strength and issuing serious warnings in the beginning, to launch exercises gradually developing into coming close to test launches. The implementation of counter-nuclear deterrence against an enemy can be the prelude to Second Artillery nuclear counterattack campaign activities, which are an important content within Second Artillery campaign activities. Second Artillery “dual deterrence” involves intermixing the many forms and types of expression for modern campaign activities. Second Artillery “dual deterrence” is a primary form of activity in the prologue stages of local wars under informationalized conditions and it includes the characteristics of Second Artillery campaign activities.

2. Campaign Deterrence is an Important Means of Forming an Advantageous Situation in Campaigns

The situations of the enemy and our side involve the conditions and circumstances formed by the deployments and activities of both sides. Time periods are divided into the pre-combat situations for both sides, the mid-combat situations for both sides, and the post-combat situations for both sides. Advantageous campaign situations are the foundations of a smoothly implemented campaign. The prelude to a campaign usually involves the implementation of psychological warfare against the enemy, the application of deterrence stratagems, the adoption of scientific methods, the planning of a series of deterrent activities, and the planned-for creation of advantageous situations. Organizing demonstrations of military strength, carrying out launch exercises, and increasing weaponry preparation, and other levels of preparation, create a situation in which the “bow is pulled taut” against the enemy, while at the same time these things are also important activities for campaign command. The utilization of nuclear and conventional missile units to flexibly [end of page 271] carry out deterrence, aiming at different targets to be deterred, prudently selecting the methods of deterrence, scientifically seizing opportunities for deterrence, and adjusting the strength of deterrence at appropriate times in accordance with the situations of the enemy and our side and changes in those situations, guarantee the formation and maintenance of advantageous battlefield deterrence situations. Second Artillery campaign deterrence activities are an important means for achieving Second artillery campaign goals, and even for achieving national strategic goals. Campaign deterrence forces should both be the creators of advantageous

campaign situations and important forces in the propulsion of the smooth development of campaigns.

3. Campaign Deterrence is an Important Channel for Achieving Strategic and Campaign Goals

In The Dictionary of Military Terminology (军语 Jūn Yǔ), Second Artillery strategic nuclear force application is explained in this way: it is the planning for and the application of strategic nuclear forces in order to achieve specified strategic objectives, including strategic nuclear deterrence applications and strategic nuclear counterattack applications. In addition, deterrence activities involve a series of deterring measures, which are adopted in order to achieve specified strategic and campaign goals. The immediate goals of deterrence applications are to carry out psychological warfare on the enemy and to “subdue the enemy’s troops” without shedding any blood. Zhang Liang used stratagems that caused the King of Chu to fall into “utter isolation.” An army of hundreds of thousands suffered defeat because of a psychological collapse. After the 1940s, with the explosive success of atomic bombs and hydrogen bombs and long-range means of carrying them across continents and oceans, the deterrent role of missile units, and particularly the deterrent role of nuclear missile units, greatly increased. Second Artillery strategic missile units are an important means used by headquarters to restrain warfare, to suppress conflict, to prevent fission, and to maintain peace. They are a nuclear weight that allows us to effectively contend with powerful enemies as an equal. As such, deterrence applications are an important channel for achieving the above-mentioned strategic goals.

II. Campaign Deterrence Missions

Second Artillery campaign deterrence activities are directed against the level of nuclear deterrence the enemy directs against us, in accordance with the overall deterrence plans of the highest headquarters. The application of nuclear missile units to carry out counter-nuclear deterrence involves the use of deterrence to prevent conventional warfare or the use of deterrence to prevent the escalation of nuclear deterrence campaign activities. The application [end of page 272] of conventional missile units to carry out conventional deterrence compels the enemy to throw out its original activity plans for its campaign activities. The primary missions of campaign deterrence are:

1. Simultaneous Nuclear and Conventional Escalation and Containing Wars that do Break Out

The application of Second Artillery nuclear and conventional deterrence is the “double-edged sword” of campaign deterrence. Nuclear deterrence plays a huge shock-value role, but it is obviously restrained by international public opinion. It requires prudent decision-making and discreet use. However, the destructive role of conventional missiles is small and the conditions in which their applications causes restraint are few, while deterrent applications are relatively flexible and the level of decision-making is usually lower than

that for nuclear deterrence. According to the requirements of our nation's "active defense strategic policy," Second Artillery missile units often shoulder the arduous missions of maintaining sovereignty, opposing secession, and restricting aggression. This determines that campaign deterrence should have a foothold in defensiveness and that it is primarily the utilization of the huge threat of nuclear and conventional missile weaponry and long-range strike capabilities that cause an invader to be awed at their sight. Concern on the part of the enemy about the ability to withstand retaliatory strikes thereby disposes of the enemy's plans to launch a war.

2. A Clear Demonstration of Power to Deter the Escalation of a War

Clearly demonstrating power includes demonstrating nuclear strike capabilities as well as conventional missile strike capabilities. By revealing weaponry, deploying troops and arranging battle lines, carrying out launch exercises, and through other modes, disseminating to the enemy information about our side's power, decisiveness, and braveness to attack and win causes the enemy to psychologically fear that there is no way for them to withstand a retaliatory strike, causing the enemy to abandon its adventurous activities. Deterring the escalation of warfare primarily refers to the application of nuclear weapons to carry out active and passive deterrence: to prevent a conventional war from escalating into a nuclear war; to prevent the enemy from carrying out a conventional strike against our nuclear facilities and creating nuclear leakage; and to prevent the enemy from causing huge, unrecoverable losses to our major, strategic facilities through high-powered air raids against us. The demonstration of power causes the enemy to dread the possible consequences of the actions it adopts or to dread that its gains will not equal its losses, thereby causing the enemy to change its plans for adventurous activities [end of page 273] and achieving the goal of restricting the war to a certain size.

3. Using Nuclear Weapons as a Backstop to Support Conventional Operations

Nuclear forces are the main body of campaign deterrence and nuclear deterrence is an important content of campaign deterrence. Atomic bombs and hydrogen bombs use their incredibly destructive effects to cause people to "change color at the talk of nuclear weapons." Neutron bombs in particular are small-scale hydrogen bombs that increase the strength of nuclear radiation in the early period after being detonated. On the battlefield, they can be used in large numbers and they are extremely lethal to humans. From the perspective of international strategic patterns, nuclear weapons are a strong nuclear backstop for ensuring the status of large countries and they are a potentially huge deterring resource. In local conventional wars under informationalized conditions, just by moderately revealing one's nuclear strength, one is able to flexibly apply many types of deterrent methods. An enemy that is using informationalized, conventional air raids against us cannot but prudently consider how difficult a price might be paid, thereby achieving the goal of supporting conventional operations.

4. Nearby Test Launches to Compel the Opponent to Give in

The most important component of national deterrence strategy is nuclear weaponry. Nuclear deterrence and nuclear counterattack have thresholds that are difficult to overcome. However, in the primary direction of military struggle, the means of deterrence against the primary operational opponent are conventional weapons. The main components of conventional means of deterrence, then, are conventional missiles. For conventional deterrence to be effective, the strength of conventional missile deterrence must be increased. In addition to drumming up support through propaganda and revealing one's potential military strength, one can also carry out nearby test fires vis-à-vis the enemy at appropriate times, to show that we possess the capability and the determination to carry out high-powered conventional strikes against the enemy's important objectives. This is a psychological attack against the enemy that forces the enemy not to move imprudently or to accept the conditions that we put forward.

III. The Characteristics of Campaign Deterrence

The characteristics of deterrence are reflected in the external nature of deterrence and are the foundational conditions that guide the Second Artillery missile [end of page 274] units in carrying out campaign deterrence activities. They are also important contents of campaign deterrence theory that must be understood and analyzed and thoroughly expounded.

1. Campaign Deterrence Endures Obvious Political Restraints and the Level of Decision-making is High

Second Artillery campaign deterrence endures the dual restraints of basic national policy and the international strategic environment. The nation has taken economy building as the core fundamental national principal, and this has not changed. In a centralized way, this reflects the overall interests and long-term interests of the nation. This determines that Second Artillery campaign deterrence is, speaking from an overall perspective, defensive. However, when a separatist groups attempts to gain independence, we will apply conventional weapons to carry out campaign deterrence against the enemy, in accordance with the strategic intentions of the Military Commission. The large international environment of peaceful development has become the primary trend of the era, and deterrence activities will inevitably spread to the countries around our borders. Therefore, the application of deterrence might endure a certain degree of constraint, especially the constraint of international society's public opinion. This will be even more true for nuclear deterrence applications. Second Artillery campaign deterrence activity determinations involve the selection of the number of troops in the deterrence force, when the deterrent will be applied, the basic methods, and the goals of deterrence, as well as the implementation of overall planning and decision-making for achieving the goals of deterrence. Deterrence activities not only involve military questions, but also they involve important political questions. As such, the decision-making authority for major issues must be highly centralized in the highest headquarters.

B. Dual Deterrence and a Focus on its Overall Arrangement

For Second Artillery campaign deterrence activities, conventional weapons are applied first to carry out conventional deterrence against the enemy; second, strategic nuclear weapons are applied to carry out counter-nuclear deterrence against a country with nuclear weapons that is carrying out nuclear deterrence against us. Conventional operations will be the primary mode in future local wars under nuclear deterrence conditions. Nuclear and conventional deterrence must exist simultaneously, with the result that they play supplemental roles for each other. Dual deterrence must take dependable strength as its foundation, with appropriate amounts of troop strength, properly functioning weaponry and equipment, quality, trained deterrence personnel, broad, [end of page 275] rational command structures, programmatic, highly effective means of control, and rapid, accurate intelligence information systems. All of these things are basic conditions for carrying out effective campaign deterrence. Just by combining various deterrent qualities at opportune times, one is able to obtain the most effectiveness out of campaign deterrence activities.

C. Campaign Deterrence Activities Emphasize a Competition of Stratagems

Second Artillery campaign deterrence activities often have clear targets to be deterred. Therefore, relevant measures of resistance should be adopted in accordance with the deterrence ideology, the deterrent strength, and the activity methods of the enemy. The time during which campaign deterrence activities continue as well as the level of strength of deterrence will endure economic and military strength restraints. Campaign deterrence activities must strive in the face of fierce deterrence and in counter-deterrence competitions, adopting many types of modes, concealing our true plans, conserving limited operational strength, and manipulating and arranging soldiers and goods in ingenious ways. This will cause the enemy to have no doubts about our operational might and operational determination and it will cause the enemy to not analyze our operational capabilities thoroughly. By planning out and using stratagems over many areas and many points in time and space, by flexibly utilizing deterrent troops, and by adopting troop demonstrations, electronic demonstrations, launching pad demonstrations, and troop movements, and through other modes, one can confuse the enemy and deter the enemy. Psychologically, this creates a large amount of pressure on the enemy, that they may come under attack, compelling the enemy to not dare to act rashly. Advantageous stratagems are used to make up for deficiencies in deterrent strength and their relatively small costs obtain the greatest effects on campaign deterrence activities.

Section 2. The Guiding Ideologies and Principles of Second Artillery Campaign Deterrence Activities

The guiding ideologies and applied principles of Second Artillery campaign deterrence activities are the high-level outlines and summaries of campaign deterrence theory and are the fundamental bases guiding Second Artillery campaign deterrence. Research into the guiding ideologies and applied principles of campaign deterrence activities is a key

content in a discussion of Second Artillery campaign deterrence applications. [end of page 276]

I. The Guiding Ideologies of Campaign Deterrence Activities

The guiding ideologies of Second Artillery campaign deterrence activities are a centralized reflection and a high level outline of the guiding laws of Second Artillery campaign deterrence and they are the fundamental bases on which the Second Artillery carries out campaign deterrence.

The guiding ideologies of Second Artillery campaign deterrence activities are: “creating the appearances of a plan to attack and the right amount is effective” (造势伐谋，适度有效 *zào shì fá móu, shìdù yǒuxiào*). A concrete explanation of this is: taking national military strategy as the basis, earnestly carrying out the military strategic policy, engaging and applying nuclear and conventional missile unit forces, directing the activities against the enemy’s weak links and psychologically weak points, and adopting many forms of deterrence comprises a non-physical, psychological attack of active and flexible physical deterrence, thereby achieving the goal of subduing the opponent without war.

“Creating the appearances of a plan to attack” involves the arranging of nuclear and conventional missile unit deterrence forces in the appropriate forms in order to achieve pre-determined campaign deterrence goals. The show of might to the enemy will be enough to produce the effect of shaking the enemy, creating great psychological pressure on the enemy and creating a mood of caution, thereby forcing the enemy to change its plans for action. The creation of appearances must be credible and it must broadly apply stratagems, utilize effective opportunities, manufacture advantageous situations, adopt many types of methods, benefit from the actual situation, and cause the enemy to have no doubt as to the retaliatory strikes it will face. Sometimes concocting appearances requires hiding weaknesses and showing strengths, not covering up advantageous forces, and even making exaggerated demonstrations to the opponent. Sometimes, one should also conceal the true and reveal the false, making it difficult for the enemy to distinguish between true and false and making it difficult for the enemy to fully comprehend and believe the effect of these forces, thereby bringing respect to oneself.

“The right amount is effective” refers to the mastery of the level of deterrent strength in deterrence activities, which must be reasonable, advantageous, controlled, and effective. The right amount is the key and effectiveness is the goal. If the strength of the deterrent is too great, the enemy might take a risk because this huge psychological pressure is too difficult to bear, ultimately leading to campaign deterrence resulting in defeat. If the strength of the deterrent is too small, the side being deterred might not feel the presence of the deterrent and an enemy will not restrain its actions [end of page 277], so campaign deterrence would still be ineffective. How to implement the right amount of campaign deterrence and how to have effective campaign deterrence is a question for the guiding arts of warfare. The Second Artillery must base itself on the weaponry and equipment

and the number of troops that it currently possesses. On this foundation, one must painstakingly plan, painstakingly organize, and painstakingly execute. One must cleverly apply many means, combining technology with tactics and blending space with time. One route is not enough. All of these things, along with flexible applications and smooth preparations for contingencies, form a powerful deterrent force like that of a boulder rolling down a thousand-fathom tall mountain. This will cause the developmental direction of the deterrence situation to move to one's own advantage.

“Creating the appearances of a plan to attack” and “the right amount is effective” are an organic whole, interconnected and interdependent, with mutuality of conditions and closely combined. “Creating the appearances of a plan to attack” is the means of “the right amount is effective.” “The right amount is effective” is the goal of “creating the appearances of a plan to attack.” By not taking “the right amount is effective” as the ultimate objective, “creating the appearances of a plan to attack” loses direction, campaign deterrence activities lose their aim, and there is no way to achieve the right amount of deterrence or effectiveness. Without “creating the appearances of a plan to attack,” Second Artillery campaign deterrence becomes difficult to give effect to its own function and the deterrence effect of the missile units will no longer exist.

II. The Applied Principles of Campaign Deterrence

The applied principles of Second Artillery campaign deterrence involve the organization and implementation of the basic norms of Second Artillery campaign deterrence activities and they also involve the specific embodiment of the guiding ideologies of Second Artillery campaign deterrence. The applied principles of Second Artillery campaign deterrence reveal the basic laws and essence of Second Artillery campaign deterrence activities and they possess relatively strong natures meant for guiding and finding that which is suitable.

1. Unified Command and Centralized Shows of Strength

Second Artillery campaign deterrence, and particularly nuclear deterrence, must be carried out under the unified command of the highest headquarters (or the highest joint command posts). Missiles and nuclear weapons possess huge [end of page 278] lethal and long-distance strike capabilities. Decisions about the Second Artillery, whether they are for nuclear counterattack (or surprise attack) operations or nuclear deterrence activities, all touch upon huge national and strategic issues. Determinations about huge issues involve not only huge military questions, but also, and even more so, they involve huge political questions. Therefore, the power of command must be centralized in the highest headquarters. In the early periods of their utilization, the long-range launch and shaking effect of conventional missiles is strong. Therefore, the power of decision-making for major questions of conventional missile unit deterrence can be made by the highest headquarters or by joint command posts, in light of the realities of the situation. During the application of Second Artillery campaign deterrence, the utilization of campaign deterrence forces must be centralized and many means must be applied to form

a situation where deterrence is strong so that pressure is brought upon the enemy from the strategic level.

2. The Unity of Nuclear and Conventional Weaponry and the Coordination of their Application

Second Artillery campaign deterrence not only includes nuclear deterrence, but it also includes conventional deterrence. In accordance with the needs of deterrence, nuclear and conventional deterrence supplement each other and complement each other. When carrying out campaign deterrence, the Second Artillery must pay attention to the following four [sic] points. First, when carrying out conventional missile unit campaign deterrence, the Second Artillery must succeed in preparing for conventional missile strikes and for carrying out nuclear deterrence. Second, when carrying out nuclear missile unit campaign deterrence activities, the Second Artillery must be sure to closely coordinate with conventional campaign deterrence and conventional missile strike activities, to carry them out in coordination. Third, no matter whether it is conventional missile unit campaign deterrence or nuclear missile unit campaign deterrence, the interplay between the service branch (or service arm) operations within the joint operational arrangements and the deterrence activities must be taken care of in order to bring the full overall effect of joint deterrence to bear. Fourth, when nuclear deterrence and counter-nuclear deterrence are involved, one must prepare for nuclear counterattack operations. Fifth, campaign deterrence activities must be closely linked to political and diplomatic struggles in order to seize the support of international opinion, frustrate the intentions of the main enemy, create advantageous situations, and provide a strong backstop for powerful nuclear and conventional deterrence. **[end of page 279]**

3. Prepare Beforehand and Rapidly React

During peacetime, Second Artillery missile units must strengthen their warfare preparation work in order to be fully prepared for future military struggles. When threatening portents come from the enemy, missile units must maintain a certain state of alertness, while at the same time preparing to carry out campaign deterrence or even fire strikes. During conventional operations, missile units must be prepared to carry out nuclear deterrence or even nuclear counterattacks. The level of strength of nuclear and conventional missile unit campaign deterrence must increase in line with increases in the strength of the enemy's deterrence. The military pressure on a powerful enemy should be maintained so that it is, from beginning to end, equal with the pressure levered by the powerful enemy, while the military pressure on a weak enemy should be maintained so that it is, from beginning to end, relatively greater than the pressure leveraged by the weak enemy. When carrying out nuclear missile unit or conventional missile unit campaign deterrence, one must be prepared to transition into actual warfare and one must be fully ideologically and operationally prepared beforehand to be able to adopt nuclear and conventional retaliation against the enemy's extreme behavior. One must form a multi-form scheme in advance, one must prepare well beforehand, and one must rapidly react.

4. Key Points and Degrees of Advancing and Retreating

When planning, directing and organizing the command of Second Artillery campaign deterrence, Second Artillery campaign commanders and their command offices must take the overall situation as their basis, must centralize plans for the deterring forces, and must grasp the key points for influencing the effects of deterrence. This is especially true for the goals, opportune moments, degrees of strength, activities, and other important questions and key links for campaign deterrence, all of which should be mastered and scientifically controlled. Before the beginning of campaign deterrence, and aiming at various complex situations, one should scientifically arrange the deterrence forces, rationally determine the deterrence deployments, flexibly apply many means, and adopt many methods to ensure the smooth implementation of campaign deterrence. For specific applications, one must adjust one's own degree of deterrence strength at appropriate times in light of changes in the enemy's degree of deterrence strength. One must both be able to achieve the goals of deterrence and as much as possible avoid exacerbation of contradictions, maintaining the initiative in deterrence activities. From the perspective of campaign deterrence practices, the degree of strength for deterrence ranges from low to high and from weak to strong, escalating step-by-step. In carrying out campaign deterrence, the Second Artillery should adhere to this basic law. **[end of page 280]** At the same time, the Second Artillery must also prudently master deterrent strength, make key links prominent, and, at appropriate times, adjust the degree of strength of the campaign deterrence in order not to lose opportunities for carrying out effective deterrence.

5. Integrating the True and the False and Using Stratagems to Seize Victory

Second Artillery campaign deterrence is both a confrontation of forces and wills and a contest of stratagems and wisdom. The intense, fierce conflict among stratagems acts as the invisible smoke of gunpowder. One must master the deterrent tactics of the use of troops with knowledge and seize victory in warfare with stratagems. When carrying out campaign deterrence, one must, in light of the specific situation, broadly apply military stratagems and integrate the true and the false. "With the true comes the true," "with the false comes the false," "truth with an exterior of falsity," and "falsity with an exterior of truth." This will cause strength to appear and disappear from time to time, making it difficult for an enemy to discern the true from the false, and causing an enemy to make faulty judgments. When one's own strength is weaker than that of the enemy, one must ingeniously apply the means for changing between the false and the true, using "falsity with an exterior of truth," to cause the enemy to make faulty decisions and to prevent them from finding out the true size of our forces, thereby forcing the enemy to be unable to dare to act rashly. To grasp this principle, one must achieve a combination of secrecy and "leaks." One must both cause the opponent to know the strength of one's own deterrent force, but also, one must cause the opponent to be unable to clearly ascertain one's true intentions. During the deployment of deterrent forces, one must intermix real objects with fake, real positions with fake, real intelligence with fake, real activities with fake, etc. This will make it difficult to discern the true from the false and it will make it difficult for the enemy to decide upon operational decisions, ultimately achieving the goal of "victory through deterrence."

Section 3. Second Artillery Campaign Deterrence Methods

Second Artillery campaign deterrence methods is a general designation for the various modes, channels, measures, and means adopted by Second Artillery missile units when carrying out campaign deterrence. No matter whether it is nuclear missile units carrying out campaign nuclear deterrence or counter-nuclear deterrence or whether it is conventional missile units carrying out campaign deterrence, the following methods can be selected on the basis of differences in objectives and differences in opportunities. **[end of page 281]**

I. Exerting Pressure Through Public Opinion

Exerting pressure through public opinion primarily involves the dissemination by the missile units to the enemy of the campaign deterrence forces, their determination, attitude, and other information, through broadcasts, television, the issuing of statements, interviews with reporters, magazines, publications, and written works, as well as through the international and other multi-media outlets, in accordance with the campaign deterrence goals to be achieved. This is done in order to produce the result of shaking the enemy psychologically.

1. Methods of Implementation

The method of exerting pressure through public opinion is a primary method for applying nuclear missile unit campaign deterrence. In accordance with our nation's principled "no first use of nuclear weapons" stance and in light of the fact that our nation will not threaten the use of nuclear weapons against a non-nuclear nation, the method of public opinion propaganda of the application of nuclear deterrence is primarily directed against nations that possess nuclear weapons, since we do not use nuclear weapons as a deterrent for non-nuclear nations. The United States, Russia, the United Kingdom, France, and other countries, have not promised "no first use of nuclear weapons." They can, in accordance with their nations' strategic needs, use or threaten to use nuclear weapons at any time against any country or region. Our nation is a nation that loves peace. Our nation's nuclear policy is different from the nuclear policies of the other countries that have nuclear weapons. For this reason, when the international environment is advantageous for our nation, we should work hard to propagandize about our no first use of nuclear weapons principled stance in order to use our limited nuclear missile units as a bargaining chip, thereby forcing the major nuclear countries to take the lead in disarming their military or in carrying out nuclear arms control and restraining the major nuclear countries from engaging in nuclear blackmail, in order to win the broad sympathy and support of the third world nations. When the international environment is not to our advantage, when the nations that possess nuclear missile units show off their nuclear might, we can apply many types of public opinion means to demonstrate our strength and to issue a stern warning to the enemies, in order to restrain or delay an escalation of campaign deterrence. When a militarily strong nation counts on its conventional weapons it cannot be called an asymmetrical superiority and when it carries out conventional

strikes that threaten our nuclear facilities, in order to prevent letting out large amounts of nuclear contamination, we can utilize propaganda vehicles to issue forth statements, **[end of page 282]** manifestos, announcements, and other things to send to the enemy a threatening warning of our conditions for the use of nuclear weapons, forcing the enemy to make major concessions.

For conventional missile units, exerting pressure through public opinion is an important means for carrying out psychological attacks against the enemy. It primarily involves the utilization of many types of propaganda vehicles by conventional missile units to disseminate the campaign deterrence determination and the operational preparation state and other deterrence information about the conventional missile units to the enemy, in accordance with the deterrence plans of headquarters (or joint command posts). It convinces the enemy that our conventional missile units possess sufficient and effective strike forces, thereby keeping them from daring to act rashly.

Pressure is exerted through public opinion primarily through the following methods. First, issuing news announcements about new types of missile weaponry. Second, releasing pictures of the situations in missile unit exercise to the foreign media. Third, issuing stern warnings to the enemy that we will carry out missile strikes. In accordance with the needs of missile unit campaign deterrence, one can adopt the forms of television news announcements, the internet, and one can hold press conferences. At suitable times, one can issue information about new types of missiles. When the enemy carries out a military intervention against us, we should fiercely denounce the enemy's interventionist activities, and prepare for comprehensive operations. We should not fear a strong enemy and we should be brave in the face of threats of reprisal, forcing the enemy to abandon its plans to use force against us. When an enemy already comprises a threat against us, we can utilize the form of broadcast video recordings to send to the enemy the enormous scenes of our missile units' pre-combat exercises. This will allow the enemy to clearly understand that we are prepared to deal with suddenly arising events and that we are filled with the bravery to fight and the confidence to win. When a strong enemy's aircraft carrier combat group invades our maritime territory and when it directly uses military force to engage in a military intervention, we can communicate to the enemy, through the use of diplomatic, broadcast, television news, and other channels, that the use of conventional missile weaponry in fire strikes against the enemy's nuclear aircraft carrier will not be removed from possibility. Moreover, to protect national unity, we can send a strong warning about the defense of the sovereignty of territorial waters in order to restrain and scare away the enemy's interventionist activities. **[end of page 283]**

2. Key Points to Master

When applying the method of exerting pressure through public opinion, campaign commanders and their command offices should master the following key points. First, one must broadly open up agitation and propaganda, actively spread fighting spirit among the officers and soldiers, and build up an atmosphere of deterrence. Missile units adopting public opinion propagandizing of the deterrence must first actively expand the operational enthusiasm of the officers and soldiers and take full advantage of the

convening of mass effort pledging ceremonies and other opportunities, thereby causing the officers and soldiers to share a bitter hatred for the enemy. This is done in order to expand the soaring fighting spirit of the officers and soldiers and to create psychological pressure on the enemy. Second, unification of a centralized show of power, stepping up the reserved power from low to high. The method of exerting pressure through public opinion must be carried out under unified planning, in accordance with the deterrence plans of headquarters, and applying many types of public opinion dissemination tools. Early on, non-authoritative suggestions of warnings and other methods of public opinion propaganda must be adopted to create momentum in order to seize the broad support of international public opinion. At appropriate times, high-level public opinion dissemination should be carried out from authoritative deterrence mechanisms, adopting the speeches, press conferences, public announcements, and other forms put out by the highest officers and directed at the enemy to exert high-power psychological pressure. Third, remain in line with advantageous, rational, and considered principles. For a showing of strength in public opinion, there must be some leeway in the adjustment of the degree of strength of deterrence to ensure that the initiative is maintained from the beginning of deterrence to its end.

To exert pressure through public opinion, one should select opportune moments where the international strategic environment is very advantageous. One should revolve around one's own national policies and strive hard to gain the sympathy and support of world public opinion. At the same time, one must also achieve considered deterrence and one must know when to stop, and to quit when ahead. One must prevent excesses in public opinion, prevent the enemy from "a battle in which they either win or die," and prevent oneself from falling into passivity. Having leeway is an important principle that should be mastered by missile units engaging in campaign deterrence and it is a viewpoint put forward in the application of deterrence. One must fully consider when deterrence is no longer in force, the possibility and the reasonableness of achieving its goals, preventing "failing to keep one's word" and falling into passivity, all of which can cause post-deterrence problems.

II. Raising the Level of Weapons Preparation

Raising the level of weapons preparation refers to carrying out a transformation from low-level [end of page 284] to high-level, in accordance with the regulations regarding levels of weapons preparation, in order to achieve an activity increase in the state of operational preparation.

1. Methods for Raising the Level of Armed Preparation

Raising the weapon systems of missile units to different levels of preparation symbolizes different degrees of deterrent strength. Different degrees of deterrent strength can lead to different results for deterrence. Missile unit campaign deterrence preparation includes two levels. The first level involves technical preparation of the missiles. The second level involves preparations for missile launches. 'Technical preparations for the missiles' is a general designation for the equipping, inspecting, testing, and other technical

preparations work that provides up-to-standard missiles for the launch positions. This level is divided into technical preparations for the warheads and technical preparations for the missile body.

‘Technical preparations for the warheads’ refers to the various types of technical preparation work carried out on warheads. This primarily includes: the inspection and testing of defense penetration technology, carriage controls, firing controls, safety controls, and other systems and the overall equipping and testing of the warhead, as well as the technical analysis and handling work.

‘Technical preparations for the missile body’ refers to the various types of technical preparation work carried out on the missile’s body. This primarily includes: unit testing, separation system testing, and comprehensive testing. Missile launch preparations refer to the various types of technical preparation work to transform a missile which has completed technical preparations to a pre-combat state.

Raising the level of armed preparation usually proceeds step-by-step, as regulated by the operational flow and the level of preparation. Each missile must complete the contents of different levels of preparation, which are not at all similar, in order to meet the requirements for transitioning to real operations once deterrence is over. The programs and contents of campaign deterrence preparations and preparations for real operations should be basically the same in order to meet the requirements for quickly transitioning to real operations once deterrence is over. In accordance with the objective situations in which nuclear missile units must prudently raise [the level of preparation], under the usual circumstances, pre-combat preparations are not carried out on the launch pad in order to prevent [end of page 285] the objects from exploding. Liquid [fuel] tank launch units can carry out pre-launch preparations under non-filling circumstances and solid [fuel] missile units can complete pre-launch preparations.

2. Key Points to Master

During the course of raising the level of weapons preparation to carrying out nuclear missile unit campaign deterrence, commanders and their command offices should master the following key points. First, they should be good at dealing with the relationship between concealing and revealing. Second, they should be good at dealing with the relationship between deterrence and actual warfare. Missiles are high tech weapons. The time for their technical preparation is long and their launch times are relatively short. The technical preparation of missiles is usually carried out in a central storehouse, so it is escalation under concealed conditions and there is no way to let an opponent know the heightened state of our missile unit weapon systems. Because of this, the whole course of raising the level of weapons preparation that takes place in the silos can be recorded and then distributed around the world through television stations, the internet, and other recorded media transmission systems. However, one must carefully select which scenes are revealed, only exposing the outlines of certain instruments and facilities in order to keep from divulging technical secrets. The possibility that nuclear missile units will be used in actual warfare is small, but as applied in nuclear missile unit deterrence, one must

adhere to the law of steadily increasing the strength of nuclear deterrence in order to prepare to transition into actual warfare when deterrence is over. For this reason, during the course of nuclear deterrence, the technical preparations for the missile weaponry should be carried out in accordance with the needs of actual warfare. The nuclear missile units and warhead units shouldering strategic duty missions can act as the basic deterrent force, undertaking the early period tasks of nuclear missile unit campaign deterrence. Other units can act as a reserve deterrent force, shouldering the follow-on nuclear deterrence tasks.

