

## PLA Hopes B-21 Will Follow in B-2's Footsteps

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The B-21 was unveiled to the public on December 2, 2022. In the following two months several assessments of the B-21 were published in the media of the Chinese People's Liberation Army (PLA) and the Chinese Communist Party (CCP). Almost all the articles avoided assessing the capabilities of the B-21 itself, instead downplaying the effect that the B-21 will have on the balance between the U.S. military's offensive capability and the PLA's defensive capability. It is impossible to determine whether these assessments represent the consensus on the B-21 in the PLA or not, but because they revolved around a negative prediction of the future of the B-21 program, the success of the B-21 program will likely force those optimists in the PLA to reassess the threat that is posed by the aircraft.

The first assessment that appeared in the print media of the Chinese People's Liberation Army (PLA) was published on December 8, 2022 in the Global Military Section of Liberation Army News. Liberation Army News is the mouthpiece of the Chinese Communist Party's Central Military Commission, which is roughly equivalent to the U.S. national command authority; Global Military is a weekly section covering military affairs outside China. Because Global Military is published weekly, the six days between the unveiling of the B-21 and the publication of the first assessment should not be interpreted as a delayed response.

The authors of the first assessment are Li Jiechun, Duan Ting, and Shi Hanjuan. Li and Duan are affiliated with the PLA's National Defense University; Shi is affiliated with the PLA's Air Force Research Institute.<sup>1</sup> The authors mostly avoided assessing the B-21's capabilities. In fact, they initially listed the B-21's capabilities as those were publicized, doing so without explicitly quoting Northrop Grumman or the U.S. Air Force. However, doing so was not intended to affirm the publicized capabilities of the B-21. Instead, they reserved judgment, remarking, "Whether the B-21 is as strong as the U.S. Defense Department and the U.S. Air Force conceive or not, and how much of that is a strategic gamble, and how much of it is strategic blackmail, all requires the test of time and actual use."<sup>2</sup> The "strategic gamble" here refers to a gamble on the B-21's effectiveness; "strategic blackmail" refers to the authors' critique of what they perceive as America's larger strategy involving the B-21.

They wrote that, in American eyes, the B-21 is not only useful for enhancing America's "offensive superiority," but it "can also force an opponent to pay the price of sacrificing offensive capability in order to commit more resources to defense, thereby weakening the opponent's

capability and desire to conduct war with the USA."<sup>3</sup> They asserted that America's plan to build 132 of the B-21's predecessor, the B-2, was similarly intended to "drain the Soviet Union's military and economic strength."<sup>4</sup> However, although they raised the B-21's lesser costs than those of the B-2 as one of its advantages, they also raised the possibility that the B-21 itself will be too costly.<sup>5</sup> They described the estimated total cost of producing and maintaining 100 B-21 bombers as an "astonishing" amount, and they predicted that if the B-21 program does not achieve "economies of scale" because of the high cost of the program, then the B-21 will "have difficulty" achieving any "strategic effect."<sup>6</sup>

They concluded that another factor in the ultimate success of the B-21 will be whether "other great powers" can "realize asymmetrical innovations" and surpass the USA or not. "Once another country achieves a breakthrough in strategic technology, then what will be offset [a reference to America's strategic offset strategies] is the B-21 itself as well as the American military's other strategic weapons," they wrote hopefully in the article's final sentence.<sup>7</sup>

Most other assessments of the B-21 aligned with Li, Duan, and Shi's article. On the same day that their article was published, a very similar article was published in the Military Weekly section of China Youth Daily. China Youth Daily is the newspaper of the Chinese Communist Youth League, and it is a major newspaper in China. Unlike the CCP's other major, nonmilitary newspapers, it still regularly publishes original reporting about the PLA and military affairs. The article was written by Sun Yefei and Zhou Haoting, who are associated with China's Northwestern Polytechnical University.<sup>8</sup> The university is a leading research university in the field of aerospace. Zhou's position is unknown, but Sun is a professor and is also the deputy director of the university's Military-Civilian Fusion Development Strategy Research Center.<sup>9</sup>

