

# Characteristics and Implications of the Obama Space Strategy: A New Type of Multilateralism?

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The U.S. space strategy, consisting of the national space strategy and the national security space strategy, is subject to and serves the larger U.S. National Security Strategy. Because space technology and space projects can serve both military and civilian purposes, the U.S. national space policy and space military strategy are highly intertwined. The strongly assertive space strategy adopted by the Obama administration will have a major impact on the balance of international security.

## **I. Main Features of the Obama Administration's Space Strategy**

Every U.S. executive administration since the 1950s has proposed its own national space policy. In June 2010, the Obama administration unveiled its U.S. National Space Policy. In January 2011, U.S. Defense Secretary Robert Gates and

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National Intelligence Director James Clapper jointly released the country's National Security Space Strategy. Through these two reports, the Obama administration's new space strategy has emerged rather clearly, and the strategy comprises of the following characteristics.

**1. Although the U.S. is moving towards a more multilateralist space policy, it remains committed to maintaining its advantage in space technology development.**

The Obama administration's new space strategy is a deviation from the George W. Bush administration's unilateralist approach, moving towards more multilateralism. Under the Obama administration, multilateralism is incorporated into one of the policy's six major targets: "expand international cooperation on mutually beneficial space activities." This international cooperation includes widening and extending mutual benefits derived from space; promoting the peaceful use of space; and fostering partnerships in collecting and sharing information from space assets. The Obama administration's National Security Space Strategy regards "establishing partnerships with responsible countries, international organizations, and commercial companies" as a major strategic direction. The administration's National Space Policy – the more civilian policy towards space – also proposes that the Global Positioning System (GPS) should become an area of international cooperation for research and development, in an attempt to enhance the adaptability and compatibility of the GPS. In the past, the U.S. has excluded other countries from utilizing its GPS technology. The Obama administration believes that potential fields of international cooperation should consist of space science; space exploration (including manned space activities); space nuclear power to support space science and exploration; space transportation; space surveillance for debris monitoring and awareness; missile warning systems; earth

science and observation; environmental monitoring; satellite communications; geospatial information products and services; disaster mitigation and relief; search and rescue; maritime domain awareness; and long-term preservation of the space environment for human activity and use.

The Outer Space Treaty (1967) established the right of free movement in outer space as one of its key principles. The United States is a signatory of the treaty. The Clinton administration's National Space Policy stated: "The United States maintains that any country's space system is the country's national property, and is entitled to the freedom of movement and action in the space without interference. Any intervention of the space system on purpose will be seen as the violation of the [country's] sovereignty." The George W. Bush administration, in its National Space Policy released in October 2006, modified the last sentence: "The U.S. sees intentional intervention of its space system as a violation of its sovereignty." In its subtle but significant edit, the Bush administration changed the meaning to only emphasize the sovereignty of the United States, in effect neglecting the sovereignty of other countries. The Obama administration's "National Space Policy" currently states: "The U.S. maintains that the space systems of all countries have the freedom of passage and action without interference. Any intentional intervention of space systems, including supporting infrastructure, will be seen as a violation of that country's sovereignty." It has not only returned to the original stand of the Clinton administration's National Space Policy, but also added more multilateral emphasis by explicitly writing "the space systems of all nations."

Since the United States entered space, successive U.S. administrations have sought to maintain the country's leadership in the field. The Obama administration is no exception. In the National Space Policy, it openly stresses efforts

to strengthen “U.S. leadership” in space. These efforts include reassuring allies of U.S. commitments to collective self-defense in space-related fora and activities; promoting regulations and encouraging interoperability within these regulations; promoting security, stability and responsible behavior in space; facilitating new market opportunities for U.S. commercial space capabilities and services; advancing appropriate risk-sharing among participating nations in international partnerships; and augmenting U.S. capabilities by leveraging existing and planned space capabilities of allies and space partners. The National Space Policy also stresses that the U.S. seeks to “strengthen U.S. leadership in space-related science, technology, and industrial bases.” This translates to a policy of conducting basic and applied research that increases capabilities and decreases costs; encouraging an innovative and entrepreneurial commercial space sector; and ensuring the availability of space-related industrial capabilities, etc.

