

## The Study of U.S. War System

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### Abstract

Based on the competitive background of the great powers of China and the United States, this paper analyzes the elements of the U.S. War System, the concept of military strength and the key links supporting the operation of the war, and analyzes the strong weakness of the U.S. War System in the contact layer and the reinforcements layer of the war, positioning the center of gravity of the U.S. War System and putting forward the measures to break the enemy.

### Keywords

War System; Strong Weakness; Contact Layer; Reinforcements.

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## 1. Introduction

As America's strategic center of gravity shifts eastward, the world pattern returns to the era of "great power competition". By summarizing the ten-year experience of the American war on terror, it can be concluded that the single military action can not achieve the political goal, and the inter-state war is the confrontation between the system and the system. At present, the Sino-US confrontation presents an omni-directional and multi-polar situation. To examine and measure the political, economic, cultural and religious factors and the war as a system will be the winning thinking to deal with the large-scale and high-intensity all-round war in the future.

## 2. The Connotation of the War System

### 2.1 Comparison of the Sino-US War System

Our military language on the "War System". The term "War System" is not found in the U.S. military dictionary, but it is related to the "Five Rings" theory put forward in 1988 by former U.S. Air Force Colonel Walden.

Table 1. Walden's theory of "Five Rings"

	Walden's theory of "Five Rings"	Military language "War System"
First ring (Command and Control)	A government, command, control, communication, etc	Strategic decision command system
Second ring (Production facilities)	Resources, scientific research, military industry, etc	Defense science, technology and industrial system
Third ring (Infrastructure)	Transportation, industry, energy, etc	Infrastructure system
Fourth ring (People)	Military and non-military personnel	War mobilization system
Fifth ring (Field Troops)	Arms, troops, etc armed forces	Armed forces system

From the above correspondence, we can see that the military language interpretation can also be used as a basis for the study of the U.S. military War System.

### 2.2 The U.S. War System and the Conception of Military Forces

According to the theory of the "Five Rings" of the U.S. military, the importance of the attack from the elements of the inner and outer layers is decreasing, and the model of the force situation in the 2018 U.S. Defense Strategy report (see Fig. 1) is used here to deconstruct the U.S. War System from the contact layer and the reinforcements layer, to integrate the elements of the War System into the operation and to analyze it, as follows:

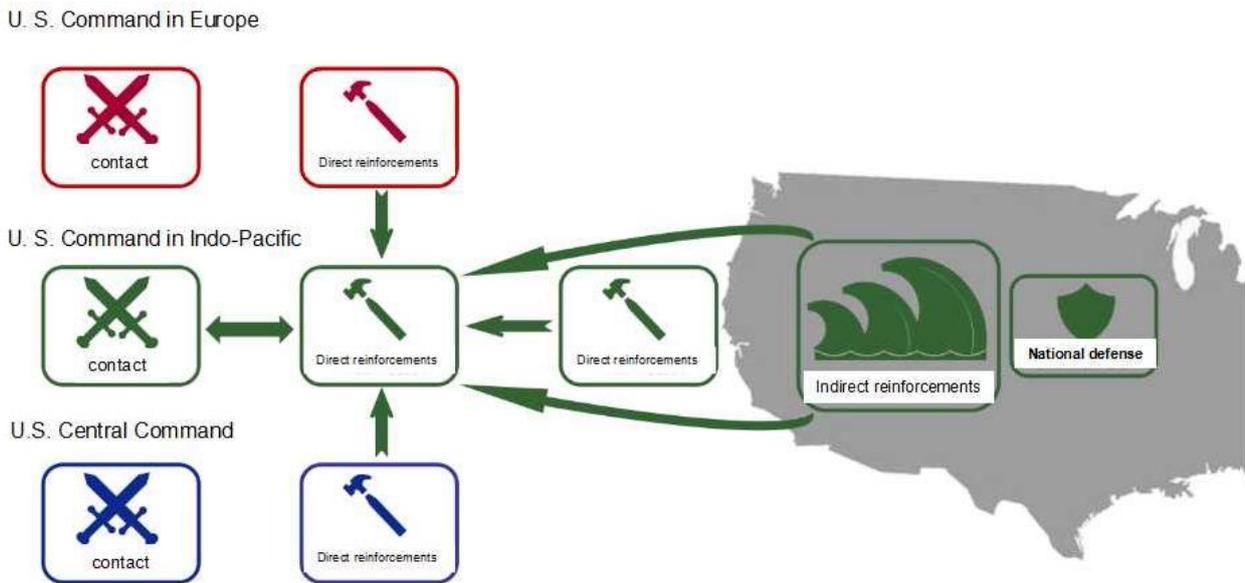


Fig. 1 The model of the force situation

Table 2. The U.S. War System

	Characteristic	Corresponding "Five Rings" theoretical elements
Contact layer	A brief, extraneous, direct collision of elements.	Fifth Ring Field Forces, Third Ring Frontier Infrastructure, First Ring Frontier Command and Control System, etc.
Reinforcer layer	A persistent, internal, indirect system of confrontation.	The fourth ring of non-military personnel, the third ring of local infrastructure, the second ring of defense science, technology and industry, and so on