In their article, Sun and Zhou, too, listed the capabilities of the B-21 as those were publicized, but they did so at greater length, praising its stealth, networking, and unmanned flight capabilities.<sup>10</sup> However, they also very briefly mentioned what they saw as the deficiencies of the B-21. They remarked that the maximum take-off weight of the B-21 is "relatively small" and that its combat radius is "relatively short."<sup>11</sup> They added that the B-21 is "highly reliant" on tankers and airborne early warning and control aircraft.<sup>12</sup>

Sun and Zhou asserted that despite the improvement of the B-21's stealth capability over that of the B-2, "especially when facing a great power possessing a relatively perfect counterstealth sensor network and air defense system, although its stealth capability has been improved, even the B-21 will have difficulty penetrating the opponent's airspace to conduct bombing without being detected and intercepted."<sup>13</sup> Alluding to their claim that the B-21 is very reliant on combat support, they also asserted that "once the combat support system suffers attack, the combat effectiveness of the B-21 will greatly weaken."<sup>14</sup> And while Sun and Zhou positively assessed the relatively low costs of manufacturing, operating, and maintaining the B-21, they also insinuated that the B-21 may ultimately "walk in the trail of the B-2"—that the U.S. Air Force may still not have the budget to acquire enough of the aircraft for it to make a difference.<sup>15</sup>

The final assessment of the B-21 was published in the International section of Chinese National Defense News. Chinese National Defense News is the sister newspaper of Liberation Army News; the International section is similar to the Global Military section of Liberation Army

News, but it is published three times per week. It is noteworthy that this section did not carry an article about the B-21 for almost two months after the B-21's unveiling, but it is unclear what significance this delayed response would have if it has any at all. The article that was eventually published there was written by Zhang Xuefeng, whose affiliation is unknown.

Zhang's article was somewhat more negative than the above articles. Zhang did not list the capabilities of the B-21, but he did assert that the labelling of the B-21 as a sixth-generation aircraft belies the U.S. military's lack of confidence in the aircraft.<sup>16</sup> The premise of this claim is that the label is mere propaganda to justify the huge cost of developing an aircraft that is hardly distinguishable from the B-2.<sup>17</sup> He implied that the B-21's stealth capabilities are insufficient, reasoning that "now many radars have the capability to detect stealth targets."<sup>18</sup> And he, too, alluded to the possibility that the U.S. Air Force will be unable to acquire enough B-21 bombers because of competition for funding for other service's programs and even for the Air Force's other programs, such as the Next-Generation Air Dominance fighter.<sup>19</sup>

One article appearing in the PLA's authoritative media diverged from all the above articles. It was published in mid-December 2022 in the Science and Technology section of Chinese National Defense News. The Science and Technology section is a weekly section covering military technological developments outside China. Articles in the Science and Technology section tend to be more straightforward than those in other sections covering global news, eschewing political messages in order to introduce foreign technological advances that China may have to deal with or may wish to adopt.

The affiliation of the article's author, Xin Qizhi, is unknown. Like those before him, Xin described the capabilities of the B-21 as those were publicized, but he did not attempt to downplay the significance of the B-21.<sup>20</sup> In fact, he refuted a particular criticism of the B-21 "from outside," a vague reference that likely refers to the world outside China's defense establishment—the popular press and the Internet.<sup>21</sup> The criticism is that the combat radius of the B-21 is short. In addition to being mentioned by Sun and Zhou, this criticism was also propagated by China Central Television (CCTV), the Chinese Communist Party's television broadcaster, on its Weibo microblogging account. In a video that CCTV posted to the account on December 4, 2022—a video that was produced by a PLA television show covering military technology—one frequent commentator on the PLA's television shows said that the combat radius of the B-21 is the shortest of all the U.S. military's bombers, and he added that because the aircraft's payload capacity is also small, the B-21 is inferior to the B-2.<sup>22</sup> Xin remarked that "this one defect" is not enough for the B-21 to be "looked down upon."<sup>23</sup> He wrote that the affordability of the B-21 is its "major advantage" and that it can be acquired, maintained, and used on a "large scale."<sup>24</sup> Xin concluded his article by writing, "This aircraft is absolutely not a simplified version of the B-2, so [we] cannot treat it lightly."<sup>25</sup>