III. Demonstrating Strength

Military strength usually refers to currently-held weaponry and forces, as well as to military facilities, armaments, resources, and other quantities and qualities. Demonstrating missile unit strength primarily involves demonstrating nuclear missile weaponry, various types of launches, and maintenance equipment, as well as high-quality operational personnel. **[end of page 286]**

1. Methods for Demonstrating Strength

To demonstrate strength, one usually adopts the following five [sic] methods. First, reviewing the troops; second, holding exhibitions of various types of weapons; third, inviting foreign military officials and reporters to visit weapons storehouses and launch pads (or silos) that have already been exposed; fourth, having the highest headquarters [officials] inspect the missile units at appropriate times; fifth, selecting the moment just before an enemy satellite flies over and organizing troop movements in the region of deterrence; sixth, arranging for troop movements and organizing troop and electronic decoy activities in order to increase the effect of demonstrating strength; seventh, occupying launch sites and organizing simulated missile launches, in order to increase the degree of deterrent strength. In various nations throughout the world, the national day is the best opportunity to review the troops and show off military strength. It is also the best opportunity for nuclear countries to show off the strength of their nuclear missile units. Nuclear missile units should fully utilize these opportunities, and bring out new types of missile weaponry and equipment. This is especially true for showing off new types of intercontinental missile nuclear weapons, the important “trump card” (撒手锏 chē shǒujiǎn). When demonstrating strength, one can, in accordance with the needs of nuclear deterrence, display before the world, in part or in whole, medium-range and long-range intercontinental missiles; solid and liquid [fuel] missiles; fixed and mobile missiles; missiles launched from land and missiles launched from the sea, as well as missiles launched from the air; guided missiles, cruise missiles, and other kinds of missiles. This is done in order to give an opponent a great psychological scare. It will force an enemy to understand that if it dares to step into the arena, it could endure a nuclear strike that will be difficult to bear. This will be taken into consideration when an enemy considers threatening the use of missiles or nuclear weapons. During the course of demonstrating nuclear strength, one should also utilize decoy launch sites and already-exposed launch silos as deterrence locations, while at the same time arranging various types of missiles and nuclear weapons, as well as the relevant coordinating facilities, combining the true

and the false and joining the vacuous with the solid. At appropriate times, one should open up the deterring locations and invite the relevant nation's major officials, military officials, and reporters to visit and take pictures at these locations. This is a conscious demonstration of strength. When an enemy nation demonstrates nuclear missile unit military strength and comprises a direct threat to us, **[end of page 287]** we should strongly oppose them and adopt inspections by the highest-level headquarters of the nuclear missile units and particularly of the intercontinental missile units. We should utilize the news media and other modes to distribute information related to the development and status of the nuclear forces, creating a psychological scare for the enemy and thereby weakening its deterrence activities.

2. Key Points to Master

When organizing missile unit demonstrations of strength, campaign commanders and their command offices must master three key points. First, they must combine currently possessed weaponry with future possible developments; second, they must combine real and fake missile weaponry; third, they must combine the actual level of technology with an appropriate degree of technical embellishment. Usually, active duty missile weaponry, currently-equipped missile weaponry, and the missile weaponry in research and development are planned for. The three are organically combined and fully shown, “showing the weak to be strong” and “showing nothing to be something.” This thereby increases the effectiveness of deterrence. Demonstrating strength must have both quality and quantity in order to increase the degree of strength of the deterrent. In peacetime, one should copy a large number of highly realistic models of missiles and highly realistic equipment vehicles, or one should use multi-media, the properties of optical physics, or some other technological means to create a large number of decoy missile weapons and thereby achieve the goal of demonstrating the strength and subduing the enemy.

IV. Creation of the Appearance of Troop Strength

Creation of the appearance of troop strength involves the state of affairs and appearances created by missile unit deployments and activities. It can be divided up by time periods into peacetime creation of the appearance of troop strength, pre-combat creation of the appearance of troop strength, creation of troop strength during conventional warfare, and post-combat creation of the appearance of troop strength. The creation of appearances involves the use of appropriate forms to create advantageous situations for us by creating the appearance that inferior strength is transformed into a balance of power and that a balance of power is transformed into superior strength. Creation of the appearance of troop strength is not at all a military state between the two sides during operations, but instead it involves the missile units bullying and confusing the enemy through the use of manipulated troops and battle lines, which achieves the goal of leaving the enemy with no way to accurately determine what the true intentions of our side are. **[end of page 288]**

1. The Methods for Creating the Appearance of Troop Strength

The primary methods for creating the appearance of troop strength include the following. First, troop mobility; second, moving the real and the fake together; third, simulated launches; fourth, electronic decoys; fifth, all-out escalation. Troop mobility involves the mobile capabilities of missile launch vehicles and their associated facilities which, after an appropriate degree of camouflaging, organize units to move in a partially visible manner in pre-determined directions just before the time when the enemy's reconnaissance satellites are overhead. This indicates to the enemy that one's own side is engaging in the early periods of preparations for operations, thereby causing the enemy to show restraint in its possible adoption of risky actions. Troop mobility can involve splitting up and going many different ways, moving as one group, and many other forms. Looking at the means of mobility, they include moving on public roads, moving on railroads, and moving through the air, as well as moving over waterways. It can also use two or more modes in combination. All of this causes the enemy to psychologically endure our major units moving into operations zones and it can bring the huge psychological pressure of a large-scale nuclear strike being carried out against it. Moving the real and the fake together involves using a small number of actual combat troops to compliment decoy forces and operational units so that together they create the appearance of troop strength. Decoy forces include engineering units, electronic resistance units, and other forces, which carry with them fake missiles and fake equipment and engage in nearly parallel maneuvers. Moving the real and the fake together expands the size of the troop strength and it increases the overall effects of deterrence. Simulated launches involve mobile missile units occupying training grounds and fake [launch] sites just before an opponent's reconnaissance is overhead. They show off equipment, raise missiles to a vertical position, and carry out pre-launch inspections. Liquid [fuel] missiles carry out simulated fueling. This makes the enemy believe that our missile units have already entered a situation in which they are waiting for an opportunity or that they are carrying out pre-combat exercises. Because of this, the enemy will consider the effects and abandon certain of its activities. Electronic decoys involve the use of electronic equipment and communications gear to simulate the electromagnetic radiation characteristic of one's own missile unit activities and command center activities. This will cause an opponent to make mistaken decisions about unit activities and cause it to be in a highly nervous state from beginning to end. All-out escalation involves silo units and launch pad units carrying out their various missile weaponry technical preparations at the same time. It uses many types of media to transmit recorded information on the operations and on the weapon escalation of the units to the world. This causes the opponent to see the state of our missile weaponry escalation **[end of page 289]** and thereby creates a psychological fear so that the enemy takes the after-effects of its actions into consideration.

2. Key Points to be Mastered

When organizing the creation of the appearance of troop strength for nuclear missile units, campaign commanders and their command offices should master the following few key points. First, the combination of actual combat troops and decoy troops, which, to the

enemy, appears to be strength. Second, the combination of the creation of appearances during active periods and the creation of strength during quiet periods, while taking activity as the main element. Third, the combination of hard means and soft measures, which employs two means to achieve one goal. Fourth, the combination of demonstrations of strength and concealment of plans, with strict protection of secrecy. Fifth, the combination of the creation of the appearance troop strength and the dispersal of information, rationally selecting the opportune moments to create strength, sending out relevant information at the right times, and ensuring that the creation of the appearance of troop strength is effective.

V. Launch Exercises

Launch exercises are actual troop campaign exercises organized by command offices with deterrence as the goal. They primarily involve launching missiles at a pre-determined area of land (or area on the sea) as a deterrent activity to scare the enemy psychologically. Launch exercises are mid-strength and high-strength deterrents and they are deterrents that come close to being actual combat. Through launch exercises, on the one hand one can create huge psychological pressures and panic in the enemy, with a huge deterrent effect. On the other hand, they can also test the operational capabilities of the units through an actual missile launch.

1. The Methods for Carrying Out Launch Exercises

The following methods for carrying out launch exercises can be adopted. First, a single missile launch exercise. Second, a multiple missiles launch exercise. Third, launching a missile into a predetermined area of land. Fourth, launching a missile into a predetermined area on the sea. Fifth, a launch exercise using a single type of missile. Sixth, a launch exercise using many types of missiles. The level of deterrent strength for missile unit launch exercises is selected in accordance with the objects of deterrence and the functions of the weaponry. When carrying out [end of page 290] medium strength deterrence against an enemy, one can execute a single missile launch exercise. When carrying out high-level strength deterrence against an enemy, one can carry out launch exercises with multiple waves of multiple missiles. When carrying out campaign deterrence against the land of nearby countries, one can launch missiles into a pre-determined area in one's own border zone. When carrying out campaign deterrence against a nation's sea (or ocean) territory, one can launch missiles into a pre-determined area on the sea in open waters nearby the enemy's maritime territory. In nuclear deterrence against a powerful enemy, one often coordinates the nuclear forces with other service branches to carry out joint deterrence against the enemy. When carrying out deterrence against an enemy of comparable military strength, one usually carries out high strength deterrence with a single missile unit using many types of missiles and launching those missiles in a number of waves into predetermined areas on one's own land (or sea territory) in order to demonstrate one's multi-missile comprehensive strike capabilities and thereby increase the overall deterrent effect of the various missile units.

2. Key Points to be Mastered

During the course of launch exercises, campaign commanders and their command offices should master the following key points. First, careful selection of opportune times to launch missiles. Second, using intercontinental missile launch exercises as the main form for carrying out deterrence against strong enemies. Third, to ensure effectiveness, economize in the use of missiles. Fourth, joint deterrence, with an emphasis on coordination. The effect of deterrence is closely related to the selection of opportune times to launch missiles. For this reason, campaign commanders and their command offices should grasp developments in the enemy's situation, conscientiously analyze the state of deterrence, scientifically devise strategies, carefully select opportunities for missile launches, and ensure that the greatest deterrence effectiveness is attained. When a strong enemy counts on its nuclear superiority to threaten the use of nuclear weapons, we should usually sharply oppose this and use nuclear weapons to control nuclear weapons, taking the major strategic and critical locations in the strong enemy's homeland as the targets of our retaliation, launching intercontinental missiles with non-nuclear warheads into pre-determined areas on the sea. This should be done in order to display our intercontinental nuclear strike capabilities, in order to demonstrate that we are bravely determined to use nuclear missile units to carry out nuclear strikes against the enemy, and in order to deter the strong enemy's nuclear threats. During the course of launch exercises, one should take an emphasis on effectiveness and the economization in the use of missiles as basic principles. A prerequisite to effective deterrence is rational planning for the number of missiles to be expended. Nuclear missile units should initiate coordination, **[end of page 291]** and actively cooperate with the deterrence forces of other service branches.

VI. Close (and On-The-Border) Launches

Close (and on-the-border) launches involve launching missiles at nearby enemy ships and nearby enemy nations (or near to the land or sea territory of an island the enemy is occupying). This causes the enemy to feel that if it acts according to its will and dares to take a risk, it will necessarily come under a missile fire attack that will be difficult to bear. This thereby is a method which causes the enemy to abandon its risky actions. This sort of deterrence belongs to the high strength indirect strike method of deterrence.

1. The Methods for Carrying Out Close (and On-The-Border) Launches

The following are the primary methods for carrying out close (and on-the-border) launches. First, launches near a land border (or sea border). Second, two-prong converging attack close (or on-the-border) launches. Third, over-island offensive-style launches. Fourth, close-to-aircraft carrier launches. Two-prong converging attack close (or on-the-border) launches involve launching missiles near the sea territory (or land) of two or more important objectives on an enemy-occupied island (or an enemy nation). This embodies the suppressive strength of a converging attack and it hits the head while striking the tail, cutting off the enemy's head from its tail and thereby causing a huge psychological scare for the enemy. Over-island offensive-style launches involve the use

of conventional missile launches over relatively long distances when one is carrying out high strength deterrence against an enemy guarding an island. Its ability to penetrate defenses is strong, among other advantages, and this allows the missiles flight path to go over important cities and other important objectives, creating great psychological pressure that calamity will fall upon the enemy from the clouds. This method can have unintended effects. When carrying out high strength deterrence against an enemy nation connected to our country or separated from our country by the sea, we can directly launch missiles into the land borders connecting us to them or we can launch missiles into the open waters close to the enemy's maritime territory. When carrying out deterrence strikes against an enemy aircraft carrier battle group intruding into our territorial waters, we can launch missiles nearby their flanks or in front of them in order to show our capabilities and our determination to carry out a devastating strike against the enemy's nuclear-powered aircraft carriers. This will scare the enemy psychologically and the enemy will leave our **[end of page 292]** territorial waters.

2. Key Points to be Grasped

Campaign commanders and their command offices should master the following key points when organizing and executing close (and on-the-border) launches. First, handling the relationship between combat and non-combat and mastering this as the starting point. Second, ensuring precise strikes and preventing errors that would cause the quality of deterrence to vary. Third, scientifically selecting launch opportunities in order to obtain the best deterrence effects. Fourth, uniting with the international diplomatic struggle and mastering the nature of policies. Close (and on-the-border) launches do not touch important targets within an enemy's homeland. They are not directed against enemy targets and they do not create any substantial damage. It is not necessary to directly announce them or to notify the enemy through diplomatic channels. One can announce restricted airspaces or sea spaces to the world through other channels in order to limit the people within the scatter area and prevent mistakenly injuring third-country people or ships. During close (and on-the-border) launches, one must maintain a certain appropriate distance from the enemy's border (or territorial waters) and one must select very precise missiles in order to prevent errors in precision or losing control of the missile when it is in flight such that it enters enemy territory (or an enemy-occupied island), or such that it directly strikes an enemy aircraft carrier. If these things are not prevented, they could cause the appearance of deterrence to change, giving the enemy a handle on our violence or creating passivity following the deterrence. In the selection of missile launch opportunities, one should precisely determine developmental changes in the situation and ensure that the best deterrence effects are obtained in accordance with the possible level of threat comprised against the enemy as well as the developmental trends in the situation. Because close (and on-the-border) launches have a very strong quality of directionality and strong political sensitivities, it is extremely easy for them to come under the attention of international public opinion. Militarily strong nations might use various types of excuses to directly or indirectly engage in military interventions. For this reason, one must master principles that are rational, advantageous, moral, and considered, as well as mastering the principles of quitting while one is ahead and focusing on actual

effects. This must be done to ensure that the initiative in deterrence is firmly grasped.
[end of page 293]

VII. Reducing the Nuclear Deterrence Threshold (or Adjusting Nuclear Policies)

Reducing the nuclear deterrence threshold refers to when a militarily powerful country armed with nuclear missiles and depending on its absolute superiority in high tech conventional weapons carries out medium or high strength continuous air raids against our major strategic targets. When one's own side lacks a brilliant plan for resisting the enemy, the nuclear missile forces should follow the orders of the highest headquarters, adjust their nuclear deterrence policies in a timely fashion, and actively carry out powerful nuclear deterrence against the enemy, in order to deter the powerful enemy from continuously using conventional air raids against our major strategic targets. The following are opportune moments for nuclear missile units to reduce the nuclear deterrence threshold. First, when an enemy threatens to carry out conventional strikes against our nuclear facilities (or nuclear power stations). In order to prevent the large-scale disaster of nuclear leakage, one's own nuclear missile units must sharply oppose the enemy and use nuclear missiles to carry out effective deterrence. This will restrain the enemy from carrying out its scheme of using conventional air raids against our nuclear facilities. Second, when an enemy threatens to carry out nuclear strikes against one's own major strategic targets related to the safety and sanitation of the people, like large-scale water and electricity stations, one should adhere to the deterrence orders of headquarters and threaten to use nuclear missiles against the enemy in order to ensure the absolute security of one's own major strategic targets. Third, when an enemy threatens to carry out medium or high strength conventional strikes against our capital, important major cities, and other political and economic centers, the nuclear missile units should follow the orders of headquarters and resolutely issue threats to the enemy of the use of nuclear weapons. This should be done in order to achieve the goal of reducing the strength of the enemy's air raids or the goal of deterring the enemy from carrying out air raid activities. Fourth, when conventional warfare continues to escalate and the overall strategic situation changes from positive to disadvantageous for us, and when national safety is seriously threatened, in order to force the enemy to stop its invasion warfare and in order to save the country from danger, the nuclear missile units should follow the orders of headquarters and carry out effective deterrence against the enemy.

1. The Methods for Reducing the Nuclear Deterrence Threshold (or Adjusting Nuclear Policies)

Reductions to the nuclear deterrence threshold should strictly follow the commands of headquarters regarding reducing the nuclear deterrence threshold. **[end of page 294]** Reductions should use many paths, adopt methods flexibly, and carry out nuclear strike deterrence against the enemy. Its main program should include: public opinion propaganda of nuclear deterrence — showing the form and creating the shape of nuclear deterrence — and nuclear deterrence launch exercises. First, one should disseminate warning information about nuclear strikes through the television, broadcasts, publications, the internet, and other forms of media. This will cause the enemy to clearly

understand that our side's nuclear missile units are already following the orders of the highest headquarters, that our nuclear policies have been adjusted, and that comprehensive preparations for the retaliatory use of nuclear weapons have begun. This will create a huge psychological scare for the enemy. We can, in accordance with the level of threat the enemy presents to us and at appropriate times, disseminate the points at which our nuclear strikes are aiming. This is the highest level of deterrence and it is also the lowest limit of reductions to the nuclear deterrence threshold.

2. Key Points to be Grasped

When reducing the nuclear deterrence threshold, campaign commanders and their command offices should master the following key points. First, strictly implementing the orders of the highest headquarters to reduce the nuclear deterrence threshold. Second, prudently selecting deterrence opportunities after reducing the nuclear deterrence threshold. Third, leaving sufficient room to maneuver. Fourth, completing comprehensive preparations for nuclear counterstrike operations. Because of the strong nature of reducing the nuclear deterrence threshold, missile units must strictly adhere to the commands of highest headquarters and cannot in any way carry on with their own affairs, or at their own will decide on the major question of reducing the nuclear deterrence threshold. Directed against a powerful enemy only using conventional strikes against us that can constitute a huge threat to us, campaign commanders and their command offices should scientifically strategize and prudently select the opportunities for nuclear deterrence in order to ensure the formation of an advantageous nuclear deterrence situation. During nuclear deterrence, one should retain ample room to maneuver, prudently select the lowest threshold of the use of nuclear weapons to threaten the enemy, and when the threatened use of nuclear weapons is unable to restrain the occupying enemy's military activities, one should ensure the transition into a post-nuclear strike strategic situation that is advantageous to one's own side and in which one can firmly grasp the strategic initiative, winning the broad support of the world's peace-loving nations and peoples. The bottom line that must be firmly grasped is that when nuclear deterrence is a bargaining chip that both measures whether or not an enemy can accept deterrence defeat and whether or not an enemy can prudently [end of page 295] consider deterrence defeat, we are able to use our nuclear deterrence currency in a way that ensures that our own side is believable and that we can act on what we are saying. This establishes the best foundation for the deterrence that follows. Therefore, to carry out nuclear deterrence, one must make decisions prudently. Nuclear strikes usually take nuclear deterrence as their forerunner. Therefore, during the course of high strength nuclear deterrence, one should prepare for nuclear counterstrikes. The better the preparations, the more believable the strength of nuclear deterrence. The better the nuclear deterrence goals are achieved, the less likely that nuclear missile units will be used in actual combat. [end of page 296]

Chapter 11

Second Artillery Nuclear Counterattack Campaigns

Second Artillery nuclear counterattack campaigns refer to the operational activities of Second Artillery nuclear counterattack campaign large formations when carrying out a number of second-strikes with nuclear missiles, in accordance with unified plans and highly centralized command, in order to achieve particular strategic or campaign goals. Second Artillery nuclear counterattack campaigns consist of two modes of activity, namely stand-alone nuclear counterattack campaigns and joint nuclear counterattack campaigns. Because the nuclear forces of the Second Artillery are our nation's primary nuclear forces, joint nuclear counterattack campaigns usually take the nuclear forces of the Second Artillery as their main component, with the nuclear forces of the navy's nuclear submarines and the nuclear forces of the air force's bomber units unifying three dimensions of nuclear counterattack operational activities. Nuclear counterattack campaigns usually are divided into three stages, namely campaign preparation, campaign execution, and campaign conclusion. Campaign preparation refers to the course of preparations carried out by the campaign commanders, their command offices, and the operations and logistics units to organize and support a nuclear counterattack campaign, from the time after being assigned a nuclear counterattack operation advance order (预先号令 yùxiān hàoling) by headquarters and before the Second Artillery sends orders to the units to launch the first wave of missiles. Campaign execution refers to the process from the beginning of the orders to launch the first wave of missiles to the completion of the launches of the final wave of missiles. Campaign conclusion refers to the withdrawal from positions, adjustments and replenishments, reports on the state of the war, and other series of activities adopted by the campaign commanders and their command offices after the completion of the pre-determined number of nuclear strikes in order to conclude the campaign.

Section 1. Missions and Characteristics of Second Artillery Nuclear Counterattack Campaigns

In strictly carrying out the nuclear counterattack strategic intentions of headquarters, one must clarify nuclear counterattack [end of page 297] missions and adhere to the laws of nuclear counterattack campaigns. In order to lead nuclear counterattack campaigns to victory, one must first understand the missions of nuclear counterattack campaigns and correctly grasp the characteristics of nuclear counterattack campaigns.

I. The Missions of Nuclear Counterattack Campaigns

The basic mission of Second Artillery nuclear counterattack campaigns is: carrying out missile strikes on the enemy's important strategic and campaign targets, in accordance with the intentions of higher levels, in order to frustrate the enemy's strategic plans, shake the enemy's will, cripple the enemy's command systems, retard the enemy's warfare activities, weaken the enemy's warfare potential, and prevent an escalation of nuclear warfare.

The concrete missions of Second Artillery nuclear counterattack campaigns are: after our nation has endured an enemy's nuclear raid, Second Artillery campaign large formations carry out the nuclear counterattack operations orders of the highest headquarters, either independently or jointly with the nuclear forces of the other service arms, carrying out nuclear missile strikes against the enemy's command centers, communications hubs, transportation hubs, military bases, political centers, economic centers, important industrial bases, and other strategic and campaign targets.

II. The Characteristics of Nuclear Counterattack Campaigns

In future local wars under informationalized conditions, because of the particularities of nuclear missiles, the strategic nature of the targets struck, the length and breadth of the campaign battlefield, and the complexity of the operational environment, in addition to possessing the normal characteristics of local warfare campaigns under informationalized conditions, Second Artillery counterattack campaigns also possess the following primary characteristics:

1. The Battlefield Environment is Ruthless and the Need for Survival and Protection are High

In light of our nation's no first use of nuclear weapons principled stand, the Second Artillery can only carry out nuclear missile strikes against the enemy's important strategic targets in accordance with the operations orders of the highest headquarters and after the enemy has carried out a nuclear raid against our nation. The Second Artillery is an important strategic force for headquarters, and it is also an important target in the early period of enemy strikes. Second Artillery command [end of page 298] centers, missile bases, warhead bases, and other important targets will all be important points for an

enemy's nuclear raids. For this reason, from an overall perspective, Second Artillery nuclear counterattack campaigns carry out operational activities under nuclear conditions (or under nuclear deterrence conditions). For operations under nuclear conditions, the battlefield situation is extremely complex, the operational environment is very ruthless, the shock waves (killing machinery), light radiation (physical devastation), atomic radiation (physical devastation), radioactive fallout (killing life forms), electromagnetic pulses (effecting destruction), as well as environmental destruction and other things effecting total annihilation are caused by nuclear explosions. This can cause people, weaponry and equipment, position engineering, reconnaissance systems, command and control systems, communications systems, and many other things to be come under severe duress and destruction. At the same time, the nuclear counterattack operations zones will come under widespread pollution, which will severely affect the survivability and nuclear counterattack operational activities of the operational units.

Strategic reconnaissance is the basic means by which the enemy gathers intelligence about our targets. Under a situation when the enemy's military reconnaissance technology and missile aiming precision is continually increasing, their appearance is equivalent to destruction. The first question is the close protection of missile unit survival. One must adopt all effective measures to preserve to the greatest extent possible the operational capabilities of a nuclear strike, concealing the activities and plans of the units, strengthening the effectiveness of the camouflage for the operational positions, avoiding and to the greatest extent possible eliminating the losses caused by an enemy's nuclear raids or precision guided weapon raids. One must also carry out counter-airborne and ground-based defensive operations to ensure the safety of important targets within the area of operations.

Protection should pass through the entire course of the whole campaign. First, one must establish perfect early warning and warning report information distribution systems. One must fortify, and take many other types of measures, to resist against nuclear weapons, increasing the comprehensive protective capability of launch silos, missile storehouses, and command centers. One must set up and perfect air raid defense, electronic defense, and ground defense systems in coordination with the forces of other service branches. The units must conceal their deployments and positions must be arranged in a dispersed manner, and clever camouflaging must be carried out. Air strike defense plans under informationalized conditions must be formulated. When protective exercises are carried out, they must set up ruthless battlefield environments and organize unit mobility and feigned movements at appropriate times, in order to conceal the activities and plans of the units. **[end of page 299]**

2. The Effect of Using Nuclear Weapons is Huge and the Command Authority is Highly Centralized

When Second Artillery campaign large formations carry out nuclear counterattack campaigns, they use medium-range, long-range, and even intercontinental strategic nuclear missiles to strike important strategic and campaign targets in the enemy nation. Because the firing distance and destructive power of nuclear missiles is enormous and

because their ability to breach defenses is strong, one can destroy thousands of kilometers or even tens of thousands of kilometers of the enemy's political, command, and other important military targets within a few minutes, thereby influencing the progress and outcome of the whole war and affecting the overall state of the nation's political, economic, diplomatic, and military struggle. For these reasons, when the Second Artillery carries out nuclear counterattack campaigns, it must engage in highly centralized command. The determinations of campaign policies, the selection of strike targets, the determinations of opportunities for nuclear counterattacks, the number and type of attack waves and the number and type of nuclear missiles used, as well as the other major issues involved with achieving strategic and campaign goals must all be decided by headquarters. Second Artillery campaign large formations must extremely strictly and extremely precisely carry out the operational orders of headquarters and they must carry out nuclear counterattack campaigns independently or under the unified planning and unified command of joint command posts. In order to guarantee that highly centralized command is realized, Second Artillery campaign large formations must set up crack, highly effective command mechanisms, as well as command automation systems that are resistant to interference and destruction, to comprehensively safeguard the system in a timely manner. They must guarantee that the plans and determinations of headquarters are carried out. Under the prerequisite of highly centralized, unified command, Second Artillery campaign commanders and their command offices must fully bring their initiative, activity, and creativity to bear. When command is disrupted or when the situation is urgent, the Second Artillery campaign commanders and their command offices should, within their limited scope of authority, act on their own judgment, in light of the strategic intentions of headquarters.

3. The Period for Campaign Preparations is Long and the Requirements are High

Nuclear missiles belong to the category of high tech weaponry. Their weapon systems are complex and their technological, overall, [end of page 300] and accuracy requirements are high. Examples of this include the on-site assembly facilities and huge equipment maintenance systems for warheads, shells, propulsion engines, and ground equipment. During the course of operations, if a problem appears in a certain component, if a certain portion of the technical maintenance work does not follow, or if a key point to be taken care of among the various factors being coordinated does not happen in time, the smooth completion of the overall campaign's mission will be affected. For these reasons, if one wants to reduce the preparation time for nuclear counterattack campaigns in order to increase the rapid reaction capabilities of the missile units, in peacetime one must have high standards and strict requirements, so as to fully prepare and to maintain the weapon systems in an optimal state. In examining and transporting nuclear warheads, one must do so in a concealed, precise, strict, and detailed manner, so that it is sure to fire. For storing the vulnerable equipments and parts, one must prepare for urgent needs. In keeping technical talent in reserve, one must do as much as possible to shorten the technical preparation time in wartime, in order to increase their ability to handle high technical issues.

4. There are Many Restricting Factors and the Relationships to be Coordinated are Complex

When the Second Artillery is carrying out a nuclear counterattack campaign, the things to be maintained are many and the required standards are high. The restricting factors are numerous and the control is difficultly high. The transition between attack and defense is rapid and the fields of coordination are broad. The on-missile instruments and the on-the-ground test equipment are legion. The technical aspects are relatively complex. If a certain device is damaged, it will affect the completion of the whole nuclear counterattack operational mission. If one factor in maintenance does not follow, the whole nuclear counterattack operational activity will be affected. If the launch position (or launch silo) assembly facilities are not prepared, there will be no way to examine or test or launch the missiles. If routes of maneuver are interrupted the troops will necessarily be blocked. During the coordination of the operation, if a single firing activity is out of balance, it could affect the result of the fire coordination and it could even slow down the progress of the whole operation. During the course of campaign protection, if the activities of one link in the defensive system is broken, for example, if something is overlooked or if the protecting units are unable to coordinate their activities, it can allow the enemy to seize the opportunity to sneak in, creating severe destruction for our missile positions, storage centers, and command posts, and causing command to be severed, positions to be eliminated, storage bunkers to cave in, personnel to die, equipment to be lost, etc. For these reasons, campaign commanders and their command offices must keep an eye on the overall situation, strategize carefully, and conscientiously organize. **[end of page 301]** Organizing and executing a nuclear counterattack campaign in light of the progression of the campaign under pre-prepared conditions eliminates many of the negative effects of the restraining factors. Conscientiously assembling the weaponry and equipment often gives rise to the optimal circumstances. Perfect operational positions and facilities conform to defensive, offensive, transportation, food, lodging, and storage needs. With command system security and dependability, one is able to maintain uninterrupted command. Each measure of maintenance done in a specified and timely fashion is in line with operational requirements. The complete arrangement of operational plans, the frequent carrying out of exercises, and the resolution of existing issues, cause every kind of person to have the best military and political qualities and to be ever ideologically prepared.

5. Battlefield Space is Broad and the Difficulty in Command and Control is Great

Second Artillery missile units are proliferated throughout various war zones, separated from each other by thousands of kilometers. The command post, launch positions (and silos), central storehouses (and testing warehouses), and other facilities of just one missile base are dispersed within areas ranging from tens of thousands of square kilometers to hundreds of thousands of square kilometers. The launch position groupings of one missile brigade are also dispersed within a scope of thousands of square kilometers. The function of these weapons determines that missile units must be deployed throughout our hinterland in relatively fixed positions. However, the factors that could expose them are many, camouflaging is very difficult, it is easy for enemy reconnaissance to spot them,

the threat of a surprise raid is necessarily very great, and the chain of command and control is easy to break. For dispersed arrangements of operational positions, there are advantages to concealing camouflage, which increases the survivability of the units. However, the campaign space is large, causing a certain amount of difficulty for command, maintenance, and coordination. For these reasons, the establishment of battlefield information high-speed roadways must be strengthened and the ability of C⁴ISR systems to resist destruction must be strengthened. The concealment and camouflage work must be strengthened to increase survivability. The means for testing nuclear explosions must be perfected in order to increase the testability of the effects of a strike. These things must be done in order to produce a timely, accurate basis on which campaign commanders can make determinations. [end of page 302]

Section 2. Guiding Ideologies and Principles of Second Artillery Nuclear Counterattack Campaigns

Second Artillery nuclear counterattack campaign operations must be carried out under the guiding ideologies and principles of Second Artillery campaigns. Because the resultant effect of these operations is so great, policymaking authority is highly concentrated. However, the ability to protect oneself is weak and the number of forces are limited. For this reason, one must adhere to one's own operational guiding ideologies and principles.

I. The Guiding Ideologies of Nuclear Counterattack Campaigns

The guiding ideologies of nuclear counterattacks campaign operations are “close protection, key point counterattacks.” (严密防护，重点反击 yánmì fánghù, zhòngdiǎn fǎnjī)

“Close protection” is the prerequisite for carrying out nuclear counterattacks. It is the fundamental channel through which the Second Artillery increases survivability and the effective preservation of nuclear counterattack might under nuclear conditions. The purpose of “close protection” is to set up a complete protective organization, to fully prepare, and to adopt all effective measures to avoid or to the greatest extent possible reduce the losses caused by an enemy nuclear raid or precision strike. This guiding ideology embodies the comprehensive and continuous natures of protection requirements and the closeness and activeness of defensive measures. The comprehensive nature of protection requirements refers not only to the need to adopt all effective measures to reduce the losses caused by an enemy nuclear strike, but at the same time it also refers to the need to prepare to deal with the enemy's conventional weaponry precision strikes and electronic attacks. The continuous nature of protection requirements refers not only to the need to prepare to defend against sudden enemy raids in the early periods of a war, but it also refers to the need to organize and execute defenses against sudden enemy raids in the middle and at the end of a war. It involves preparing to attack while in the middle of defending and having defenses while in the middle of attack, and it combines attack and defense. Close protection runs throughout the entire course of nuclear counterattack operations. The closeness of the protective measures refers to the need to adopt effective

measures, from operational engineering, defensive systems, unit deployments, position arrangements, concealment and camouflage, and other things in order to increase **[end of page 303]** missile unit survivability. The active nature of the protective measures refers to the goals of protection, which are to preserve the limited nuclear counterattack forces and to protect key points, from beginning to end revolving around the survival for nuclear missile units in order to provide the material foundation on which to carry out nuclear counterattacks.

