

An excerpt from Yu, Jin, ed. 2004. *Dierpaobing zhanyixue (The science of Second Artillery operations)*. Beijing: People's Liberation Army Press, 294-296.

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Introduction

This document contains a translation of a short section of a classified Chinese military text generally known in the United States as *The Science of Second Artillery Campaigns*. I prefer to translate the title as *The Science of Second Artillery Operations*. The word "campaigns" suggests a discussion of military strategy, but the book is a training manual for the officers and soldiers who operate China's missile forces. It was written by a committee of professional military educators supervised by the General Command of China's People's Liberation Army (PLA) and distributed to authorized readers in 2004.

This short section of text generated a lot of interest in the United States because many U.S. experts on China's nuclear weapons program interpreted it as indicating a shift in or qualification of China's No First Use (NFU) policy. This may be because this short section is often discussed out of the context of the rest of the 405-page textbook.

It is important to understand that although NFU is sometimes discussed using moral or symbolic language, from the beginning Chinese strategists based the policy on the practical realization that there is no imaginable situation in which starting a nuclear war would end well for China or be in China's interest. To the contrary, they believe it would be a disaster for China. So while many in the United States appear skeptical of China's NFU pledge, it represents a hard-nosed cost-benefit analysis that has been reconfirmed by Chinese leaders for 50 years.

The Science of Second Artillery Operations repeatedly reminds the officers and soldiers who operate China's nuclear weapons that NFU is a fundamental concept of Chinese nuclear planning. It is important to keep those reminders in mind when reading just a few pages of a much longer text, especially since the language at some places in these pages is ambiguous in the original Chinese; I have carefully tried to retain that ambiguity in the rendered English.

The translation that follows is the entire seventh and final section of a tenth chapter titled "Deterrence Operations." It appears to reflect the PLA grappling with the problem of what China should do if it is suffering large and sustained conventional military attacks by a superior enemy that threaten its vital interests. This section suggests the PLA developed the idea of trying to stop such attacks by threatening to use its nuclear weapons—announcing targets, conducting launch exercises—as a way of getting the attacker's attention and trying to coerce the attacker into stopping its attack.

The key question for analysts is whether this threat is inconsistent with NFU, or alternately how such a threat could be credible and therefore effective given China's NFU policy.

Considering the repeated emphasis on NFU throughout the text and other elements of Second Artillery operations explained in the book, including the small size of China's arsenal and the fact that it is kept off alert, my interpretation is that this is intended as a bluff. The Chinese leadership understands that initiating nuclear use against the United States would invite nuclear retaliation, which would be catastrophic for China, especially following a large-scale conventional war that China is losing. The PLA apparently believes the psychological impact of this bluff during a crisis could be strong enough to be effective in bringing an end to the crisis in some cases.

At a purely rational level, if NFU is real then the bluff is not credible and is unlikely to be effective. However, the bluff is likely to have some credibility with U.S. leaders for at least two reasons. First, the widespread skepticism in the United States about the reality of China's NFU policy means that U.S. leaders are unlikely to be sure whether or not it really is a bluff. Second, U.S. leaders could not be sure whether the preparatory steps and public threats described in the text, combined with a possible erosion of central control of nuclear weapons in a crisis, might lead to unauthorized or unintended nuclear use—the “threat that leaves something to chance” in the words of Thomas Schelling. It appears that this ambiguity in the heat of a crisis is what the PLA believes could make this measure effective.

The classified guidance in *The Science of Second Artillery Operations* makes clear that Chinese leaders are concerned about possible loss of nuclear control and emphasizes that those in the field will not be given discretion to make their own decisions. This is consistent with leaders wanting to make sure the bluff remains coercive and does not drag China into a nuclear war, which suggests this coercive strategy is intended to be consistent with a NFU policy.

The two paragraphs associated with “leaving room for maneuver” are the most ambiguous. One way to read the first of those paragraphs is that if China's actions fail to stop an attack it will switch to a nuclear attack. However, I do not think that is the intended meaning. The NFU policy is repeated just two-pages later in the introduction to the following chapter on “Second Artillery Nuclear Retaliatory Attack Operations,”

“According to our country's principle, its stand of no first use of nuclear weapons, the Second Artillery will carry out a nuclear missile attack against the enemy's important strategic targets, according to the combat orders of the Supreme Command, only after the enemy has carried out a nuclear attack against our country.”
(p. 298)

Moreover, the authors themselves give some insight into their meaning by summarizing the main point of these two paragraphs as the need to leave room for maneuvering when choosing how much to lower the threshold in making coercive threats. “Room for maneuver” typically means getting out of a tight situation, and to me suggests being able to shift positions to avoid being forced to carry out its nuclear threat as a result of lowering the threshold too far. That interpretation appears consistent with the subsequent paragraph, which seems to acknowledge the uncertainties and potential pitfalls of the coercion strategy—in particular if the bluff doesn’t work, and how that may affect China’s credibility in future situations.

Most importantly, the final paragraph in the translation infers there is a risk that attempting to engage in nuclear coercion may provoke a preemptive nuclear attack by the enemy. It stresses the importance of China’s forces being prepared to launch a retaliatory strike should that occur, and states that showing China is prepared for such a strike is important for increasing the credibility of coercion and deterring a first strike from the enemy.

