China Criticized for Anti-Satellite Missile Test

Destruction of an Aging Satellite Illustrates Vulnerability of U.S. Space Assets

By Marc Kaufman and Dafna Linzer

The Chinese military used a ground-based missile to hit and destroy one of its aging satellites orbiting more than 500 miles in space last week -- a high-stakes test demonstrating China's ability to target regions of space that are home to U.S. spy satellites and space-based missile defense systems.

The test of anti-satellite technology is believed to be the first of its kind in two decades by any nation and raised concerns about the vulnerability of U.S. satellites and a possible arms race in space.

China's action drew sharp protests from other nations with satellite programs -- a predictable response that experts said dramatically illustrates Chinese willingness to face broad international criticism when it comes to space, which Beijing considers a key part of the push to modernize its military and increase its ability to compete in high-tech warfare.

"The U.S. believes China's development and testing of such weapons is inconsistent with the spirit of cooperation that both countries aspire to in the civil space area," National Security Council spokesman Gordon Johndroe said yesterday. "We and other countries have expressed our concern regarding this action to the Chinese."

A spokesman at the Chinese Embassy said that he had no information about the antisatellite test. The Chinese military did not mention the test either. But a Chinese newspaper that concentrates on foreign affairs, Global Times, relayed the reports from Washington in today's editions. The newspaper quoted Maj. Gen. Peng Guangquin as saying that the U.S. government was making too much of the test.

In addition to introducing a renewed military dimension to space, the destruction of the Chinese satellite created a large "debris cloud" that can seriously damage other satellites in nearby orbit, and possibly even spacecraft on their way to the moon or beyond. Analysts said that based on computer models, as many as 300,000 pieces of debris may have been created. While many would be very small, they said, hundreds would be large enough to create potentially serious problems.

The United States and the Soviet Union tested anti-satellite technology in the 1980s, and the United States shot down one of its orbiting satellites in 1985. Partially as a result of the debris problem, both sides stopped the programs.

The Chinese test, first reported online by the magazine Aviation Week and Space Technology, comes at a time of heightened tensions between the United States and China over space. China is leading an effort in the United Nations to set up an international conference to address what many consider to be an imminent space arms race. The United States has opposed the idea, arguing that it is not needed because there is no arms race in space. The Bush administration nevertheless released an updated national space policy last fall that strongly asserted an American right to defend itself in space against any actions it considers hostile.

The U.S. military is especially dependent on satellites for navigation, communications and missile guidance, while the American economy could also be broadly damaged by disruptions of communications, weather and other satellites. Some in the administration believe that this has left the nation especially vulnerable to attack and have proposed efforts to develop ways to defend its assets in space.

The day the test was conducted, the chiefs of major U.S. intelligence agencies presented their annual threat assessments to Congress. Neither China's anti-satellite program nor its general push toward space weapons was mentioned during the public hearing or anywhere in the written testimonies of the director of national intelligence, the director of the Pentagon's intelligence agency or the CIA director.

The United States retains the ability to destroy low-orbit satellites and has been conducting research on more advanced systems for years.

Officials who have been briefed on the test said that the Chinese ballistic missile reached as high as some U.S. spy satellites are positioned. Other satellites positioned at the same altitude are part of the missile defense network that the U.S. military is assembling. Sources said a hit-to-destroy ballistic missile could knock out any satellites at that low orbit. Many sensitive communications satellites are much higher, at about 22,000 miles above Earth, and officials said yesterday that the recent test does not prove that China has the capability to disrupt those systems. Still, U.S. intelligence officers and administration officials fretted.

"It's unfortunate that China is going down this path," said one administration official. "No one has done this in over 20 years, and in that time, international cooperation in space has come so far. It is a bustling commercial, scientific and research arena. This sort of thing is such a throwback to the Cold War."

The issue of possible hostilities in space became more real in August when National Reconnaissance Office Director Donald M. Kerr told reporters that a U.S. satellite had recently been "painted," or illuminated, by a ground-based laser in China. The United States did not make any formal protest then, but it did yesterday.

Johndroe of the NSC said that Australia and Canada have lodged protests, and Britain, South Korea and Japan are expected to follow suit.

He said the Chinese satellite was shot down using a ground-based medium-range ballistic missile, which slammed into its target 537 miles above earth on Jan. 11.

"In my view, the Chinese are sending a strong signal here," said Jeffrey Kueter, president of the George C. Marshall Institute, a nonprofit space and defense think tank in Washington. "They're saying they can hold our space-based, war-fighting capability at risk, and are putting into doubt our ability to challenge them. They're a rising space competitor."

Kueter said the test makes it essential for the United States to get more serious about developing technology to defend its satellites.

Michael Krepon, president emeritus of the Henry L. Stimson Center, another nonprofit involved with security issues in Washington, called the Chinese test a predictable -- and unfortunate -- response to U.S. space policies.

"The Chinese are telling the Pentagon that they don't own space," he said. "We can play this game, too, and we can play it dirtier than you."

Krepon said the Chinese test "blows a whole through the Bush administration reasoning behind not talking to anybody about space arms control -- that there is no space arms race. It looks like there is one at this point."

Rep. Edward J. Markey (D-Mass.) said the Chinese action makes it essential that the administration begin negotiations to stop any possible space arms race. "The Chinese anti-satellite test is terrible news for international stability and security, and could presage the dawn of a new arms race -- this time in space," Markey said. "American satellites are the soft underbelly of our national security, and it is urgent that President Bush move to guarantee their protection by initiating an international agreement to ban the development, testing, and deployment of space weapons and anti-satellite systems."