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## China's Role in Space: Cooperation, Competition, and Conflict

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## China's Role in Space: Cooperation, Competition, and Conflict

The panelists in this session were in agreement that China pursues cooperation, competition, and conflict in space. Space capabilities can be used to forge and improve relations with some states. These capabilities are also a means of displaying and projecting comprehensive national power. Finally, space capabilities apply to conflict.

### Cooperation

In terms of cooperation, China emphasizes in its two Space White Papers that it is interested in engaging in cooperative space ventures. The success of the Double Star program on heliophysics is repeatedly mentioned in China as an example of cooperation. A second example is the Sino - Brazilian CBERS / Ziyuan satellite program that provides remote sensing of Earth resources. Data acquired from this program is made available through data sharing agreements with African states in particular. China is also cooperating with a number of states with the creation of the FengYunCast weather service uplink.

Chinese pursuit of international cooperation is not just a matter of joint space missions. Through the Asia Pacific Space Cooperation Organization, China has made it clear that it views space as a diplomatic tool. Through this Organization, headquartered in Beijing, China

is prepared to use space as one means of expanding influence and improving relations with neighboring states.

In the case of space cooperation between the U.S. and China, there is a presumption among U.S. leaders that the Chinese place a greater value on cooperation. This is insulting to the Chinese. The Chinese desire to be treated as equals by the U.S., rather than in the way the U.S. has tended to view space cooperation with China as a reward for good behavior internationally. Despite this, there is recent progress in space cooperation. There are indications of future space science cooperation between the U.S. and China. Panelists suggested as well that the U.S. should discuss with China measures for safety in spaceflight, like compatible air locks and compatible electrical busses for possible future cooperation with the Chinese on the ISS program.

In the past, the U.S. was able to achieve space cooperation with the Soviet Union despite deep suspicions, a nuclear arms stand-off, and the Cold War. Yet with the Soviet Union there was a long history of a number of strategic and conventional confidence building measures, such as strategic arms talks and agreements on not interfering with National Technical Means of Verification (NTMV). Today, there is no dynamic of cooperation and confidence building measures with the Chinese as there was with Russia during the Cold War. To create a climate for Sino-U.S. space cooperation, both states will need to engage in confidence building discussions.<sup>1</sup>

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<sup>1</sup>One panelist mentioned that the Chinese military leadership was invited by USSTRATCOM Commander, General Kevin P. Chilton. On 28 October 2009, General Chilton hosted

## Competition

China has made efforts to enter into the area of commercial launch services and the international satellite market. The recent Chinese sale of satellites to Nigeria and Venezuela are examples of these efforts, which included satellite manufacture and launch, and training of local personnel, all at competitive prices. An additional area that typifies the competitive nature of China's space efforts lies with the indigenous development of a satellite navigation system, Compass. This development makes China a potential competitor for the satellite navigation and positioning market regionally and worldwide. China has emphasized the importance of satellite navigation and positioning for future business and security development. China is also playing a greater role in the effort to develop international standards for space activities, including orbital data. Chinese participation in these efforts will improve their competitiveness, as they help shape industry standards and best practices.

Chinese competition in space is not simply a matter of technological capability as there is a "space race" among the major spacefaring Asian states. Japan and India have little desire to be left behind in space, while China advances its space activities. For all these Asian space powers – China, Japan, and India – space capability reflects comprehensive national power, and it is not surprising that these space powers want to use satellite launches, lunar probes, and human spaceflight missions for advertising their scientific and engineering prowess as well as the state of

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General Xu Caihou, one of two Vice Chairmen of China's Central Military Commission, today. General Xu's visit is a vital part of U.S. efforts to engage China on shared strategic issues, develop cooperative capacity and foster institutional understanding between the two militaries, <http://www.stratcom.mil> (accessed November 2009).

their economic, technological, and human resource capabilities.

## Conflict

There is the potential of conflict involving China in space. This potential is supported by several key developments. One, the overall policy climate with regard to space and defense has not changed since the export controls issues and violations in relation to commercial space cooperation between the U.S. and China in the early 1990s. Two, there exist lexicon and language issues between the U.S. and China. For example, the concept of deterrence in China is different than it is in the U.S. Space deterrence for the Chinese refers to the idea of signaling an opponent of the likely actual use of space power and the attendant consequences in the hopes that this will persuade an opponent to undertake a cost-benefit analysis, affect their psychology, and compel them to abandon their original aims. Within this context, there is an emphasis on space deterrent capability and the need to demonstrate that capability. This accounts for the laser blinding and ASAT tests conducted by China.<sup>2</sup>

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<sup>2</sup>China has stated that they reserve the right to continue ASAT testing. The panel debated the reasons for China's ASAT test and the chain of events that led to the test. One view was that the ASAT test was conducted not per se in response to any specific U.S. actions and not targeted at any specific adversary. The test was simply a logical technology development path since the 1960s and 1970s for the projection of Chinese space power. The political view is that test was a result of U.S. actions, primarily the 1999 U.S. bombing of the Chinese embassy in Belgrade. The decision for the test was made at the highest levels of government, including both the People's Liberation Army and Ministry of Foreign Affairs. Further, orbital debris experts in China briefed officials that the risk was minimal. One panelist further remarked that in hindsight the Chinese see the ASAT test as a poor political choice given the debris issue and negative international implications for China, in particular, as a norm-setter for space.

A third area of conflict lies with space surveillance. Surveillance is seen as hostile by China as there is no shared understanding of the importance of NTMV as there was with Russia. Chinese writings also suggest that space is not necessarily a global commons – suggesting an interest in extending sovereignty there – and that space is a possible contested battlefield, alongside land, sea, air, and cyberspace.

As with cooperation and competition, conflict, including deterrence, is not solely aimed at the U.S. Chinese leaders have concerns about Japan, especially in light of Japan's new Basic Space Law, which allows Japan to use space for national security purposes. In addition, China is concerned about the 2008 "Joint Declaration on Security Cooperation" between Japan and India.