“Key point counterattacks” involves centralized nuclear firepower key point strikes on the enemy’s crucial targets. Its goals are to cause huge losses for the enemy and to cause the enemy to be very shaken psychologically in order to achieve the goal of weakening the enemy’s will to wage war. This guiding ideology is a specific application of the “centralize forces to attack and annihilate the enemy” principle in nuclear counterattack operations. Second Artillery nuclear counterattack campaigns are usually carried out under conditions in which the enemy is strong and we are weak. We must change the situation from overall inferiority to local superiorities and we must change the passivity of the early period of the war into the initiative during the middle of the war. To do this requires the use of nuclear counterattack forces at key points and the centralization of superior forces at the critical moment, when the enemy is not expecting it, to carry out nuclear strikes against the enemy’s major strategic targets. “Key point counterattacks” is primarily achieved through the centralization of superior firepower, namely through the implementation of nuclear fire maneuvers to already-equipped positions, in accordance with the nuclear firepower plans, to centralize forces for carrying out nuclear strikes against the enemy’s major strategic targets or target groupings. In order to make up for insufficient ranges of fire, one can move troops and weapons to achieve the goal of centralized fires.

“Close protection” and “key point counterattacks” are an organic, interlinked, interdependent, mutually conditioned, and closely combined whole. “Close protection” is the prerequisite for “key point counterattacks” and “key point counterattacks” are the goal of “close protection.” Without “close protection,” “key point counterattacks” have no way of being carried out. Without “key point counterattacks,” the use of nuclear counterattack forces could lose its overall threat, with no way to form local superiorities and no way to achieve the goal of shaking the enemy. For these reasons, the two should be interdependent, complementary of each other, and inseparable. **[end of page 304]**

II. The Principles of Nuclear Counterattack Campaigns

In addition to requiring adherence to the principles of Second Artillery campaigns, nuclear counterattack campaigns must also adhere to the following principles.

1. Adapt to Noxious Environments and be Fully Prepared in Advance

For Second Artillery nuclear counterattack campaigns, the weaponry used is special and the operational activities are related to the overall situation in the war. The technological

nature of the weapon systems is strong, the requirements for synthetic assembly are high, and the organization of command is complex. One must accord with the strategic intentions of headquarters and fully prepare during peacetime. One must from beginning to end maintain the integrity of the weapons, set up the battlefield properly, closely camouflage and protect, and draw up many plans for activities and coping in advance. One must repeatedly verify the nuclear counterattack targets, scientifically arrange them, and carry out pre-combat exercises. This will allow the units to adapt to various noxious battlefield environments and ensure that we are still able to carry out nuclear counterattack operations even after coming under an enemy's nuclear raid and conventional weapons raids.

2. Scientifically Plan Fires and Centralize the Use of Troops

Second Artillery nuclear counterattack campaigns are usually carried out under conditions where the enemy is strong and we are weak and where the enemy is superior and we are inferior. The principled standpoint of the no first use of nuclear weapons determines the follow-on nature of our nuclear strikes. Looking from an overall viewpoint, our nuclear strikes are carried out under situations in which we have sustained serious losses. For these reasons, we must centralize the limited nuclear counterattack forces to carry out retaliatory nuclear counterattacks against the enemy. The substance of centralized troops is the centralization of firepower, which fully utilizes our limited nuclear forces, forms local superiorities, and makes up for our limited numbers of weapons and their insufficiently high precision. The centralization of superior troops requires scientific planning of fires, the selection of major strategic targets that will have a major impact on the overall strategic situation, and the execution of key point strikes will cause great psychological fear in the enemy and thereby achieve strategic goals. **[end of page 305]**

3. Using Speed and Stratagems to Obtain Victory and Flexibly Applying Battle Methods

Second Artillery nuclear missile units are a high-tech, long-range strike force, but no matter the number of units or the quality of their weaponry and equipment, when compared with a powerful enemy, there will be rather large differences. For this reason, during operations, we must foster the glorious traditions of our military's operations, and use the arts of command, apply stratagems in order to change a technological inferiority into a tactical superiority. We must flexibly vary the battle methods that are applied, use our strengths to strike at the enemy's weaknesses, bring the overall effectiveness of our missile systems fully to bear, and use speed to constrain the enemy and stratagems to gain victory.

Section 3. The Primary Operational Activities of Second Artillery Nuclear Counterattack Campaigns

The primary campaign activities are the main body of nuclear counterattack campaigns. The campaign commanders should have a deep understanding of the strategic intentions

of headquarters. They should combine the actual situation of the missile units, strictly conform to the operations orders from the highest headquarters, and apply medium-range, long-range, and even intercontinental nuclear missiles. They should adopt the modes of initial strikes and follow-on strikes, fixed operations and mobile operations, single strikes, group strikes, and closely centralized strikes, and other modes. They should do all of these things to carry out key point strikes against the enemy's strategic and campaign targets.

I. Initial Nuclear Strikes

Initial nuclear strikes are the first nuclear missile strikes carried out in a nuclear counterattack campaign and they are important operational activities for achieving strategic and campaign goals. They are usually carried out by the operational units shouldering the primary missions. Campaign commanders and their command offices should effectively organize electronic resistance, protection against the air, and protection on the ground, all while grasping the developing nuclear strike situation. They should focus on shields for the main battle units' nuclear counterattack campaign activities. They should organize and execute comprehensive support to ensure that the smooth execution of the initial nuclear strike. In order to seize the [end of page 306] initiative for the initial nuclear strike, a battlefield situation that is advantageous for us should be planned for and created first. Sufficient nuclear counterattack forces should be saved and they should comprehensively prepare for the initial nuclear strike.

When organizing and executing the initial nuclear strike, campaign commanders and their command offices should focus on doing the following work in accordance with the strategic intentions of headquarters, the situation between the enemy and us, as well as the operational capabilities of the missile units under them. First, a rational campaign distribution should be established. This ensures better concealment, better command, better counterattacks, better coordination, and better support. Second, basic strike groups, reserve strike groups, and support groups should all conceal their activities in accordance with the campaign distribution. Third, sufficient nuclear firepower should be centralized in order to ensure that the first wave strike is effective. At the same time as organizing and commanding an initial nuclear strike, one must prepare to carry out follow-on nuclear strikes and effectively join in follow-on nuclear strikes. This is done so that the campaign develops in a direction favorable to us.

II. Follow-On Nuclear Strikes

Follow-on nuclear strikes involve the carrying out of a number of waves of nuclear missile strikes after the initial nuclear strike. They are strikes carried out against pre-determined targets in accordance with the nuclear counterattack campaign plans. Alternatively, they are operational activities that carry out supplemental nuclear fire strikes against targets where the initial nuclear strike was unable to produce the planned-for result. Campaign commanders and their command offices should fully utilize the effects of the initial nuclear strike to rapidly organize follow-on strike forces and to execute follow-on nuclear strikes in order to maintain the huge amount of pressure and

psychological fear against the enemy. When organizing and executing follow-on nuclear strikes, one should rationally determine the number of strikes and the gap between waves. Good strike opportunities should be seized and striking methods should be flexibly applied. At the same time, one should also properly coordinate the various maintenance forces and supporting operational forces in order to ensure the smooth execution of the follow-on nuclear strikes.

When organizing and executing follow-on nuclear strikes, one should grasp the following key points. First, one should pay close attention to the impact effects of the initial nuclear strike. When the pre-determined goal of destroying the enemy's major strategic and campaign targets has not been achieved, campaign commanders and their command offices **[end of page 307]** should rapidly organize follow-on strike forces to carry out follow-on strikes against the targets where the pre-determined goals were not achieved. Second, when carrying out follow-on nuclear strike preparations, campaign commanders and their command offices should, in accordance with the results from the initial nuclear strike, scientifically strategize and quickly make operational determinations regarding a follow-on nuclear strike in order to rapidly organize follow-on strike forces and in order to send out troops and weapons for carrying out another nuclear strike. Third, good strike opportunities must be grasped, methods for striking must be applied flexibly, and the various operational forces and maintenance forces must be well-coordinated. The relationships between subordinate forces, deployed forces, and support forces must be coordinated in order to ensure the smooth completion of the follow-on nuclear strike missions.

III. Maneuvering Campaign Firepower

The maneuvering of campaign firepower refers to the operational activities that transfer nuclear firepower onto unplanned strategic and campaign targets (or target groups) in circumstances where the launch positions are not changed. This primarily includes: adjusting the direction of fire for nuclear firepower attacks; adjusting the depth of nuclear firepower attacks; and adjusting the density of nuclear firepower attacks. It also encompasses the activities which transfer firepower from one target to another. In accordance with changes in the targets of attack and the operational missions, the timely adjustment of firepower can bring the full advantage of the flexible use of missile firepower to bear. When carrying out firepower maneuvers, campaign commanders and their command offices should, at appropriate times and in accordance with the new operations plans of higher-levels, send down firepower maneuvering orders and clearly identify when the nuclear firepower will be maneuvered and what needs to be destroyed. They should also strengthen the firing data, weather, electronic resistance, anti-air defense, and other supporting work within nuclear firepower maneuvers in order to ensure the smooth execution of nuclear firepower maneuvers.

When organizing nuclear firepower maneuvers, campaign commanders and their command offices should do the following. First, they must rationally select the missile units and seize the opportunities for firepower maneuvers. Second, they must, in accordance with the new targets to be attacked and the new operational missions, redraw

fire plans and recalculate the firing data. Third, they must, in accordance with the additional destructive requirements for the attack, adjust the use of different kinds of missiles and choose different types of missile warheads in order to obtain the greatest effect. Fourth, they must organize transformations single strike, group strike, and closely centralized strikes in a timely manner to adjust [end of page 308] the strength of the fire strikes. Fifth, they must carry out nuclear destruction effect determinations in a timely manner in order to make new firepower maneuver determinations and to provide accurate intelligence support.

IV. Nuclear Strike Effectiveness Reconnaissance and Determinations

Nuclear strike effectiveness reconnaissance and determinations refer to reconnaissance and determinations of the nuclear strike effects in the blast zone during the organization of nuclear counterattack operations. It involves the organization of trajectory observation and nuclear blast assessment units (or subunits) and the coordination of satellite reconnaissance forces to employ multiple means to carry out nuclear blast assessments, to clarify and determine the situation as to the destruction on the target from our nuclear missiles. This is done in order to provide target destruction effect data to campaign commanders and their command offices, which data are the fundamental basis for carrying out supplemental attacks. Nuclear counterattack operations are carried out within enemy areas thousands or even tens of thousands of kilometers away. To determine whether or not the missiles that were launched were intercepted by the enemy's anti-missile defenses, whether or not the pre-determined target was struck, whether or not an explosion occurred, and whether or not the actual state of destruction for the target met the pre-determined requirements, one must organize forces to carry out reconnaissance and make determinations. Because of this, nuclear attack effectiveness reconnaissance and determinations are important steps in the proper decision-making by campaign managers as to whether or not to carry out additional nuclear counterattacks. The primary contents that trajectory observations and nuclear blast assessment units (or subunits) use when organizing and implementing strike effectiveness reconnaissance include: reconnaissance missions; the times positions were occupied and missiles launched; coordination with the launching units; the employment of many methods to carry out attack effectiveness determination and the time limitations and requirements for reports on the results of the reconnaissance. In addition, campaign command offices should, in light of the nuclear blast assessment data provided by the headquarters' intelligence and reconnaissance department's nuclear blast assessment satellites and other technological reconnaissance means and the data from the observations and assessments from missile base nuclear blast assessment subunit reports, calculate, process, and make determinations. They should also repeatedly verify and scientifically issue nuclear counterattack effect reports and their opinions on whether or not to carry out additional nuclear attacks.

The basic methods for nuclear attack effectiveness reconnaissance and determinations include: [end of page 309]

1. The Methods for Trajectory Observations

Reconnoitering, tracking, measuring the missile flight path, and impact parameters, are methods for determining where the warhead lands. When organizing and implementing, one should select observation points such that one has a good view of the environment so that it is easy to observe and properly seize opportunities to observe. One should strictly monitor the angle, speed, and other key parameters of impact and at the appropriate time afterwards, one should record the missile flight path parameters, carrying out trajectory calculations, simulating the flight path, and reporting on the results of the determinations in a timely manner.

2. The Methods for Nuclear Blast Assessments

This involves the methods of obtaining nuclear blast assessment data through nuclear blast assessment satellites, ground-based assessment equipment, and many other technical means, analyzing and handling that data in a timely manner, and determining the effects of the nuclear destruction. When organizing and implementing, one should focus on properly organizing the coordination between reconnaissance and support and the communications links. Missile bases must closely organize the nuclear blast assessment units (or subunits), properly carry out trajectory observations and nuclear blast assessments, and gather and in a timely manner report on the observation and assessment data. The Second Artillery must properly accept reports in a timely manner that provide intelligence on the effectiveness of the destruction of the target, gathering pre-assessment and assessment intelligence reports from their own units and from other missile bases' reports. It must carry out comprehensive analyses, calculations, verification, processing, and it must in a timely manner provide a nuclear destruction effectiveness situation report and issue an opinion on the application of a subsequent nuclear fires.

V. Handling Special Circumstances

Handling special circumstances involves the activities of campaign commanders and their command offices when handling launch errors, launch postponements, early launches, the temporary replacement of a target for attack, a major malfunction appearing during the missile of a launch, a sudden enemy raid, an interruption in communications, the loss of control, and other special circumstances. Nuclear counterattack operations are both power struggles and struggles between tactics and the arts of command. During the course of a nuclear counterattack operation, because of the many types of restraining factors, as well as **[end of page 310]** sudden changes in the battlefield situation and situations that no one thought of can all occur together. For this reason, campaign commanders and their command offices must not only control the overall situation in a campaign and focus their attention on the key points for executing the campaign, but at the same time they must also grasp the circumstances in a timely manner and handle them in a proper and timely manner. This is particularly true for the special circumstances that occur during the execution of a nuclear counterattack campaign.

1. Handling the Circumstances when There is a Launch Error

A launch error refers to a missile that is not able to fire properly or to an emergency impact after a missile has been fired because of a malfunction. It also refers to malfunctions that occur during flight that cause a missile to be unable to hit its target. When a launch error occurs, one should quickly clarify the reasons for it. Launch work units should handle this in accordance with the launch error regulations and assign reserve troops to quickly take over the launch error nuclear missile unit's mission to be completed.

2. Handling the Circumstances when There is an Early Launch and When the Target of Attack Must be Changed

When under circumstances in which nuclear missile units have already prepared for launch, but the threat of coming under an enemy raid requires an early launch, early launch orders issued by campaign commanders, in accordance with the criteria of higher levels or within the scope of one's authority, organize the missile units to carry out an early launch.

Changing the target of attack refers to the activities adopted when missiles have already been aimed at a certain target and when higher levels in advance decide to attack a different target. Changing the target of attack requires a decision from headquarters. Campaign commanders should re-clarify the new target for attack and the new time of launch and they should organize the units in light of the firepower prepared to be used against the new target. Alternatively, they should use reserve troops to complete the change in the target of attack mission. Readjustment of the mission refers to missions that have already been made clear to the missile units but, in light of the needs of the campaign, were readjusted to change the launch units, the launch position, and the kind of missile. **[end of page 311]** Mission adjustments require the decision of campaign commanders. The original units should re-do preparations in light of the new missions to be shouldered. The missile units shouldering the new operational missions should quickly carry out launch preparations and campaign commanders and their command offices should organize the units in time for the missile launch.

3. Handling Major Malfunctions that Occur During the Course of Launch Testing

When major malfunctions occur during the course of testing a missile for launch, campaign commanders and their command offices should handle it together with the chief engineer and through the decision-making consultation mechanism, promptly hold meetings and research plans for handling the situation, quickly remove the malfunction or replace the instrument or equipment. In light of the result of handling the situation, the campaign commanders, within the scope of their authority, should adjust the launch time when appropriate. An important rule of command is: when a missile malfunctions during the course of technical position testing, it must be removed and the malfunctioning missile must not be taken to the launch position. When a missile malfunctions during the course of launch position testing, in principle it must be removed. In special

circumstances, when it is difficult to remove the missile, one should analysis and determinations should be made by the chief engineer and through the decision-making consultation mechanism and they should put forth their opinions. The ultimate decision-maker is the campaign commander. When, according to analyses and determinations, the malfunction will not lead to the launch failing, the launch can still be carried out.

4. Handling When Communications Links are Severed

When communications links are severed after the campaign large formation has received advance orders from headquarters, the campaign commanders and their command offices should continue to complete all of the contents the advance orders and regulations. After the missile units and the various support units (and subunits) have achieved the operations preparation state regulated by the advance orders and communication links still have not been restored, they can take the operations preparations to the next level and complete the various types of work of top-grade operations preparations.

When communications links are severed after receiving operations orders from headquarters, campaign commanders should continue to complete preparations work within the time specified in the operations orders. For example, silo **[end of page 312]** launch units can do the advance work of completing the propulsion engine fueling. Ground surface launch units can complete the advance work of occupying the launch position.

When communication links are severed after the campaign large formations organized by missile bases have received launch orders from the high-level campaign large formation organized by the Second Artillery, the missile base campaign commander should, as stipulated in the launch order, autonomously organize units to complete the launch missions.

After communication links have been severed, military officer liaison teams (军官联络小组 jūnguān liánluò xiǎozǔ) should be sent out. After headquarters has issued an operations order, when communication links from the Second Artillery to the missile bases have been severed, those communication links are sometimes difficult to restore and Second Artillery campaign command mechanisms should send out military officer liaison teams to go to the missile bases and transmit the orders and commands. Military officer liaison teams carry copies of headquarters orders and Second Artillery operations orders. At the same time, they can also carry missile launch orders and they can give the orders to the missile base commanders that received missions. The bases that receive orders must have proof of their receipt.

5. Handling the Situation After Coming Under a Raid

After a campaign large formation has come under a sudden enemy raid, especially after coming under a nuclear raid, unit personnel, weaponry and equipment, and position engineering, as well as reconnaissance, command, communications, and other systems

will have been seriously damaged and destroyed. The units will be faced with large areas of nuclear fallout, large fire zones, and large amounts of personnel losses. The weaponry and equipment will have sustained losses, position facilities will have been destroyed, bridges will have been cut, roads will have been blocked, and command will have been paralyzed, along with there being many other bad things in the environment. The exceptionally complex battlefield situation will cause major difficulties for the campaign commanders and the campaign activities. The first task to be accomplished after coming under a raid is to deal with the effects of the raid. Reconstituting a nuclear counterattack operational capability as quickly as possible is the key to dealing with the effects of the raid. Handling the effects of a raid is often carried out under circumstances in which the enemy threatens and time is pressing. Second Artillery and missile base campaign commanders and their command offices should promptly gain an understanding of the casualty situation of the units and issue clear commands to the units for the activities to handle the effects of the raid. Missile base campaign commanders should, in light of the casualty [end of page 313] situation, select schemes for handling the situation and rapidly organize the handling of the effects of the raid and promptly send a report on the handling of the situation. Units that shoulder nuclear counterattack missions should as quickly as possible clarify plans for adjusting and replenishing personnel and weaponry and equipment and for renewing operational capabilities. They should clearly put forth what they need and specify time limits for restore operational capabilities. At the same time, they should adopt effective measures to rapidly restore command and communications systems. They should inspect the instructions for saving wounded personnel and they should repair equipment, vehicles, position facilities equipment, and roads and bridges. They should quickly transport the commodities needed for operations and they should organize units to suppress and distinguish fires. All this should be done in order to restore, to the greatest extent possible, nuclear counterattack operations capabilities. At the appropriate times, they should send defensive, engineering, medical rescue, and other support units (and subunits to the units under them to assist the units that came under the raid in dealing with the raid's effects).

During the course of dealing with a raid's effects, one must closely defend against subsequent enemy raids. One must guide the units to conscientiously summarize their experiences and continuously organize and implement nuclear counterattack campaign preparations. When necessary, one must revise the nuclear counterattack campaign plans and, after reporting to headquarters for its examination and approval, adjust the operational missions and operational deployments.

6. The Use of Campaign Reserves

Campaign reserves are campaign forces under the direct control of the campaign commander. They are an operational force meant to deal with sudden situations and to guarantee that the primary directions and primary missions are smoothly carried out and in-hand. During the course of the execution of a campaign, campaign reserves should be used at important stages and at key times to ensure centralization of superior forces and to guarantee the campaign initiative.

Opportunities for using campaign reserves include the following. Usually, reserves are used temporarily to carry out headquarters nuclear strike missions. They replace the missile units to complete nuclear strike missions because the missile units are unable to carry out a launch or there are launch errors or they have lost their combat strength. The support forces within the campaign reserves, are usually used when the threat of the enemy is rather great or when the units' support forces have come under an enemy raid and sustained heavy losses. The support forces within the campaign reserves then carry out support and maintenance for the units. **[end of page 314]**

VI. Concluding a Campaign

After the nuclear counterattack campaign missions have been completed, campaign commanders and their command offices should promptly conclude the campaigns, in accordance with the operational intentions and the campaign conclusion orders of higher levels.

1. Organizing Units to Move and Recuperate

After missile units have completed the nuclear counterattack operational missions, campaign commanders and their command offices should promptly issue move orders and organize the units to move in turn to pre-determined locations, in accordance with pre-determined routes and within the stipulated time limits. Move orders are one of the most important operational documents in a nuclear counterattack campaign. They are the fundamental basis on which a unit moves. Their contents primarily include: a brief amount of intelligence on the enemy; the overall plans; other relevant items (items related to withdrawing from positions, items related to damage control work, and the mission after arriving at the determined location, among other things).

When organizing unit moves, one should clarify the time limits and routes for the units to move and the ways for reaching the destination location. Commands for the relevant departments to properly handle the damage control work should be clarified and the various support and protective work should be handled properly during the move. This ensures the units' safety while moving. One must promptly comprehend the circumstances of the units' move and guide them through handling special circumstances.

2. Adjusting and Replenishing Personnel, Weaponry and Equipment, and Operations Materials

Nuclear counterattack campaigns are usually carried out under nuclear conditions. For this reason, personnel losses and losses of weaponry and equipment, as well as the amount of operations materials consumed, are extremely great. In order to restore the operational capabilities of the missile units as quickly as possible, and in order to prepare to carry out subsequent operational missions, when concluding a campaign, campaign commanders and their command offices should organize units to quickly assess the personnel losses, the weaponry and equipment losses, and the amount of operational materials consumed.

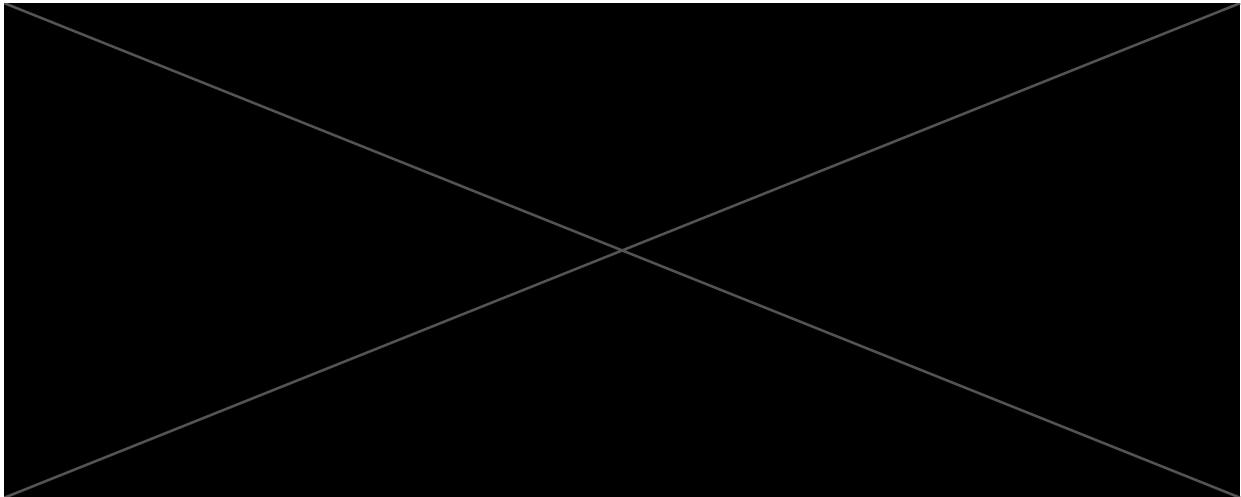
They should promptly issue orders to adjust and replenish, to organize the adjustment and replenishment personnel, weaponry, and equipment, as well as the various types of materials. For weaponry and equipment and important operations materials, one should focus on replenishment in order to meet **[end of page 315]** the needs of the missile units for carrying out subsequent missions.

3. Organizing Position Repairs and Camouflage and Repairing Roads and Bridges

After a nuclear counterattack campaign, the central storehouses, the launch positions, the launch opportunity positions, and other important targets will have possibly been destroyed. Roads and bridges will also have possibly been damaged. Campaign commanders and their command offices must rapidly assess the damage situation for positions' equipment, facilities, roads, and bridges. For the operational positions needed for subsequent use, one should organize active forces to repair them, to restore the positions' camouflage, and to do protective work. This defends against a retaliatory enemy strike and is good for follow-on campaigns.

4. Organizing Campaign Summaries and Submitting Detailed Campaign Reports

In order to summarize the experiences for the benefit of future wars, during the campaign conclusion stage, campaign commanders and their command offices should promptly organize units to carry out war appraisal summaries (战评总结 zhàn píng zǒngjié). The contents of war appraisal summaries include: experiences learned in organizing command, unit activities, battle method applications, coordinated actions, electronic resistance, defensive operations, various types of support, military moral and martial spirit, obedience and discipline, and other aspects. Through the summaries, one is better able to understand, step-by-step, the enemy's operational characteristics and rules of action, as well as it relates to troop forces and weapon functions. One is also better able to understand our organization and command capabilities, our unit operational capabilities, our comprehensive support capabilities, and our ability to coordinate various subordinate and support forces. The methods of war appraisal summaries should accord with the situation as determined at that time and they can adopt the 'from the top downward' method. War appraisal summaries can also employ the top downward method to carry out comprehensive summarization. They may also summarize certain or several prominent issues. On the foundation of campaign summaries, detailed campaign reports should be drawn up and quickly submitted. **[end of page 316]**



Chapter 12

Second Artillery Conventional Missile Strike Campaign

The Second Artillery conventional missile strike campaign refers to the offensive operation of conventional missile strike against the enemy's important targets by the Second Artillery's conventional campaign large formation in accordance with the higher level's operational intentions, in order to achieve certain strategic or campaign objectives, and in accordance with unified planning. The Second Artillery conventional missile strike campaign is usually a component of our military's joint campaigns; it can appear as a sub-campaign in joint campaigns along with naval campaign, air force campaign, etc. It can also participate as the main entity in joint firepower strike campaigns, joint blockade campaigns, joint island landing campaigns, joint border counter-attack campaigns, joint anti-air raid campaigns, etc. Under special circumstances it can also be independently organized and implemented.

Section 1. The Missions and Characteristics of the Second Artillery Conventional Missile Strike Campaign

The Second Artillery conventional missile strike campaign is usually organized and implemented within the context of the joint campaign; it bears special operational missions; and its operational activities hold unique characteristics.

I. The Missions of the Conventional Missile Strike Campaign

The basic missions of the Second Artillery missile strike campaign are: independent implementation of firepower strike against important targets in the enemy's strategic and campaign depths; assist the air force in seizing campaign air dominance; assist the navy in seizing campaign command of the sea; assist the army in seizing land [end of page 317] operations' initiative; implement conventional deterrence; etc.

Its concrete missions are: strike against the enemy's strategic, campaign command centers; strike against the enemy's communication hub, radar stations, and other

information targets; strike against the enemy's missile positions; strike against the enemy's air force bases, naval bases; strike against targets like campaign landing fields, airborne fields, railway organization stations, and bridges; strike against the important army groups, logistical bases, energy facilities, electrical power centers, etc., which lie within the enemy's strategic depth; strike against the enemy's aircraft carrier combat groups; implement conventional military deterrence. Its objectives are to paralyze the enemy's command systems; weaken the enemy's military strength and its ability to continue operations; create psychological shock in the enemy and sway its operational resolve; halt the powerful enemy's military interventionist activities.

II. Characteristics of the Conventional Missile Strike Campaign

The Second Artillery missile strike campaign is usually implemented with the background of joint campaign. Because the Second Artillery missile weapons possess advantages like long firing ranges, high precision, and strong mobility and powerful penetration capability, which greatly impact the course of the campaign, as long-range precision strike weapons, they constitute an important means for penetrating the enemy's air defense system, striking the enemy's in-depth targets, seize air and naval dominance in future local wars under informationized conditions, they constitute an indispensable operational force in our military's joint operations. There are many factors that constrain its campaign activities, its operational areas are broad in scope, its demands for synthesis and accessories are high, and its campaign preparatory missions are burdensome. Other than the general traits that characterize the campaigns in local wars under informationized conditions, it also possesses the following main characteristics:

1. High Level Decision-Making, Clear Constraints by Political Factors

Because its campaign objectives and strategic objectives are closely connected, the operations of the Second Artillery conventional missile strike campaign involve the overall strategic situation. There are many campaign activities under the jurisdiction of campaign commanders at the current level that must be decided by commanders at a higher level or even by strategic commanders at an even higher level. **[end of page 318]** On questions like the targets for strike, the damage level, the campaign scale, and the timing for strike, the campaign commander can only determine them on the basis of the strategic commander's macro decisions. And some missile strike combat operations, even certain critical technical management items, must be decided by the campaign commander and subsequently organized and implemented in concrete forms by the tactical commander. The Second Artillery conventional missile strike campaign must satisfy the nation's political and diplomatic struggle requirements, correctly comprehend the general strategic intent's demands on the conventional missile strike campaign, and based on the command headquarters' strategic intent, make timely adjustments or changes to the campaign operational plan. The high level of decision-making for the Second Artillery conventional missile strike campaign does not suggest the lightening of command responsibilities for campaign commanders at each level; on the contrary, it raises even greater demands on the campaign commander to quickly adapt to strategic requirements and promptly comprehend the higher level's operational intentions.

2. Powerful Deep Striking Capability, Great Impact on the Overall Situation of the War

The basic form of the Second Artillery conventional missile strike campaign operation is long-range firepower strike; it has unique functions and clear advantages in future operations under informationized conditions. One is the long firing range and the powerful ability to shock and deter. Its effective range of over 200 kilometers can place the enemy's deep strategic, campaign targets under direct fire control, causing the enemy to constantly face the threat of tremendous damages, thus possessing powerful shock and deterrent functions. Two is firepower agility and mobility, with a wide range of coverage. Under the condition of unchanging operational position, it can adjust the launch directions at any time, implement omni bearing firepower mobility within a short period of time, and maintain timely fire control over the enemy. Three is that the precision of conventional missile weapons is high, warhead types are numerous, their flight speed is fast, and their penetration capability is strong. The flight speed of ballistic conventional missiles can reach over 4 mach, the reflective surface after the separation of the warhead and the missile body is extremely small, and when employing submunitions several hundred submunitions will be dispersed, making it very difficult for the enemy to conduct effective interception. When large amounts of missile weapons are employed in campaign-scale strike, clear strike effects will be definitely be produced. **[end of page 319]** Four is that the areas of deployment are concealed, the element of surprise is strong. Because the firing range of the missile weapons is relatively long, they can be deployed within our campaign depth and engage in operational readiness and implementation in the established concealed positions within our country's borders, and launch attacks at times and places outside the enemy's conception; the speed of the strike will also be extremely rapid and intense, thereby achieving the element of surprise in strike. At the same time, deep deployment also increases the enemy's difficulty to strike against us, raising the survivability of our conventional missile forces. The Second Artillery conventional missile strike campaign not only can be uniformly organized and implemented along with other armed service campaigns in joint campaigns to fully carry out the effects of the firepower fist, it can also be organized and implemented independently to achieve specific strategic and campaign objectives, directly affecting the course and conclusions of the war; therefore, it has a great impact on the overall situation of the war.