### 3. Operation of the U.S. War System

Military law has cloud: "the victory or defeat of the soldiers, not in the majority, but in the division." The modern war emphasizes the confrontation between the War System based on the overall strength of the country, the seamless connection between the contact layer and the reinforcements layer, the key lies in the integration of each system and the efficient release of energy. However, a complex set of systems formed between the sub-systems can not clear a number of operation chains, but the same is the strategic decision-making command system will always play the overall command and planning role, here focus on the analysis of the three key chains supporting the operation of the war: First, the military-industrial complex is the driving force for the United States to start the war, The second is that the infrastructure system connects the operations from the command to the armed forces, and the third is that the war mobilization system supports the reinforcement of the war from the command to the defense industry. Based on the above point of view, the following model diagrams are constructed:

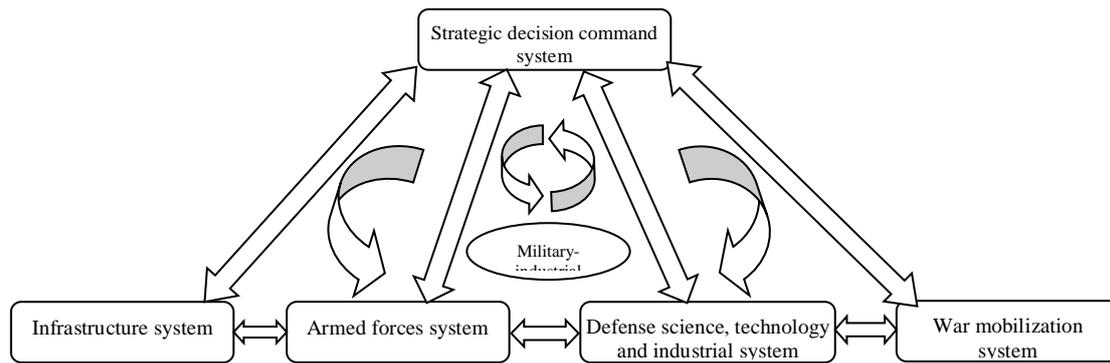


Fig. 2 The three key chains supporting the operation of the war

### 3.1 Strategic Decision-making Command System-Armed Forces System-Relationship between Defense Science, Technology and Industrial Systems

The military-industrial complex represented by the United States government, the army and the military-industrial enterprises is the epitome of the three sub-systems of the War System. Within the military-industrial complex, the relationship between the military and the military-industrial enterprises was more closely influenced by the two world wars and the cold war between the United States and the Soviet Union. Under the stimulus of the war, the military-industrial enterprises received a large amount of government appropriations. While developing military technology rapidly, they made it easier for the military by recruiting ex-servicemen and employing consultants, and then made use of the relationship between the military and the government to gradually transform into political influence. The military has formed a "mutual aid" relationship between the military and the military enterprises as it continues to acquire more advanced weapons and equipment and uses officials recruited by military enterprises to influence government decision-making in an effort to avoid disarmament and balance inter-military interests. On the other hand, because the United States carries out civilian administration, and then establishes the Defense Department as the intermediate agency to coordinate and supervise the production cycle and profit cost accounting between the government and the enterprise, and feedback the demand of the army; while maintaining their own interests, the army and the military enterprises meet the government's demand for national security, which has produced a kind of "non-cooperative game" process. The military-industrial complex has always been criticized by American society, but as the core force supporting the United States to realize the national interest, it is related to the interests of politics, the military and business. The result is that the interest groups of capital accumulation interfere with the administration of the government, extract the taxpayer's blood and sweat, and disturb the world peace order.

### 3.2 Relationship between Strategic Decision-making Command System-Infrastructure System-Armed Forces System

Infrastructure systems act as bridges and links between strategic command decisions and armed forces operations, and the elements that play the most important role in the war are military bases. At present, there are more than 500 overseas military bases in the U.S. military. The deployment is characterized by the combination of points and lines, control points and choke points, which can effectively guarantee the U.S. military's global operations. On the eve of the Iraq war, some 300,000 coalition troops massed in 18 bases in 12 countries bordering Iraq for pre-war deployments; during the Syrian war, the first U.S. airstrikes were targeted at Shailat Air Force Base in Syria, deliberately avoiding Russian S-400 air defense positions to intercept and cover areas in cruise missile trajectory planning, achieving a hit rate of more than 96 percent. It can be seen that the infrastructure system is the key link between the strategic command decision-making and the use of the armed forces, which deeply influences the realization of the command decision-making intention.

