

“Potential for Cooperation with China”

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Is China genuinely interested in cooperation on space and space security?

The Obama administration seems interested in engaging China on these issues and appears to be making a good-faith effort. Officials point to the language on space in the [Joint Statement](#) issued after President Obama’s visit to China in November 2009; NASA Administrator Bolden’s visit to China in November 2010; and ongoing attempts to initiate a dialog on strategic stability, which presumably would include space.

Unfortunately, administration officials attempting to engage China on space are frustrated with China’s apparent lack of enthusiasm. Despite the language in the November 2009 Joint Statement, China does not seem to be willing to meet the United States halfway, and is not pressing to make space an important issue in bilateral relations.

More troubling, China is pursuing, in a sustained and systematic fashion, the development, testing, and deployment of counter-space capabilities.

Obama administration officials don’t seem to know which part of the Chinese bureaucracy they should attempt to engage on space cooperation and space security. One of the questions frequently raised by the administration is. “Who should we talk to?” Another is “What does China want?”

Neither of those questions is easy to answer, even for the Chinese themselves. One thing Obama administration officials can do, however, is to try to understand the questions of international cooperation in space and space security from China’s point of view.

History Matters

To appreciate China’s current perspective, U.S. officials responsible for engaging China on space-related questions need to look at China’s interest in cooperation on space and space security in historical context.

China’s current space programs, infrastructure, bureaucracy, and funding mechanisms, as well as its beliefs about space—something the U.S. State Department derisively refers to as “theology”—are products of an early Chinese analysis of U.S. President Ronald Reagan’s March 1983 address launching the Strategic Defense Initiative. The speech was a “Sputnik moment”—a formative moment—for China’s space community.

At that time, at the insistence of a small group of scientists and engineers leading China's defense science community, China's political leaders made a long-term strategic commitment to ensure a seat at the table—or “a place for a mat” (一席之地) as the Chinese saying goes—for China in space. China's political leadership committed a large sum of what were, in the mid-1980s, very limited domestic economic and technical resources to building the human and technical infrastructure it needed to realize this ambition.

Recently published histories of China's space program all suggest the Chinese leadership made this commitment because it believed what its scientists and engineers told them—that President Reagan's speech would launch a “new Apollo program,” a massive investment in new technology focused on space that would have important scientific and economic spinoffs. China's defense science community was very concerned about the implications of a new U.S. scientific and technological push ahead, and saw a real danger the China could be left far behind if it failed to respond. In the letter they wrote to Chinese leader Deng Xiaoping urging him to make a comparable strategic investment in space technology, China's defense scientists argued that China was in danger of becoming a second-rate world power.

Chinese commentators often compare the Shenzhou program—China's human space flight program—to China's nuclear weapons program. Western observers tend to hear this as reflecting the military utility of space technology. But this comparison instead reflects a long-running internal Chinese discussion about national status, international respect, and technological prowess—not military force.

Besides focusing on space technology generally, China's decision to invest in space technology in the 1980s did include investments in military space programs, most notably the hit-to-kill technology demonstrated in China's 2007 anti-satellite (ASAT) test and 2010 missile interception. China had been observing U.S. and Soviet missile defense and ASAT tests as early as the late 1960s, so it is not surprising that it began a similar development program. That program reached the point of testing the technology only in the last couple years.

At the same time, given its concern about the direction U.S. and Soviet space technology might be headed, China also launched a diplomatic initiative for a treaty to prevent an arms race in outer space. China's Ambassador to the United Nations Conference on Disarmament (UNCD) in Geneva presented a very radical and comprehensive set of restrictions on the military use of space in a 1985 statement at the UNCD. This included restrictions on using satellites to transmit images and communications for military purposes.

It is important for Americans to remember that at the time China decided to make these substantial investments in space, the U.S. and China were allies in the Cold War struggle against the Soviet Union. The United States was sharing military information and technology with China, trade and economic relationships were developing rapidly, and

Deng Xiaoping was named Time Magazine's "Person of the Year" two times during the Reagan's tenure in office.

In sum, China has been pursuing space capabilities, including military space and counter space technology—as well an international agreement to restrict it—for nearly a quarter century.

This dual pursuit of military space technologies and international measures to restrict them seems to perplex administration officials attempting to engage China on space. They often note the contradiction and routinely suggest these seemingly contradictory Chinese policies suggest duplicity.

But there is another possible interpretation of why China might be pursuing military space technology at the same time it is pushing for an international agreement to restrict it. At the time of Reagan's speech, China's defense science community understood the general technological trends and alerted the Chinese leadership of the need to keep pace. China's leaders responded to that warning with a strategic investment in space technology, but also made an effort to deal with the threat of falling behind by making the case for an international agreement to restrict military applications of this technology. The two initiatives work together to help China close the gap in technological development while reducing Chinese exposure to its military implications.