3. Heavy Operational Missions, Complex Coordination Relations

The Second Artillery conventional missile strike campaign, regardless of whether it is implemented within the context of the joint campaign or is implemented independently by the Second Artillery Corps, involves the need to manage large amount of internal and external coordination relations. With respect to internal coordination, it must ensure that various operational elements are organically combined so as to enable the formation of the operational capability. The Second Artillery conventional missile force's operation is an enormous and complex task of system engineering; personnel organization, weapons and equipment, operational positions, command systems, and various supports must be synthesized and accessorized, especially with respect to weapons and equipment readiness and various supports, there are many issues to attend to, high demands, wide areas of involvement, and they intersect every link of the operation. Errors that appear in

any component and movement will directly affect the effectiveness of the missile strike and even the achievement of campaign objectives; synthesis and accessorization have especially important positions and functions. The level and quality and quantity of accessorization are determined by peacetime and pre-war preparations. Peacetime preparations mainly involve the completion of the collection, compilation of the data about the targets; the selection and construction of the launch positions, the positions of readiness, and the technical readiness depots; the repair of the roads for maneuver within the operational area and the storage of weapons and equipment; etc. Other than the large volumes of work conducted during peacetime **[end of page 320]**, there is also a series of pre-war preparatory work. Aside from the completion of the operational plan, command system readiness and campaign disposition, defense deployment, emergency training, and other general preparations, one should also emphasize the reorganization of emergency targets, firepower planning and simulation, the rush construction and opening of the launch positions, the rush repair and rush construction of the roads for maneuver, technical upgrading of the weapon systems, and other individually characterized preparations; this is the critical link that must be emphasized by commanders at each level. The absence of any one of these elements of synthesis will affect the generation and maintenance of the troops' overall combat power, even causing the troops to lose operational capabilities. Therefore, it is necessary to smoothly manage the coordination relations among the missile forces, the support forces (or elements), and the subordinate forces. With respect to external coordination, aside from the necessity of maintaining close coordination with the various armed services and service arms as well as the relevant support forces in areas such as intelligence, air defense, surface defense, and the use of the roads for maneuver, it is also necessary to closely coordinate with other armed services and service arms with respect to the firepower strike's targets, timing, order, effectiveness reconnaissance, etc.

4. Weapons and Equipment Possess High Technical Contents, Campaign Support has Great Impact on Operational Activities

The conventional missile is a high-technology weapon that combines aviation, aerospace, microelectronic, new material, and other technologies, with a strong systemic nature. The use of conventional missile weapons raises special demands on support; not only are the contents numerous, the procedures complex, there are also large effects on the operational activities. In general, campaign operational support includes intelligence and reconnaissance, targeting, land surveying, trajectory and data computations, meteorology, communication, engineering, chemical defense, camouflage support, etc. Without intelligence and reconnaissance and target support, without mastering the data on the targets for strike, the inability to effectively assess the effectiveness of the strike, missile strike would be equivalent to random shooting; without surveying, trajectory and data computations as well as meteorological support to provide the launch positions with the point data [dianwei shuju 点位数据], the trajectory and data computation cards, and the "launch window," missile strike cannot be conducted; without effective communication support, the requirements to centralize command and engage in command by levels cannot be realized; **[end of page 321]** without effective engineering support, the rush construction of the positions and troop mobility will be seriously affected. In addition,

without effective electronic warfare, communication may be disrupted, electronic equipment becomes blinded and the control over weapons lost, resulting in the inability to launch successfully and penetrate effectively. Moreover, there are logistical support and equipment support, they are all key elements of synthesis in the completion of campaign strike missions by conventional missile forces. Among the numerous support elements, technical support for missile weapons and equipment is especially significant. Because the technical nature of the missile weapons and equipment is strong, and has significant impact on the decisions of the campaign commanders and the campaign operational activities, only if every level establishes complete equipment technical support systems can it be ensured that the weapons and equipment will always maintain a proper technical state. During the course of executing the strike mission the conventional missile force must strictly conduct technical guarantees with respect to the weapon system's individual testing, comprehensive testing, inspection prior to entry into the launch position at the technical positions, and the pre-launch inspection after entering the launch position. Otherwise, the progress and the outcome of the strike campaign will be directly affected.

5. Numerous Exposed Factors, Great Difficulty in Defending against Enemy Raid

The Second Artillery conventional missile force is one of the enemy's targets for major strike. During the course of executing the campaign strike mission the conventional missile force displays distinct characteristics, thus the exposed factors are greater. The conventional missile strike campaign mobilizes numerous equipment, large quantities of troops and equipment must be active on a regular basis in the operational area, operational activities are thus easily exposed, and it is easily discovered by the enemy's reconnaissance satellites. At the same time, the Second Artillery's ability to conduct surface self-defense and air defense is relatively weak, making it difficult for it to independently defend against the enemy's air raids and special raids. All of these magnify the difficulty for campaign defense against raids. [end of page 322]

Section 2. Operational Guiding Thought and Principle for the Second Artillery Conventional Missile Strike Campaign

The Second Artillery conventional missile strike campaign operation is clearly distinct from the nuclear counter-strike campaign operation, it must adhere to its own operational guiding thoughts and principles.

I. Conventional Missile Strike Campaign's Operational Guiding Thought

The conventional missile strike campaign's operational guiding thought is "take the opportunity to strike first, engage in focused strike" [xianji zhidi, zhongdian tuji先机制敌，重点突击].

To "take the opportunity to strike first" mainly refers to the need for the Second Artillery conventional missile force to act before the enemy, take the enemy by surprise, and attack

when the enemy is unprepared during its operational activities. It should be used first during the initial phase or at a certain stage of the campaign. To carry out this idea the first thing is to be grounded in offensive operation when it comes to campaign planning. Our military's strategic guideline is "active defense," "active defense is not simply a type of defense, there is offense within defense" (see Selected Works of Deng Xiaoping). After the Military Commission's military strategic guideline was determined, leaders of the Military Commission emphasized on numerous occasions that while upholding the overall defense in terms of strategy, even more attention should be paid to our offensive operations in campaigns and combat. In addition, they pointed out, henceforth "once incidents occur, the main thing remains the reliance on offensive operations to achieve resolution." The Second Artillery conventional missile force is different from the nuclear missile force, it is an important strike force in our military during local wars under informationized conditions, it is similar to the nuclear missile force in possessing the function of deterring the enemy. However, during actual wartime application it is even more practical and prominent. In terms of offensive and defensive functions, its offensive function is significantly greater than that for defense, conventional missile strike campaign itself is an offensive campaign. Therefore, in terms of campaign planning, it is necessary to launch attack before the enemy, strike first, and maintain the offensive intensity until the victorious conclusion of the campaign. The second thing is that the conventional missile strike force must precede our military's **[end of page 323]** other strike forces in being inserted into the operation. The conventional missile strike campaign in joint campaigns is necessarily the vanguard among the various fire assaults. The conventional missile strike's great depth, fast speed, high precision, broad range, strong penetration capability, few casualties and small costs to our personnel cannot be substituted by any other means of strike. Our military's overall operations, the island landing offensive campaign for example, the offensive actions on the island must first depend on the navy to seize the command of the sea, yet the securing of the command of the sea must depend on the air force and other aviation forces to seize air dominance; as for the seizing of air dominance and electromagnetic dominance, the Second Artillery conventional missile force can have critical effects. The conventional missile force as our military's "fist force" must fully be prepared to fight in the "lead position." The third thing is to take the initiative in seeking opportunities, move before the enemy, change before the enemy. The conventional missile strike campaign is composed of a series of missile strikes. The initial strike may create relatively great damages to the enemy, but the enemy will surely adopt various countermeasures, making every effort to change its passive posture. The Second Artillery campaign commanders at every level must anticipate the enemy and know the enemy, commanding the conventional missile forces to act before the enemy during every phase of the campaign, securely mastering the campaign initiative. They must find various opportunities to overcome the enemy and achieve victory; under unified planning, implement sudden and intense missile strike against the enemy, causing the enemy to be in a perpetual state of being too tired to respond and reactionary and subjected to attack. The fourth is to implement highly effective, concise, and clear command as well as agile and flexible operational activities. The key to taking the opportunity to striking first is "first" [xian先], this is the logic behind the idiom that speed is precious in war. In the life-and-death struggle between two armies, highly efficient troop operation is the key. The Second Artillery campaign

commanders and command staff at every level must continuously improve the command methods, renew the command equipment, elevate the art of command, optimize the command structure, so that command efficiency will continue to rise. The conventional missile force must increase the intensity of training and exercise, continuously elevate the [technical] operating skills and tactical standards, earnestly carry out the weapons and equipment's greatest effectiveness, so that the operational activities will be fast and agile.

To “engage in focused strike” refers to the need during operation for the conventional missile force to choose the enemy's vital points, concentrate firepower, strike with intensity. To carry out this idea the first thing is to have focus with respect to striking the enemy's targets. **[end of page 324]** In local wars, there are many enemy targets that need to be struck. However, our military's conventional missile weapons are limited in quantity, the targets for missile strike must be major targets. This type of target can be the enemy's command center, air force base, naval base, it can also be the enemy's air defense facilities, electronic warfare facilities, energy facilities, etc. Because the campaign forms and objectives differ, the selection of the major targets also differs. In various campaigns, it is necessary in the main offensive direction to strike against important targets that affect the course of the campaign. The second thing is to be focused regarding the use of the operational forces. The quantity of the Second Artillery conventional missile forces is limited, each unit's operational capability has definite distinctions, the equipment's weapon models all have individual characteristics; therefore, during the organization of the campaign forces the campaign commander should, based on the missile units' fire assault missions, concentrate the employed troops and weapons in the main direction and in critical phases, absolutely guard against the even distribution of firepower, must concentrate the application of limited forces on the main targets of strike; at the same time use the strongest force in the initial strike, turn the mission of striking the important targets over to the main battle units. The third thing is to have focus when planning the operational phases. The conventional missile strike campaign must go through individual phases like campaign assembly, campaign camouflage, campaign maneuver, campaign readiness, campaign strike, campaign transfer, etc. The campaign commander must master the important phases among them, absolutely cannot permit major errors to occur with respect to work during key phases. The fourth item is that there must be focus in terms of the order and the number of strike waves. The initial missile strike must be stressed by every campaign commander. Our military has historically emphasized the cautious undertaking of the initial operation, whether the initial operation is successful or not has major effects on the entire campaign posture. Other than stressing the initial strike, one should also increase the striking power of important strike waves that are related to the campaign's success and failure, emphasizing support for them.

The idea of “taking the opportunity to strike first, engage in focused strike” emphasizes the synthesis of offense and defense, with offense assuming the main role, strive to achieve the element of surprise in campaigns; stress earlier operations, strive to seize the initiative, strive to achieve the initiative in the campaign's initial phase; stress mobile operations, in-depth strike, strive to achieve the campaign objective of striking the enemy's vital targets; stress joint operations, close coordi- **[end of page 325]** nation,

strive to carry out the missile force's overall advantages, so as to seize the campaign victory. The fundamental objective of "take the opportunity to strike first, engage in focused strike" is to maximize our strengths, hit the enemy's weaknesses, strike the enemy without being struck by the enemy. "Take the opportunity to strike first" demands the mastery of the keys to striking the enemy in terms of timing and opportunity, "engage in focused strike" demands the mastery of the keys to striking the enemy in terms of spatial and force applications, they are dialectically unified, constitute the overall requirements for the conventional missile forces' operational missions, operational forms, operational timing, and operational effectiveness.

II. Principles for Conventional Missile Strike Campaign

The conventional missile strike campaign operation must on the one hand adhere to the Second Artillery campaign principles and on the other hand receive guidance from the following principles.

1. Grounded in Mobile Operation

The Second Artillery conventional missile weapons systems have relatively high degrees of integration, miniaturization, automation, fewer equipment and vehicles, strong troop mobility, can implement cross-theater maneuvers or in-theater maneuvers through highways, railways, and other modes of conveyance. During peacetime, there is the maneuvering preparatory plan, fully prepared, organize maneuvering exercise when faced with war; during wartime, organize and implement the conventional missile strike campaign, the command organ must be grounded in mobile operation, closely coordinate with relevant departments, scientifically select the modes of maneuver, thoroughly formulate the maneuvering plan, rationally engaged in the organization of the maneuvering forces, timely organize maneuver support, implement all forms of mobile operations, etc.

2. Rational Application of Firepower

The Second Artillery conventional missile strike campaign has numerous targets of strike, many types of targets, large amount of missile consumption, assumes fire assault or firepower support missions at every phase of the joint campaign. Therefore, one should, in conformity with the principle of conserving missile use, fully carrying out the maximum effects, [end of page 326] engage in repeated operational research about firepower application, scientific calculation, allocation optimization, cautious decision-making, so as to obtain the best striking effects.

3. Early Strike Implementation

The Second Artillery conventional missile strike operation is usually implemented in the context of the joint campaign, engages in coordinated operation with other armed services and service arms, implements strike against the enemy's important targets; using

its advantages of concealment and surprise, active and intelligent response, and powerful penetration capability the missile force implements advanced strike against the enemy's important in-depth targets, providing a sound environment for the carrying out of the armed service's firepower. The Second Artillery conventional missile strike operation is usually implemented in an intense combat environment, the conventional missile force and operational positions are under the enemy's intense reconnaissance surveillance and threat of air raid. Therefore, speedily striking the enemy, strive to seize the initiative, avoid losses are issues with which the campaign commander must first be concerned. It is necessary to implement strike early, before the enemy has discovered our campaign intentions and actions, surprise the enemy, act before the enemy, strike rapidly, catch the enemy by surprise.

Section 3. The Main Operational Activities in the Second Artillery Conventional Missile Strike Campaign

The implementation of the conventional missile strike campaign begins when the launch order is issued. The campaign commander and his command staff should, based on the higher level's orders, directives, and the state of campaign readiness, issue the launch order at an appropriate time. After the launch order has been issued, one should quickly organize the launch units to occupy positions, organize missile strike and other operational activities. Its main campaign operational activities include: advanced strike, follow-up strike, supplemental strike, counter the enemy's "counter-strike," reconnaissance and assessment of the outcomes of the strike, management of special situations, and end the campaign. [end of page 327]

I. Advanced Strike

Advanced strike is the missile strike activity that is first implemented when the joint campaign is launched for the purpose of rapid and effective achievement of the campaign objectives. It is usually implemented by the operational units responsible for the main strike mission. The campaign commander and his command staff should at all times master the main force's operational readiness and launch situation, inspect, supervise, guide its prompt launches, organize at the appropriate time air defense, electronic warfare and surface defense, and other operational activities. When engaged in advanced strike, it is necessary to get a good handle on the timing of the strike and the number of the launch strike waves before the enemy, strictly control the quantity and scale of the missile launches, flexibly apply campaign and operational methods, conscientiously ensure the effectiveness of advanced strike.

1. Advanced Destruction

When seizing electromagnetic dominance in local campaigns, adopt the two means of "soft" and "hard," engage in electromagnetic jamming before the enemy, sabotage the enemy's advanced warning capability, paralyze the enemy's command system, then employ missile firepower to implement destruction. When organizing its

implementation, one should master the following links: first, employ electronic warfare reconnaissance means to engage in direction finding and positioning vis-à-vis the enemy's electromagnetic radiation target. Second, organize the Second Artillery electronic warfare force, or under the unified organization of the joint headquarters, to join the electronic warfare forces reinforced by the higher level and the electronic warfare forces in other armed services and service arms that are part of the coordinated operation, so as to engage in coordinated operation a few hours before the launch of the campaign, to conduct jamming and suppression of the enemy's electromagnetic radiation sources. Third, the conventional missile strike groups must, in accordance with the precise positioning of the enemy's electromagnetic radiation targets provided by our electronic warfare groups, using missiles carrying counter-radiation warheads, adopt the mode of individual strike to engage in precision strike against the enemy's wireless reconnaissance stations, warning satellite stations, and other electromagnetic radiation targets; adopt the mode of group strike to engage in paralysis strike. **[end of page 328]**

2. Focused Destruction

This refers to the operational activity of engaging in destructive strike against the enemy's air force bases, airfields, command centers, and other major targets so as to weaken the enemy's aerial operational capability. When organizing its implementation, one should master the following links: first, one must ascertain the targets for focused strike. With respect to air force bases, airfield targets the focus is on airfields with parked bombers, early warning aircrafts, refueling aircrafts, and other high-quality aircrafts, there the conventional missiles are to focus strike against the runway targets; with respect to command centers the primary means is the cruise missiles with precision positioning, focusing strike on the command towers, the exposed large-scale antennae, radar towers and stations, etc. The second link is to be clear about the mode of strike, usually adopting the mode that combines group strike and intense strike to concentrate destruction.

3. Consecutive Suppression

This refers to the implementation of consecutive strikes in different waves in accordance with the scale, quantity of the missile force, as well as its mission requirements and the nature of the targets. When organizing its implementation, one should master the following links: first, the objects of strike must be ascertained, usually they are targets in the enemy's airfields, such as the aircraft depots, "aircraft shelters," barracks, aircraft repair shops, as well as the surface-to-air missile positions. The second link is to rationally distinguish the strike waves. The third link is, based on the mission, to implement suppressive strike against the targets so that the enemy cannot recuperate within a short period of time.

II. Follow-Up Strike

Follow-up strike is the various strike operational activities against the enemy that is built on the foundation of the advanced strike and for realizing the existing operational

objectives. It is usually implemented by the units responsible for the advanced strike or the reserve units. When engaging in follow-up strike, the campaign commander and his command staff should, based on the objectives of the missile strike, in accordance with the requirements for target damage and strike, fully master the readiness and launch states of the operational units, inspect and supervise and guide their follow-up launches; **[end of page 329]** scientifically select the operational modes, have a good handle on the launch waves and gaps; soundly organize the maneuvering, protection, and camouflage during the launches; do a good job with respect to the coordination and the various support items during follow-up strike, engage in close coordination with the neighboring units and the local armed forces. When the follow-up strike missions are extremely strenuous, one can simultaneously activate the base strike groups and the reserve strike groups.

1. Occupy the Follow-Up Launch Position

After the commander and his command staff receive the higher level's follow-up strike order, they should, in accordance with the battlefield situation, promptly organize the conventional missile forces, using darkness or poor weather conditions, as well as the enemy satellite's reconnaissance blind angle to the greatest extent possible, to move from the concealed areas toward the follow-up launch positions, or move from the original launch positions toward the follow-up launch positions; in addition, at the same time, organize air defense, ground defense, electronic defense, and organize various types of logistical support units (or elements) to implement fixed or escort support.

2. Determine Launch Window, Launch Order and Number of Waves

After the launch units occupy the launch positions the commander and his command staff should quickly determine the missile launch window, clarify the missile launch order and the number of strike waves. In addition, they should quickly circulate the relevant situations to all the coordinated units and simultaneously report to the higher level.

3. Issue Launch Order, Organize Missile Strike

The commander and his command staff should closely observe the battlefield situation, master the targets' movement; rapidly issue launch order to the launch units, organize follow-up missile strikes. After completing the follow-up missions, the launch elements should immediately retreat to the positions of readiness, reload, be prepared to launch again. At the same time, command must implement consecutive highly effective command; technical elements must test missiles consecutively, the support elements must provide timely and effective support, so as to ensure the successful completion of the missile strike missions. **[end of page 330]**

4. Quickly Manage Unusual Situations

The campaign commander and his command staff addressing sudden situations during the course of the operation. The primary [situations] include: subject to electronic offensive and precision strike, communication disruption, last-minute change in the direction of strike, last-minute change in the targets of strike, last-minute change in the operational positions, last-minute adjustment of the timing of strike, last-minute change in the strike procedures, etc.; they should be quickly, decisively, and correctly managed.

5. Detect the Effects of the Missile Strike

The conventional missile strike campaign is conducted within the space of hundreds, even thousands, of kilometers from the enemy. In order to understand and master whether the launched missiles were intercepted by the enemy's anti-missile defense system, whether the missiles hit the targets, and whether the level of damage to the targets reached the pre-determined requirements, it is necessary to organize reconnaissance and assessment. Therefore, the reconnaissance and assessment of the effects of the strike is an indispensably important basis for the campaign commander to implement effective strike. The campaign commander and his command staff, at the same time that the missile strike order is issued, should issue instructions to the ballistic observation and damage effect detection units (or elements) in the support group regarding the organization and implementation of conventional missile strike effect detection. The main contents [of the instructions] include: reconnaissance mission; the time of occupation of the positions and that for the launch of missiles; coordination with the launch units; the time limitation and requirements for reporting the reconnaissance results to the higher level, etc. The campaign command staff should, based on the detection data provided by the intelligence reconnaissance departments at the higher level and those provided by the coordinated units (or elements), and the detection data reported by the subordinate detection units (or elements), immediately conduct calculation, processing, verification, analysis, assessment, thus providing reports on the effects of the conventional missile strike. The main contents [of the reports] include: number of launch waves, operational units, weapon models, target serial number, launch time, results of actual detection, analysis and assessment conclusions, etc. The units (or elements) responsible for the mission of strike effect detection should, under the unified organization of the campaign command staff, in coordinated and unified fashion **[end of page 331]** implement the reconnaissance and assessment of the effects of the conventional missile strike.

III. Supplemental Strike

Supplemental strike refers to, on the basis of advanced strike and follow-up strike, in accordance with the evaluation assessment conclusions for the effects of the strike, the additional implementation of firepower assault against important targets that have not yet reached the damage effects, or the firepower assault activities against newly discovered targets. It is usually borne by the campaign reserve units. When engaged in supplemental strike, the campaign commander and his command staff should quickly

determine the launch units and the operational positions, issue the supplemental launch order, clearly specify the targets of strike and the damage requirements. The implementation of supplemental strike should be conducted after seeking and obtaining the higher level's approval, usually it is necessary, on the basis of advanced strike or follow-up strike activities, to adjust the launch units involved in the operation, reconnoiter the target's damage effects in real time, in accordance with mission requirements, re-plan the firepower, issue the launch order. When employing the basic assault group to carry out the firepower assault mission against the planned targets, the campaign commander should, based on the results of the target damage effects assessment and the supplemental strike plan, issue the supplemental strike order, clearly specify the quantity of the supplemental missiles and the launch window, implement firepower assault in accordance with the procedure of advanced strike. When employing the reserve strike group to carry out firepower assault against targets that have not been damaged, one should issue the launch order in accordance with the predetermined plan, organize firepower assault at the appropriate time.

IV. Counter the Enemy's "Counter-Strike"

"Counter-strike" refers to the series of operational activities that include electromagnetic offensive, air raid implemented by the enemy to check our conventional missile strike. Counter the enemy's "counter-strike" is the adoption of effective modes to frustrate and defeat the enemy's retaliatory activities against us. The counter the enemy's "counter-strike" operation permeates the entire course of the conventional missile strike campaign. [end of page 332]

1. Counter the Enemy's Electronic "Counter-Strike"

Counter the enemy's electronic "counter-strike" is the countermeasure activity adopted against the enemy's electronic "counter-strike." When organizing its implementation, one should focus on mastering the following areas: first is the implementation of electronic reconnaissance. Electronic reconnaissance is an important means for seizing local electromagnetic dominance, it is also an important component of countering the enemy's electronic "counter-strike" against us. When implementing electronic reconnaissance, the campaign command staff should divide up the reconnaissance areas, clearly specify the reconnaissance targets and missions for each electronic countermeasure reconnaissance force, coordinate the coordination issues between electronic reconnaissance and other reconnaissance activities. Second is the implementation of electronic jamming and destruction. Electronic jamming is the primary means for countering the enemy's electronic "counter-strike." When the enemy implements "counter-strike" electronic jamming and suppression against us, one should based on the information obtained through electronic reconnaissance, first organize the electronic countermeasure force, in the main direction of the incoming raid, utilize high-powered jammer to implement confrontational anti-jamming and anti-suppression, or adopt frequency conversion, frequency hopping, and other techniques to engage in evasion. Next is focusing on the enemy's jamming source, employ anti-radiation missile, anti-radiation unmanned aircraft to implement firepower destruction, so as to ensure the

normal operation of our electronic equipment and the successful conduct of the operational activities. Third is the organization of electronic offensive and communication jamming. Using instruments such as laser countermeasure and infrared countermeasure to engage in concentrated illumination against the detection heads of the airborne enemy laser, infrared precision-guided weapons, so that they would overload or their instruments would be damaged. Engage in communication jamming against the airborne enemy early warning command aircraft and other aerial platforms, so that the enemy cannot form overall air raid combined forces. Fourth is the implementation of electronic deception and electronic diversion. Electronic deception and electronic diversion are important components of campaign deception and campaign diversion, they should be conducted in combination with campaign deception and campaign diversion. When implementing electronic deception and electronic diversion, based on the campaign commander's overall intention, under the unified planning of the campaign command staff, using a portion of the communication troops and instruments, or adopting electronic simulation installation, and in combination with campaign deception and campaign diversion (such as force diversion, launch point diversion, installing false targets **[end of page 333]**, circulate false information, etc.), coordinate as one, rationally applied. One must strictly comply with the camouflage code, stop the occurrence of incidents involving the loss and the leaking of secrets.

2. Counter the Enemy's Airborne "Counter-Strike"

Counter the enemy's airborne "counter-strike" is the operational activity adopted against the enemy's aerial "counter-strike." When organizing and implementing [the activity], one should handle it from the following areas: first is issue air raid warning, organize campaign defensive activities. When discovering signs of the enemy air raid or after receiving air raid forecast, warnings from the higher level, neighboring forces, the campaign commander should immediately organize the issuance of air raid forecast, warning signals to the units that may be subjected to the enemy air raid. Each unit, after receiving the warning signals, should, based on the plan (or predetermined plan) for countering the enemy's "counter-strike" or the campaign commander's orders, engage in campaign defense activities. Mainly adopting rapid camouflage, position transfer and dispersal and concealment, and other modes. Under normal circumstances, one can adopt emergency release of smokescreen, engage in electromagnetic screening, and other modes, so as to make it difficult for the enemy to discover the targets. During daytime one must strictly limit the personnel, equipment activities within the positions; during nighttime one must unify the implementation of lighting control, nighttime activities should also implement anti-reconnaissance camouflage, requiring all the units to strictly comply with the air defense discipline. Second is request air defense support, organize anti-air firing. The countering of the enemy's airborne "counter-strike" operational activity within the conventional missile force's positional area is the focus of the theater point air defense. Its airspace security is primarily the responsibility of the theater air defense force. When threatened by enemy air raid, the campaign commander should immediately and accurately report the aerial situation to the theater (or the theater air defense command post), requesting air defense support from the joint command headquarters. The conventional missile force's air defense force, when the enemy

aircrafts are in air, must actively organize aerial interception. The campaign commander and the command staff should correctly provide the situation about the troop movement, make known the defense requirements for key targets. The subordinate and support air defense forces must also correctly assess the enemy situation, concentrate forces in the main direction, constitute the fire net that combines the high, the medium, and the low. During operation, it is necessary to have soundly accessorized air defense systems, engage in planned, focused employment of various anti-air operational forces **[end of page 334]**, adopt long-distance aerial search, rapid relay early warning, short-distance air support, the combination of permanent defense installation and mobile operation, and various other operational methods, frustrate and defeat the enemy's airborne "counter-strike" activities. Third is ascertain the situation of the raid, establish management resolve. After succumbing to the enemy's airborne "counter-strike," the campaign commander should immediately ascertain the situation of the raid, which mainly includes: the damage level, scope of the raid for our various targets; the impact on the operational activities, etc. After succumbing to raid, the command staff should draft the enemy airborne "counter-strike" damage posture graph, quickly ascertain the situation, rapidly organize rush recovery, rush repair and transfer, evacuation. In addition, it should immediately report the situation to the higher level, propose recommendations for managing [the situation], establish management resolve.

V. Reconnaissance and Assessment of the Effects of the Strike

The reconnaissance and assessment of the effects of the strike is the activity of conducting the reconnaissance and assessment of the targets' damage situation after the missiles were launched. During the course of the missile launch, the campaign commander should organize forces to implement ballistic tracking, measurement, calculation, engage in the reconnaissance of the effects of the strike for the missile launch, forecast the warhead's landing point, analyze the target's damage situation, report the effects of the strike to the higher level, provide basis for the formulation of the repeated strike plan, and provide recommendations to the higher level on whether to engage in supplemental strike. First, the campaign commander and his command staff, at the same time when issuing the launch order, should issue instructions to the ballistic observation and effect detection units (or elements) in the campaign operational support force about the organization and implementation of conventional missile strike effects reconnaissance. The main contents include: reconnaissance mission; the time for occupying the position and for launching the missile; coordination with the launch forces; the time limit and requirements for reporting the reconnaissance results to the higher level, etc. Second, the campaign command staff should, based on the detection data provided by the higher level's intelligence reconnaissance department and those from the coordinated units (or elements), and the detection data reported by the detection units (or elements) in the subordinate campaign operational support force, immediately engage in calculation, processing, analysis and assessment, supply the conventional missile strike effect report. The main contents [of the report] include: the number of launch waves, operational units, weapon models, target serial number, launch time, actual measurement results, analysis and assessment **[end of page 335]** conclusions, etc. Third, the units (or elements) responsible for detecting the effects of the strike should, under the unified

organization of the campaign command staff, coordinate in unison the completion of the conventional missile strike effect reconnaissance and assessment mission. Fourth, after implementing fire assault according to plan, immediately obtain information about the effects [of the strike] through various means, and quickly determine which target or which components of the target has been destroyed, the level of damage, which targets or components have not yet been damaged, the purpose of this is to verify the state of the completion of the firing plan, to determine whether the strike against that target has satisfied the damage requirement, provide basis for determining whether it would be necessary to implement repeated strike.

VI. Management of Special Situations

The conventional missile strike campaign, the campaign pace is fast, the campaign environment is harsh, the threat from enemy reconnaissance and air raid is great; during the course of the campaign maneuver, fire assault, one may threats from the enemy's electronic jamming, precision strike, and special raid and interference, at any time situations like communication disruption, raid on important targets can occur. In addition, special situations like weapon system malfunction, unsuccessful missile launch, changes in targets of strike, the commander and his command staff must be quick-witted and decisive, organize troop movements based on the regulations and requirements for managing special situations, quickly restore operational capability, successfully complete the campaign mission. The main methods include: first, when subjected to the enemy's sudden raid, one should act in accordance with the plan formulated in advance, adopt active and effective defensive methods to engage in defensive protection. Second, when the communication connection is disrupted, one should adopt turning communication or the method of skip echelon command to restore command over the troops. Third, when the direction of the strike is changed at the last minute or when the targets of strike are changed at the last minute, one should adopt the method of firepower mobility, make immediate firepower adjustments. Fourth, when engaged in last-minute changes in the operational positions, adjustments in the time of strike or last-minute changes in the strike order, one should immediately adjust deployment, revise the operational plan, issue the launch order at the appropriate time. Fifth, if launch cannot be conducted within the regulated time limit, one should quickly organize the troops to retreat to the concealed areas. At that time, the campaign commander should decisively employ the campaign reserve forces to replace the original operational units [end of page 336], to carry out the missile strike.

VII. End the Campaign

Ending the campaign, after reaching the pre-determined campaign objectives, with approval from the higher level, end the campaign at the appropriate time. The campaign commander and the command staff should immediately organize troop transfer to pre-determined areas; when organizing troop transfer, the first thing is to conduct it quickly and covertly, engage in close aerial surveillance, guard against the enemy's precision strike. At the same time, it is necessary to immediately understand the troops' damage situation, organize personnel, weapons and equipment, and material adjustments and

supplement, do a good job in the rush repair of positions and roads, organize the troops to conduct campaign summary, formulate campaign briefs, detailed reports to the higher level. **[end of page 337]**

Chapter 13

Important Campaign Operations of the Second Artillery Corps

In a Second Artillery Corps campaign, in addition to the organization and execution of the basic campaign forms, there are also the organization and execution of various important campaign operations. They mainly include the information operation of a Second Artillery Corps campaign, the defense operation of a Second Artillery Corps campaign, the maneuver operation of a Second Artillery Corps campaign etc. These campaign operations run through the entire course of a campaign from beginning to end and will have a major impact on the progress and the outcome of a campaign. Thus they occupy an important position and play an important role in a campaign. A commanding officer should correctly understand and grasp the characteristics and the laws of these campaign operations, advancing the campaign in the direction of victory.

