Marshall Institute Policy Outlook
January 2007

Crossing the Rubicon in Space Again: *Iacta alea est*

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"The die is cast," Suetonius reports Julius Caesar said as he exhorted his men to cross the river Rubicon and created the popular idiom for a point of no return. The long-held Rubicon in space, the deployment and use of so-called space weapons, was crossed long ago by both the former Soviet Union and the United States. Still, many have claimed that it is possible to turn back history's pages and preserve space as a sanctuary.

If there were ever serious doubts about the impossibility of that dream, they are dispelled now. Last fall, when reports that China had used lasers to "blind" a U.S. satellite were made public, the Rubicon of space was crossed (again) and now we learn that China has demonstrated successful anti-satellite (ASAT) capabilities launched from earth.[1] In destroying their own satellite, China has signaled to the world its capability to threaten essential satellites directly, by physically destroying them, and indirectly, by using lasers and other jamming techniques to deny free use of them.

The Chinese die is cast. They are a military space power and a force the U.S. must reckon with immediately.

Why has China developed these capabilities? As a world power and rising military competitor, it is natural that Chinese leaders would probe for weaknesses in its competitors and develop the strategies to exploit those weaknesses. Over the past decade space-based navigation, communications and reconnaissance systems became key enablers for U.S. global power projection. This integration of space and warfighting is currently unmatched and gives the U.S. the unique ability to influence world events and promote the values of freedom, democracy and enlightenment.

During the waning years of the Cold War, the Soviet Union and U.S. also tested kinetic-kill ASATs. While the Soviet co-orbital ASAT undoubtedly would have posed a threat to low-orbiting spy satellites, the loss of these highly classified "national systems" would have had little direct impact on conventional forces in Europe. By contrast, a coordinated attack on U.S. space assets today would have profound consequences for coalition operations—potentially turning back the clock several decades and thus increasing risks for U.S. and allied soldiers, sailors and airmen.

That other nations, and especially an emerging peer competitor like China, would seek to counter America's asymmetric advantage in space, including the development and deployment of ground- and space-based anti-satellite weapons, was thus perhaps inevitable. Students of the Soviet ASAT program also should not be surprised that the Chinese military's provocative ASAT development program was accompanied by hypocritical hand-wringing over the specter of an arms race in and the weaponization of outer space.

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[1] Covault, Craig "Chinese Test Anti-Satellite Weapon." *Aviation Week and Space Technology* January 17, 2007, ***http://www.aviationweek.com/avnow/news/channel_awst_story.jsp?id=news/CHI01177.xml*** (accessed January 18, 2007).

There can be no doubt that space is now weaponized. Arguments over whether an earth-launched ASAT is really "a space weapon," implying that they might not be, given that they are not launched "from" space, ignores the practical reality that an ASAT launched from either the ground or from space brings war to space. Debate over the nuances of the lexicon may continue, but the threat to the United States remains the same.

So the question now facing America's leaders is how does the U.S. best deter, deny, and dissuade the Chinese, and other emerging space powers, from hostile actions in space? There is no doubt that diplomats at the State Department and military planners in the Pentagon and at United States Strategic Command, and many, many others are working through those options right now. America's political leaders must recognize the new reality and provide the support necessary to begin serious work on ways to protect our critical space assets from both direct and indirect threats.

Diplomacy alone can not restore U.S. security. Demarches by America and its close allies that formally scold the Chinese government for its actions will probably have little effect on an authoritarian system that regularly withstands international criticism over a host of issues, from human rights abuses to the environment. Is the United States ready to impose real economic sanctions or other punitive actions on China over a weapons test? Likely not. Without some kind of punitive economic, political, or military measures backing them up, diplomatic protests will have little impact.

Other diplomatic approaches, such as adoption of a multilateral code of conduct, are largely camouflage for unverifiable arms control agreements. The growing interdependence between economic and security interests will necessitate improved cooperation between the U.S. Government and commercial satellite operators. Washington also will need to coordinate its space protection activities with military and civil space authorities in allied and friendly nations. As information sharing advances, new norms for shared space situational awareness and orbital traffic management may emerge among America and other responsible spacefaring nations. However, the success of any norm requires parties to exhibit maturity, trustworthiness and a willingness to act responsibly—three preconditions which China has now demonstrated its utter inability to support.

Absent the ability to enforce compliance or punish offenders, a code of conduct rule regime may be weak and, more likely than not, ineffectual. A rules system for space that relies on voluntary compliance and lacks viable punitive measures will be a hollow one.

While efforts to protect critical space infrastructures are crucial, the U.S. and its allies must not fall prey to sophistic arguments for binding rules that are the moral equivalent of arms control. For example, some have suggested that anti-satellite testing could be "banned" using a rules or code of conduct system. Such a ban is neither enforceable nor verifiable in a voluntary rules system. Nor would a treaty be, for that matter. The Chinese, of course, are leaders of the "Prevention of an Arms Race in Outer Space" (PAROS) treaty process at the United Nations. At the same time that their diplomatic corps raged against the supposed weaponization of space by the U.S., the Chinese government successfully executed at least two anti-satellite tests that the public is aware of. The credibility of this international process stands in shambles today.

If a prospective treaty is neither enforceable nor verifiable and there are strong reasons to suspect that cheating will occur, then it is a treaty that is best left alone. Furthermore, those who suggest that such an agreement would protect U.S. interests have yet to explain why China would abandon capabilities that hold the "soft underbelly" of American military power at risk.

Some will certainly argue that the U.S.

brought this state of affairs on itself, that our space policy signaled aggressive intentions in space, and our nascent missile defense capabilities forced others to react in a hostile manner. The United States did issue a new national space policy last October that reiterated a 50-year commitment to preserve peaceful uses of space, safeguard freedom of action for all nations, reserved the right to protect and defend U.S. space systems, and expressed antipathy toward additional international agreements. While there may be "tonal" differences between the new policy and past presidential statements, the content is virtually the same and certainly could not have been the spark that catalyzed Chinese development of sophisticated ASAT capabilities. Those had to have been in development for much, much longer.

Ironically, the Chinese ASAT test should "boost" the prospects for space-based missile defense. The Chinese direct ascent ASAT reportedly was carried aloft by a ballistic missile. If the international community is truly worried about the debris-generating effects of ASAT weapons, then it ought to embrace, indeed demand, development and deployment of boost-phase missile defenses capable of intercepting ASAT missiles long before they reach their satellite targets. Guided by the criteria first postulated by Ambassador Paul Nitze over two decades ago, this orbital interceptor constellation could build upon capabilities developed in a precursor system of rapid replenishment satellites. Combined with a new emphasis on satellite protection, ground-based replenishment capabilities and space-based missile defenses could frustrate any attempts to block the peaceful use of space by America and her allies.

After years of debate, the question of whether there is an arms race in space also appears to have been settled for us. The challenge confronting the United States is how it will react now that China has crossed the Rubicon.