Notwithstanding Xin's final comment, the difference in the views expressed by Xin and the others is not a matter of how they assess the capabilities of the B-21 itself; it is one of how they assess the future of the B-21 program and the aircraft's ultimate effect on the balance between the U.S. military's offensive capabilities versus the PLA's defensive capabilities. Overall, all the authors besides Xin expressed doubt that enough B-21 bombers will be acquired to compensate

for their expected losses due to advances in radar.<sup>i</sup> The question that this ostensible difference raises is which side represents the prevalent opinion in the PLA.

Optimism and even bravado themselves do not necessarily belie fear, so it is possible that Xin is alone in his caution. However, one must also consider the fact that the sections in which their articles were published have different purposes. The Chinese media's analysis of foreign countries and their armed forces is unabashedly subjective, and the Global Military and International sections of the PLA's two main newspapers always downplay the efforts of Beijing's enemies. Writing for a different section with a less ideological purpose, Xin was unburdened by the requirement to weave a political message into his analysis, so it is perhaps more likely that the view that he expressed is closer to the prevalent opinion in the PLA. In the end, though, given that the difference in opinion is unrelated to the capabilities of the B-21 itself, the optimists in the PLA will likely become increasingly worried as the U.S. Air Force acquires more and more B-21 bombers.

<sup>&</sup>lt;sup>i</sup> Similarly, doubt that the B-21 program will proceed according to schedule has also been expressed. 吴玉国 [Wu Yuguo], 齐呈荣 [Qi Chengrong], and 程春蕾 [Cheng Chunlei], "战略轰炸机飞向何方" [To where will strategic bombers fly], 解 放 军 报 [Liberation Army News], March 17, 2023, accessed March 17, 2023, http://www.81.cn/szb\_223187/szbxq/index.html?paperName=jfjb&paperDate=2023-03-17&paperNumber=10&articleid=900537.

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## Endnotes

December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>&</sup>lt;sup>1</sup> 段挺 [Duan Ting] and 李杰春 [Li Jiechun],""伙伴国"折射北约扩张图谋"['Partner countries' reflect NATO's expansion plot], 解 放 军 报 [Liberation Army News], May 26, 2022, accessed March 8, 2023, http://www.81.cn/szb\_223187/szbxq/index.html?paperName=jfjb&paperDate=2022-05-

<sup>26&</sup>amp;paperNumber=11&articleid=835061; 辛乃军 [Xin Naijun] and 石汉娟 [Shi Hanjuan], "无人机成为伊朗战略 博弈有力工具" [Unmanned aerial vehicles become powerful tool for Iran in strategic contest], 解放军报 [Liberation Army News], September 8, 2022, accessed March 8, 2023, http://www.81.cn/szb\_223187/szbxq/index.html?paperName=jfjb&paperDate=2022-09-08&paperNumber=11&articleid=845869.

<sup>&</sup>lt;sup>2</sup>李杰春 [Li Jiechun], 段挺 [Duan Ting], and 石汉娟 [Shi Hanjuan], ""突袭者"难以缓解美国焦虑" [Difficult for 'Raider' to alleviate America's worries], 解放军报 [Liberation Army News], December 8, 2022, accessed