Because of these uncertainties in the coercive strategy and especially the risk that attempting to coerce a nuclear-armed enemy by showing signs of preparing for a nuclear attack during a crisis could lead the enemy to launch a preemptive nuclear attack, many Chinese experts believe the Chinese leadership would never decide to use this option, even though the Second Artillery may be training to carry it out.

Translation of Chapter 10, Section 7 of Yu, Jin, ed. 2004. *Dierpaobing zhanyixue (The science of Second Artillery operations)*. Beijing: People’s Liberation Army Press, 294-296.

7. Lowering the Nuclear Coercion Threshold (Adjusting Nuclear Policy)

Lowering the nuclear coercion threshold means that when a strong military power possessing nuclear-armed missiles and an absolute advantage in high-tech conventional weapons is carrying out intense and continuous attacks against our major strategic targets, and we have no good strategy to resist the enemy, our nuclear forces must obey the orders of the Supreme Command, quickly adjust nuclear coercion policy and actively carry out strong, forceful nuclear coercion in order to dissuade the continuation of the strong enemy’s conventional attacks against our major strategic targets.

The times for our nuclear missile forces to lower the nuclear coercion threshold are:

1. When enemy forces threaten our nuclear infrastructure (nuclear power plants) by carrying out conventional attacks. In order to prevent a catastrophic leak of nuclear radiation, our nuclear missile forces must measure for measure use nuclear missiles to carry out effective nuclear coercion in order to achieve deterrence of the enemy’s plot to carry out

conventional attacks against our nuclear infrastructure.

2. When the enemy threatens major strategic targets affecting the security of the lives of broad masses of our people, such as large hydroelectric plants, with conventional attacks, we should, obey the coercion orders of the Supreme Command, threaten to use nuclear-armed missiles against the enemy, in order to protect the absolute security of our major strategic targets.

3. When the enemy threatens to carry on high and medium level conventional attacks against our capital, large and medium sized cities, our political and economic centers etc., our nuclear missile forces should obey the orders of the Supreme Command, resolutely send out threats to the enemy to use nuclear weapons in order to achieve the goal of diminishing the severity or bringing a halt to enemy bombing.

4. When conventional war continuously escalates and the strategic situation is extremely disadvantageous to us, and the safety and survival of the nation is seriously threatened, in order to force the enemy to stop a war of invasion, and rescue the nation from the midst of calamity, our nuclear missile forces should obey the orders of the Supreme Command and carry out effective nuclear coercion against the enemy.

(1) Lowering the Nuclear Threshold (Adjusting Nuclear Policy) Methods

Lowering the nuclear coercion threshold should strictly obey the directives of the Supreme Command on lowering the nuclear coercion threshold, use varied channels, and adopt flexible methods to threaten to carry out a nuclear attack against the enemy. The principal order should be: nuclear coercion via public opinion and propaganda, nuclear coercion via demonstrating and creating impressions and nuclear coercion via launch exercises.

First, via television, radio, print, the internet and other media we will issue a message warning the enemy of a nuclear attack, making the enemy recognize clearly that our nuclear missile force already adjusted our nuclear policy, following the orders of the Supreme Command, and started to implement comprehensive preparations to use nuclear weapons to carry out retribution, thus creating a great shock in the enemy's psyche. We can, according to the level of the enemy's threat against us, at an appropriate time, announce the intended targets of nuclear attack. This is the highest level of nuclear coercion, which is the lowest limit of lowering the threshold of nuclear coercion.

(2) Crucial Links to Master

In the course of lowering the threshold of nuclear coercion operational personnel and units should master the following key links.

The first is that they should strictly carry out the orders of the Supreme Command on lowering the threshold of nuclear coercion.

The policy nature of lowering the threshold for nuclear coercion is strong, so the missile forces must strictly follow the orders of the Supreme Command, and absolutely cannot do this their own way, making decisions as they please on important matters in the midst of lowering the threshold of nuclear coercion.

The second is to prudently select the opportune time for coercion after lowering the threshold for nuclear coercion.

Taking into consideration that a strong enemy only using conventional attacks can create enormous threats to us, operational personnel and units should plan scientifically, prudently selecting the opportune moment for nuclear coercion, guaranteeing the creation of a beneficial situation for nuclear coercion.

The third is to leave enough room to maneuver.

At the time of nuclear coercion you should leave enough room to maneuver, prudently selecting the lowest threshold to threaten to use nuclear weapons against the enemy, and when threatening to use nuclear weapons is unable to stop enemy military activities, you should assure the strategic situation after switching to nuclear attack is advantageous to our side, and we are able to tightly grasp the strategic initiative, winning the broad support of most of the peace-loving nations and peoples of the world.

This bottom line must be grasped tightly: we must weigh whether the counter of nuclear coercion is something the enemy can accept, and prudently consider when coercion fails, that we are able to carry out nuclear coercion credibly, that our word can be believed, that we do as we say, laying a good foundation for later coercion. Therefore, carrying our nuclear coercion must be decided prudently.

The fourth is to finish complete preparations for retaliatory nuclear attack warfare.

Nuclear attack is often preceded by nuclear coercion. Because of this, in the midst of the process of a high, strong degree of nuclear coercion we should prepare well for a nuclear retaliatory attack. The more complete the preparation, the higher the credibility of nuclear coercion, the easier it is to accomplish the objective of nuclear coercion, and the lower the possibility that the nuclear missile forces will be used in actual fighting.