Section 1. The Information Operations of a Second Artillery Corps Campaign

The information operation is an important operation of the Second Artillery Corps campaign. The Second Artillery Corps campaign under informatized conditions has changed the battlefield modality of the past. The battlefield modality of the past has been replaced by the modality of a multi-dimensional battlefield that combines land, sea, air, space and electro-magnetic fields. With the emergence of information conflict systems

with the C⁴ISR systems as the core, the information operations have already become an important component of the Second Artillery Corps campaign. It is a key to achieving victory in the Second Artillery Corps campaign.

I. The Nature, Status and Role of the Information Operation

The information operation of the Second Artillery Corps is an important operation that supports guided missile fire power attacks and that runs through the entire course of a campaigns from beginning to end. It occupies an important place and plays an important role in the Second Artillery Corps campaign. **[end of page 338]**

1. The Nature of the Information Operation

The information operation is a form of expression of information warfare in the military field. The information operation is a series of combat actions taken to affect and disrupt the information capabilities of the enemy and to protect the information capabilities of one's own forces. Its objective is to take advantage of and disrupt the information systems of the enemy and to protect one's own information systems through electronic counter actions, computer network counter actions and other means so as to seize the rights to acquire, control and use information. It is one of the important operations of a Second Artillery Corps campaign and is an advanced stage in the development of electronic countermeasure operations.

The information operation mainly includes information system protection, information security safeguard and information attacks etc. It is often under the command and unified planning and coordination of the campaign commander of the Second Artillery Corps and his command organ, and it is organized and executed by the campaign command organ and various operational groups.

The nature of the information operation is to cause serious damage to the enemy's information systems with electronic counter actions and network counter actions as the main means, making the enemy unable to control the battlefield and its troops' actions, forcing it to abandon its confrontational intent and leading to an end to the conflict.

2. The Status and the Role of the Information Operation

The future war is often carried out in a battlefield environment in which the level of informatization is relatively high. Information can translate into real operational capabilities and turn into a source that helps one achieve victory. The information operation will run through the entire course of the Second Artillery Corps campaign. Its status is shown in the following two aspects:

1) The information operation is an important combat operation in the Second Artillery Corps campaign

The main operational forms of the Second Artillery Corps campaign are the nuclear counter attack operation and the conventional guided missile attack operation. Whichever form, the backing and support of the information right is indispensable. In the campaign theories and practices of the past, electronic counter actions were only taken as **[end of page 339]** an operational support action, thus placed in a relatively unimportant position. As information technologies have become the dominant technologies in the main battle gears and support gears of the Second Artillery Corps, the exertion of the operational effectiveness of the Second Artillery Corps mainly relies on the success of its information operational actions, which help seize the information superiority in the battlefield and maintain the initiative in the campaign. Hence, in a local war under informatized conditions in the future, although there may be many operational forms in a Second Artillery Corps campaign, and there may be many types of operational actions, information operations are no doubt the most important operational actions as the degree of informatization of operations develops gradually from low stages to advanced stages.

2) The information operation is the key to seizing the battlefield “commanding height”

In a future local war under informatized conditions, the battlefield of a Second Artillery Corps campaign will become increasingly transparent. The maneuverability of the troops of the two sides will become swifter. Operational command will become even more flexible and sensitive. There will be a great increase in the degree of dependency of various operational elements on information. The accuracy of the strikes of precision guided weapons based on information technologies will be greatly enhanced. The ability of information flows to control material flows will also be increased greatly. In the organization and execution of campaign operations, both sides will attempt to damage each other’s information and information systems, destroy each other’s information infrastructure, block and sever the adversary’s information flows with an ultimate aim to capture the information superiority. Thus, the command of information has become the most salient “commanding height” on the campaign battlefield. Only through collective information operations jointly carried out by the information operation forces of various professions and various departments, and non-professional information operation forces can one seize and maintain the command of information in the battlefield of the campaign and create favorable conditions for achieving campaign victory.

The information operation mainly uses information capabilities to carry out effective attacks on the information systems and information infrastructure of the enemy to achieve certain objectives. It often can achieve the result of big leverages.

i. Reacting to the enemy's operational intent so as to prevent the outbreak of a conflict [end of page 340]

When we have detected the enemy's intent, and as signs of a pending crisis and open hostility have emerged, we can employ the damaging aspects of information. For instance, through technical information means, we can feed the enemy with false or wrong information, or by using "virtual reality" means, we can simulate many operations of our forces, thus leading the enemy to mistake false information as the truth, to make wrong decision and to take wrong actions. We can also use electronic jamming means to disrupt the enemy's acquisition of information; or we can use computer virus weapons to plant such viruses into the enemy's command and control systems, and into other information systems so as to paralyze these systems. We can also allow computer network "hackers" to hack into the enemy's Internet network systems to carry out information sabotage work. These measures can have a direct impact on the confidence of the enemy commander, demoralize him in terms of his determination and will to continue the confrontation. They can also have an impact on the confidence of the enemy's command organ and of the combatants, making the enemy forces depressed and demoralized, thus disrupting the decision-making and command and control procedures, and preventing the outbreak of a conflict. This way, we can achieve the objective of "subduing the enemy without a fight." (bu zhan er qu ren zhi bing不战而屈人之兵)

ii. To carry out deterrence and electronic offensive operations against the enemy to create favorable conditions for other campaign operations.

As it is the case with any other matter, information weapons are a double-edged sword. Information systems have insurmountable vulnerabilities. This gives the information weapons, mainly used to attack the adversary and protect oneself, the dual characters of threatening and attacking others while fearing threats and attacks by others at the same time. Information weapons pose a greater threat to the forces that are heavily dependent on information systems for command, decision-making and control. The more developed a country the more vulnerable it is to information attacks. There are more targets for attacks by information weapons in a country or a force with powerful technological and economic capabilities. They include, for instance, wireless communication and telephone systems, space-based sensor equipment, communication relay systems, various automation systems, supportive electric power production and distribution systems, as well as software and hardware associated with the enemy's information systems. The strategic and campaign information systems used by the enemy force, and the control and relay joints of its network systems, are particularly vulnerable to attacks. Hence, when a confrontation becomes unavoidable, one should carry out information deterrence by taking advantage of the weaknesses of the enemy's information systems and its psychological fears. **[end of page 341]** By pre-emptively launching information attacks at the start of a campaign, one could create favorable conditions for other campaign actions.

iii. In the course of a campaign, closely coordinate with other campaign actions to directly accomplish strategic and campaign objectives.

In a Second Artillery Corps campaign, the information operation can play a prominent role only by its organic combination with other operations. The operational capabilities of the Second Artillery Corps are a body of collective capabilities consisting of maneuvering capabilities, protective capabilities, fire power attack capabilities and information operation capabilities. Only by way of close coordination with campaign maneuvering, campaign protection and fire power attack operations can the information operation show its important value. Thus, to achieve the overall strategic and campaign objectives, in the course of a campaign, on the one hand, one should, through the organization of information defense, ensure that his own information systems can operate in a secure and normal manner and work to its full effectiveness; on the other hand, in the course of the entire campaign, one should employ multiple information offensive means to damage the enemy's C³I systems and weapon control systems so as to degrade its operational effectiveness and to ensure the smooth execution of other operations.

II. The Missions and Requirements of the Information Operation

1. The Missions of the Information Operation

The basic missions of the information operation of the Second Artillery Corps are to protect the security of the operational information and information systems of one's own forces and to damage the operational information and information systems of the enemy, degrading its capabilities to acquire, process, transmit and use information. The concrete tasks are as follows:

1) The Organization and Execution of Information System Protection

The campaign commander and his campaign organ should regard the command and control networks, communication networks and intelligence networks as the key focus, and command centers, communications hubs, radar stations, computer network stations and regard joints as the key targets, adopt measures to counter the enemy's electronic jamming, guard against the enemy's use of computer networks to carry out information attacks and counter the enemy's attempt to destroy or damage the information systems of their own forces. **[end of page 342]** They should organize tight protective actions to ensure the safe and stable operations of their campaign information systems.

2) The Organization and Execution of Information Offensive Actions

The campaign commander and his command organ should regard the command and control networks, communications networks and intelligence networks as the key focus and command centers, communications hubs, radar stations, computer network stations and joints as the key targets, adopt disruptive measures such as electronic jamming, electronic deception, fire power destruction, computer network intrusion, and computer

virus planting, and actively organize information offensive actions so as to seize the command of information in the campaign and thus capture the campaign initiative.

2. The Requirements of the Information Operation

In a Second Artillery Corps campaign, the information operation is often launched prior to other operations and it often runs through the entire course of the campaign from beginning to end. In the adoption of the methods that combines soft kill with hard kill, and integrates offensive with defensive operations, the protection of information systems and the safeguard of information security occupy prominent positions. Hence, very high requirements have been advanced regarding the information operation.

1) It is imperative to bring into full play the collective superiority of the forces and to go all out to fight back.

Compared with the powerful enemy, the Second Artillery Corps is in a inferior position, even though the corps and its bases are equipped with corresponding electronic countermeasure units and the capabilities of its information operational equipment have their own strength. Its state of inferiority vis-à-vis the enemy will not see any fundamental changes for a considerable long period of time. This would require the campaign commander to carry out scientific organization of various information operational forces within the scope of the campaign, apply them in an integrated manner, bring into full play the collective superiority of the forces, and develop the operational capabilities for joint force counter action in the main operational direction and at critical junctures, so as to achieve the objective of subduing a superior enemy with an inferior force and defeating a stronger enemy with a weaker force. For this purpose, one should first stress the unity between the information operation and the overall campaign situation, organize information operations based on the campaign action plan and the needs of the overall situation of the whole process and the whole campaign, and ensure a high degree of coordination and unity in the attack direction, targets and timing between the information operational means and other operational means, especially such as guided missile fire power attacks and campaign maneuvering. Secondly, one should put various **[end of page 343]** information operational forces to concentrated and unified use, rationally determine campaign disposition, based on the various characteristics of the information operational forces, make scientific deployment, comprehensively employ various information operational means to maximize their strength and avoid their weaknesses, give full play to each means' superiority, and form a collective joint operational force.

2) To carry out unified command on the basis of rational composition

The information operational force of the Second Artillery Corps is made of two parts: the professional information operation force and non-professional information operation force. To ensure that the various information operation forces are able to exert their collective power, one must take care to make a rational composition of both soft and hard means and of both the main bodies of information offense and information defense, to

combine them closely and intimately coordinate them. One should also truly bring the information operation onto the track of campaign operations. This way, one is able to scientifically handle the contradictions in the information operation between information offense and information defense, and the contradictions generated in the mutual interference in information transmission between different equipment so as to avoid self interference. One should well handle the relationship between information operation actions and other operation actions, coordinate them well to form a joint force. Only by exercising unified command can one accurately carry out the campaign intent of the campaign commander, make comprehensive use of various information operational means and attack the main targets in a planned and well targeted manner. For this purpose, inside the campaign command system a stable, sensitive and highly efficient command coordinating body should be set up, and based on the campaign plan, it should make unified dispatch and employment of various information operational forces, determine the focuses of information operations at different stages of the campaign and enable the forces to bring into full play their effectiveness.

3) It is necessary to focus on the organization of information defense and to combine offense with defense.

The focus of the information operation of the Second Artillery Corps is to effectively organize information defense. This is determined by two types of factors. First, compared with major military powers, our information technology and information weapons and equipment are overall in an inferior position. Thus the defense of our information systems and the security of information are salient issues. Secondly, the operational form of the Second Artillery Corps campaigns is mainly to carry out beyond visual range fire power battles. The distance between the enemy and our own forces can range from several hundred kilometers to several thousand kilometers. Yet at present, we do not have long range attack capabilities in our information operational means. Thus, **[end of page 344]** we must take information defense as the focus of the information operation of the Second Artillery Corps so as to ensure, first, the survivability of our campaign forces. However, it is not advisable to engage only in passive defense. This is because the capture of information superiority depends on the collective effect of both information offense and information defense. A good information defense is the basis for the execution of information offense. An effective information offense, in turn, can strengthen the effect of information defense. Hence, in operational guidance, we must stress key point defense, and offense and defense integration. Only in this way can we achieve certain information superiority.

4) It is imperative to resolutely carry out the overall campaign intent, respond swiftly, and be flexible and mobile.

In a local war under informatized conditions, the campaign battlefield is complex and fluid. The pace of transition between offense and defense has accelerated. To capture and maintain the command of information in a campaign, one must, based on the overall campaign intent, give full play to the initiative and flexibility of the commander so as to subdue the enemy by strategizing. The information operation can be well concealed,

highly diversified and complex. Given these special conditions, one should especially stress rapid response, flexibility and mobility. One should be able not only to make rapid deployment of troops and weapons but also to swiftly change the means and methods of the information operation. In an operation, the campaign commander should have a strong sense of change and organize information operation actions creatively in line with the campaign intent. One should be able to swiftly organize various reconnaissance forces, reconnaissance equipment and reconnaissance means to accurately acquire, comprehensively process, and determine intelligence information. One should strengthen the concept of time effectiveness and to make correct decisions in the shortest time and to use the simplest means. One should, based on the realities of changes in the battlefield electro-magnetic fields, be able to change with the enemy in countering measures, to change faster than the enemy, and to change before the enemy, so as to control at all times the initiative in the information operation.

III. The Actions and Methods of Information Operation

The information operation, generally speaking, includes two basic operation actions of information defense and information offense. **[end of page 345]**

1. Information Defense Operations

Information defense operations are comprehensive measures for the protection of information systems and the safeguard of information security. They are based on the unified plan of the campaign commander and the information operation command organ of the Second Artillery Corps. Their main contents include counter-reconnaissance, anti-jamming, counter destruction, counter computer attacks etc. They are centered on the capture and maintenance of the command of information and are for the purpose of protect the security of one's own information and information systems.

The battlefields of the Second Artillery Corps are expansive. The command and control of the battlefields and operation actions by the campaign commander and his command organ are mainly realized through the battlefield information system. The battlefield information system is a complex system with computer and communications networks as its core. It generally includes the command and control system, the information search and collection system, the information transmission system etc. Because of the insurmountable vulnerability of the battlefield information system, if no effective protective measures are taken, the consequences are imaginable once it is invaded or damaged by the enemy. Hence, it is imperative to organize necessary and effective protection actions for various types of information systems.

1) To counter the enemy's electronic jamming

This is an operation action taken in a comprehensive but focused way with radar anti-jamming and communication anti-jamming as the main contents. In carrying out radar anti-jamming actions, one generally uses a variety of methods to flexibly counter the

enemy jamming. These measures include using organized radar networks, combined use of optical, laser, infrared sensors, and in conjunction with the use of anti-jamming circuits and instruments, combining them with operation technical anti-jamming measures, frequency change anti-jamming measures, working system change anti-jamming measures, activation of covert work frequencies, sensing by using the blind angles of the jamming beams. In the execution of counter radio communication jamming operations, one generally employs such measures as flexible use of communications equipment, establishment of concealed communication network (dedicated) and establishment of service radio networks (dedicated) or duplicate radio communications so as to enhance anti-jamming capabilities. In the execution of photo-electric anti-jamming operations, one generally adopts duplicate guidance, protective mirror and anti-radiation killing methods so as to eliminate **[end of page 346]** the impact of various photo-electric jamming signals.

2) Guarding against the enemy's use of computer networks to carry out its information attacks.

These are information operation actions taken to guard mainly against computer network infiltration and virus intrusions. When guarding against computer network infiltration, one mainly adopts fire wall technologies to wall off outside access to the information, structure and operating conditions of the protected networks so as to realize security support for network information. In guarding against intrusion of computer viruses, one generally uses software protection, installs anti-viral chips, inserts anti-viral cards, and takes full advantage of the functions of the network operating systems to strengthen protective and treatment capabilities.

3) Countering the enemy's attempt to destroy one's information systems

This is to carry out comprehensive protective actions over the campaign information systems, especially the key stations, points and vital parts. At the present, the ways the enemy would attempt to destroy our information systems are mainly two: One is conventional fire power destruction; The other is anti-radiation weapon destruction. When countering the enemy's conventional fire power destruction, one generally use such measures as shortening the switch-on time, rational location taking advantage of the terrains and land objects, maintaining appropriate distances between stations, and coordinating multiple same-spectrum radars by taking turns in switching on and switching off, so as to offer effective protection to the systems.

Information defense involves a wide scope. In order to ensure the security of information systems, one must adopt flexible and effective methods. These methods mainly include:

i. Controlling radiation and concealing information

This is an information defense method that would adopt comprehensive control of radiation, concealment of signals and other measures to maximally conceal the true

information concerning one's electronic information systems and radiation so as to prevent or reduce the enemy's electronic reconnaissance and anti-radiation destructive effects and capabilities. The guided missile positions and weapons and equipment of the Second Artillery Corps are the enemy's key targets for reconnaissance and strikes. **[end of page 347]** Whether it is peace time or war time, the enemy has never ceased its electronic intelligence reconnaissance against our forces. Hence, concealing electronic information is a regular task in information defense.

Using this method, first one should try to control radiation. This is to limit, under a unified plan, the electro-magnetic radiation time and the scope of one's information system to the shortest possible time needed to accomplish the mission. One should also take effective measures to control and reduce the electro-magnetic exposure of the computer systems. For this purpose, one should strictly control the quantities of information transmission, simplify documents and tables, and reduce the time for communications and liaisons. One should rationally use electronic equipment and, on the premise that the missions can be accomplished, try as much as possible to send signals in low power modes. When necessary, one should use narrow beam antennas to narrow the radiation space of the electric waves. One should place emission equipment correctly and make sure that its radiation direction stays away from the enemy signal interception directions. One should control the transmission timing, and when necessary, one should maintain radio silence. Secondly, one should try to conceal signals. That is to say, in order to avoid the enemy's reconnaissance against our electro-magnetic information, we should try to conceal relatively the signature of our electro-magnetic spectrum and information content. For this purpose, we should use random multiple access communication (sui ji duo zhi tong xin随机多址通信), spread spectrum communication (kuo pin tong xin扩频通信), frequency hopping communication (tiao pin tong xin跳频通信), burst communication (cu fa tong xin猝发通信) and other technical means to reduce the probability of frequency exposure. One should also apply widely the electronic encoding technologies, particularly computer technologies to all links in confidential communication, and should camouflage the signature of one's electro-magnetic information.

ii. Concealing the real information and showing false information, deceiving and confusing the enemy

This refers to the information defense method that comprehensively employs various technical means and tactical measures of information deception to conceal and cover the truth about one's own information and information systems.

Using this method, one should first combine the means of concealing the truth with those of showing the fake so that the enemy is unable to tell what is true and what is false. "Concealing the truth" is to make rational deployment of information warfare operational weapons and equipment and gears by taking full advantage of the favorable terrains of the positions of the Second Artillery Corps and pre-constructed concealed tunnels, to take tight camouflage measures regarding the surface information gears, making it difficult for

the enemy to detect. “Showing the fake” is to use false information to confuse the enemy so as to provide cover for one’s electronic information systems in conducting normal operations. Actions may include organizing radio feint moves, setting up fake positions and fake command posts, using feint operation vehicles to fake troop movements. **[end of page 348]** Secondly, one should organically combine information source deception, information channel deception and information deception so as to make it impossible for the enemy to attend to everything at once. Information source deception is to entrap the electro-magnetic reconnaissance equipment and gears of the enemy in the air or in the space through setting up false radiation sources, and to dupe the enemy. Information channel deception is to frequently alternate between real and false information channels as planned in the course of information transmission. This would increase the degree of difficulty for the enemy to conduct reconnaissance control and make determinations. Information deception is to skillfully employ stratagems and artificially create information that is both true and false so as to deceive the enemy in its process of intelligence collection, analysis and utilization.

iii. Rationally organizing networks and conducting collective protection

This refers to the information defense method that uses various types of electronic information equipment and systems, adopts different organization forms and methods, forms systems of different scales based on the network structures, and uses the collective capabilities of the systems to counter jamming, counter destruction and counter stealth.

Using this method, one first has to organize various communication means such as radio stations, relay, cable, optical cable and satellite means into picket net systems that are interlaced with multiple, circuitous routes. Such networks will ensure that while some channels are cut off, others will remain open. In this way, one can enhance the collective electronic defense capabilities. One can also organize multiple network structure forms that have the theatre communication networks as the backbone and combine duplex mobile radio communication networks, simplex radio communication networks, satellite communication networks and dispersion networks so as to fundamentally improve the defense level of the information systems. Secondly, one should make relatively unified deployment of radars of different systems, different modality, and different platforms and connect them into networks so as to form a network air defense system to counter four types of threats, namely, enemy’s electronic jamming, low altitude penetration, anti-radiation weapon attacks, and stealth attacks.

d. Putting up information shields and interdiction obstacles

This is an information defense method that comprehensively uses active and passive electronic jamming measures to carry out jamming against the enemy’s electronic reconnaissance systems in specific directions and areas so as to reduce the enemy’s capabilities to carry out reconnaissance over the radio communication, radar and computer electronic equipment or systems in our main direction or areas. This is a defense by offensive method. **[end of page 349]**

Using this method, one first carry out shielding in designated directions. This is to aim at the enemy's reconnaissance directions and use one's ground or air jamming platforms to carry out interdiction and collimation jamming, creating an objectively existing directional electronic shield between the enemy and one's own, and making it impossible for the enemy to detect one's radio communication signals. Secondly, one can carry out area shielding. This is to use electronic countermeasure drones or electronic countermeasure aircraft to carry out jamming against the enemy above one's positions and form a relatively large-scope electro-magnetic shield. This is to prevent the enemy from carrying out reconnaissance, jamming and damage against one's communication hubs and important communication networks. Thirdly, one can set up passive electro-magnetic shields. This is to drop between our targets and the enemy's radar and photo-electric sensor equipment chaff (bo tiao箔条) of certain thickness and length, aerosol (qi rong jiao气溶胶) and multi-spectral smoke-screen bombs (duo guang pu yan mu dan多光谱烟幕弹) so as to form a passive jamming shield and reduce the enemy's sensor capabilities against one's targets. Fourthly, one can carry out computer information shield. This is to carry out continuous jamming using noise jamming and visual jamming in the frequencies in which the computer system's electro-magnetic information is leaked. Furthermore, one should fully mix up jamming signals and leaked computer signals so as to reduce the effect of enemy's computer reconnaissance.

e. Limited counter attacks to assist defense with offense

This is an information defense method that uses offensive actions to assist the defensive operations to counter the enemy's electronic attacks. The offensive actions include mounting jamming suppression and virus attacks against the enemy's information systems, or carrying out fire power destruction against the sources of the enemy's electronic jamming. This method embeds information offense in information defense, using electronic jamming, virus attack and fire power destruction methods to jam and destroy the electronic warfare systems that pose the great threat to one's forces. The purpose is to strive for seizing the initiative while in a passive position.

Using this method, one should first select as the primary targets those enemy electronic jamming sources and electronic reconnaissance facilities that pose the great threat to one's forces. Secondly, one should select corresponding offensive means based on the nature of the targets. For instance, one should decide whether to use the information jamming or the fire power destruction method. When one adopts the information jamming means, he should take care to select jamming frequencies different from the working frequencies of his own electronic equipment. Thirdly, one should correctly select the timing of the attacks. One generally selects the main operational phase and critical junctures as the time to launch such offensive actions, **[end of page 350]** particularly when one is subject to the enemy's electronic suppression and could not break away.

2. Information Offense Operations

Information offense refers to active offensive operations carried out under the unified command of the campaign commander and his command organ by professional information offensive forces and non-professional forces for the purpose of seizing and maintaining the command of information. In such operations, comprehensive measures are taken to maximally weaken, damage and break up the functional capabilities of the enemy's information systems. The enemy's command and control centers, communication hubs, large radar stations, computer network stations (joints) etc. are the main targets for such operations. Operation actions include electronic jamming, network attacks and physical destruction etc. The objective is to seize the battlefield initiative.

1) Electronic jamming

Electronic jamming is an operation action in the form of electronic soft kill against the enemy's electronic equipment or systems, making them unable to function normally, thus reducing the amount of information acquired by the enemy's electronic systems and lowering their functional effectiveness. It has two operational forms: one is suppressive jamming and the other is deceptive jamming. In the future wars, the combat adversaries of the Second Artillery Corps will be powerful, highly informatized enemies with information activity capabilities. C⁴I systems are the "ears and eyes," "nerves," and "brains," of their operational forces and they are the basis for realizing "three-dimensional warfare and combined operations." In such systems, three links – information acquisition, information transmission and information processing – play the decisive role. And among them, information transmission is the critical link. To carry out information operations, the Second Artillery Corps can accomplish the objectives of paralyzing the functions of the command, communication and intelligence systems as long as it can adopt various electronic jamming measures, combine active with passive jamming, carry out simultaneously both suppressive jamming and deceptive jamming, focus on communication jamming and radar jamming, concentrate on jamming the critical joints of the enemy's information chains, and sever the main "nerves" of its information operations.

Suppressive jamming is a soft kill means of information offensive operation in an information operation. **[end of page 351]** Its role is to weaken and damage the information acquisition, information transmission and information processing functions of the enemy's information systems and its information weapons. The main measures include communication jamming, navigational jamming, radar jamming, photo-electronic jamming, guidance jamming, friend-or-foe identification (IFF) jamming etc.

Deceptive jamming is an operation that deceives and confuses the enemy in the electromagnetic field. It involves letting one's electronic gears and camouflage equipment emit false information, or the imitation of enemy radios in making false intelligence reports or faking communication, issuing false orders, setting up fake electronic targets etc. It may also involve the use of electronic gears and electronic techniques to simulate troop and vehicle movements. To carry out electronic deceptive actions, one should first of all

getting close to or conform to the electro-magnetic environment of the battlefield. Secondly, one should make comprehensive use of multiple means. Thirdly, the deception must have a high degree of verisimilitude and must be credible. Fourthly, the timing of the deceptive action should be coordinated closely with the combat operations of the troops. This is to enhance the effect of deception through concerted actions.

2) Network attacks

This is an operation that takes concealed, dormant, contagious or destructive actions against the computer-centered information infrastructure in the enemy's military, financial, electric power and other systems. It involves the selection and employment of various forms of computer viruses and network attacks.

A computer network attack refers to the deliberate breaking by illegal means into a network, to browse, steal, alter data at will, thus denying legitimate log-ins and services, as well as using other means to cause losses and damage to the computer network. In terms of its deterrence effect, by altering, damaging and massive copying artificially devised special computer programs, it can endanger the safety of the enemy nation. At the same time, by damaging the enemy's propaganda machines, doctoring various enemy orders and controlling the instructions, it can shake the confidence and the mood of the military ranks and populace, demoralize the enemy, destroy its will to fight, and realize the objective of "subduing the enemy without a fight." In terms of its actual combat effect, if destructive attacks are carried out against the enemy's C⁴I systems, communication networks, guided missile weapon systems and the computer systems of various precision guided weapons, **[end of page 352]** it can paralyze the enemy's massive modern war machine at the instance when a computer key is pressed, making the entire decision-making and command system dysfunctional, and losing the ability to coordinate and control the overall situation of the war.

A computer virus attack is an offensive action taken against the enemy's fully closed systems, joint wire and wireless semi-closed systems, and joint systems of public networks. Its main objects are various military information systems and various weapon systems controlled by computers. It takes advantage of such characters of computer viruses as being widely contagious, dormant, activatable, destructive and self-generating. The attack can be carried out by the insertion of virus contaminated chips, the planting of "logic bombs," and transmission via cable and other ways.

3) Physical destruction

This is an operation action that uses fire power and other high tech weapons to mount direct attacks on the enemy's information systems so as to achieve permanent damage to the systems. At present, one generally uses anti-radiation weapons and conventional fire power to carry out the attack so as to achieve the objective of total physical destruction of the enemy's information systems.

An anti-radiation attack mainly uses such anti-radiation weapons as anti-radiation guided missiles and anti-radiation drones to mount attacks on radars or radar jamming aircraft. It can also be used to attack communication hubs and important radio communication systems.

A fire power attack mainly refers to the hard kill action against information targets by using conventional guided missile fire power steered by a radiation source precision location system.

An information attack is a comprehensive operation that has been formed gradually with the development of information technologies and that uses electronic warfare and computer network warfare as the main forms. The main methods are as follows:

i. Suppressive jamming and information shutoff

This is an operational method that concentrates a superior information offensive force to carry out, within specific periods of time and in certain directions, large-scale suppressive electronic jamming against the enemy's information systems. **[end of page 353]** Combined with the use of such means as radio imitation and network deception, it will blind the enemy's radar and photo-electric systems, and make them lose their normal functional capabilities.

Using this method, one first should rationally determine the targets for jamming. Since we have only a limited force for information attacks. We cannot pursue comprehensive jamming. Instead, jamming is carried out within specific time and in specific space against specific important targets. Thus, one should carry out focused jamming based on a comprehensive consideration of the needs and of the campaign operations, and by concentrated use of many measures. Secondly, one should conduct invisible posture creation, trying hard to conceal the intent of one's information offensive operations through the employment of such measures as electronic camouflage, electronic feints and network deception. Thirdly, one should control the combat opportunity. One generally should carry out strong suppressive jamming against the enemy prior to the launch of one's campaign, ahead of the actions of the main force, so as to achieve surprise in the operation.

ii. Jamming information channels and polluting information

This is an information offensive method that seeks to jam the enemy's information channels through deliberately dumping false information, information waste and "poisonous" information in the enemy's information systems, or causes "pathological changes" to useful information, or pollutes the environment under which the enemy's information systems operate, so as to achieve the objective of curbing the enemy's information systems from performing their normal functions.

Using this method, one first should learn to understand the state of the operations of the enemy's information systems, and then deliberately send a massive amount of false information and waste information, and create "information floods," so as to jam and crowd out the enemy's information channels, overloading and saturating its information systems. Secondly, one should use the method of secretly instilling, uploading or transmitting computer viruses to prevent the enemy's information systems, especially the information processing systems, from carrying out their normal functions, so as to seize the command of the computer network systems. Thirdly, one should use various types of gas producing, fog making, refrigerating, heat making and smoke producing devices, and combine indigenous and foreign means to pollute the environment under which information systems operate, so as to confuse and blind the enemy's information reconnaissance sensor systems.

iii. Damaging the joints and paralyzing the systems

This is an information offensive operation method that seeks to degrade or damage the overall operational effectiveness and capabilities of the enemy's electronic information systems by concentrating one's information offensive forces [end of page 354] to carry out integrated soft kill and hard kill actions including high-intensity electronic jamming, virus attacks and fire power destruction against specific electronic information systems of the enemy or the vital parts of the systems that play a decisive role.

Using this method, one should first use various information reconnaissance means to search for, analyze and accurately determine the joints of the enemy's information systems. Secondly, one should start from the vital parts, hit the weaknesses of the systems and carry out focused strikes, so as to achieve the objective of "shaking up a single point to affect the entire body." Thirdly, one should pay attention to structural damage. As "the more complex an information system the greater reliance it has on information," information is the inner essential element and fundamental driver in the formation of operating systems into organic systems. To perform its normal functions, any information system must maintain a relatively stable structure, including its hierarchical structure, functional structure, frequency and spectral structures, configuration structure, sequencing structure etc. Damaging any single structure can make it difficult for the system to perform its functions.

Section 2. Campaign Defense of the Second Artillery Corps

In a local war under informatized conditions, the increased informatization of the main operational adversary, particularly the aerial reconnaissance capabilities and long-range strike capabilities of the powerful enemy, is posing a very grave threat to the effective survivability of the guided missile troops of the Second Artillery Corps. While we strive to enhance the guided missile attack capabilities of a campaign large formation of the Second Artillery Corps, we should also strengthen campaign defense of the Second Artillery Corps.