<sup>&</sup>lt;sup>3</sup> 李杰春 [Li Jiechun], 段挺 [Duan Ting], and 石汉娟 [Shi Hanjuan], ""突袭者"难以缓解美国焦虑" [Difficult for 'Raider' to alleviate America's worries], 解放军报 [Liberation Army News], December 8, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>&</sup>lt;sup>4</sup> 李杰春 [Li Jiechun], 段挺 [Duan Ting], and 石汉娟 [Shi Hanjuan], ""突袭者"难以缓解美国焦虑" [Difficult for 'Raider' to alleviate America's worries], 解放军报 [Liberation Army News], December 8, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>&</sup>lt;sup>5</sup>李杰春 [Li Jiechun], 段挺 [Duan Ting], and 石汉娟 [Shi Hanjuan], ""突袭者"难以缓解美国焦虑" [Difficult for 'Raider' to alleviate America's worries], 解放军报 [Liberation Army News], December 8, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>&</sup>lt;sup>6</sup>李杰春 [Li Jiechun], 段挺 [Duan Ting], and 石汉娟 [Shi Hanjuan], ""突袭者"难以缓解美国焦虑" [Difficult for 'Raider' to alleviate America's worries], 解放军报 [Liberation Army News], December 8, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>&</sup>lt;sup>7</sup>李杰春 [Li Jiechun], 段挺 [Duan Ting], and 石汉娟 [Shi Hanjuan], ""突袭者"难以缓解美国焦虑" [Difficult for 'Raider' to alleviate America's worries], 解放军报 [Liberation Army News], December 8, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>&</sup>lt;sup>8</sup> 孙晔飞 [Sun Yefei] and 周澔霆 [Zhou Haoting], "B-21 的软肋在哪儿" [What is the B-21's weak point], 中国青 年报 [China Youth Daily], December 8, 2022, accessed December 12, 2022, http://zqb.cyol.com/html/2022-12/08/nw.D110000zgqnb\_20221208\_3-07.htm.

<sup>&</sup>lt;sup>9</sup> 徐晓琳 [Xu Xiaolin], "西北工业大学"翱翔智库讲坛"第一期顺利举办" [First session of Northwestern Polytechnical University's 'Soaring Think Tank Forum' held smoothly], 西北工业大学科学技术研究院 [Northwestern Polytechnical University's Office of Science and Technology], September 29, 2022, accessed March 13, 2023, https://kyy.nwpu.edu.cn/info/1031/4864.htm.

<sup>&</sup>lt;sup>10</sup> 孙晔飞 [Sun Yefei] and 周澔霆 [Zhou Haoting], "B-21 的软肋在哪儿" [What is the B-21's weak point], 中国青 年报 [China Youth Daily], December 8, 2022, accessed December 12, 2022, http://zqb.cyol.com/html/2022-12/08/nw.D110000zgqnb\_20221208\_3-07.htm.

<sup>&</sup>lt;sup>11</sup> 孙晔飞 [Sun Yefei] and 周澔霆 [Zhou Haoting], "B-21 的软肋在哪儿" [What is the B-21's weak point], 中国青 年报 [China Youth Daily], December 8, 2022, accessed December 12, 2022, http://zqb.cyol.com/html/2022-12/08/nw.D110000zgqnb\_20221208\_3-07.htm.

<sup>&</sup>lt;sup>12</sup> 孙晔飞 [Sun Yefei] and 周澔霆 [Zhou Haoting], "B-21 的软肋在哪儿" [What is the B-21's weak point], 中国青 年报 [China Youth Daily], December 8, 2022, accessed December 12, 2022, http://zqb.cyol.com/html/2022-12/08/nw.D110000zgqnb\_20221208\_3-07.htm.

<sup>13</sup> 孙晔飞 [Sun Yefei] and 周澔霆 [Zhou Haoting], "B-21 的软肋在哪儿" [What is the B-21's weak point], 中国青 年报 [China Youth Daily], December 8, 2022, accessed December 12, 2022, http://zqb.cyol.com/html/2022-12/08/nw.D110000zgqnb\_20221208\_3-07.htm.