**2. The U.S. has accepted the proposal of using space for peaceful purposes, all while continuing to develop its own military capabilities in space.**

Since human society entered the space age, the international community has been demanding that outer space be used for peaceful purposes. Peaceful use of outer space has even been used in many UN documents and international treaties. The Clinton administration advocated “peaceful use of space,” but the Bush administration rejected this commitment. In its National Space Policy, the Obama administration states that “all nations have the right to explore and use space for peaceful purposes, and for the benefit of all humanity, in accordance with international law.” The preceding quote is one of the five core principles of U.S. national space policy, but the Obama administration has re-interpreted the “peaceful use of space,” now arguing that “peaceful purposes allows for space to be

used for national and homeland security activities.”

In 2002, China and Russia jointly put forward the Treaty on the Non-Weaponization of Space, but the treaty was rejected by the U.S. government. The Bush administration claimed in its National Space Policy that “it would not sign anything that might limit U.S. freedom of action in space, and [that] it must cut off the channels to prevent all countries hostile to U.S. interests from entering space.” The Obama administration reshuffled the U.S. Space Arms Control Policy, expressing willingness to negotiate on space arms control and come to an agreement. Soon after they took office, the Obama administration called for a total ban on space weapons and hoped that international society would sign a treaty on this, committing to the non-weaponization of space. This marks a departure from the U.S. goal of developing space weapons that were both offensive and defensive in nature, begun by the Bush administration, and it also is the first time that the U.S. government has officially listed the non-weaponization of the space as a long-term policy goal.

The Obama administration also stated that the United States is willing to comply with the Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies (Outer Space Treaty), which was signed in 1967. The Outer Space Treaty set the international legal foundation for mankind’s peaceful use of outer space. However, the treaty does not prohibit the deployment of regular weapons (as opposed to weapons of mass destruction) in the outer space, nor does it prohibit the development, production or use of outer space weapons. As a result it leaves a loophole for the weaponization of space in the future.

But the Obama administration has not stopped developing its national military capacity in space. The United States’ effort to develop its space capacity for civil purposes is always closely connected with its efforts to develop the national space capacity

for military purposes. The Obama administration's National Space Policy stresses that "the United States will employ a variety of measures to help assure the use of space for all responsible parties, and, consistent with the inherent right of self-defense, deter others from interference and attack, defend our space systems, and contribute to the defense of allied space systems. [If] deterrence fails, the United States will defeat efforts to attack them." This shows that the Obama administration will continue to develop the country's defensive and offensive capabilities in space.

### **3. The U.S. is actively advancing the development of commercial use of space.**

Since the 1950s, space exploration and development in the U.S. have been primarily conducted by the government, and the U.S. National Aeronautics and Space Administration (NASA) and other national institutions have been responsible for the implementation of space development. In recent years, as space technology has rapidly developed and as a growing number of space technologies have been grasped by private companies, the commercialization of space has made great progress. In October 2004, Scaled Composites, a California-based U.S. private company, developed a reusable launch vehicle (RLV) called "Space Ship One" which could carry civilians into space. Several U.S. companies are working on launching private space stations and spacecrafts to develop space tourism. NASA Director Michael Griffin proposed the concept of a "space economy" in September 2007 for the first time. Griffin claimed that the space economy had arrived. The space economy includes the products, services and markets created by various space activities, and technological innovation will become the driving force for sustainable development of space economy. In June 2010, the U.S. private enterprise Space Exploration Technologies Co. successfully test-fired a Falcon-9 carrier

rocket. It sent a model of the Dragon series spacecraft into orbit, taking a great stride in the commercial development of space transportation. NASA plans to adopt Dragon ships to transport cargo and even astronauts to the International Space Station after all the space shuttles retire in 2011.

In this context, the Obama administration's "National Space Policy" holds that "a robust and competitive commercial space sector is vital to continued progress in space." The document states: "The United States is committed to encouraging and facilitating the growth of a U.S. commercial space sector." The Obama administration will push competitive U.S. industries to participate in the global space market, promote satellite manufacturing and the development of satellite-based services and space launch, and give them top priority under the U.S. national space policy. According to the Obama administration, the main task for NASA in the future will be deep-space exploration, namely the development of a Mars exploration spacecraft, while the delivery of supplies to the space station and the development of manned spacecraft to transport astronauts will be mainly conducted by the private sectors. The government will only purchase the private sector's services; it will no longer shuttle vehicles or formulate strict security standards to ensure the safety of private space tools. In order to encourage the private sectors development of manned spacecraft, the Obama administration plans to provide \$6 billion in funding to the private sector.