I. The Nature, Status and Role of Campaign Defense

Campaign defense is an important action of a Second Artillery Corps campaign. It runs through the entire course of the campaign from beginning to end and will have a major impact on the progress or even the outcome of the campaign. Thus, it occupies an important position and plays an important role. The campaign commander and its command organ should gain a correct understanding of, and grasp, the characteristics and laws of campaign defense actions, so as to advance the campaign in a favorable direction.
[end of page 355]

1. The Nature of Campaign Defense

Campaign defense is the sum of a series of counter surprise attack battles and protective actions conducted under the unified command of the campaign commander for the purpose of achieving set strategic or campaign objectives. Campaign defense of the Second Artillery Corps refers to a series of operational actions carried out by a campaign large formation of the Second Artillery Corps based on a unified plan of the superior and in coordination with troops of other services (arms) and armed militia forces for the purposes of guarding against and counter aerial and ground fire power strikes and information attacks mounted by the enemy and of preserving the effective campaign forces.

2. The Status and the Role of Campaign Defense

Campaign defense occupies an important position and plays an important role in a Second Artillery Corps campaign and in campaign actions. They are mainly shown in the following aspects:

1) It is an important operation of the Second Artillery Corps

Offense and defense are two major categories of the operations of an army. The two campaign forms of the Second Artillery Corps are the nuclear counter attack campaign and the conventional guided missile strike campaign. Both belong to offensive campaigns. Campaign defense is an important operation that centers on the two campaign forms and runs through the entire course of a campaign from beginning to end. It is a defensive campaign action. Although it cannot constitute an independent defensive campaign, campaign defense of the Second Artillery Corps, as an important campaign action, runs through the entire course of a Second Artillery Corps campaign and occupies an extremely important position in the Second Artillery Corps campaign.

2) It is the premise for the execution of a Second Artillery Corps campaign

The ultimate objective of a Second Artillery Corps campaign is to carry out, based on the strategic intent of the supreme command, the missions of military deterrence, nuclear counter attack campaigns and conventional guided missile attack campaigns. Our

country's principle and position of no first use of nuclear weapons have determined that any nuclear counter attack mounted by the guided missile troops of the Second Artillery Corps is executed after our country has suffered from a nuclear attack launched by the enemy country. Yet, our **[end of page 356]** nuclear guided missile troops and their launch sites are the core targets of the enemy's attacks. The conventional guided missiles of the Second Artillery Corps are flexible in use and are the "magic mace" weapons for subduing the enemy and winning victory. As a result, they are also the prime targets for the initial strikes of the enemy. Therefore, the outcome of campaign defense of the Second Artillery Corps has a direct bearing on the key issue of whether we can carry out fire power strikes against the enemy. If we cannot carry out effective campaign defense, we will not be able to preserve the campaign attack forces of the Second Artillery Corps, to say nothing of carrying out nuclear counter attack campaigns or conventional guided missile attack campaigns.

3) It is an important guarantee for enhancing the capabilities of the Second Artillery Corps for sustained operations

The guided missile weapons used by a campaign large formation of the Second Artillery Corps have distinguished and exposed features that are easily detectable by the enemy's reconnaissance. They are thus vulnerable to the enemy's fire power strikes and information attacks, which gravely threaten the survivability of the campaign force. This requires that while stressing offense, the campaign large formation of the Second Artillery Corps must pay a lot of attention to defense, adopt active defense actions and all effectively means, take full advantage of the superiority of collective defense, homeland operations and people's war, and carry out effective protection against various sabotage means of the enemy, so as to enhance survivability of the campaign forces of the Second Artillery Corps and ensure that they are in good conditions.

II. The Missions and Requirements of Campaign Defense

1. The Missions of Campaign Defense

A campaign large formation of the Second Artillery Corps carries out nuclear counter attack campaigns and conventional guided missile attack campaigns. Its battlefield space is vast. Its positions are located at different places. Its line is long and its front is wide. Thus the campaign defense missions are arduous. The basic missions are mainly divided into two major categories: One is to guard against enemy attacks in multiple forms and enhance the survivability of the troops; Second is to swiftly handle the aftermath of such attacks and restore operational capabilities. In guarding against enemy attacks in multiple forms, the campaign large formation of the Second Artillery Corps should focus on guarding against the precision guided weapon attacks launched from the enemy's land (sea) platforms, against weapon attacks delivered from the enemy's aerial platforms, and against the attacks mounted by the enemy's airborne troops, and against attacks and harassments carried out by the enemy's special operation forces.

1) Guarding against the precision guided weapon attacks launched from the enemy's land (sea) platforms [end of page 357]

The precision guided weapons launched from land (sea) platforms use precision guidance technologies and have a direct hit ratio of above 50%. In view of the practices in the few recent local wars, guided missile troops will become the prime targets of attacks of precision guided weapons launched from the enemy's land (sea) platforms. How to preserve survivability under the attack of such weapons and to maintain operational capabilities is the primary task of campaign defense.

2) Guarding against attacks mounted by the enemy's aviation corps

The enemy's use of aerial platforms to carry out air attacks is the main offensive form of modern operations. It is also an important means of joint fire power attacks. In the future local wars under informatized conditions, such attacks will pose extremely grave threats to the security of the main deployment, weapons and equipment, guided missile positions and other important targets within the land area of the Second Artillery Corps campaign. In the entire course of the campaign, the campaign large formation of the Second Artillery Corps should take various measures and use various means to provide protection to different important targets within the land area of the campaign and to minimize the damages caused by the enemy's air attacks.

3) Guarding against attacks carried out by the enemy's airborne troops.

Under informatized conditions, the enemy may use heliborne and parachute methods to carry out surprise attacks. The campaign large formation of the Second Artillery Corps should organize defense forces to resolutely resist the enemy's airborne troops attacking important targets in the operational area, and actively cooperate with defense support troops within the theatre to complete the anti-paratrooper mission.

4) Guarding against attacks and harassment mounted by the enemy's special operation forces

Campaign defense forces should focus on the protection of various command organs, operational positions and support systems in defense against, and resist, attacks and harassments mounted by the enemy's special operation forces.

5) Handling the aftermath of the enemy's attacks

After suffering from an enemy attack, the troops should organize defense forces to swiftly handle the aftermath of the attack and to restore operational capabilities. These mainly include: finding out the situation of the attack; promptly reporting to the superior and putting forward [end of page 358] suggestions on how to adjust, replenish, and how to restore, operational capabilities; organizing troops to rescue the wounded and to carry out emergency repairs, cooperating with neighboring units and local support forces to

carry out adjustment and replenishment, and restoring as soon as possible operational capabilities; following the plan to complete various preparations for a nuclear counter attack campaign or a conventional guided missile attack campaign.

2. The Requirements of Campaign Defense

In campaign defense of the Second Artillery Corps, campaign commanders at various levels and command organs must follow the military strategic principles of the Central Military Commission and the people's war concept, follow the instructions of the command headquarters and the superior, make full preparations, carry out tight protective measures, respond flexibly, mount collective counter actions, and maximally preserve the campaign forces of the Second Artillery Corps. The concrete requirements are as follows:

1) Preparations in advance and multiple plans to guard against attacks

To carry out campaign defense of the Second Artillery Corps, one must make full preparations. This is determined by the objective environment of campaign defense of the Second Artillery Corps and the characteristics of the enemy's surprise attacks. Before the enemy launches a surprise attack, the campaign commander of the Second Artillery Corps and his command organ should organize troops to use various types of reconnaissance means and surveying technologies to find out the enemy's intent to launch a surprise attack, possible weapons it will use for the surprise attack, and to determine the timing, area and scale of the enemy's surprise attack so as to provide the basis for the defensive operation actions. Based on the possible enemy surprise attack, one should select favorable terrains around his positions to build defense works, adopt multiple measures to hide the truth and show the false, adjust defense deployments, build good material reserves, draft and revise advance defense operation plans, carry out defense operation drills and training, especially organize combined operation drills and training with other services, inspect defense operation preparations, find out problems and make immediate corrections.

2) Focused protection and prepared for mounting strikes in defense

Campaign defense of the Second Artillery Corps involves many targets and a wide scope. One must carry out comprehensive protection while do a good job in the protection in key directions and over key targets. For instance, one must adopt effective measures, use multiple methods simultaneously to carry out comprehensive protection over the guided missile bases in the main operational directions, the operational units with the missions to carry out the first waves of attacks or counter attacks etc. One should minimize losses from the enemy's attacks and maximally **[end of page 359]** preserve the campaign operational strength of the Second Artillery Corps. At the same time of providing tight protection, one should actively organize resistance against the attacking enemy troops and weapons to protect the safety of personnel, guided missile weapons, equipment and the facilities of the operational positions. Campaign defense is an operational action concerning the overall situation and running through the entire course of a campaign from beginning to end. The campaign commander and his command organ must correctly

handle the relationship between “protection” and “strikes.” Based on the concrete battlefield conditions and the balance of forces between the enemy and one’s own forces, one must carry out overall planning and make all-round considerations, and grasp the whole situation so as to ensure the smooth conduct of protective operation actions.

3) Setting up defense comprehensively and coordinating closely

The status and the role of the nuclear and conventional guided missile troops of the Second Artillery Corps in a modern war are very prominent. Their campaign actions have a great impact on the overall situation of a war. Thus, inevitably, they will be the focus of the enemy’s fire power strikes and electronic attacks. To achieve the objective of effective defense, one must combine dynamic and static actions, falsehood and authenticity, indigenous and foreign methods; he must bring into full play the power of collective defense and people’s war of the PLA, discover the vulnerable links inevitably exist in the high tech weapons of the enemy despite its superiority in aerial attacks, and adopt active and effective protective measures, carry out comprehensive defense so as to seize the initiative in the protective actions. In campaign defense of the Second Artillery Corps, there are multiple elements participating in the operation and there is a strong requirement for collective operational actions. In a defensive operation, one should do a good job not only in coordination between different defensive units within the Second Artillery Corps but also in coordination with external defensive units assigned to and supporting the Second Artillery Corps. One must, under the unified command of the joint command, actively seek close coordination with other services (arms), and take advantages of one’s own strength while avoiding one’s own weaknesses so as to form a joint might of collective defense.

III. Campaign Defense Actions and Methods

In campaign defense of the Second Artillery Corps, one should adopt practical methods and concrete measures that are based on the different characteristics of the weapons the enemy will use in its surprised attacks and are compatible with the defense capabilities of the campaign large formation of the Second Artillery Corps, so as to win the initiative in campaign defense actions. **[end of page 360]**

1. Guarding Against the Precision Guided Weapon Attacks Launched from the Enemy’s Land (sea) Platforms

To guard against the precision guided weapon attacks launched from the enemy’s land (sea) platforms, a campaign large formation of the Second Artillery Corps should do a good job in the following work:

1) Perfecting reconnaissance, early warning and alert standard notification systems
(pei xi配系)

To detect signs of pending enemy surprise attacks as early as possible is an important link in guarding against enemy precision strikes. Campaign commanders at all levels of the Second Artillery Corps and their command organs must organize and perfect reconnaissance, early warning and alert standard notification systems, and set up early warning systems centered on phased array radars. Such systems should be joined by theatre reconnaissance and early warning systems. All guided missile bases should also join the theatre alert networks. This is to ensure timely acquisition of information about the enemy. Important gears of the reconnaissance, early warning and alert standard notification systems should have sufficient capabilities to resist destruction and communication and liaison capabilities. The positioning of the points in such systems should be scientific and rational. They should be convenient for observation, conducive to processing and should enable one to swiftly, reliably and accurately notify relevant parties of the sudden attacks by precision guided weapons launched from the enemy's land (sea) platforms. The standard notification systems should meet the requirements of being reliable and highly efficient.

2) Correctly analyzing and determining the enemy's intent to launch surprised attacks

The enemy's precision strikes have the characteristics of being highly concealed and highly surprising. However, they are not without signs that can be detected. The operational positions of the Second Artillery Corps are important strategic protection targets. The enemy's attacks on such targets are major decisions. Prior to launching such surprised attacks, the senior levels of the enemy inevitably will undergo a process of deliberation. At the same time, there will be corresponding adjustments in its deployment. For instance, its warships carrying cruise missiles will have to move to forward positions within the effective range of the weapons. Its long-range weapons will also undergo frequent maneuvering. Radio communications will also show abnormality. The campaign commander and his command organ must maintain a high degree of alert, collect effective information, and analyze and determine the enemy's intent to launch surprised attack, its force deployment and adjustments. They should be able to predict and learn of the enemy's intent before the fighting starts so as to strive for the command of the initiative in the defense operations. **[end of page 361]**

3) Perfecting preparations of materials and instruments for protective works

The command headquarters at all levels of the campaign large formation of the Second Artillery Corps and participating troops (detachments) should have the support of protective works. These underground works and other forms of protective facilities are the basic conditions for guarding against the enemy's precision strikes. To achieve effective protection, one should mainly use underground defense systems with tunnels as the main body. At the same time, one should also rely on semi-underground works, emergency protective works and protection by natural terrains. One should organize serious inspections of the protective works. The focus of inspection should be the anti-

destructive reinforcement, the ventilation and obturation conditions of the tunnels, as well as the survival conditions in the tunnels and other important links. When problems are detected, one must make timely corrections. For those facilities that are susceptible to destruction, one must be able to make swift repairs. The key parts should be reinforced. Water, ventilation, electric and other equipment in the positions should be maintained in good conditions. Protective works that have been built on a provisional basis must have certain anti-destruction strength and they should be well camouflaged.

To deal with the attacks by precision guided weapons launched from the enemy's land (sea) platforms, one should mainly adopt the following methods:

First is to use smoke to blind the enemy's weapons. Precision guided weapons are susceptible to smoke, fog and weather conditions. Based on these characteristics, one can use smoke screens to effectively confuse the weapons and reduce the precision of their strikes, thus enhancing the survivability of the targets under attack. Prior to being attacked by the enemy's precision guided weapons, one may generate smoke in the main attack directions of the enemy or surrounding the key targets so as to form several layers of smoke screens with certain height, thickness and length and in certain distance. Such smoke screens can have a strong effect of absorbing, heat-dissipating and weakening laser and infrared radiation, or can even block laser and infrared transmission, thus blinding the laser, infrared and TV guidance heads of the weapons. This would make it difficult for such weapons to capture the real targets and reduce the effectiveness of the strikes of precision guided weapons.

The second is to show false targets and carry out deception. This is to use standard materials or handy materials to make fake guided missiles, fake equipment, fake positions, fake roads and other fake targets, making it difficult for the enemy reconnaissance and detection systems to differentiate what is real and what is false. One may also shoot infrared bait ammunition to carry out deception **[end of page 362]** against the enemy's precision guided weapons, or to guide the enemy's precision guided weapons toward fake targets, so as to achieve the objective of protecting oneself. War practices have proved that deception is an effective method against precision guided weapons with low cost but fast results. The faking instruments should be not only "real looking" but also "real feeling." Retired or scrapped weapons and gears, after maintenance, can be "put on the stage after cosmetic makeovers." They can achieve good results in showing the fake and deception.

The third is to carry out electronic jamming. One should make comprehensive use of various means to carry out effective jamming of the enemy's precision guided weapons so as to reduce their successful hit rates and weaken the power of their strikes. The technical means of the precision guided weapon systems are complex. There are many inter-related intermediary links as well as many constraints on realizing their capabilities. Their reliability and accuracy are also susceptible to attacks. Furthermore, most precision guided weapons rely on sensors to seek targets. The information method for acquiring targets is to use visible light, infrared, microwave, millimeter wave and laser. The guidance systems of precision guided weapons working in such electro-magnetic wave

band all can be jammed. Hence, one should use various measures to jam them so as to blind them instantaneously, making them lose control of the weapons and making it difficult for the weapons to realize their capabilities.

The fourth is to intercept and destroy the enemy's weapons. One should coordinate with air defense forces of various services and arms assigned, use multiple weapons to intercept and destroy the precision guided weapons launched by the enemy so as to protect the important targets of the enemy's attack. Based on the characteristics of the precision guided weapons in the course of their attacks in terms of their low and high altitude, of their constraints in terrain contour-matching, and the duration of their flights, one should use various standard equipment weapons, with the coordination of support fire power, to carry out focused, multiple phased, multiple tiered and from long to short distance interceptions of the enemy's precision guided weapons, and strive to destroy them before they reach their targets.

The fifth is to carry out evasive maneuvers. Guided missile troops with maneuvering capabilities should give full play to its superiority in mobile operations, adopt flexible ways to carry out maneuvering in order to effectively protect the guided missile attack force. One should take advantage of the intervals in the enemy's reconnaissance, give full play to the maneuvering capabilities of the guided missile troops, use mobility to avoid detection by the enemy's satellites, and prevent one's weapon systems from **[end of page 363]** destruction and damage by the enemy's long range precision guided weapons, so as to maintain the operational capabilities of one's nuclear and conventional guided missile troops.

2. Guarding Against Attacks Mounted by the Enemy's Air Aviation Corps

Guarding against attacks mounted by the enemy's air aviation corps is an action to counter the enemy's aerial fire power attacks. A campaign large formation of the Second Artillery Corps, in guarding against attacks by the enemy's aviation corps weapons, generally should follow the steps below to implement:

1) Issuing air raid alerts and organizing protective actions

When the campaign commander has received air raid early warning and alerts from the superior and friendly neighboring units, he should swiftly make his decision on air defense operation, and issue air raid early warning and alert signals to the troop that could be hit by the enemy's air strikes. At the same time, he should notify the government organs and people's armed units within the operational theatre. After receiving the alert signals, those troops and various defense elements should follow the (advance) anti-air raid plans or the campaign commander's orders to swiftly organize the troops to carry out protective actions. During the day, one should tightly restrict personnel and equipment activities in the positions. During the night, one should institute blackout. All troops must strictly follow the relevant concealment and camouflage disciplines.

2) Requesting air defense support and organizing anti-air fire

A campaign anti-air raid operation in the area of the positions of the Second Artillery Corps is generally an organic component of the theatre key location air defense. The security of the air space is generally the responsibility of the theatre air defense force. When coming under the threat of the enemy's air attack or under such actual attacks, the campaign commander should accurately report to the theatre (or the theatre air defense command) on the conditions of the enemy's air raids so as to allow the defense forces to swiftly react to such attacks and to actively organize interception and resistance. The air defense units assigned to Second Artillery Corps operational bases should be integrated into the theatre key location air defense systems. At the time of the enemy's attack, the air defense units assigned should fire at the attacking enemy aircraft and cruise missiles flying in low altitudes. The enemy's attacking aircraft flying in medium and high altitudes should be intercepted by air defense guided missiles of the air force units assigned to support the operational bases of the Second Artillery Corps. During the Gulf War, even it completely lost the command of the air, the Iraqi military was still able to shoot down several Tomahawk cruise missiles. Thus, with the air defense units of services and arms as the main force, **[end of page 364]** giving full play to the air defense force of the Second Artillery Corps by organizing effective and concentrated fire power to attack low and slow flying aerial platforms is also an important link in the defense against air attacks. When directing air defense troops within the Second Artillery Corps establishment or assigned to the corps, the campaign commander should make an accurate determination of the enemy's conditions, concentrate forces in the main directions, set up defense in key areas, carry out mobile operations and swift strikes, and form interception networks with multiple layers consisting of multiple high, medium and low altitude fire power to counter the attacking enemy. In an air defense operation, the campaign commander should rely on the support of the air defense system, scientifically employ various anti-air operational forces, flexibly use and change methods, adopt multiple methods such as combining positional cover with aerial cover and integrating fixed position defense and mobile operation so as to defeat the aerial attacks mounted by the enemy's air aviation corps.

3) Finding out the conditions after the attacks and making decisions on handling the aftermath

After the enemy's air attack, the campaign commander and his command organ should find out the losses from the attack in a timely manner, make adjustments in the troops and weapons, so as to swiftly restore operational capabilities. One should mainly find out the weapon types, quantities, directions, and timing of the weapons used in the enemy's attack, and the degrees and extent of the damages caused to various types of targets, the degree the attack sets back operational actions, and recommendations concerning the restoration of operational capabilities and timeline etc. After finding out the situation of the aftermath of the attack, one should immediately report to the superior, put forward recommendations on handling the aftermath and swiftly make decisions on handling the aftermath. The content of the decisions include: the bases of the decisions (e.g., the aerial conditions and a brief account of the attack, directives of the superior and the decision of

the commander), the use of rescue, emergency repair and emergency transportation forces, the requirements for restoring operational capabilities, adjustments to troop deployment plans, arrangements for the next steps in anti-air attack defense, command coordination and support during air attacks etc.

4) Organizing rescue and emergency repairs and restoring operational capabilities

The enemy's air attack operation is generally carried out in multiple waves. Hence, it is possible that rescue and emergency repairs may need to be carried out on a sustained basis. The organization of rescue and emergency repairs may consist of a series of actions and they may be carried out during the intervals of the enemy's air attacks. Hence, the campaign commander and his command organ should have multiple advance plans and devise multiple scenarios. Once attacked by the enemy from the air, one can swiftly **[end of page 365]** organize rescue and emergency repairs, and maximally restore the operational capabilities of the guided missile troops.

When guarding against air attacks mounted by the enemy's air aviation corps, one should adopt the basic method of "using force in proportion to the enemy's force employed and three dimensional defense." Based on the characteristics of the forces and weapons used in the enemy's air attack, the timing of the attack and the possible directions of the attack, one should adopt flexible and multiple operational methods, establish the operational thought of active defense, use flexible and adaptable tactics, place limited force around important targets that are a key for defense, make multiple tiered deployment, form three dimensional defense networks, actively seek to annihilate the attacking enemy, so as to ensure the safety of the guided missile troops of the Second Artillery Corps within the theatre and the facilities of their operational positions. The concrete methods are as follows:

First is to provide early warning in a timely manner and employ force in proportion to the enemy's force used. Once detecting enemy attack or upon receipt of early warnings and alerts from the superior and friendly neighboring units, the campaign commander and his command organ should organize the observatory and reporting services within the operational theatre to strengthen its aerial observation and to report developments in a timely manner. The service should notify air defense units of the types and sorties of the enemy's aircraft, their incoming directions and flying altitudes etc. One should employ force in proportion to the force the enemy uses and, based on the needs of the defense mission, request air defense support. One should organize air defense forces and weapons assigned to the Second Artillery Corps to be ready at all times to counter the attacking enemy aircraft.

The second is to carry out interception at a long distance away while countering the attack at a short distance. The campaign commander should correctly grasp the situation of the enemy's attack, notify in a timely manner the fighter air aviation corps of the air force, and provide in a timely manner reliable information for the organization of aerial interception so as to intercept the incoming attack enemy aircraft at a long distance away, to counter them at a short distance, and to carry out conventional guided missile attacks

against the sources of the enemy's air strikes. One should use air defense guided missiles to intercept the enemy's attacking aircraft coming from a long distance. Once they are overhead, one should actively organize various forces to carry out short-range concentrated fire against these aircraft.

The third is to carry out three-dimensional defense and counter the enemy's attack in different layers. When the enemy's aircraft have penetrated through the first and second lines of defense networks and have entered the air space of one's operational zone, the campaign commander, based on the defense capabilities of his unit and those of the supporting and assigned forces and weapons, organize multiple layers of defense. In the high altitude, interceptions by the fighters of the air aviation corps **[end of page 366]** should be the main means of defense. In the medium low altitude, one should mainly use surface-to-air guided missiles. In the low altitude, one should mainly rely on the fire power of the anti-aircraft artillery force. In the ultra-low altitude, one should mainly combined military, police and civilian defense against the enemy's aircraft. In this way, one can develop an operational posture of multi-dimensional defense and multi-layered counter actions to ensure the safety of one's positions.

3. Guarding Against Attacks Mounted by the Enemy's Airborne Troops

When guarding against attacks mounted by the enemy's airborne troops, one should do a good job in organizing the following actions:

1) Issuing anti-airborne attack alerts and dispatching anti-airborne command team

Upon receipt of intelligence concerning the enemy's airborne operation, the campaign commander should immediately issue anti-airborne attack alert signals to subordinate units and notify friendly neighboring troops of the anti-airborne intelligence. The issuance of the alert signals should follow the order of air defense units, ground defense units, and other units so as to enable them to swiftly organize counter actions. One should also send the alert signals to the local government and the people's armed units. At the same time, following the anti-air borne operational plan, one should swiftly organize a lean and crack anti-airborne command team, which should go to the pre-determined location to provide auxiliary assistance to the basic command to carry out unified command over the anti-airborne operations.

2) Finding out the enemy air-borne attack situation and making decisions on anti-airborne actions

The campaign commander should use various means to find out the scale of the enemy's air-borne operation and determine if it is enemy's campaign air-borne operation, or tactical air-borne operation, or special force air-borne operation. One should also find out the type of enemy air-borne operation, whether it is helicopter-borne or parachute drop, or both. In addition, one should find out the enemy's pre-determined air-borne operation area, analyze and determine the intent of the enemy's air-borne operation so as to swiftly

make decisions on anti-air-borne actions. A decision on anti-air-borne operation should mainly include: moving assigned air defense units to carry out mid-air interception; directing subordinate anti-air-borne reserves to occupy vantage positions; organizing subordinate ground defense forces to carry out attacks against the enemy before they get established, cutting them up and encircle them; organizing and making arrangements and deployment to provide tight protection to key targets, and organizing command and coordination.

3) Adjusting operational deployment and annihilating the air-borne enemy troops

When the enemy carries out air-borne operation in the area where one's operational positions are located, the campaign commander should swiftly direct **[end of page 367]** air defense forces, anti-air-borne reserves and ground defense troops to develop a posture of encirclement against the enemy. Air defense troops and units with the anti-air fire capability should base themselves on trying to intercept or shoot down the enemy's air-borne transport aircraft and helicopters in mid air and to annihilate enemy paratroops before they hit the ground. After they manage to land, one should take advantage of their having yet to establish themselves, launch pre-emptive and intense attacks on them, striving to swiftly divide them up, encircle them and annihilate them. At the same time, one should strengthen the protection of guided missile positions and weapons and gears, and resolutely prevent the enemy from maneuvering toward the operational positions. When the defense strength is not sufficient, one should focus on guarding the key passes and points, take a temporary defensive posture, and interdict the enemy from the targets so as to wait for reinforcement. One should resolutely protect the key targets and immediately ask the superior for support so as to, in the end, completely annihilate the enemy's air-borne troops.

In an anti-air-borne operation, the basic method that one should adopt is: "to seize the key points before the enemy, to divide and encircle the enemy, and to annihilate the enemy before it is established." To seize the key points before the enemy is to detect as early as possible the aerial developments, swiftly organize one's troop to occupy the commanding elevations in the enemy air-borne landing area before the enemy, and strive for the initiative. To divide and encircle is to encircle the air-borne enemy in different pocket areas and not to allow it to collect and form joint power. To annihilate the enemy before it is established is to carry out intense attacks against the air-borne enemy before it establishes a foothold. The concrete methods are as follows:

First is to seize the key points before the enemy and select the right time to subdue the enemy. The campaign commander and his command organ must make swift decisions, and organize forces to seize key points before the enemy. One should first of all grasp the aerial developments, detect signs of the enemy's air-borne operation, make timely adjustments to the forces, predict the way the enemy will use its troops, and seize the key points. After receiving air-borne or heliborne alerts, one should, based on the intent of the superior and the terrain conditions of the operational area, make accurate determination on the scale, timing or area of the possible enemy air-borne operation, seize the key

points before the enemy, wait for opportunities to annihilate the enemy, and choose the opportunity to carry out focused attacks on the enemy.

The second is to integrate air and ground operation and carry out three-dimensional attacks. This is to adopt flexibly the operational method of integrated air and ground, multi-layers and multi-dimensional attacks against the air-borne enemy. One should distinguish the main from the secondary missions and determine what would be the focus of the attack. Between attacking the enemy's paratroops and attacking the enemy's aircraft, the focus should be on attacking the aircraft. Between dispersed targets and concentrated targets, one should focus on concentrated targets. Between attacking light transport aircraft and heavy transport aircraft, the focus should be on attacking heavy transport aircraft. For medium and low altitude targets, anti-aircraft artillery units and air aviation corps **[end of page 368]** should play the main role. For low altitude and ultra low altitude targets, anti-air-borne infantry units, armed police units and militia should play the main role. One should closely coordinate with various service and arms and local forces to form three-dimensional attack networks, annihilate the enemy by layers and strive to annihilate the enemy in mid air.

The third is to place ambush in the areas and stay put at fixed point to wait for the enemy. In an anti-air-borne operation, one should pay attention to annihilating the enemy in its air-borne landing areas. At the same time, one should also pay attention to place ambush in such places where one may find enemy air-borne operation as roads, bridges, defiles, and commanding elevations, and wait at fixed spot for the enemy. When the enemy make air-borne landing in the possible ambush areas, one should react rapidly, maneuver toward the center, encircle the enemy in multiple layers and annihilate it, everywhere whittle away at the enemy force, and strive to achieve complete annihilation of the intruding enemy air-born troops.

4. Guarding Against Attacks and Harassments Mounted by the Enemy's Special Forces

To guard against attacks and harassments mounted by the enemy's special forces, one should do a good job in the following areas:

1) Making accurate determination of the enemy's conditions and making decisions on operation

When hostile enemy developments emerge, the campaign commander should swiftly and accurately determine the scale, types, operational capabilities and operational methods of the attacks and harassment mounted by the enemy's special forces, as well as the targets of their sabotage operations and other operational intents. Then, he should swiftly make operational decisions based on the advance defensive operation plans, and on the deployment of the defensive forces and the support forces that he can call on. The operational decision should mainly clarify the operational deployment adjustment plan so as to develop a favorable posture, determine the main and auxiliary attack direction and methods to annihilate the enemy, clarify the operational missions of various units, and command and coordination issues.

2) Coordinating with other defense forces and protecting the key targets

To guard against attacks and harassments mounted by the enemy's special forces, one should place the emphasis on the protection of the safety of the key targets. The campaign commander and his command organ should take all effective measures to ensure the safety of the key targets such as the command posts of the Second Artillery Corps at all levels, communication hubs, warhead and guided missile storage facilities, technical positions, launch positions, transit stations, gear and fuel depots etc. The area that a Second Artillery Corps position covers is broad. Thus in carrying out ground defense, one should do a good job in coordinating with the assigned and supporting defense forces, specially in coordinating with the supporting rapid response units of the theatre in the mobile operation directions. **[end of page 369]** One should do a good job in combining the forces of the Second Artillery Corps with the supporting forces, combining long-distance fire power with short-distance fire power, and combining military with civilian forces, so as to develop a posture of multi-layered defense and step-by-step counter actions.

3) Adjusting operational deployment, dividing, encircling and annihilating the enemy that is carrying out attacks and harassments

In the case of the enemy force that carries out ground attacks and harassment, one should first adjust operational deployment so as to develop advantageous operational postures to ensure that one keep the attacking enemy force off the operational positions. In the case of a small group of enemy carrying out attacks and harassments, one should concentrate forces to swiftly encircle and annihilate the enemy and allow no escape. In the case of a relatively large group of enemy, one should, with the help of other units, first break up the enemy force into many pockets so that it cannot develop a joint power, and then annihilate it. One should pay special attention to searching for and capture those who have escaped. One must not allow those who have not attracted attention to get close to our positions and guided missile weapons.

In guarding against attacks and harassments mounted by the enemy's special forces, the basic method to be adopted is: "Make deployment with depth, set up multiple layers for interdiction, actively encircle and annihilate the enemy." Based on characteristics of one's own defense forces, and the multiple forces including those in the supporting theatre, people's armed police and militia forces, one should make a scientific organization of these forces, and from the forward areas of the operation areas to the depth, set up multiple lines of defense around the targets, carry out multiple layers of interdiction, and annihilate the enemy's special forces outside the operational theatre. The concrete methods include the following:

First is to organize joint military, police and civil defense forces to mount a comprehensive defense. The campaign commander should closely coordinate with the assigned forces of various services and arms within the theatre, local forces, armed police force, militia etc, scientifically organize them and establish a three-in-one defense system consisting of military, police and civilian forces. The military forces should be mainly

responsible for protecting the key parts. The police forces should be mainly responsible for protecting the key road and bridges. The civil defense forces should be mainly responsible for protecting all other targets. By combining military, police and civilian forces, one can carry out comprehensive protection in the operational theatre of the large campaign formation of the Second Artillery Corps.

