

## **New Questions About U.S. Intelligence on China:**

### **An Analysis of the March 2005 Report by the U.S. National Air and Space Intelligence Center**

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#### **Summary**

As part of our ongoing research on Chinese military space programs, we analyzed the March 2005 report *Challenges to U.S. Space Superiority* by the National Air and Space Intelligence Center (NASIC). While this report makes few specific claims about the capabilities of particular countries, it highlights a quote about Chinese anti-satellite development attributed to someone at a Chinese military facility.

By locating the original Chinese-language source of this quote, we found that it does not represent an authoritative source on Chinese military space activities. Worse, an examination of the original Chinese shows that the quote is mistranslated in ways that significantly change its meaning.

#### **Introduction**

In its recently released 2005 annual report *The Military Power of the People's Republic of China*, the U.S. Department of Defense (DoD) states that China “plans to field” anti-satellite (ASAT) systems.<sup>2</sup> The report offers no evidence to support this assertion, which is noteworthy if true since it appears to be inconsistent with China’s longstanding diplomatic effort to begin negotiations on a new international arms control agreement that would ban attacks on satellites.

However, previous DoD claims about Chinese ASAT systems have been called into question. The 2003 and 2004 DoD *Chinese Military Power* reports referred to an advanced Chinese ASAT system called a “parasitic microsatellite” that had reportedly been “ground tested” and was ready for space-testing. The Union of Concerned Scientists challenged this assertion in an August 2004 analysis of the source of this claim, which showed that the original source was not credible.<sup>3</sup> The 2005 DoD report is more circumspect about Chinese capabilities, and has withdrawn the claim about the “parasite satellite,” but it continues to state that China intends to deploy ASAT systems.

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<sup>2</sup> Office of the Secretary of Defense, *The Military Power of the People's Republic of China 2005* (July 2005), p. 36. <http://www.defenselink.mil/news/Jul2005/d20050719china.pdf> (accessed 10 August 2005).

<sup>3</sup> Gregory Kulacki and David Wright, “A Military Intelligence Failure? The Case of the Parasite Satellite,” 16 August 2004, [http://www.ucsusa.org/global\\_security/china/page.cfm?pageID=1479](http://www.ucsusa.org/global_security/china/page.cfm?pageID=1479) (accessed 10 August 2005).

What is the basis of this claim? As noted above, the 2005 DoD report does not provide evidence or a source. A possible source is the National Air and Space Intelligence Center (NASIC) at Wright-Patterson Air Force Base. NASIC's website states that it is "The sole national center for integrated intelligence on aerospace systems, forces, and threats."<sup>4</sup>

NASIC released a report entitled *Challenges to U.S. Space Superiority* in March 2005,<sup>5</sup> which was during the time the DoD report was being prepared. A close evaluation of information in this report raises questions about the quality of the analysis NASIC provides, and more generally about the sources of information on which the DoD relies for its assessments of Chinese military capabilities.

Our intent is not to consider the issue of whether or not China is developing or fielding ASAT weapons, but to gain insight into the quality of U.S. intelligence on this issue.

### **Analysis of the March 2005 NASIC Report**

The NASIC report discusses current uses of space and potential threats to U.S. space assets, but makes few specific claims about the capabilities of various countries.

However, the report highlights its concern about anti-satellite threats by including a quote—which is emphasized by being set off from the text in a box—by an official at a Chinese military facility. Its inclusion suggests that it was seen as an important quote that accurately reflects Chinese intentions regarding ASATs.

Although the NASIC report does not give a reference for the quote, we conducted a search of Chinese periodical databases and found the Chinese-language article from which it was taken. As we discuss in more detail below, it was written by Liying Zhang (not Zhan, as the NASIC report states) and two colleagues. Zhang was a junior instructor at the Langfang Army Missile Academy, which was closed in July 2004. Its primary responsibility was providing live-fire and simulated training for junior Chinese artillery officers. The article is far from an authoritative source on China's military space program. More seriously, an examination of the original Chinese sentence shows that NASIC mistranslated the quote in ways that significantly change its meaning.

Considering the accuracy of this quote is interesting since it is the most specific claim the NASIC report presents about Chinese intentions regarding ASATs.

The quote in question appears on page 21 of the NASIC report. NASIC's translation clearly states that China is actively developing anti-satellite weapons:

“China will monitor closely foreign developments in advanced satellite technology, paying close attention to progress made in military use of space while actively developing ASAT systems.” - Liying Zhan, Langfang Army Missile Academy

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<sup>4</sup> National Air and Space Intelligence Center, “Mission and Vision,” <http://www.wpafb.af.mil/naic/mission.html> (accessed 29 July 2005).

<sup>5</sup> National Air and Space Intelligence Center, *Challenges to U.S. Space Superiority*, NASIC-1441-3894-05, March 2005, [http://www.armscontrolwonk.com/Challenges\\_to\\_Space\\_Superiority.pdf](http://www.armscontrolwonk.com/Challenges_to_Space_Superiority.pdf) (accessed 29 July 2005).

The quote is taken from the final sentence of the original Chinese article; a more accurate translation of the original is:

“While properly following foreign satellite advanced technology, (China) also should actively develop anti-satellite weapons and pay close attention to the progress of international space arms control, in order to facilitate the timely determination of a response.”<sup>6</sup>

The NASIC translation makes several important errors. The first is rendering the Chinese word *ying* as “will” instead of “should.” Zhang et al. use this sentence to close their essay with a recommendation about what China should do, not a statement of what China intends to do or is currently doing. This is an important distinction. The original text makes clear that the authors believe China has not yet made a decision about proceeding with anti-satellite weapons, and they therefore make a recommendation about China’s course of action..