#### **4. The U.S. is planning to land on Mars and establish a robot base on the moon.**

During the George W. Bush administration, NASA created the "Constellation" program, planning to build a new manned spacecraft to replace the current space shuttle and to establish a base on the moon. President Obama criticized the program as being too expensive and time-consuming. In February 2010,

the White House announced the official abandonment of the “Constellation” program. But under pressures from many sides, the Obama administration has formulated a plan to establish a base on the moon that largely depends on robots. In April 2010, in a speech at the Kennedy Space Center in Florida, Obama said that the U.S. government would increase investment in its space program and send astronauts to explore space beyond the moon in 2025, to send astronauts to orbit Mars and return them safely to Earth by the mid-2030s, and that U.S. astronauts would then be able to land on Mars. President Obama said that the goal will help NASA find new direction and “leap into the future.”

## **II. Main Factors Contributing to the Obama Administration’s Space Strategy**

### **1. “High Frontier” conception remains the theoretical basis for the Obama administration’s space strategy.**

U.S. strategist Daniel Graham was renowned for the High Frontiers Theory that he raised in 1980. He observed: “Throughout human history, those countries which could most efficiently move from one area of human activity towards another area have achieved huge strategic advantages.” Accordingly, Graham pointed out: “When the offshore of space – the atmosphere – becomes a new area of human activity, the United States will win a great strategic advantage by virtue of the fact that it has the most effective military and civil capabilities in the field of aviation. Today, after human beings finish their epic manned or unmanned space exploration, we will be able to see a country send something on par with the British merchant and navy fleets into space.” In his view, space has become the “high frontier” to safeguard national security and interests. Those countries or blocs of countries with outstanding

performance in the conquest of space will gain decisive edges in the strategic highland. This is another strategic theory exerting profound impact on the process of human society that should be interpreted along with Mahan's historic "sea power" theory and Douhet's "air supremacy" theory.

Since the 1980s, the U.S. has always seen space as the strategic "High Frontier," largely in an attempt to control space and thus maintain U.S. supremacy in the international strategic structure. If a country has an advantage in outer space weapons, it often enjoys the dominant position in the international military balance, and becomes the dominant country in the international strategic structure. In the 1980s, U.S. President Ronald Reagan unveiled the "Strategic Defense Initiative," also known as the "Star Wars" program, under the influence of the "High Frontier" theory. Since the Cold War, the "High Frontier" theory has continued to exert its influence, although the U.S. no longer emphasizes the theory. In the 1990s, the Clinton administration began to implement the "National Missile Defense Program" and the "Theater Missile Defense Program." The Obama administration has inherited the essence of the "High Frontier" strategy, and the long-term goal of its space strategy is still to control space.

## **2. U.S. national security strategy and military strategy**

The U.S. space strategy and the national space policy are formulated under the direction of the U.S. national security strategy, while the U.S. space military strategy is formulated under the guidance of the U.S. defense policy and military strategy.

The Reagan administration put space into the scope of U.S. national security for the first time. In July 1982, President Ronald Reagan signed National Security Decision Directive Number 42, claiming that "the United States will engage in space activities for self-defense." According to this directive,

the U.S. government set up a senior inter-ministerial group responsible for drawing up the space policy, headed by the National Security Affairs Assistant to the President. In order to reverse its disadvantages in the nuclear arms race with the Soviet Union, President Reagan proposed and implemented the “Star Wars” program. As a result, the United States managed to occupy the high ground of space high technology and thus gained the strategic initiative in the arms race with the Soviet Union.

In the wake of 9.11, the Bush administration gave first priority to anti-terrorism, addressed the proliferation of weapons of massive destruction in its national security strategy, and implemented the “preemptive” military strategy. Correspondingly, the Bush administration accepted the concept that space will “inevitably” become the “fourth battlefield” after land, sea, and sky. The idea was first raised in the 2001 report of the Space Commission chaired by Donald Rumsfeld. In accordance with this concept, the Bush administration saw space resources as the core of U.S. national security. The administration not only intended to make space a “force multiplier” but also attempted to “control space.” To this end, the United States began to develop and improve the theory and principles of space warfare. In 2003 the U.S. Air Force introduced “Vision 2020.” It put forward the idea of “full-spectrum advantages” and put forth the idea that the United States can only control the globe when it controls the outer space. In August 2004, the U.S. Air Force released the “counter-space operations” document, stressing that the U.S. military should have the capability of launching free attacks from space. In 2006, the Bush administration released the “National Space Policy” document, demanding that the United States should have the same freedom of action in space as in the sea or air. The administration mandated that the Secretary of Defense “formulate necessary plans to develop space

capabilities to ensure the accomplishment of the goal, while not recognizing the freedom of action of hostile countries when receiving orders.” The Bush administration’s space strategy accelerated the pace of the U.S. space weaponization.