### **3.3 Strategic Decision-making Command System-War Mobilization System-Relationship between National Defense Science, Technology and Industrial System**

Under the condition of informationization, war mobilization presents the characteristics of network, precision and three-dimensional. The scientific and technological forces promote war mobilization to cover more "invisible resources", and the content is changing from heavy material to heavy technology. Just as in the Gulf War, the United States mobilized a number of high-tech departments and units, in a short period of time developed a GBU-28 laser-guided ground bomb, and successful experiments, this type of bomb can effectively destroy the Iraqi army's solid underground command post. In the Iraq war, the U.S. military used high-tech information to carry out accurate mobilization, realizing that the combat force is only 40% of the Gulf War, and 10% of all kinds of materials are put into the Gulf War, greatly reducing the war resources. In addition, the U.S. military has mobilized civilian satellites, Internet companies and civilian "hackers" for war propaganda and cyberwarfare. By establishing the national scientific and technological industrial base of "combining military with civilian", the united states is accelerating the integration of the war mobilization system and the defense science, technology and industry system, thus greatly improving the precision, timeliness and potentiality of the war mobilization for combat support.

## **4. Analysis and Countermeasures of the Strong Weakness of the U.S. War System**

In order to contain the rise of our country, the united states is likely to provoke war in the Taiwan sea or the south china sea. The war between great powers is a system confrontation, and the geopolitics of the Indo-Pacific region will deeply influence the situation of the Sino-US war confrontation, analyze the strong weakness of the US War System in the level of war contact and reinforcements, find out the center of gravity of the US War System, and locate the target precisely, which can be regarded as the winning thinking of the Sino-US war.

### **4.1 Analysis of Armed Forces in Contact Layer**

There is no doubt about the superiority of American armed forces in the contact layer. There are three aspects that stand out: first, the number of weapons and equipment is large, and the number of American armed forces is second to none, whether it is the number of ships at sea, the number of aircraft in the air or the number of missiles. The second is advanced platform weaponry, the United States military has the world's most combat capability of the "Nimitz" class nuclear-powered aircraft carrier, the only service of the fifth generation carrier fighter F-35 and the only stealth strategic bomber B2 and so on. The third is the anti-zone outside the attack ability is strong, the AGM-158 joint defense area outside the air-to-ground missile as the representative of stealth cruise missile, the maximum attack distance reached 926 km, the final minimum flight altitude can reach 10 m, accuracy within 3 m.

The U.S. military expedition to the western Pacific Ocean to fight with me, armed forces direct confrontation is also outstanding weakness: First, the combat capacity is weak, any advanced weapons platform can not be separated from supplies, the U.S. military from the recent supply from Yokosuka port to the sea east of Taiwan Island about 40 hours, from Guam to the Taiwan Sea 2 days, from the west coast of the United States to Guam about 15 days, In accordance with the wartime use of 1 reserve 3 mobilization reserve, replenishment capacity is limited. Second, the war damage bearing capacity is weak, the U.S. military high value target is numerous, one aircraft carrier is easy to move tens of billions of dollars, the front military base deployment of about 80,000 U.S. troops, personnel equipment war damage will have a huge negative impact in the United States, from the U.S. military in recent years in the implementation of the dynamic troop deployment strategy can also confirm its concern.

According to the analysis of the strong weakness of armed forces, some countermeasures can be taken: first, blocking the direct reinforcements of enemy allies, relying on each other on the strength of the United States and its allies, mutual influence on determination, relative separation of interests, aiming

at the core of interests, we can carry out the policy of "strengthening the weak alliance and deterring the alliance", and by vigorously developing diplomacy, To promote regional economic co-integration and deterrence, and other means to break the regional alliance between the United States and its allies, blocking the military reinforcements of the United States allies. The second is to control the strategic fortress at sea, on the one hand, it can cut off the supply of strategic supplies at sea of the United States, on the other hand, it is to break the "C-shaped encirclement" built by the strong enemy to me, so that the sea and air combat forces of our country can be extended to fight for control, such as the Gonggu Strait, the Korea Strait, the Malacca Strait, etc. are the key areas of control. Third, kill core sensitive targets, in recent years, the United States military launched the "mosaic war", dynamic deployment of forces and other operational concepts, the purpose of high-value targets and personnel-intensive military bases, such as modular disassembly, to avoid large-scale war losses in wartime, so in the early days of the outbreak of the conflict to hit the enemy, the enemy surface warship formation, heavy troop build-up base as the key targets.