The second is to divide the defense area into zones and carry out multiple layers of interdiction. When after carrying out heliborne or air-borne landing, the enemy's special forces or a large group of the enemy special forces mount an attack from outside the campaign operational theatre, the forces in the first line of defense should follow their operational missions, occupy operational positions in separate zones, hold firmly the commanding elevations, key points, passes and key passages, put up stubborn resistance against the enemy, concentrate various forces and weapons, inflict massive casualty on the enemy, blunt **[end of page 370]** its offensive momentum, and slow down the enemy's action aimed at damaging one's important targets. In the enemy's main action route, one should carry out multiple lines of interdiction, blockage, and inflict casualties on the enemy to slow down its attack, while swiftly moving and gathering ground defense troops, and organizing the encirclement and annihilation of the enemy.

The third is to combine attacks with suppression and to encircle for complete annihilation. When the enemy's special forces use dispersed method to carry out reconnaissance, sabotage, attacks and harassment within the campaign theatre of one's forces, and when such actions are posing a grave threat to the safety of the operational positions, communication hubs, key transportation lines, fuel depots, power and other vital parts, the defense forces within the theatre should immediately move from different directions and different places toward the areas with active enemy activities. Using operational actions of "searching, hunting, resisting, seeking and attacking," they should develop the posture of net pulling and encirclement to completely annihilate the enemy's special forces (detachments) within the operational area.

5. Handling the Aftermath of an Attack

After the operational area of the Second Artillery Corps has suffered from a surprise attack by the enemy, the campaign commander and the campaign command organ should find out in a timely manner the situation, swiftly organize emergency repairs, make timely adjustments and replenishment so as to restore as soon as possible the operational capabilities. They should also report the situation to the superior.

1) Finding out the situation of the attack

To find out the situation of an attack is the basis to determine the intent of the enemy's action and to direct one's own troop actions. After a campaign large formation of the Second Artillery Corps has been attacked by the enemy in surprise, one should learn in a timely manner the damage the troops has suffered, adopt effective measures and find out mainly the following information: The time, location and method used in the enemy's surprised attack and the scope of the damages the attack has caused; the damages

inflicted on the command organ, weapons and equipment, positions, communication facilities, roads, bridges etc; troop casualties suffered from the attack etc.

2) Swiftly carrying out rescue and emergency repairs

After finding out about the situation of the attack, one should swiftly organize emergency repairs of the damaged weapons, equipment and facilities in the positions. The wounded personnel should carry out self rescue and mutual rescue. One should do a good job in sending the wounded to the rear. At the same time, one should organize troops in a timely manner to swiftly extinguish fire that endangers guided missile weapons, **[end of page 371]** carry out emergency repairs to the roads and bridges that urgently need repairs, clear the cave-ins in the operational directions and other blocking obstacles, so as to ensure that guided missile troops can carry out mobile operations. The guided missile units which carry out operations supported by fixed positions should swiftly adjust forces and rationally divide the missions, strengthen the emergency repairs to fixed launch equipment and works, so as to swiftly restore the operational capabilities to carry out nuclear counter attacks and to get well prepared for renewed enemy attacks.

3) Making adjustments and replenishment at appropriate time

On the basis of finding out the situation of the enemy's attack and of swift execution of rescue and emergency repairs, the campaign commander should, based on the situation of the attack and the results of rescue and emergency repairs, and on the operational missions of various troop units, resolutely make decisions, swiftly adjust operational deployment, and carry out replenishment at appropriate time so as to swiftly restore operational capabilities. When making adjustments to deployment and replenishment of personnel, weapons and other materials, one should pay special attention to maintaining and restoring the complete sets of weapon systems and to the development of collective operational capabilities.

4) Reporting the situation to the superior in a timely manner

A campaign large formation of the Second Artillery Corps mainly shoulder the strategic missions or campaign missions that have a major bearing on strategy. Hence, an attack on its troops could have a direct impact on decision-making by the supreme command. Because of this, when the enemy's surprise attack on the campaign large formation of the Second Artillery Corps would affect the accomplishment of the entire campaign mission, the campaign commander and his command organ should immediately report to the superior the damage the troops have suffered and put forward suggestion on handling the aftermath and possible degree of restoration. Under the unified direction of the superior, they should make major adjustments to deployment so as to swiftly restore the capabilities to carry out nuclear and conventional operations. **[end of page 372]**

Section 3. Campaign Maneuvers of the Second Artillery Corps

As an important method to gain the initiative and shake off a passive position, and an effective means to achieve surprise in a campaign, maneuver is playing an increasingly important role in modern campaigns. The successful execution of campaign maneuvers is not only a necessary condition for achieving campaign victory but also an important expression of the art of campaign command.

I. The Nature, Status and Role of Campaign Maneuvers

Maneuver is not only an important content of campaign actions but also an important way for an operational force to gain the initiative, create favorable postures, achieve campaign surprise, enhance survivability and achieve campaign victory. The deployment of Second Artillery Corps units is dispersed. A unit needs to carry out long-distance maneuver to get from the area it is garrisoned to the operational area. Similarly, after a launch, a unit has to travel a long distance to change position. In view of the above, campaign maneuvers are an important and indispensable operational action in a campaign of the Second Artillery Corps.

1. The Nature of Campaign Maneuver

Campaign maneuver refers to the troop and weapon movement organized and executed for the purpose of concentrating troops and weapons, enhancing survivability, and reaching certain campaign objectives. It is one of the important campaign actions and is an indispensable component of a campaign entity.

Campaign maneuver of the Second Artillery Corps refers to an organized troop and weapon movement carried out by a campaign large formation of the Second Artillery Corps to achieve strategic or campaign objectives, to gain the initiative or to develop a favorable campaign posture. The objectives of campaign maneuver are to adjust deployment, to create and maintain a favorable posture, to carry out concealed evasive actions, and to gain the campaign initiative. It is an important measure to reduce or evade the enemy's reconnaissance and fire strikes and to enhance survivability. It is **[end of page 373]** an important method to increase the rapid response capabilities and to achieve surprise in a campaign. In terms of timing, campaign maneuver can be divided into pre-operation maneuver, in-operation maneuver and post-operation maneuver. In terms of space, it can be divided into land maneuver, water (sea) surface maneuver and aerial maneuver. In terms of scope, it can be divided into trans-regional maneuver and inner-regional maneuver (battlefield) etc.

2. The Status and the Role of Campaign Maneuver

Marshal Liu Bocheng once said: "Maneuver is a military action to build on one's advantage and avoid one's weaknesses. To build one's advantage is to expand it to that extent that one completely wipes out the enemy, and to avoid one's weakness is to do

it so to the extent that one is free of any harm inflicted by the enemy.” The execution of campaign maneuvers under informatized conditions by forces of the Second Artillery Corps has very prominent status and plays a very prominent role. It is mainly shown in the following aspects:

1) A major operational action of a Second Artillery Corps campaign

A future local war under informatized conditions will generally first unfold in the coastal or frontier regions. The first issue that a guided missile force faces is maneuver: how through maneuvering, to enable the troops to enter the range to strike at the enemy so as to develop a favorable posture. Campaign maneuver, as one of the main campaign actions of the Second Artillery Corps, is an inseparable component of the campaign entity. Without mobility, a campaign will lose its essential vitality and dynamism. In the organization and execution of a nuclear counter attack campaign by the Second Artillery Corps, those parts of the forces with mobile capabilities should mainly undertake mobile operations. Mobile operation is the main operational form of the conventional guided missile forces and it is an important means to achieve campaign objectives. In a certain sense, campaign maneuver is indispensable to a Second Artillery Corps campaign - from troop and fire power concentration and campaign disposition setup to the employment of various operational methods and means. Hence, campaign maneuver is a critical dynamic factor in a Second Artillery Corps campaign that warrants a high level of attention.

2) An important way to break away from a passive position and to gain the initiative

A Second Artillery Corps campaign covers a wide scope in operation and involves many aspects. In order to adapt to **[end of page 374]** the changeable and unpredictable situations, only through frequent maneuvering can one make constant adjustments and changes to the deployment and thus gain the campaign initiative. Maneuvering will not only allow guided missile troops to attack the enemy in surprise and keep it constantly on alert, but also help reduce one's own casualties inflicted by the enemy's fire through continued maneuvering, thus enhancing one's survivability and achieving the objective of "seeking survival through mobility." For guided missile troops in maneuvering, the enemy will be unable to accurately determine their exact location, making it difficult for the enemy to detect, track and lock on those targets on the move. Thus, maneuvering will provide good conditions for guided missile troops to preserve its actual strength in the vast battlefields. Campaign maneuver is not only a means; it also constitutes an important component of the entire military action. It can, within a short period of time, concentrate campaign forces in the operational areas and in the main directions so as to realize a swift alteration of the balance of power between the enemy and one's own forces. It is a concrete expression of actual combat capabilities while at the same time, it is also an important way to gain the initiative, to break away from a passive position, and to strengthen one's real power.

3) An effective means for the flexible use of troops and weapons to achieve campaign surprise

Military surprises can alter the balance of operational capabilities. If one can hit the enemy by surprise, catch it unprepared and attack it before it can respond, this can make the enemy panic, demoralized, in disorder and land it in a passive position. Military strategists of all times have regarded surprise as an important factor in seizing military victories. There are many ways to achieve surprise in an operation. Among them, concealed and swift maneuvering is one of the important means. Both in ancient times and in the current age, many battle cases involving surprise attacks have seen the pre-determined objectives achieved through concealed and swift maneuvering. Through concealed and swift maneuvering, one can quickly concentrate forces and weapons at a time, in a place and in a direction that are not expected by the enemy and leave the enemy no time to take necessary measures but to land in a passive position subject to attacks. Thus, to be adept in detecting and capturing favorable combat opportunities and to carry out campaign maneuvering at appropriate times are an effective way to flexibly use troops and weapons and to achieve surprise in a campaign. [end of page 375]

II. The Missions and the Requirements of Campaign Maneuver

1. The Missions of Campaigns Maneuver

The basic mission of campaign maneuver of the Second Artillery Corps is to organize guided missile troops to carry out maneuver with the operational theatre and trans-operational theatre maneuvers. Maneuver within the operational theatre refers to the movement of troops and weapons by a campaign large formation from one operational position to another operational position within the operational theatre. Trans-operational theatre maneuver refers to the movement of troops and weapons by a campaign large formation from one operational theatre to another operational theatre. The fundamental objective is to build on one's advantage and avoid one's weaknesses, to adjust operational deployments, to effectively preserve one's own forces so as to concentrate forces in the main operational directions and develop a favorable campaign posture.

In a campaign operation, due to different conditions in different battlefields, the concrete missions of maneuver can be of the following types:

1) Based on the campaign mission, concentrating troops and weapons at appropriate time

One should, based on the campaign mission and operational direction, formulate campaign maneuver plans, make rational organization of the troops, and organize troops in certain order to move toward the operational area, so as to swiftly concentrate forces and develop a favorable posture vis-à-vis the enemy. To concentrate forces to develop superiority is the material basis for annihilating the enemy. The realization of concentration of forces in turn depends on successive shifting of forces. In this way, one

can concentrate superior forces at critical times and in critical places to hit the enemy by surprise.

2) Based on the operational deployment, organizing the unfolding of troops and weapons at appropriate time

Once the troops arrive in the operational area, they should follow the battle formation pre-determined by the campaign command organ, swiftly unfold the troops and weapons assigned to undertake the mission to launch the first wave of guided missile attacks, develop a superiority over the targets of the attacks, and to make full preparations for the execution of campaign operations.

3) Based on the battlefield posture, organizing troop and weapons transfers

After the campaign commander and the campaign command organ receive the intelligence on the pending enemy attack on one's guided missile positions, **[end of page 376]** to preserve one's operational capabilities, one should carry out transfer of troops and weapons according to the plan so as to maximally preserve operational power. Only by transferring troops at an appropriate time can one develop a new superiority over the new targets.

4) Based on the extent of mission accomplished, organizing in a timely manner troop withdrawal

After receiving the order to withdraw from the position issued by the superior, the campaign command organ should organize the troops to withdraw from the position in an orderly manner and to enter a safe area. Then, based on pre-set plans, they should swiftly carry out adjustments and replenishment and get ready at all time for combat operations.

2. The Requirements of Campaign Maneuver

1) Grasping maneuver timing

The determination of the timing of maneuver must be appropriate. If an action is taken too early, it could expose the intent of the action. It will not only lengthen the time of action exposed to the grave threat of enemy fire, but also lead to enemy adjustment of its deployment, taking counter measures and increasing one's difficulty in carry out maneuver. It could even have a direct impact on the realization of the maneuver and the follow-on campaign actions. If the action is taken too late, one may miss the combat opportunity, lose the favorable conditions, and land in a passive position. It could have an impact on the progress of a campaign and its outcome, and could lead to even bigger losses. The campaign commander must conduct a comprehensive analysis of the situation, scientifically forecast the development of the war situation, and appropriately select favorable timing.

To select campaign maneuver timing, one should first grasp favorable weather conditions. Dark nights, rains, fog and low clouds and other bad weather conditions place some restrictions on the use of high tech reconnaissance and precision guided weapons. One should try as much as possible to take advantage of dark nights and bad weather conditions so as to reduce the application effectiveness of the enemy's high tech weapons and equipment. The second is to take advantage of the opportune time when the weaknesses of the enemy's high tech weapons are exposed. One should grasp the functions and characteristics of the enemy's various reconnaissance and surveying gears, and take advantage of the reconnaissance blind angles or intervals to swiftly carry out maneuver. The third is to take the enemy by surprise and strive to achieve surprise in the maneuvering action. The shift changes in the enemy's sentry systems and operational command systems, holidays, dusk and dawn are times when the enemy tends to **[end of page 377]** be in a lax state and in inertia, and are thus times favorable for one to carry out maneuver.

In the "Magic Sword – 95" operation (shen jian – 95 xingdong 神剑 – 95行动), we elected to start the maneuver of the guided missile troops four days before the launch of the first guided missile. We took advantage of the night to upload and carry out transportation during the night. The guided missile launch was carried out the second day after all the troops had arrived. Although it was carried out under the continuous reconnaissance by the satellites of a powerful enemy, the enemy was not able to find out the intent of our action and operational areas due to the right timing and organization methods for the maneuver. In this way, we effectively achieved the objective of concealing the intent of the maneuver.

2) Multiple means used simultaneously

There are mainly four ways for a campaign large formation of the Second Artillery Corps to carry out maneuver: rail transport, highway transport, combined rail and road transport, and emergency air transport.

Rail transport. This way of maneuver has the advantages of high speed, big volume, long maneuvering distance, strong sustainability, and non-susceptibility to weather conditions. However, rail transport is more subject to the enemy's conditions and the throughput capabilities of the railway lines. Hence, using rail transport, one should tightly organize anti-air defense and ground protection, and adopt comprehensive support measures so as to ensure the smooth execution of rail transport.

Highway transport. Highway transport is flexible, easy to organize and speedy. Highway transport is the main way for the guided missile troops to carry out medium and short range maneuvers. When the guided missile troops carry out maneuver within the operational theatre, it is basically executed through highway transport. In organizing highway transport, one should deftly choose maneuvering timing, pick maneuvering routes with good road conditions, short distance, and good concealment from the sky. One should make scientific organization of the troops into groups and maintain a relatively high degree of adaptability. One should organize strict camouflage and

protection to enhance survivability. One should organize good transport support and enhance the speed of maneuver. Highway transport is often organized and executed with brigade as the unit. Based on the moving routes, one should organize the troops into several maneuvering columns. Each column should be organized into several maneuvering echelons so as to carry out multi-route and multi-echelon maneuver.

Combined highway and rail transport. This way of transport is flexible and is good for carrying out maneuvering by way of multiple columns moving simultaneous and swiftly, and for completing maneuvering by a large number of troops. When rail transport capacity is tight and could not meet the needs, **[end of page 378]** and when the mission is urgent, requiring speedy transport, one should use combined rail and highway transport method to organize troop maneuver. In organizing combined rail and highway transport, one should use railways to transport guided missiles and other equipment, materials and machinery not suited to highway transport, as well as some personnel. A forward command and support units should be mainly transported by highway maneuver. They should be divided into several echelons and move in multiple columns simultaneous. Highway transport should mainly carry personnel and use normal vehicles. It should transport troops to the destination ahead of rail transport.

Emergency air transport. This method has the advantages of high speed, long distance, flexibility and a strong capability to cross obstacles. However, air transport is obviously subject to multiple constraints such as weather and airport conditions and enemy conditions. Generally, it is used in the following circumstances: First is when railway transport lines are cut and highway transport cannot meet the needs; The second is when there is a need to carry out emergency transport of instruments, personnel and gears. Air transport should adopt two ways – by transport aircraft and by helicopters. Transport aircraft is mainly used to ship warheads in containers while helicopters are mainly used to transport personnel, instruments and gears.

Campaign maneuver carried out by the Second Artillery Corps, especially trans-regional maneuver, has the disadvantages of long maneuvering distances, pressing time, poor transport road support conditions. Hence, it is difficult for any single way of maneuvering to achieve the objective of maneuvering. The campaign commander and his command organ must, based on campaign missions and maneuvering ways, combine enemy conditions, transport support and the maneuvering capabilities of the troops, make comprehensive use of multiple ways of transport such as highway, railway and air transport, prepare multiple maneuvering plans, and strive to enhance the time effectiveness of the maneuver so as to ensure the smooth execution of campaign maneuver.

The campaign commander should, based on the objectives of the campaign and the needs of the maneuver mission, combine the enemy conditions, terrain and the capabilities of his forces, and flexibly select maneuvering method. Generally one should adopt the method that combines motorized transport with rail transport.

In the “Magic Sword – 95” operation, the Second Artillery Corps adopted three maneuvering methods - rail, highway and air transport – to carry out swift massing from several regions. It organized six **[end of page 379]** railway train echelons, four highway echelons and two special aircraft, which effectively ensured the concealment, speed and smooth execution of the maneuver action.

3) Seizing the main links

The operational areas are located in mountainous and hilly areas, where there are many rivers and brooks, as well as lakes. There is no convenient transportation. In view of the above, one may find in a maneuver operation that roads are few in the operational areas, that the transport means are singular, and that there are in most cases no alternative detour roads to various launch positions. Thus, the maneuver operation is susceptible to revealing the operational intent and thus to enemy attacks. In order to ensure the safety of the maneuver operation, one must seize the critical links in a maneuver operation, for instance, the selection of maneuver mode, the determination of maneuver timing, the change in maneuver mode, the communication support for maneuver, the establishment of a security corridor for maneuver, and the camouflage measures for maneuver etc. the campaign commander should indeed grasp the maneuver situation of the troops, pay close attention to the enemy’s movements, appropriately handle different conditions and meticulously organize the maneuver operation of the troops.

In the course of a maneuver operation, when being attacked or harassed by the enemy’s aerial or guided missile fire, one should, on the one hand, organize dispersal and cover, and on the other hand, organize powerful fire power to counter the enemy’s attacking weapons. When being attacked by small groups of enemy agents on the ground, one should use some troops to expel and annihilate the enemy and provide cover for the main force to continue moving forward. When the maneuvering roads or facilities are damaged by the enemy, one should actively organize emergency repairs. When it is necessary, one should adjust the maneuvering route and change maneuvering mode. When there are major changes in the conditions and missions and it is necessary to change the maneuver plan, one should follow the instructions of the superior, make new decisions in a timely manner concerning the maneuver, and swiftly organize troops to execute new maneuver.

4) Making sure to do a good job in camouflage

To conceal maneuver intent is a basic requirement for the accomplishment of campaign objectives. It is also a basic premise for the troops to carry out maneuver. As under high tech conditions, the battlefield has become highly transparent, and the characteristics of guided missile weapons and gears are obvious and their quantities are large, it is very difficult to conceal the intent of a maneuver operation. When the guided missile troops carry out maneuver, the enemy will use many means and carry out widely various types of reconnaissance activities. **[end of page 380]** First, it may take advantage of our country’s large environment of opening to the outside world to dispatch spies to collect intelligence and send special agents to carry out sabotage to the critical joints on the maneuver routes (such as bridges, culverts, stations etc.). Secondly, the enemy may use

aerial reconnaissance and detect at actually locations the maneuver operation and provide the exact location of the maneuvering troops. Thirdly, the reconnaissance satellites of the military powers could carry out continuous and uninterrupted monitoring over our battlefields. Fourthly, the enemy may use advanced radio technical reconnaissance means to learn in a timely manner one's operational preparations and track the maneuver of the troops. These would make it very difficult for our troops to conceal the maneuver intent.

The key to concealment and camouflage is to adopting various effective measures to try to conceal one's maneuver intent. One is to camouflage by changing the shape. This is to change the exterior shapes of guided missile weapons and launch vehicles from those for the military to ones for civilian use. One may repaint them in camouflage colors. In carrying out rail transport, one may change the shapes of vehicles into those of containers. The second is to be flexible in deception. For instance, one may use a small number of troops to complement feint movements so as to attract the attention of the enemy and to provide cover for the main force to carry out maneuver. One may also camouflage military vehicles into civilian vehicles or mix military vehicles with civilian vehicles before carrying out maneuver. The third is to conceal one's maneuver operation. One may take full advantage of bad weather conditions and other natural geographical environmental conditions, show the fake and conceal the truth, try as much as possible to reduce the exposed signs of the troops, and carry out swift and concealed maneuver.

5) Implementing support for maneuver

Support for campaign maneuver of the Second Artillery Corps has the following characteristics: the lines are long and the points are numerous; it is highly fluid and requires a high degree of time effectiveness; it is difficult. Maneuvering troops have a high degree of reliance on communication, weather, material, fuel and other supports. This makes the role of maneuver supports very important. Hence, the campaign commander and campaign command organ must make uniform plans and organize in a comprehensive manner support work for campaign maneuver so as to ensure the smooth execution of campaign maneuver. In a local war under informatized conditions, one should focus on the following work in support for campaign maneuver of the Second Artillery Corps: One is to use various methods to resolve the issue of communication in the course of maneuver. Communication liaison is the basic means of maneuver command. It is not only a difficult issue in maneuver support but also a focus of the enemy's sabotage. Thus, one must stress the use of multiple ways of communication and establish **[end of page 381]** a communication network with the basic command as the center and with a combination of radio and fixed line communications. One should use a variety of means to reduce the effect of the enemy jamming, including frequency change, frequency hopping, transmission interruption, random transmission etc. When conditions permit, one should also use small mobile satellite earth stations to carry out satellite communication. The second is to use multiple channels to solve the problem of ensuring open and smooth traffic flows. Transportation support is an important content of campaign maneuver support. One should develop a comprehensive support system with the engineering units subordinate to the Second Artillery Corps and local civilian professional engineering corps as the backbone and consisting of fixed location support,

mobile support and accompanying support so as to ensure prompt repairs of damages and prompt opening of traffic. This way one can ensure smooth and open traffic for troop maneuver. The third is to carry out unified organization of military and civilian technical support forces to carry out emergency repairs. Technical support in campaign maneuver is an important link that has a direct bearing on whether vehicles and equipment can maintain good technical conditions in the course of maneuvering and on whether the troops and equipment can arrive at locations on time. One should carry out unified organization of military and civilian technical forces and set up a support system with multiple points and multiple tiers so as to carry out collective emergency repair support that combines superior with subordinate forces and military with civilian forces.

III. The Actions and Methods of Campaign Maneuver

The main actions of campaign maneuver of the Second Artillery Corps include campaign force concentration, campaign force unfold, campaign force transfer and campaign force withdrawal.

1. Campaign Force Concentration

Campaign force concentration is a trans-regional maneuver action taken by a campaign large formation to move, based on a unified plan, the troops participating in campaign maneuver from where they are stationed to the operating areas to carry out their missions. Action methods include:

1) Maneuver from multiple directions

Maneuver from multiple directions refers to the method of swift maneuvering by guided missile troops, in the course of executing maneuvering, from the state of dispersed deployment during peace time to the operational area from multiple directions, in multiple echelons and using multiple methods. **[end of page 382]**

Maneuver from multiple directions can conceal maneuver intent, distract the enemy's attention, enable one to take full advantage of multiple routes and enhance maneuvering speed. When troop deployment, maneuvering ways, road conditions and other conditions permit, one should try as much as possible to use the method of maneuver from multiple directions. In the execution of maneuver from multiple directions, one should strengthen the organization of, and support for, maneuver actions in the main direction, do a good job in staging in other directions feint and deception, fake showing and truth concealment, and mixing the spurious with the genuine, and make it difficult for the enemy to determine the maneuver direction of one's main force so as to ensure the safety of the key maneuvering troops.

2) Maneuver in multiple routes and in multiple echelons

Maneuver in multiple routes and in multiple echelons refers to the method by which guided missile troops, when carrying out campaign maneuver from one direction, organize various operational units and support units (detachments) into several marching echelons based on operational missions so that they, following different roads and in different echelons, maneuver in a dispersed manner to the preparatory operational area.

By using the method of maneuver in multiple routes and in multiple echelons, guided missile troops can break up into small units and travel in small group on different roads. This way, they can be light and flexible – better adapted to dealing with different complex situations, making it difficult for the enemy to detect one's operational intent or to capture the route of one's movement. Since in a maneuver in multiple routes and in multiple echelons, the echelons in maneuver are small in scale and low in troop density, the method can effectively reduce damages the enemy's air raids and long distance fire power can inflict on one's troops, thus enhancing the survivability of the guided missile troops. Furthermore, the method allows one to take full advantage of the geographical superiority to enhance the speed of maneuvering. As the various echelons are similar in scale, the enemy will find it difficult to tell which one is the main maneuvering force. When it is necessary, one can also carry out feint maneuvering to confuse the enemy.

3) Maneuver in segments and batches

Maneuver in segments and batches refers to the method by which guided missile troops, in executing campaign maneuver, divide, based on battlefield conditions, the route into several road segments, and then organize various march echelons to use different means of transport at different road segments to maneuver in batches to another operational area. By using the method of maneuver in segments and batches, guided missile troops not only can reduce traffic jams, avoid the cramming of march echelons and enhance maneuver speed but also can allow various march echelons to **[end of page 383]** take turns in using transport facilities. In this way, at any given time and in any given road segment, the traffic flow is reduced, thus ensuring various echelons to realize fast maneuver within a given time. The method of maneuver in segments and batches can also disperse march formations thus reducing the rate of damage caused by enemy fire and enhancing one's survivability. Furthermore it will allow one to make timely adjustments to the troops in maneuver based on the changes in battlefield conditions so as to deal with various changed conditions and enhance the response capabilities of the maneuvering troops.

4) Maneuver in mixed grouping

Maneuver in mixed grouping refers to the method by which guided missile troops, in carrying out campaign maneuver, mix the equipment of different launch detachments into different groups as march echelons for the purposes of enhancing the rapid response capabilities of the guided missile troops in maneuver and increase the overall effectiveness. It will also make it easy for the troops to spread out into operational

formations and immediately join an operation. In order to conceal the intent of a maneuver, one can mix camouflaged, dedicated Second Artillery Corps carriages with civilian carriages and organize them into one train to swiftly maneuver toward the operational area.

To use maneuver in mixed grouping, guided missile troops should first conduct scientific grouping. One can use the basic fire power unit as the main body and group operational troops with support troops, and swiftly maneuver them to the pre-determined operational areas to stand by, or to carry out operational actions on the basis of the basic fire power unit. This way, one can enhance the rapid response capabilities of the troops and the overall operational cost-effectiveness. Secondly, one should carry out strict camouflage. In order to conceal the intent of maneuver, one can mix camouflaged dedicated Second Artillery Corps carriages with civilian carriages and organize them into one train to swiftly maneuver toward the operational area. One can mix launch equipment and dedicated guided missile transporters that have undergone shape changes and camouflage with large containers, organize them into a train and use railway to carry out trans-regional maneuver. This way, one can not only conceal the truth and show the fake but also enhance the survivability of the troops and accomplish the operational maneuver mission.

5) Maneuver in multiple routes and in multiple directions

Maneuver in multiple routes and in multiple directions refers to the method by which guided missile troops, based on unified operational deployment, swiftly maneuver to an operational area in different operational units, from different stations, along different routes, using different modes, simultaneously from several directions and by different transport means. It may also include troops (detachments) carrying feint gears to mount campaign feint operation toward pre-determined areas. **[end of page 384]**

For this method, the maneuver distance is long; the traversed area is vast; the requirement for coordination is high; and the organization of command is difficult. Hence, in the organization and execution of such a maneuver, one should first make meticulous organization and planning and conceal the intent of maneuver. After receiving the operational mission, the campaign commander and his command organ should earnestly study the enemy's conditions, swiftly formulate maneuver plans and feint operational plans and present the plans to the transportation authorities so as to carry out the plans concealed in civilian transportation activities. Secondly, there should be unified deployment, and advancing in multiple and separate columns. Before the operation starts, there should be unified deployment, scientific organization and grouping of maneuver echelons, and simultaneous rail and highway maneuver. Based on the different maneuver distances, one should clearly stipulate the set-off time of different echelons so that they can carry out swift maneuver toward the operational area from different directions, along different lines, and in different batches and turns. The third is to conceal the truth and show the fake, and mutual coordination. In the organization of maneuver in multiple routes and in multiple directions, one should strengthen feint and deceptive actions in the focused direction so as to ensure the safety of the troops in maneuver. The fourth is to

carry out strict camouflage, be fast and punctual. In the maneuver, the loading and unloading should be conducted during the night as much as possible. One should do a good job in the camouflage of the loading and unloading stations, the waiting areas, weapons and equipment, and personnel. Upon arriving at the operational area, they should swiftly enter the standby positions where one should do a good job in concealment, camouflage and various operational preparations.

6) Maneuver in different batches and in different echelons

Maneuver in different batches and echelons refers to the operational action in which guided missile troops in one direction are scientifically grouped into several echelons, and are organized to follow multiple routes or one route to maneuver toward the operational area in different batches and different echelons.

In the organization and execution of this type of maneuver, one should, based on operational missions, carry out unified planning, meticulously formulate maneuver plans, clearly stipulate the groups of the maneuver echelons, and do a good job in coordinating with local transport departments. When issuing maneuver orders, one should clarify the maneuver methods of different echelons, their departure times and the time limits for them to arrive at the designated areas. When organizing two or more echelons to carry out highway maneuver in the same direction but along different routes, one should select different maneuver timing, rationally differentiate **[end of page 385]** the routes to follow, so as to avoid overlaps and horizontal movements. The sizes of the echelon groups and the order of their maneuver should be determined flexibly based on operational deployment, maneuver timing, road conditions and the capacities of the transport means, in combination with the characteristics of the equipment. In the organization of maneuver in different batches and echelons, one should use various ways and means to carry out concealment and camouflage of the troops (detachments) in maneuver so as to ensure covert maneuver and smooth arrival at the operational area.

7) Maneuver by road segment and during intermissions

Maneuver by road segment and during intermissions refers to the method by which guided missile troops carry out maneuver swiftly by road segments. It requires different maneuver echelons of guided missile troops closely coordinate with local governments and air defense units to take advantage of the intermissions in the enemy's reconnaissance or of the time when the enemy's threat is relatively small and move one segment at a time to areas along the route where it is easy to provide air defense and then stop and rest or camp until the next intermission.