The Obama administration abandoned the Bush administration’s unilateralism, stressing that it would give top priority to multilateralism in handling international affairs, striving to cooperate with its allies and international organizations, and that military means would only be the last resort when all diplomatic efforts fail. The Obama administration has expanded its cooperation partners from traditional allies to include emerging powers like China and India, and expressed willingness to conduct cooperation with China on issues of common concern. In terms of military strategy, the Obama administration places more relative importance on the War in Afghanistan and the withdrawal of troops from Iraq. Under the influence of this national security and military strategy, the Obama administration on the one hand continues to develop space military capabilities, but on the other hand emphasizes space cooperation and supports space non-weaponization.

### **3. The growth of U.S. space technology**

U.S. space science and technology lays the basis for its space strategy. In 1957, in the wake of the Soviet Union’s launch of the first man-made satellite, the United States strived to develop aerospace technology, establishing three branches of the U.S. space program: the space military, space information technology, and space exploration. In 1960, NASA put forward the “Apollo” program with the goal of landing on the moon. In July 1969, this goal was successfully attained. This feat showed that U.S. space technology and space exploration made great achievements. In the meantime, the U.S. military space technology and space information technology have also made significant progress, all of which have laid the ground for the

“Strategic Defense Initiative,” proposed by President Reagan in 1984.

After the Cold War, the world witnessed the continued development of U.S. space information technology, space military technology, and space exploration. Especially noted was the U.S.’s robust progress in space military technology and space information technology. For example, in the 1991 Gulf War, the United States massively employed the space military resources in intelligence, surveillance, reconnaissance and communications, and extensively used precision-guided weapons and smart bombs. To many, this actually signaled the beginning of space warfare. From Operation Desert Storm in 1991 to the Kosovo War in 1999 and the “Iraq war” in 2003, the U.S. military’s dependence on space resources has increased rapidly. Precision guided munitions used by the U.S. Air Force have risen from 7.7 percent to 29.8 percent and now to 68 percent. These precision guided munitions are often dependent on space satellite positioning and navigation. The U.S. military believes that space-based assets no longer simply enhance the military strength of the country; they believe that their space-based assets essentially guarantee victory in war.

As early as 1985, the United States successfully tested an air-launched kinetic-energy anti-satellite weapon system to intercept an abandoned satellite. In October 1997, the U.S. Army for the first time used mid-infrared advanced chemical laser technology to destroy a satellite in orbit. The United States has also deployed an anti-satellite weapon, which is a satellite communications system to disrupt the enemy’s electronic warfare communications systems. In February 2008, the U.S. military destroyed a U.S. spy satellite that was out of control just 247 kilometers off ground with the “Standard 3” interceptor missiles, showing that the U.S. missile defense system is also used as a kinetic-energy anti-satellite weapon.

Nowadays, U.S. national security is more and more dependent on space assets. There are about 900 operational satellites in space orbit, with over 400 satellites owned by the United States. In 2007, the global satellite business activities contributed \$123 billion to the world economy. All U.S. military institutions are using space – the “high ground” – to obtain intelligence, surveillance, reconnaissance, navigation and communications capabilities via military and civilian satellites. The U.S. military has at least 83 dedicated satellites, and has more non-dedicated satellites for the purposes of navigation and earth observation.

**4. Other countries' developments in military capabilities in space may signal an increase in the vulnerability of U.S. space assets.**

Despite the growing U.S. superiority in space, U.S. space assets are becoming increasingly vulnerable. If several key satellites are damaged, the U.S. military command and intelligence systems, as well as civil infrastructure in space, will be paralyzed.

The United States believes that China successfully test-fired an anti-satellite weapon in January 2007, and that Russia has anti-satellite capability as well. Moreover, anti-satellite weapons are technically easier than missile defense weapons, because the satellites are flying around the known orbit or in a relatively still state, and are bright objects against a dark background. Therefore, to find such a target is easier than finding a fast moving target. U.S. government officials have said that in the face of the rapid development of anti-satellite technology in other countries, the United States satellites have fallen into an “unprecedentedly weak state.”