#### **4.2 Analysis of Information Network Countermeasures in Contact Layer**

No matter the information war or the future intelligent war are inseparable from the support of the data link, the advantages of the US military in the information field are as follows: First, the capability of reconnaissance and early warning is strong. At present, the US military has built a three-dimensional reconnaissance system covering space reconnaissance, air reconnaissance, ground reconnaissance, underwater reconnaissance and network space reconnaissance and eavesdropping, relying on "100Gbps radio frequency backbone network" in communications. It can transmit 50G data within 4 seconds of 200km battlefield distance, and provide data link support for new combat concept. Second, the information countermeasure ability is strong, after the U.S. military network command is upgraded to the first-level command, has been granted higher network counter-control power and the initiative attack power, presents the attack and defense both, the military and the civilian union characteristic, under the jurisdiction branch command and the combat force has formed the joint operation ability, the manufacture "worm" "the eternal blue" and so on virus has affected the whole world.

The node vulnerability of the data link is its fatal weakness, which mainly includes the information network nodes such as battlefield command, communication, early warning, anti-missile, etc., the front nodes are deployed mostly in the garrison base of Japan and Korea, the target number is large and relatively exposed, it mainly depends on the anti-missile system protection, but the anti-missile system also needs the data link support.

For the U.S. military to carry out broken network chain attack, can focus on: one is to paralyze the core command target, the U.S. strategy is inseparable from the support of Japan and south Korea, such as the U.S. military base in Yokota and the U.S. military base in south Korea is the core of many command agencies, as long as the war time allowed the U.S. military to use, such core command target should be the first implementation of the strike. Second, the target of battlefield intervention in the incapacitated frontier is fixed and exposed, such as the information network node, the six-base X-band radar station deployed by the United States in Japan and Korea, and the space-based early warning information receiving station.

#### **4.3 Analysis of the War Potential of the Reinforcements**

The war potential mainly depends on the country's politics, economy, science and technology, culture, population, resources, natural conditions, etc. The advantages of the United States in the above aspects are mainly reflected in: First, the strong economic strength, the dollar as the world's only currency linked to oil settlement, its hegemony is irreplaceable to maintain domestic economic stability and support the operation of the War System, the dollar supports the operation of the war, the war consolidates the hegemony of the dollar, the two complement each other. Second, technology is strong, and America's advantage in terms of the number of Nobel Prize winners, university rankings and the number of top tech companies is clear. The assassination of Iran in 2020 is proof enough that one super-dominant technology can minimize the cost of war. Third, the political strength is strong,

the United States has the most allies in the world, the world's three leading organizations [the World Trade Organization, the International Monetary Fund, the World Bank] headquarters are located in the United States, the world Internet 13 root server 10 in the United States, these three factors are enough to help the United States to occupy the dominant position and initiative in the world. Fourth, the strong cultural impetus, the "frontier" culture before the founding of the People's Republic and the puritanical construction of "the city on the top of the mountain", the evolution of the spirit of continuous expansion; in recent years, the interests of the supreme drive "pragmatism" concept prevails, politicians to induce the people to support the war, culture and religion in the war to provide a lasting internal momentum.

The relative weakness of the potential for reinforcements is as follows: First, the United States "has few friends", in recent years, China has deepened the "Belt and Road" policy, compared with the frequent NATO withdrawal by the United States, the increase of allies' "protection fees" and other actions, to the Indian-Pacific peripheral countries bring a lot of benefits, and then the relationship between the United States and most of its allies is not unbreakable. Second, "liberalism" rampant, the so-called talent "human rights" the core is personal freedom, through the new crown epidemic prevention and control can be seen that the American people to the government call to wear mask system as a violation of their human rights, it is obvious that the American people to the government's voice of resistance. Third, the United States "just more gas less", "2020 U.S. military strength index" report pointed out that the U.S. military stationed overseas rotation time ratio is at least 1:3, if stationed abroad for six months, need to return to China to adjust for 18 months, which reflects the weakening of the American military fighting spirit and the lack of sustained combat will, history has proved that the U.S. military in more than three years of war ended in failure.

In view of the above analysis, the potential of disintegrating the U.S. military reinforcements can be considered from the aspects of people and money: first, disintegrating the potential of the public reinforcements, people being the decisive factor in the victory or defeat of the war, focusing on the spiritual factors of the people's will to the war, party struggle, racial conflict, etc., and making the radio stations, leaders' residence and administrative organs of the ruling party the target of the attack. It can incite people's resistance to the war from the side, and then disintegrate people's support for the ruling authorities from the war mobilization. The second is to weaken the potential of economic reinforcements, to let capital withdraw from the United States and to break the hegemony of the dollar, is the fundamental way to weaken the economic potential of the United States. Historically affected by the Sept.11 incident, the New York Stock Exchange and the NASDAQ Stock Exchange were closed for several days, resulting in direct economic losses of about billions of dollars, so that the war will be equal to the United States mainland, Targeting a few financial centers could undermine America's war potential in the economic sphere.

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