The authors seem to be stating their view that China is currently following developments in foreign satellite technology, and that while it is proper for China to be following these developments,<sup>7</sup> they believe China should also be actively developing anti-satellite weapons. The word *jiji*, which NASIC properly translates as “actively,” also has the meaning of energetically or vigorously, which suggests the authors feel China needs to do more than it is at present. This is very different than the meaning implied by the NASIC version of the quote.

The second translation error is the most disturbing. NASIC translates the phrase *junbei kongzhi* as “military use of space” when it should be translated as “arms control.” It is difficult to imagine how anyone familiar with these issues could make such a mistake.

The result is to completely obscure the Chinese authors’ intention, which is to recommend that China should factor developments in international arms control into its decision of how to respond to the escalating competition in military space technology that is described in the body of their article. NASIC compounds this error by omitting the final phrase “to facilitate the timely determination of a response,” which makes clear that the authors are saying that China has not yet made a decision about whether to respond by fielding ASATs. Moreover, it makes clear that Zhang et al. believe that China’s policy toward anti-satellite weapons should depend not only on new technologies, but also on the state of international arms control negotiations (China and Russia have proposed an international agreement at the Conference on Disarmament that would prohibit attacks on satellites). The authors seem to be advocating a hedging strategy, recommending that China should have anti-satellite weapons ready if the diplomatic effort to protect their space assets fails.

## Implications

While there may be ambiguities in the meaning intended by the Chinese authors, NASIC’s translation of this quotation completely changes its meaning. As noted above, since this is the

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<sup>6</sup> The subject in Chinese sentences is often not explicitly stated. As is common practice in translating Chinese to English, we have indicated this by including the word “China” since it is implied but not stated in the original Chinese.

<sup>7</sup> NASIC incorrectly translates the Chinese word *zhengque* as “closely” instead of “properly” or “correctly.” The difference is of some importance since the correct translation implies that the statement is a judgement by the authors, which is consistent with our interpretation of the full sentence.

most specific claim presented about Chinese intentions regarding ASATs in the NASIC report, the accuracy of this quote is important.

The inclusion of this quote in the NASIC report implies that the authors of the NASIC report either:

- are unable to translate Chinese competently and are unable to evaluate the quality of its sources, or are not interested in doing so;
- used a translation of the quote supplied by someone else and did not check it for accuracy or relevance; or
- were aware that the quote was mistranslated in a way that completely altered its meaning, and decided to use it anyway.

All of these possibilities are clearly problematic given the need for accurate intelligence information. It is important to determine whether this a case of poor scholarship, or making a quote fit a particular point of view.

Moreover, it is important to understand what this case may imply about about the quality of U.S. intelligence on China more generally.

The Department of Defense, the U.S. Congress, and the American public are justifiably interested in the progress of China's military space program. They deserve high-quality intelligence information, which is necessary for making good policy decisions.

While public versions of intelligence reports typically reveal little information about their sources, with the result that those sources and claims are difficult to evaluate, two sources that we have been able to identify and analyze in the past two years have revealed serious problems in the intelligence reports. Our analyses have shown a failure of U.S. intelligence analysts to properly evaluate Chinese sources, and to properly translate and understand these sources. We do not know how widespread these problems are. But these examples indicate inadequacies in the nation's intelligence that should be addressed immediately.

### **Identifying the Source of the Quote**

Because the NASIC report does not provide a citation for the quotation about Chinese ASATs, we conducted a full-text search of eight major Chinese periodical databases containing over twenty-three million articles. The search returned 182 publications by authors from the Langfang Army Missile Academy, but none under the surname Zhan. There were, however, six publications by an instructor named Liying Zhang. Since the name "Zhan" is used twice in the NASIC report it does not appear to be a typographical error. Instead, the NASIC translator's use of "Zhan" is a probably an incorrect Romanization of Ms. Zhang's surname.<sup>8</sup>

It is worth noting that the Langfang Army Missile Academy was closed in July 2004, by a decision of the Central Military Commission. It was a small institute whose primary responsibility was providing live-fire and simulated training for junior Chinese artillery

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<sup>8</sup> We note that many Chinese routinely mispronounce standard Mandarin, and in some regions of China it is common to cut off the "g" sound at the end of words like *zhang* and *shang*.

officers. Most of these training missions were dispersed to other military facilities and a new branch of the PLA Artillery Command College was established on the old Langfang campus.<sup>9</sup> There is no indication that Langfang was an important research or development center for Chinese military aerospace programs at the time the article was written; indeed, the Zhang article is the only article on anti-satellite weapons written by an author from Langfang that we were able to discover in our extensive searches.

Ms. Zhang was a junior faculty member in the Ground-to-Ground Missile Control Testing Engineering Teaching and Research Office at Langfang. None of the articles under her name have passages that correspond exactly to the sentence translated by NASIC, but one article, entitled “A Rudimentary Analysis of Anti-Satellite Weapons Technology and Defensive Measures,” published (in Chinese) in the journal *Winged Missiles* in March 2004 just before Langfang closed,<sup>10</sup> is similar to the quotation contained in the NASIC report. Because our extensive searches did not turn up other articles by this author on this subject, and because the phrases are so similar, we assume this is the article the NASIC report used. In addition to Ms. Zhang, this article has two coauthors, Professors Zhang Qixin and Wang Hui, both from the same office at Langfang.

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<sup>9</sup> Langfang Army Missile Academy Disbanded, PLA Artillery Command College Unveils Sign, China News Service, Internet Edition, July 26, 2004, 2:35pm Beijing Time, <http://news.sina.com.cn/o/2004-07-26/14253203427s.shtml> (accessed July 15, 2005)

<sup>10</sup>张莉英, 张启信, 王辉 “反卫星武器技术及防御措施浅析”, 飞航导弹 2004 年第3 期 28-30