In most cases of international arms control negotiations, when the U.S. possesses a new weapon, it is by no means willing to sign an international treaty to limit this weapon. But when other countries also have such advanced weapons and may pose a threat to the United States, the United States suddenly becomes

ready to reach an international arms control agreement. At present, even though the Obama administration continues to develop military and civilian space capabilities and assets, and stresses the need to maintain a leadership in space, it has ascertained the policy of arms control in space and will put the emphasis on protecting U.S. assets in space from attacks.

### **5. The attitude of the U.S. Congress**

The U.S. Congress is the approval body for the space budgets, including budgetary decisions concerning space exploration, space information technology, and space military. Its attitude is of vital importance to the implementation of the U.S. space strategy. The majority of Congressional representatives are laymen of space technology and projects, and their attitudes towards the budgets proposed by the administration are mainly based on the following three factors:

#### **The election factor**

Congressional members, especially members of the House, are predominantly busy establishing political capital for the next election. They often strive for more employment and public works to make them more popular with their constituents. In states where the aerospace industry and NASA play larger roles (known as the “space states”), politicians are very energetic in their treatment of aerospace projects. But in the places with less direct connection to the space, representatives generally have little interest in the space program.

#### **The support of the U.S. public**

The U.S. public typically supports space exploration activities, holding that they are conducive to maintaining U.S. leadership in space, or even increasing the wealth of the United States. But the public pays more attention to the government’s investment in roads, schools, health care and issues of immediate interest. They believe that space exploration should not be on par with these infrastructural investments, and that space programs

may be abandoned if necessary. For example, in January 2004, the Bush administration announced the “new space program,” declaring that the U.S. would return to the moon before 2020. In July of the same year, the U.S. House of Representatives reviewed NASA’s budget. Although the special committee expressed support for the Bush administration’s new space program, it cut NASA funding by over \$1 billion.

### **The fiscal situation**

The Clinton administration achieved a fiscal surplus, but the Bush administration left a huge deficit for the Obama administration. In February 2010, the White House submitted the budget report for the 2011 fiscal year to Congress. The total budget was \$3.83 trillion, and the budget deficit rose to \$1.27 trillion. Obama wanted to keep the budget deficit within \$727 billion by the end of his first term. To this end, in the budget bill President Obama proposed cutting more than 120 projects, including the Bush administration’s project to return to the moon.

### **6. U.S. lobbyist groups and the media**

In the U.S., lobbyist groups related to the space policy include non-government organizations from the aerospace industry and the “space states.” For example, in February 2010, after renouncing the “Constellation” program to return to the moon, the Obama administration was met with criticism from many sides. Neil Armstrong, the first U.S. astronaut to land on the moon, and Eugene Cernan, the last U.S. astronaut to land on the moon, together with several other astronauts who landed on the moon, rebuked the Obama administration’s decision, claiming that it dealt a “devastating blow” to the space exploration program. There was also criticism that Obama’s decision to cancel the “Constellation” program would lead to job losses. Partly due to such pressures, President Obama said in April of the same year that the government would increase its investment in the space program, and promised to provide \$40

million to help workers who lost their jobs due to the retirement of the space shuttle at the Kennedy Space Center and the surrounding area. In addition, the administration vowed to create more than 10,000 jobs by transforming the Kennedy Space Center, upgrading the launch facilities, and encouraging the private sectors to develop spacecraft.

In the United States, the media at times focuses on the government's weaponization measures in space, but the readers have little interest in this subject. For example, in the wake of 9/11, supporters of space weaponization criticized the media for their disperse attention, while opponents of weaponization of the space claimed that the media had incited horror groundlessly. Sometimes, the U.S. military also takes advantage of the media to probe the reaction of the public to the space weapons. For example, in August 2004, the U.S. Air Force published the military doctrine document entitled "counter-space operations." The document claims that space operations in defense of U.S. interests can be both defensive and offensive, all implying the possible use of space weapons. One of the intentions of the U.S. Air Force in releasing the document in a low-profile way was to test the extent to which the file would arouse concern and opposition. But this document did not attract attention, so in 2005 the U.S. Air Force demanded a special administrative permit to implement the new national space policy guidance and to further advance the deployment of offensive and defensive space weapons.