China's initial investment in space faced two considerable obstacles: limited access to space technology and an even more limited supply of qualified scientists and engineers. The ten lost years of the Cultural Revolution (1966-1976) devastated the Chinese intelligentsia and Chinese higher education, as well as the Chinese economy. Many in China argued that a huge investment in space was a mistake, and that China should focus on more basic technologies before committing limited resources to an ambitious high-tech development program. One of the critical steps the Chinese leadership took to overcome its resource limitations was to import and utilize foreign space technology and expertise. This step was always conceived as a stopgap measure and not a permanent feature of China's space program. This is important to understand when looking at China's space program today.

Salient Features of China's Current Space Program

While keeping the historical context in mind, especially when engaging the Chinese on potential cooperation, administration officials should remember that China's space program continues to change and develop. While general Chinese concerns about space may not have changed, its capabilities have changed a great deal. The Chinese space program the administration seeks to engage today is much larger and more complex than the program the United States engaged in the 1980s and 1990s.

There are several salient features to keep in mind about China's space activities today:

- Rapid growth in numbers of people, enterprises, organizations and projects, which has led to almost constant bureaucratic reorganization.
- A reduced need for foreign technology and expertise due to the development of Chinese capabilities, which makes cooperation with the United States in space less of a priority.
- Feelings of resentment in China's space community and negative attitudes toward cooperation with the United States due to U.S. policies restricting cooperation, such as exclusion of China from the International Space Station; export controls that have severely restricted China's ability to participate in the international launch services market; and highly restrictive visa policies for Chinese space professionals.
- A recognition that—despite its need to continue working to keep pace in space—China has less concern that it is falling behind, or that its national survival or international status is in danger.

Implications on Prospects for Cooperation

The growth in the size and capability of China's space sector has virtually eliminated its previous incentives for cooperation in space.

China no longer needs to import foreign technology and expertise. Moreover, many of the scientists and engineers in China's space sector believe they make more rapid progress by pursuing a policy of self-reliance. As a result, a significant faction within the Chinese space community either actively opposes increased international cooperation or is disinclined to support it.

Increased proficiency in the field of space technology has reduced the Chinese political leadership's anxieties about national status and international competitiveness in space. Continued international isolation is an embarrassment to the Chinese leadership, and something they would like to change, but so long as the success of its own program continues to attract international attention, continued isolation does not carry any meaningful costs. The international status Chinese leaders seek through space activity can be obtained without cooperation with the United States.

China's space scientists and engineers are content with the status quo. Any impetus for change will need to come from outside the space sector. Unlike in the past, cooperation with the United States or other countries will only take place if it is imposed on China's space sector by the political leadership because the political leadership saw doing so as a high priority.. Without this, China's space programs are likely to continue on their current trajectory.

Limits of Obama Administration Efforts to Engage China on Space

The Obama administration seems reluctant to engage China on large or high profile projects in space. It strongly prefers to take small, incremental steps toward cooperation in space, as well as toward discussion of space security. Unfortunately, the Chinese

leadership is unlikely to provide any incentives for its space professionals to engage the United States on such incremental steps. With nothing significant at stake, no one in China's space sector is likely to assign a high priority to these incremental efforts at engagement. Consequently, the Obama administration's overtures are passed down to the officials in China's space bureaucracy assigned to interact with foreign entities, who are often the least powerful, least informed, and most risk-averse individuals in the Chinese space sector.

Thus, to be successful U.S. efforts to engage China on cooperation in space need a specific task or project, somewhere to go together or something to do together. This project needs to be significant enough for the senior Chinese leadership to interrupt the trajectory of China's current space agenda and direct China's space planners to accommodate it.

For that to happen China's leaders will need to be confident the United States will carry through on the project. The abrupt end to the agreement to have China launch U.S. satellites in the 1990s is a reminder of the potential political risk to any Chinese leader considering cooperation with the United States in space.

In the area of space security, China has long insisted on international treaty negotiations. In the absence of such negotiations, there is no high-profile objective that would require the Chinese leadership to direct its space community to become engaged in developing specific policies and practices to promote space security. There is some question whether international movement toward a new code of conduct for space would be important enough for the Chinese to engage internationally. The EU Code of Conduct is largely completed and unlikely to be open to significant amendment, leaving no role for China to make a meaningful contribution to its development. Thus it is unlikely to compel the Chinese leadership to engage its technical community in developing a Chinese position or response.

In the absence of something significant at stake for China to win or lose, U.S. efforts to engage space stakeholders are unlikely to succeed. The Chinese Foreign Ministry, like the foreign offices within Chinese space entities, is not empowered to initiate policy. If there is nothing to implement, there is nothing for them to do but engage in polite conversation. This may be why the Obama administration officials leave their discussions with their Chinese counterparts feeling confused and frustrated.

Conclusion

So here is the bind that must be unraveled: To decide to engage, Chinese leaders need something big enough to make it worthwhile for them to decide to disrupt business as usual and commit resources to something that may well not succeed. It also needs to have confidence that the United States is committed to the project.

But the United States appears instead to be looking for small projects to begin with in order to gauge Chinese interest, build a sense of trust between the two countries, and have examples of success that it can hold out to skeptics.

The administration may decide it is not willing to take as big a step as is needed to cut the Gordian knot that's binding up meaningful engagement with China on space. But it should at least understand what's behind China's tepid response.