In the organization and execution of such a maneuver, one should first do a good job in coordination. One should notify in a timely manner theatre commands along the way the maneuver route, timing, grouping and other conditions, and coordinate well with theatre air defense troops, aviation corps of the air force and local governments. The second is to exercise flexible command. When passing through the focused bombing and blockage areas of the enemy's aircraft, one should take advantage of the intermissions in the

enemy's air activities, seize the opportunity, resolutely direct troops to swiftly maneuver in echelon units. The third is to take advantage of the intermissions of the enemy's satellite reconnaissance. When the enemy's satellites fly overhead, one should immediately take cover. When they have passed, one should swiftly organize troop maneuver. The fourth is to change maneuver means at appropriate times. One should use different ways and means to learn of the laws of the enemy's counter-maneuver operations. Based on the changes in enemy conditions and air raid situation, one should change as the enemy changes, carry out struggles against the enemy by both wit and stratagem, and change maneuver means as appropriate. When the railway is blocked, one should change to highway transport at appropriate time. After the railway transport is restored, one may revert back to the use of the railway. The fifth is to delegate as appropriate the command power. In the course of maneuver, one should carry out command by way of command entrustment. Under the broad premise that the set-off and ending times of various maneuver echelons and the destinations of all the units are clarified, the command of various echelon groups in the course of maneuver should be carried out by the commanders of the echelons based on the concrete conditions. **[end of page 386]**

2. Campaign Unfolding

Unfolding refers to the maneuver action undertaken by a campaign large formation of the Second Artillery Corps after its arrival at the standby area to swiftly unfold, based on the operational missions, its troops and weapons in the area from marching and dispersed formation. The main methods include:

1) Multiple point maneuver

Multiple point maneuver refers to the method by which guided missile troops pre-select multiple launch positions in the operational area and choose the opportunity to swiftly maneuver and occupy in a dispersed manner the standby area.

In the organization and execution of this maneuver, one should first meticulously formulate maneuver plans, rationally select and assign launch positions, and make sure that the launch detachments and support detachments are fully prepared prior to the maneuver. The second is to optimally select the maneuver routes and avoid overlaps in the routes so as to ensure that the operational troops can smoothly complete their maneuver to the launch positions. The third is to control well the maneuver timing and clearly stipulate the set-off time of each maneuver unit so as to ensure that they enter the concealed standby areas in an orderly manner.

2) Ad hoc maneuver

Ad hoc maneuver refers to the method by which one selects ad hoc launch positions that are less threatened by the enemy, and swiftly and in dispersed manner, occupy them, when the guided missile positions have come under grave enemy threat.

In the organization and execution of this maneuver, one should first correctly analyze the enemy conditions, swiftly make determination the degrees of threats different positions have come under, and select for use those positions that are less threatened by the enemy. The second is to be decisive in making decisions, rationally determine ways to carry out maneuver, seize favorable opportunities to carry out swift maneuver. The third is to strengthen safety and protective measures so as to avoid or lessen losses on the part of the troops in the course of maneuver.

3) Hiding during the day and moving during the night

Hiding during the day and moving during the night refers to the method by which guided missile troops take cover during the day and carry out maneuver during the night. **[end of page 387]**

In the organization and execution of this maneuver, one should first pay attention to concealment, adopt strict camouflage measures, tightly limit troop movements during the day, and try as much as possible not to give out exposure signs. The second is to send out a few people during the day to do a good scouting job about the road conditions, get familiarized with the maneuver route, and remove obstacles to maneuver so as to avoid accidents during the night. The third is to do a good job in maneuver support during the night. It is especially important to send additional adjutant guards to the joints of roads to ensure the maintenance of normal order and avoid chaos.

4) Feint maneuver in opposite direction

Feint maneuver in opposite direction refers to the method by which, before the unfolding of the main operational force, one organize, for the purpose of covering the maneuver of the main force, feint troops (detachments) to carry out maneuver in the directions opposite the main operational direction.

In the organization and execution of this maneuver, one should first make full preparations and select correct feint directions to ensure that they are in opposite to the maneuver direction of the main operational force. The second is to control well the timing of the feint action, which should be taken prior to the action of the main operational force and in a way that is easily detected by the enemy so as to attract the enemy's attention. The third is to ensure that the feint action look real. In terms of scale, signals, maneuver speed and action intent, it must be simulated in ways very similar to the action of the main operational force so as to achieve the objective of deceiving the enemy.

3. Campaign Transfer

Campaign transfer is the concealed maneuver action taken by a launch detachment to swiftly withdraw from the launch position and transfer to the standby area after the

guided missile launch or when the signs are very obvious of a pending enemy air strike. The main methods include:

1) Multiple route simultaneous transfer

Multiple route simultaneous transfer refers to the method by which a launch detachment and the support detachment simultaneous carry out transfer based on plans and using multiple roads around the launch position.

In the organization and execution of this maneuver, one should first strengthen command and rationally assign routes and guided missile launch positions. Generally, the sites are small and the roads are narrow. In addition, the withdrawal procedure will keep all very busy. **[end of page 388]** If mistakes are made in directing the operation, it is very easy to cause chaos. Hence, one should strengthen command and avoid chaos. The second is to make rational grouping and clarify the order of withdrawal and road use so as to ensure orderly transfer.

2) Transfer in single lines, by echelons and in batches

Transfer in single lines, by echelons and in batches refers to the method by which, given the constraints of the road conditions around the launch position, different detachments follow the plan and transfer by echelon and in batches.

In the organization and execution of this maneuver, one should first make meticulous planning. Given the poor road conditions and the numerous pieces of weapons and equipment, one must clarify transfer order in advance. The second is to take action one after another so as to ensure the effective connection between actions taken by different echelons. In the course of transfer, if vehicle problems develop, one should swiftly carry out adjustments and ensure orderly transfer in the order of important equipment first, less important equipment later, launch equipment first and support equipment later. In this way, one can make sure safe transfer to the destinations without traffic jam and with no equipment falling behind.

4. Campaign Withdrawal

Campaign withdrawal is an action taken by guided missile troops, after they complete their operational missions, to return, based on a unified plan, to the areas of its garrison from the operational area. The main methods include:

1) Collective withdrawal

Collective withdrawal refers to the method by which various troops, after completing their operational missions, gather in a designated area and orderly withdraw in batches. In the organization and execution of the maneuver, one should first carry out the action in concealment and prevent the revelation of the intent of the action. When carrying out

collective withdrawal, the size of the troops is large and there are many elements that could reveal the movement, making it easy for the enemy to detect. Furthermore, the area of concentration is also very revealing. Hence, in the course of withdrawal, one should carry out tight camouflage and proceed in concealment. The second is to be swift in the action so as to ensure fast gathering and swift withdrawal in order to avoid enemy attacks.

2) Dispersed withdrawal

Dispersed withdrawal refers to the methods by which various launch units or several launch units together **[end of page 389]** withdraw separately on their own based on an advance plan.

In the organization and execution of such a maneuver, one should first make advance planning and clarify the withdrawal routes and the timing of different detachments. The second is that various detachments must maintain communication with the command organ in the course of withdrawal, and constantly adjust troop actions to ensure that the withdrawal proceed smoothly according to the plan. **[end of page 390]**

Chapter 14

Second Artillery Conventional Missile Forces in Coordination with Land, Naval, and Air Force Campaign Operations

Joint campaigns generally take two forms, one being a campaign simultaneously implemented through two or more service campaign army groups, and another being a sequential campaign composed of two or more service campaigns. Comparatively independent service campaign theory has already been researched in the chapter on conventional missile assault campaigns. Moreover, through the participation of conventional missile forces and small-scale joint campaigns or service campaigns, campaign movements revolve around the main service implementation. As for conventional missile forces, they are only for coordinated combat operations. This chapter will only focus on research in coordinated combat operations with various armed service branches, as well as related questions.

Section 1. Missions and Characteristics of Coordinated Operations by Second Artillery Conventional Missile Forces

The heart and essence of a joint campaign is to fully exploit the overall superiority of all participating battle forces and to pool forces against the enemy. In joint campaigns, second artillery campaign forces, in addition to following their own combat principles, must be under the unified command of the joint campaign command apparatus. Accordingly, it must attempt to assume the relevant combat missions of the joint campaign and equally satisfy the fundamental demands of the joint operation.

I. The Primary Tasks to Shoulder

The primary tasks of second artillery campaign forces in a joint campaign, when cooperating [end of page 391] with other service campaign force operations, are: suppressing enemy air bases, airfields and anti-missile defense (air defense) systems; participating in naval blockade operations, destroying enemy naval bases, ports, and other important targets, and blocking enemy naval routes; supporting offensive operations on land (island) and creating a good battlefield environment for combat operations; participating in withstanding enemy military intervention operations, launching warning strikes against enemy air attack bases, and deterring and blocking enemy carrier battle groups.

II. Important Characteristics of Coordinated Combat Operations

1. When the Scope of Participating Battle Forces is Comparatively Small, Combat Ability is Limited

When conventional missile forces participate in joint campaigns (or other service campaigns), they usually form a conventional missile strike group. In line with the unified plan of the joint campaign command post (or service campaign command apparatus), conventional missile forces work in coordination with armed service forces in battle with the goal of achieving the complete or partial objectives of the joint campaign (or service campaign). At the moment, although progressive campaign operations are under the direct command of the conventional missile attack campaign corps command, from the scope of the armed forces, achieving objectives still shape conventional missile strike campaigns. In other words, from beginning to end, conventional missile strike groups revolve around accomplishing the overall mission and advancing the campaign operations of a joint campaign or service campaign. In different phases of campaign operations, and in accordance with different combat tasks, the principal coordinator will also change continuously. Thus, the conventional missile strike group can become the main body in progressive campaign operations, and it can also carry out support operations.

2. Broad Coordination, Strong Timeliness

Looking at military strength, conventional missile forces coordinating operations with other armed forces branches collaborate with air force aerial assault forces, aerial reconnaissance forces, aerial transport forces, as well as air defense forces; they collaborate with naval submarine forces, naval surface forces, naval marine forces, naval aviation, and naval intelligence forces; they collaborate with army **[end of page 392]** amphibious landing and offensive operation forces, army defense operation forces, and army intelligence forces; they collaborate in spaceflight strength; they collaborate in regional military command and infantry, etc. Internally, the conventional missile strike campaign corps also has numerous elements that can be effectively collaborated on. The heart of collaboration between conventional missile forces and all arms and services is firepower coordination. The flexibility, concealability, and rapid decision-making capabilities of applying missile firepower in coordination with all armed services firepower require great timeliness. Only when firepower is effectively linked can it produce a maximally beneficial coordinated operation.

3. The Command System Can Be Destroyed Easily, is Very Difficult to Control

Conventional missile force campaign operations command relies on an automated system of war zone command, with priority given to wireless systems for coordination correspondence and a complementary role for wired communication. The strong electromagnetic radiation from wireless communication system broadcasting stations (stations) is closely monitored by enemy reconnaissance, and the stations can be easily subjected to enemy electrical interference, suppression, and anti-radiation destruction **[反辐射摧毁]**. Wired communication facilities can easily be destroyed by enemy special forces, creating breaks in communication, command malfunctions, and discoordination. The joint campaign corps command post (or the service campaign corps command apparatus) and the command apparatus of conventional missile strike groups transmit a large volume of news, important orders to subordinates, and other information between themselves. All of this is completed through the coordination correspondence system, using imperfect communications facilities and submitting coordination communications through easily destroyed command links, creating large difficulties in battlefield command.

4. Firepower Coordination is Complex, Requires High Standards

The application of conventional missile firepower is a very complex systematic project. Coordinating the firepower of all arms and services requires the full consideration of the combat ability of conventional missile forces, force deployment, missile quality and quantity, the types of warheads, operational support capability and many other factors. Additionally, it is also important to understand the value of enemy targets, their structural characteristics, dynamic conditions, restoration capability and other factors. At the same time, it is also important to consider the characteristics, **[end of page 393]** degree of support, and durability of applied coordinated service firepower, among other factors. It is necessary to have full and accurate data and quantitative parameters for all of the

factors influencing conventional missile firepower application, to use simulation methods to conduct firepower damage assessments, and to project how many bombs conventional missile forces will use in coordinated operations, in order to provide a reliable basis of determination for campaign commanders.

Section 2. Basic Requirements of Coordinated Operations by Second Artillery Conventional Missile Forces

The important organizational components of a conventional missile strike campaign group taking part in a joint campaign (or service campaign) force are coordinating operations with all armed forces in a joint operation, strictly executing the unified coordinated battle plan, proactively conducting ad hoc coordination, and ensuring the preservation of integrated forces from start to finish. To this end, conventional missile campaign strike groups must accomplish:

I. Have a Foothold in the Overall Situation, Drive Coordination

Having a foothold in the overall situation means that conventional missile strike group campaign commanders look at the entire joint campaign, are aware of the entire establishment, and are conscious of the combat actions of the conventional missile forces and their inclusion in overall combat operations of the joint campaign. They resolutely plan and prepare the organization and execution of conventional missile force combat operations in accordance with the joint campaign's coordinated plan and around the overall objectives of the joint campaign. They also pay close attention to armed service coordination during important phases and key moments of the campaign. For the sake of the whole, they bravely sacrifice the narrow interests of their own service branch and do not damage the overall interests of the joint campaign for their service branch's interests, so as to ensure that the participating forces form an overall pool and jointly capture victory for the campaign. These are intrinsic decisions in a joint campaign, the basic requirements for organizing a joint campaign, and also the basic conditions for implementing the overall operations of a joint campaign and securing victory. [end of page 394]

Driving coordination means that in a joint campaign, conventional missile strike groups ought to strictly abide by the campaign's coordinated plan, proactively carry it out in close coordination with other participating forces, and dispatch coordinated groups in a timely manner. They also should be conscious of maintaining links and connections, coordinate the movements of all parties, and circulate situation reports among themselves. In the event of a coordinating imbalance or enemy damage, they should speedily adjust to the circumstances, recover, and organize a new coordinated system, so as to ensure coordinated continuity.

II. Target Key Points, Grasp Key Links

Targeting key points is a basic requirement for a joint campaign using second artillery forces. In a joint campaign, conventional missile strike groups should be used as a “trump card”, contingent on the main direction of the joint campaign. In accordance with the primary operational mission, they should choose an advantageous combat opportunity that revolves around the heart of the campaign and focus superior firepower to implement a key assault. To this end, they should target key points when applying force and target key points when selecting targets. Second artillery campaign commanders should have high standing in the overall campaign and should look at overall operational needs such as key times in a joint campaign as well as its main direction. They should select targets for attack that have a great impact and high value for the campaign, striking key points such as enemy firepower systems with large-scale casualty and destructive capability, command and control system nodes, communication hub system nodes, air defense weapons systems, etc. When arranging attack times, they should stress key goals and determine the order for using different weapons systems in accordance with the firepower characteristics [of the weapons systems], using superior second artillery weapons systems with strong defense penetration capability, long range, concealability, etc. In space combat, they should target key points in accordance with missile range, striking important targets that affect enemy campaign depth in service operations.

Grasping key links is a fundamental requirement for the use of second artillery campaign forces in a joint operation. In grasping key links, above all else it is necessary to look at the whole situation, to deeply comprehend overall strategy and the overall demands of the joint campaign, and to deeply understand the position and function of conventional missile forces [end of page 395] in the overall joint campaign. Fundamentally, control has a decisive influence on many factors of a joint campaign, such as implementing flexible campaigns and advancing campaign development.

III. Revolve Around the Principal Objective, Transfer Quickly

Revolving around the principal objective is an issue that joint campaign commanders and armed service commanders must constantly pay attention to. When all arms and services are coordinating operations, because campaign phases, campaign focuses, and assault objectives are different, the principal coordinating objective will also be different. When an armed service force implements a campaign operation for the principal objective, the conventional missile forces should take active initiative, organizing firepower support in accordance with need and ability. When a conventional missile force implements a campaign operation, the conventional missile campaign strike group commanders should, in accordance with the joint campaign’s overall intent and centering on the advantages of conventional missile firepower, actively organize all arms and services and carry out a coordinated operation with the goal of fully exercising the operational capability of the joint campaign.

The need for quick transfer arises in light of the particular characteristics of modern campaign. In local wars under informationization conditions, real-time battlefield

perception systems, integrated command and control, and firepower accuracy cause modern wars to transform rapidly between offense and defense, with many interweaving patterns. When missiles are launched, defensive operations are conducted; naval and air force fire strikes are implemented at the same time or shortly after a conventional missile fire strike, with multiple firepower units relying on a mutually applied firepower plan. These operations result in mutual interaction. Therefore, campaign commanders should grasp timely transfers of campaign maneuvers so as to ensure the ample utilization of efficient links and strike results by service firepower.

IV. Tightly Protect, Ensure Survival

Tightly protecting and ensuring the survival [of conventional missile forces] is a requirement because, due to the relatively fixed position of conventional missile forces, they are the primary targets of the enemy's first-strike and counterstrike systems. In joint campaigns, [end of page 396] second artillery conventional missile forces must, under the coordination of neighboring forces, guard against aerial reconnaissance, beat back aerial interception, and conduct defense operations on the ground, inseparably linking active and passive defense. They must take effective measures that emphasize creating comprehensive defenses for missile forces and frontal installations. The greatest limitation on the capability of a preservation operation rests firmly in battlefield initiative, protecting the forces against effective enemy missile fire assaults throughout a battle. Because the second artillery's defensive capability is weak, it is important to have coordinated air defense forces, electronic warfare forces, early warning forces, ground resistance forces, and regional armed commandos under the unified command of the joint campaign command apparatus. Forming an effective defense system seems to be particularly important for guaranteeing the effective survival of our conventional missile forces.

Section 3. Main Activities in Coordinated Operations by Second Artillery Conventional Missile Forces

Coordinating conventional missile forces with land, naval, and air force campaign operations is an important activity for joint campaigns that runs throughout the entire course of the campaign. Conventional missile forces can be considered to be the main body of a coordinated operation, but other armed service forces can also be seen as the main body of a coordinated operation. The primary activities of conventional missile forces include: participating in seizing air dominance, participating in naval blockades, participating in resisting strong enemy military intervention operations, and supporting land-based (island-based) offensives.

I. Participating in Operations to Seize Air Dominance

Participating in operations to seize air dominance refers to coordinated operations between conventional missile forces and air forces for air assaults against enemy air force bases, airfields, anti-missile defense systems, and regional air defense installations.

The threat to seizing air dominance comes from enemy air forces, anti-missile defense forces, **[end of page 397]** and air defense forces. Therefore, in order to seize air dominance, long-range firepower, or “air dominance on the ground” must be used, suppressing or destroying enemy combat aircraft on the ground, blocking them in a cave **[封阻于洞中]**, and making it difficult for the enemy air force to be effectively used. In the first battle, we must use missile firepower to suppress the enemy on the ground, blocking them in a cave; conventional missiles carrying anti-radiation sub-munitions or EMP sub-munitions should be used to paralyze the enemy’s early warning radar system, making the enemy incapable of using early warning systems or implementing effective interception. Enemy air defense systems are the primary threat to our airmen just before an air offensive, and they are also the primary obstacle to seizing air dominance. Therefore, using long-range firepower to paralyze these systems ensures the safety of our airmen when they are flying to a target. Early warning, command, and interception systems are the heart of the enemy’s air dominance. Therefore, when destroying air defense installations, conventional missiles carrying anti-radiation sub-munitions should be simultaneously used to paralyze the enemy command and control system nodes—and all radar stations.

When conventional missile forces participate in operations to seize air dominance, campaign commanders and the command apparatus should pay careful attention to the following major activities: advance firepower suppression, follow-up firepower support, supplemental fire assaults, etc. First is advance firepower suppression. Advance firepower suppression consists of segmented incisive fire strikes on important enemy airfield targets using conventional missiles carrying penetrating sub-munitions, at the same time or shortly after anti-radiation Unmanned Aerial Vehicles (UAVs) launch anti-radiation offensives at the start of a joint campaign, forcing enemy planes to surrender; repressive fire strikes and anti-radiation offensives are implemented against early warning radar stations, and after that airmen carry out supplemental bombings to destroy regional enemy aerial operations installations and thus seize air dominance. Second is follow-up firepower support. During the progress of a joint campaign, in accordance with the developing needs of a campaign and the firepower support orders of the joint campaign’s headquarters, supportive fire assaults should be conducted for targets that are difficult for airmen to fly to and where our aerial assault squadrons become threatened targets. Supportive fire assaults should have planned firepower scenarios; supportive fire assaults should be swiftly prepared and launched in order to increase the success of fire strikes; during fire assaults it is important to have prompt links and communication between coordinated services. Definite **[end of page 398]** strike targets, the positions of strategic points, and the time for fire assaults is short, and communication will prevent creating collateral from firepower. Third is supplemental fire assaults, which center on operations to seize air dominance. When strikes on important targets do not achieve anticipated results or important targets are newly discovered, another fire assault is executed. A supplemental fire assault should be implemented in accordance with newly projected, fixed targets for firepower. Campaign commanders and the command apparatus should, in light of the damaging results of an objective, determine the outcome and hold consultations as to the conditions of coordinated services. Commanders should, in a timely manner, determine the targets of supplementary strikes and transmit orders to

subordinates. It is primarily important to apply prepared forces for a supplemental fire assault, and prepared forces should complete operational preparations in advance and be ready to be quickly deployed.

II. Participating in Naval Blockade Operations

Conventional missile forces participating in a naval blockade regard naval forces as the principle body, with the air force, second artillery, and army combining to implement naval offensive operations. Implementing a naval blockade seals off enemy sea area, corresponding airspace, and air and sea travel within a certain period of time, with the primary goal of cutting off the enemy like an island from military links and the outside economy. Firepower is often used for methods of blocking and setting up obstacles, such as building a naval blockade zone to block thoroughfares crossing through enemy waters and ports, effectively limiting enemy warship movements and cutting off naval transportation lines. Firepower can also be used to strike important naval base and port targets so as to weaken enemy naval anti-blockade operational capability. The objective of naval blockade operations is to seize partial naval dominance or complete naval dominance. Seizing naval dominance is often advanced from a foundation of air dominance, so naval blockade operations are extremely difficult. They involve many services, require a sustained length of time, and maintaining superiority is very difficult. This is because an effective blockade must be built on maintained air dominance and is implemented on the basis of naval dominance. Conventional missile forces participating in a naval blockade centered on the navy must fully utilize missiles with long-range, stealth, flexibility, and other [end of page 399] advantages, they must put sustained pressure on enemy anti-submarine planes and early warning equipment in air bases, block important enemy harbor passageways for warships, build naval missile firepower blockade zones, blockade important channels, etc.

When conventional missile forces participate in naval blockade operations, campaign commanders and the command apparatus should pay attention to the following important activities: sustained pressure on air force bases, establishing missile firepower blockade zones, blockading important enemy naval bases and ports, etc. First is sustained pressure on enemy air force bases. Air force aviators, particularly early warning planes, anti-submarine planes, and long-range combat planes are our primary obstacles to implementing a naval blockade. It is necessary to put sustained pressure on important airfields by means of sustained suppression, in order to gradually change the force balance of the naval blockade operation, shape an advantageous battlefield situation, and seize air dominance in the blockade zone. Second is establishing missile firepower blockade zones. Important naval routes are the lifeline of the enemy's naval transportation, so using missile firepower to block them can have the overall effect of an extended blockade. This is important because a long and sustained period of time is often required after a naval blockade zone is established, and it is difficult to keep naval and aviation forces within the blockade zone in the air and at sea for a long time; at the moment, the superior length of conventional missile "arms of firepower" can be brought into play against selected important enemy paths in narrow regions, establishing many naval firepower blockade zones and applying loose missile firepower to interfere with

and deter enemy transports and warships to reduce the enemy's ability to pass through the channels, thus achieving the goal of an effective blockade. Third is blocking important enemy naval bases and ports. When adopting unified attack and blockade methods, the key targets for attack inside the ports are fueling and fuel unloading facilities, logistical supply depots, etc; the blockade controls the coming and going of enemy warships, strips the enemy of naval dominance and reduce its anti-blockade operational capability.

III. Participating in Resistance against Military Intervention Operations

Resisting enemy intervention operations means that, under the unified plan of the joint campaign command apparatus, naval, aerial, and second artillery long range firepower are in charge, implementing a fire assault operation to drive out the enemy. **[end of page 400]**

Resisting enemy intervention represents an important part of joint operations. The degree of enemy military intervention is determined by looking at current strategic structure and military status as well as the developing conditions in various areas. Methods of enemy military intervention often include: a show of military strength from a carrier battle group, naval escorts, establishing no-fly and restricted sea zones, naval and aerial intervention, inshore fire assaults, and deep strategic air raids. Resistance to enemy military intervention requires ample preparation, not underestimating nor fearing the enemy, fully utilizing our long-range firepower, and grasping three fundamental principles: 1) preparing in advance, not giving the impression of weakness, and not being provocative; 2) grasping the principle of advantage, restraint, and gaining mastery only after the enemy has struck; 3) making enemy carrier battle groups a focal point for attacks. By fully utilizing the easily scattered distribution of our forces, easily concentrated firepower, inshore operations, flexibility of movement and other advantages, and by focusing attacks on the weak points of vital enemy targets, we can force the enemy to retreat from its military intervention mission.

When conventional missile forces are participating in resistance against enemy intervention operations, campaign commanders and the command apparatus should pay attention to the following actions: harassing fire attacks, frontal firepower deterrence, driving firepower from the flanks, focused fire assaults, information assaults, and long-range warning strikes. First is harassing fire attacks. If the enemy uses peripheral allied military bases and aircraft launches from carrier platforms, when it implements various forms of military interference and its allied peripheral military bases are beyond our aviators' firing range, and moreover when the carrier battle groups are far away from our shores and it is difficult to carry out dominant coordinated service firepower operations, conventional missiles can be used against the enemy's peripheral allied military bases and to carry out harassing strikes against carrier battle groups. Commanders should cautiously make strategic decisions, choose an opportunity, select high-precision missiles for a precision strike, prevent missile firepower from deviating from the target and prevent manipulation, using the third country's participation in military intervention as an excuse. Second is frontal firepower deterrence. When conventional missile forces participate in resisting intervention by enemy carrier battle groups, conventional missiles

can be launched in front of the core carrier's advance, serving as a warning and perhaps compelling the enemy to withdraw through fear of suffering a destructive strike. Third is driving firepower from the flanks. When our naval forces [end of page 401] deploy ahead of a carrier battle group to intercept it, at the right moment conventional missiles should be launched towards the enemy carrier battle group opposite our relatively threatened flank, compelling the enemy to withdraw from the marine intervention. Fourth is the focused fire assault. When many carrier-borne aircraft are used in continuous air strikes against our coast, in order to halt the powerful air raids, the enemy's core carrier should be struck like a "heavy hammer". The conventional missile forces should be a select group carrying sensitive penetrating sub-munitions and, using the "concentrated fire assault" method, a wide-coverage strike against the enemy's core carrier should be executed, striving to destroy the enemy's carrier-borne planes, the control tower and other easily damaged and vital positions. Fifth is the information assault. Directed against the enemy's command and control system or weak links in its Aegis [宙斯盾] system, conventional missiles carrying anti-radiation sub-munitions or EMP sub-munitions can be used when enemy radar is being used and their command systems are working, with anti-radiation sub-munitions striking radar stations and EMP sub-munitions paralyzing the enemy's command and control system. Sixth is warning through long-range firepower. When the enemy implements a high strength air raid against us, in order to shake their mental state, we should create panic among the enemy's common people and thus increase their domestic opposition to the war. In accordance with commanding orders, we should carefully select long-range and even intercontinental missiles carrying conventional warheads, target the enemy territory's will for war, and, at the right moment, conduct a long-range (intercontinental) cautionary strike. This will make the enemy unwilling to see its country suffer unbearable attacks and will restrain its intervention actions.

IV. Supporting Land-based (Island-based) Offensive Operations

Supporting land-based (island-based) offensive operations refers to close coordination between conventional missile forces and army troops, naval marine troops, and other land operations forces so as to implement interdicting, suppressing, and paralyzing attacks on important enemy communications hubs, command and control centers, and other targets.

During land and island-based offensive operations, troop strength and firepower are often interwoven. Conventional missile forces should carry out firepower support in accordance with operational needs, and usually they ought to accomplish three goals: 1) prevent the enemy's second-line troops from advancing and delay their combat operations; 2) suppress the enemy's countering capability and prevent our campaign's rear from suffering a surprise attack; 3) [end of page 402] paralyze the enemy's land-based (island-based) operational command and control system and cripple their overall defense operational capabilities.

When conventional missile forces are supporting land-based (island-based) operations, campaign commanders and the command apparatus should pay attention to the following major actions: firepower interdiction, firepower shock, firepower suppression, firepower

paralysis, firepower destruction, etc. First is firepower interdiction. In accordance with the needs of a land-based (island-based) operation, fully apply conventional missile firepower. Carry out strikes against bridges, railway switchyards, and other communications hubs deep within enemy territory, cut off the mobile transportation routes to the front for the enemy's second-line standby reinforcement troops, and cripple the first-line's defensive capability in order to create a good battlefield situation for land-based (island-based) operations. Second is firepower shock. In order to shake the enemy's will to resist, timely conventional missile launches on the enemy's military barracks and targets with concentrated troop strength as well as continuous harassing strikes day and night will dampen soldier morale and psychologically support land-based (island-based) operations. Third is firepower suppression. To support a land-based (island-based) operation, firepower suppression should be used against important enemy airfields and anti-missile defense (air defense) systems, creating a situation for airmen to seize air dominance. Fourth is firepower paralysis. Prior to supporting a land-based (island-based) operation, in accordance with surveillance reports provided by battlefield perception systems, take the locations of key enemy command and control system nodes and use cruise missiles to carry out "pinpoint" precision strikes, creating enemy command failure, loss of weapons control, and reducing the capability of resistance operations. Fifth is firepower destruction. After assessing the precise location of enemy warehouses and oil depots, as well as logistical supply systems and other targets, use high-precision missiles to carry out precision fire strikes, guaranteeing thorough destruction or creating a chain reaction, cutting off their backup support and creating panic and terror in the enemy's mental state. **[end of page 403]**

Postscript

The Science of Second Artillery Campaigns is new generation of monograph on the science of campaigns organized and written by the General Staff Headquarters. Writing *The Science of Second Artillery Campaigns* is an important move for adapting military struggle preparation and guiding campaign training and practice. In the process of writing this book, [the compilation team] closely worked around the Second Artillery's mission of "double deterrence, double operations" given by the Military Commission of the Communist Party Central Committee; insisted on the strategic concept of the Military Commission of the Communist Party Central Committee as guidance; focused on the characteristics and laws of local warfare under informationized conditions; concluded the experiences of all previous Second Artillery campaign trainings and exercises; learned from the research and practice achievements of domestic and foreign missile force campaign theories; explored the general laws of Second Artillery campaigns through abstraction and summarization; systematically illustrated the basic theory of Second Artillery campaigns; and strived to make this book more theoretical, innovative, and practical.

The Science of Second Artillery Campaigns studies theory, basic theory, and campaign law theory of the Second Artillery campaign discipline based on the discipline system theory. In the process of writhing *The Science of Second Artillery Campaigns*, in order to increase the system nature of second artillery campaign theory and the guidance of primary campaign patterns and important activities and methods, [the compilation team] absorbed advanced academic viewpoints and newest research achievements and further deepened the study of characteristics, laws, principles, and fighting methods of Second Artillery campaigns so that *The Science of Second Artillery Campaigns* integrates the discipline theory with basic campaign activities and methods and have a strong practical guidance meaning.

Yu Jixun is the chief editor and Li Tilin is the associate editor of this book. Li Xianyun, Rong Jiaxin, Shao Yuanming, Ge Xinqing, Huang Zongyuanm and Wang Zengyong are in charge of proving the framework, gathering the draft and reviewing and revising the draft. At last, Huang Zongyuan, Wang Zengyong, and Rong Jiaxin gathered the draft. Those who wrote each chapter are as follows: Chapter 1, professor Rong Jiaxin; Chapter 2, professor Chang Jin'an; Chapter 3, professor Rong Jiaxin and lecturer Chen Changming; Chapter 4, professors Ge Xinqing, Wang Xiaodong, and Rong Jiaxin, and lecturer Li Chaomin; Chapter 5, professor Lu Xiangdong; Chapter 6, professor Ge Xinqing; Chapter 7, assistant professor Zhou Min; Chapter 8, assistant professor Huang Wei; Chapter 9, assistant professor Wu Min; Chapter 10, professor Ge Xinqing; Chapter 11, professor Chang Jin'an; Chapter 12, professor Lu Xiangdong; Chapter 13, professor Rong Jiaxin and assistant professor Mao Guanghong; and Chapter 14, assistant professor Huang Wei.

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Now that it is more difficult to compile *The Science of Second Artillery Campaigns* and our level is limited, it is hard to avoid improper points and mistakes. We earnestly ask our readers to criticize and point out mistakes so that they can be corrected.

Compilation Team, *The Science of Second Artillery Campaigns*

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