

WebMemo



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U.S.–China Space Cooperation: More Costs Than Benefits

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With the delivery of the full report from the U.S. Human Space Flight Review Committee (commonly referred to as the Augustine Report), the potential for a substantial, multi-year gap in U.S. manned spaceflight capability has drawn increased attention. In light of this problem, the idea has been raised in some quarters, including in the report, that the United States should expand its cooperation with the People's Republic of China (PRC) and leverage Chinese space capabilities. Such cooperation has far more potential cost than benefit.

Very Real Problems. The idea of relying on Chinese cooperation glosses over very real problems. At a minimum, it is an open question whether the PRC is capable of providing substantial support to the International Space Station (ISS) in the timeframes discussed by the report. It is important to recall that the PRC has had only three manned missions and has never undertaken a manned docking maneuver. Would the U.S. and its partners be comfortable inviting a neophyte Chinese crew to dock with the ISS?

Beyond the technical issues, however, there are more fundamental political concerns that must be addressed. The U.S. military depends on space as a strategic high ground. Space technology is also dual-use in nature: Almost any technology or information that is exchanged in a cooperative venture is likely to have military utility. Sharing such information with China, therefore, would undercut American tactical and technological military advantages.

Moreover, Beijing is likely to extract a price in exchange for such cooperation. The Chinese leader-

ship has placed a consistent emphasis on developing its space capabilities indigenously. Not only does this ensure that China's space capabilities are not held hostage to foreign pressure, but it also fosters domestic economic development—thereby promoting innovation within China's scientific and technological communities—and underscores the political legitimacy of the Chinese Communist Party. Consequently, the PRC will require that any cooperation with the U.S. provides it with substantial benefits that would balance opportunity costs in these areas.

What's the Point? So what would be the purpose of cooperation from the Chinese perspective? To sustain the ISS? China is hardly likely to be interested in joining the ISS just in time to turn out the lights. There is also the question of whether the other partners in the *international* station, such as Russia and Japan, are necessarily interested in including China, especially now that the most expensive work has already been completed.

There is also the issue of transparency. While it seems logical that the principal partners for cooperation would be the Chinese and American civil space agencies, the reality is that the China National Space Agency is, in fact, nested within the Chinese

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military-industrial complex rather than being a stand-alone agency.

Indeed, China's space program is overwhelmingly military in nature. And nowhere more so than in the manned space program, the "commanders" or "directors" of which include the head of the General Armaments Department, one of the four general departments responsible for day-to-day management of the entire People's Liberation Army (PLA). The challenges presented by the Chinese space program's strong ties to the PLA are exacerbated by the generally opaque nature of China's space program on issues ranging from who the top decision-makers are to the size of their budget. Any effort at cooperation is likely to be stymied so long as the PRC views transparency as a one-way affair.

Reciprocity Lacking. According to the discussions between Presidents Bush and Hu Jintao, NASA Administrator Michael Griffin's groundbreaking visit to China in 2006 (the first by a NASA administrator to the PRC) was supposed to be matched by a visit to the U.S. by the head of China's Second Artillery. Yet the PRC has never agreed to that visit, despite Hu's commitment and repeated invitations from the U.S.

If reciprocity in terms of basic leadership visits cannot be obtained, it is even more problematic how either side would achieve reciprocity in other areas. There is a general disparity in technology between the U.S. and the PRC. Under such circumstances, reciprocity would likely benefit the Chinese side far more than the U.S. side. And if the U.S. holds back, it only undermines the case for cooperation. Yet well-founded reticence on the part of the U.S. to share information could also jeopardize the missions and safety of the crews.

These are the high costs of cooperation with the Chinese on manned space flight. Covering funding shortfalls seems to be the only tangible motivation for the U.S., and even that prospect is not promising. If U.S. decision-makers conclude that a manned-space capacity is important to American interests, they should find a way to properly fund it—and not rely on the one country in the world likely to emerge as a peer competitor for global influence.

By contrast, reaching out to the Chinese from a position of strength and independence in the cause of a broader diplomacy and development of space is appropriate. But even then, such engagement must be strongly conditioned to demand transparency, limit expectations, and involve America's allies and partners.

Recommendations:

- **Demand transparency.** Transparency requires an equal commitment from both the American and the Chinese sides. It is essential to first determine what the U.S. hopes to obtain from the Chinese *before* entering into negotiations. (The Chinese side will most assuredly know what they want to gain from the U.S.) Once these goals are decided upon, it is important to push the Chinese for transparency, especially in regard to details about the space program's decision-makers. Who are the Chinese negotiators, and for what part of the Chinese bureaucracy will they be speaking? Will they be in a position to not only negotiate but enforce whatever provisions are reached?
- **Limit expectations.** Given the absence of previous space cooperation and with only limited examples of government-to-government cooperation in general, any effort at Sino-American space cooperation should start small. At this stage, thoughts of a joint manned mission are premature. Instead, the focus of any U.S.-China interaction should be on implementing concrete steps that would allow for expanding future space cooperation. Therefore, the U.S. should establish a common set of standards for instruments and data so that the two sides can at least have compatible information collection in their respective space systems.
- **Consult with allies and partners.** Space is not just about space. Any American interest in cooperating with China on space will be seen as a statement of broader U.S. policy toward the PRC. Thus, such negotiations will require coordination with not only America's ISS partners, who have a stake in any outcome affecting the station, but also U.S. allies in Asia. Furthermore, any expansion of space cooperation will be seen as affecting the cross-Straits situation as well as the

growing tension between India and China. Both India and Taiwan need to be kept apprised of any developments that might occur.

Be Cautious. The potential costs of extensive cooperation between the U.S. and Chinese space programs far outweigh the likely benefits. Steps

that can safely be taken to build toward future collaboration must be cautious and contingent.

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