### **III. The Obama Administration's Space Strategy and Its International Security Implications**

**1. The risk of an arms race in space may be reduced, but there is still a long way to go before signing an international treaty on the non-weaponization of space.**

The George W. Bush administration ran counter to the world

trend by focusing on the control of space and the development of space weapons. The Obama administration's national security strategy has laid more emphasis on international cooperation, including cooperation with the emerging powers, to deal with traditional and non-traditional security threats. This strategy is also applied to the realm of space. The Obama administration has abandoned the Bush administration's principle of putting military as its top priority in space, and attached more importance to international cooperation in space, including multilateral cooperation. The United States tries to maintain its leadership in space through both hard and soft power and though international cooperation instead of weaponization of the space.

The militarization of the space and the weaponization of the space are two different things. The militarization of space is the military use of the space, including a variety of military satellites. At present, space has a large number of military satellites, so it has actually already been militarized. Weaponization of space is the deployment of weapons in space or the deployment of weapon on land, sea and the atmosphere to target space assets. In this regard, the United States has already deployed weapons on land and sea to target space assets, but they, along with all other countries, are yet to actual deploy weapons in space. Therefore, there may still be hope in achieving the non-weaponization of the space.

In recent years, one of the focuses of the debate on space security in the United States is how to ensure security of U.S. assets in space: whether by establishing both offensive and defensive weapon systems to protect assets, or by relying largely on international systems and international agreements to protect U.S. assets in space. Scott A. Weston of the U.S. Air Force argued: "If the United States advances the weaponization of the space, the effect and outcome will not become notable,

and will do nothing to reduce the vulnerability of U.S. space assets... To ensure the establishment of rules of the game, and eventually to reach the convention that protects the future space interests of the United States, the existing passive defense capabilities, coupled with near-space defense technology development, would resolve the vulnerability of U.S. national security and safety needs; maintaining the 'space pure land' will surely bring benefits to U.S. economy, politics and even national security." The Obama administration has tilted towards the second opinion. Obama himself has gone further to set space non-weaponization as the long-term goal of his space policy. In addition, the U.S. government needs to cut the fiscal deficit, which could be aided by cutting some space weapon programs. Therefore, the Obama administration would like to hold negotiations on space arms control. These negotiations would be conducive to reducing the risk of space arms race.

However, due to the constraints of domestic forces, the United States at present puts much emphasis in negotiations on increasing space transparency and confidence-building measures. It aims to reduce the risk of attacks on U.S. satellites, and raise the security of the U.S. and its allies' space assets in a fair and verifiable way. At present, the United States will not easily agree to sign the international treaty on the non-weaponization of the space. Much needs to be done before the U.S. can sign such a treaty.

**2. The U.S. has increased the possibility of carrying out international cooperation in space, but mainly with its allies.**

In June 2010, President Obama declared in a statement: "We no longer compete with rivals; in fact, our central goal is to promote peace, cooperation and collaboration in the area of space exploration, which will not only avoid divergence, but also help our running ability in low-earth orbit and beyond."

The Obama administration's new space policy will help enhance international cooperation in space; however, this cooperation will be conducted mainly with its circle allies.

China and the United States may have cooperation over international space stations and space rubbish disposal, but given the existing "Cold War" mentality of some U.S. politicians and the strict control measures and examination and approval procedures on the export of high-tech, especially the dual-use technology, the cooperation between the U.S. and China in the space field is quite limited.

**3. Space rivalry is entering a new phase, and the possibility of the U.S. and emerging powers falling into a security dilemma should not be ruled out.**

Major countries in the world are now all mounting up their efforts to develop space programs, and the rivalry in the field of space is increasingly tense. The vast majority of countries see space resources as a tool for globalization.

The race in space between countries can be benign competition instead of the "zero sum game" mentality that now prevails. But the Obama administration is still developing space weapons. In April 2010, the U.S.'s first "space fighter" X-37B conducted a trial flight. If the United States continues to develop and deploy space weapons, other countries will have to make necessary responses to defend themselves. Therefore, the United States and other powers, including some major emerging powers, will fall into the "security dilemma." The scenario is quite simple: one party develops new weapons to obtain an absolute security advantage, the other is concerned and thus takes a similar approach, and in the end, the two sides descend into a costly arms race. This will not bring any benefit to either country's national security. 