<sup>14</sup> 孙晔飞 [Sun Yefei] and 周澔霆 [Zhou Haoting], "B-21 的软肋在哪儿" [What is the B-21's weak point], 中国青 年报 [China Youth Daily], December 8, 2022, accessed December 12, 2022, http://zqb.cyol.com/html/2022-12/08/nw.D110000zgqnb\_20221208\_3-07.htm.

<sup>15</sup> 孙晔飞 [Sun Yefei] and 周澔霆 [Zhou Haoting], "B-21 的软肋在哪儿" [What is the B-21's weak point], 中国青 年报 [China Youth Daily], December 8, 2022, accessed December 12, 2022, http://zqb.cyol.com/html/2022-12/08/nw.D110000zgqnb\_20221208\_3-07.htm.

<sup>16</sup> 张学峰 [Zhang Xuefeng], "美 B-21 项目后续发展引关注" [Subsequent development of America's B-21 program draws attention], 中国国防报 [Chinese National Defense News], January 30, 2023, accessed January 30, 2023, http://www.81.cn/gfbmap/content/2023-01/30/content\_332549.htm.

<sup>17</sup> 张学峰 [Zhang Xuefeng], "美 B-21 项目后续发展引关注" [Subsequent development of America's B-21 program draws attention], 中国国防报 [Chinese National Defense News], January 30, 2023, accessed January 30, 2023, http://www.81.cn/gfbmap/content/2023-01/30/content\_332549.htm.

<sup>18</sup> 张学峰 [Zhang Xuefeng], "美 B-21 项目后续发展引关注" [Subsequent development of America's B-21 program draws attention], 中国国防报 [Chinese National Defense News], January 30, 2023, accessed January 30, 2023, http://www.81.cn/gfbmap/content/2023-01/30/content\_332549.htm.

<sup>19</sup> 张学峰 [Zhang Xuefeng], "美 B-21 项目后续发展引关注" [Subsequent development of America's B-21 program draws attention], 中国国防报 [Chinese National Defense News], January 30, 2023, accessed January 30, 2023, http://www.81.cn/gfbmap/content/2023-01/30/content\_332549.htm.

<sup>20</sup>辛启之 [Xin Qizhi], "B-21: 美新型战略轰炸机揭开神秘面纱" [Veil of mystery removed from America's new type of strategic bomber], 中国国防报 [Chinese National Defense News], December 14, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>21</sup>辛启之 [Xin Qizhi], "B-21: 美新型战略轰炸机揭开神秘面纱" [Veil of mystery removed from America's new type of strategic bomber], 中国国防报 [Chinese National Defense News], December 14, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>22</sup> 汤喆 [Tang Zhe], 宋建业 [Song Jianye], 陈钇潼 [Chen Yitong], 曹好运 [Cao Haoyun], 王界文 [Wang Jiewen], and 陈文龙 [Chen Wenlong], "B21 作战半径在美战略轰炸机中最小" [B-21's combat radius shortest among American strategic bombers], 中国军网 [Chinese Military Online], December 5, 2022, accessed December 15, 2022, http://www.81.cn/w-j/2022-12/05/content\_10203541.htm. The post was originally published on China Central Television's Weibo account (https://weibo.com/u/6189120710) on December 4, 2022.

<sup>23</sup>辛启之 [Xin Qizhi], "B-21: 美新型战略轰炸机揭开神秘面纱" [Veil of mystery removed from America's new type of strategic bomber], 中国国防报 [Chinese National Defense News], December 14, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>24</sup>辛启之 [Xin Qizhi], "B-21: 美新型战略轰炸机揭开神秘面纱" [Veil of mystery removed from America's new type of strategic bomber], 中国国防报 [Chinese National Defense News], December 14, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.

<sup>25</sup>辛启之 [Xin Qizhi], "B-21: 美新型战略轰炸机揭开神秘面纱" [Veil of mystery removed from America's new type of strategic bomber], 中国国防报 [Chinese National Defense News], December 14, 2022, accessed December 14, 2022, http://www.81.cn/gfbmap/content/2022-12/14/content\_329790.htm.