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### The Challenge of a Rising, Nuclear-Armed China

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#### Introduction

The world has changed in dramatic ways since the end of the Cold War. The growing complexity of the security environment, including the return of open great-power tensions, the pursuit of weapons of mass destruction by rogue regimes, and the emergence of new domains and tools of conflict, have all complicated the threat landscape. Above all, the rise of a militarily powerful, nuclear-armed China has come to pose one of the greatest challenges to American leadership since the end of World War II.<sup>1</sup>

China experienced meteoric economic growth after Chinese premier Deng Xiaoping initiated economic reforms in the 1980s to integrate China into the global marketplace.<sup>2</sup> America initially responded optimistically to China's opening to the world, inviting China to become a "responsible stakeholder" in the international order.<sup>3</sup> But, contrary to Western hopes that China's rise and economic integration into the global order would lead to greater political openness, the Chinese Communist Party (CCP) entrenched its authoritarian rule at home and has used China's integration into the international community as a vehicle for an aggressive foreign policy.<sup>4</sup> This became especially evident throughout the 2010s under the leadership of Xi Jinping, who became general secretary of the CCP in 2012 and president of China in 2013. Xi's pursuit of expanded military, economic, and political influence across the region and his



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establishment of a number of China-led global initiatives have led many observers to conclude that he aspires for China to displace the United States as the lead power in the Indo-Pacific, to secure regional hegemony, and, ultimately, to achieve a place of global leadership at the expense of the United States.<sup>5</sup>

When Xi became head of the CCP in 2012, he laid out a nationalist vision, “the rejuvenation of the Chinese nation,” to guide domestic and foreign policy under his leadership.<sup>6</sup> According to Xi, national rejuvenation represents the rise of the Chinese nation and Chinese civilization, led by the CCP, out of the “darkness” of the “semi-colonial, semi-feudal society” to which China had been reduced by foreign powers between the mid-nineteenth and the mid-twentieth centuries.<sup>7</sup> Xi aims for China to achieve this national rejuvenation—attaining global superpower status—by 2049, the one-hundredth anniversary of the People’s Republic of China (PRC).<sup>8</sup> Hence, his hallmark “Chinese Dream” slogan suggests a China that will, by 2049, have recovered the historical territories lost to foreign powers during its “Century of Humiliation.”<sup>9</sup>

In keeping with this narrative, China under Xi has pressed numerous disputed territorial claims by political and military force, exacerbating simmering flashpoints in the region. The most significant and worrisome flashpoint is the Taiwan Strait.<sup>10</sup> For the ruling CCP in Beijing, political unification of Taiwan to the mainland government has always been and remains a national priority,<sup>11</sup> but Xi has injected new vigor and urgency into this goal by making unification with Taiwan a key element of his “Chinese Dream” narrative promoting the “rejuvenation” of the ethnic Chinese nation and the reclamation of China’s historical territories.<sup>12</sup> Xi has made clear his intention to repel any outside intervention in China’s plans to unify with Taiwan, declaring, “We make no promise to renounce the use of force and reserve the option of taking all necessary means” for unification, including to resist “intervention by external forces.”<sup>13</sup> A Chinese government white paper released in August 2022 was even more pointed, saying, “National reunification is the only way to avoid the risk of Taiwan being invaded and occupied again by foreign countries, to foil the attempts of external forces to contain China, and to safeguard the sovereignty, security, and development interests of our country. It is the best means to consolidate Taiwan’s status as part of China and advance national rejuvenation.”<sup>14</sup>

The CCP’s refusal to renounce force to unify Taiwan with the mainland, Beijing’s increasing belligerency toward the island, and China’s overall deteriorating relations with many of its neighbors and the United States, have prompted analysts to speculate how Beijing might leverage its nuclear arsenal to advance the critical components of “national rejuvenation.” China initially developed nuclear weapons to deter coercion by other nuclear powers, especially the United States, a motivation reflected by its historically “lean and effective” deterrent.<sup>15</sup> But now it is almost certain that China has purposes beyond defensive deterrence in mind. China is expanding and diversifying its nuclear arsenal beyond what it traditionally considered necessary for deterrence during times when the United States and Russia had much larger arsenals than they do today, indicating that Beijing plans to leverage its arsenal in a different way and for a different purpose.<sup>16</sup>



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## China's Nuclear Delivery Systems and Warheads

China first began developing nuclear weapons in the 1950s<sup>17</sup> and successfully tested a nuclear device on October 16, 1964.<sup>18</sup> Chinese Communist leader Mao Zedong had determined to acquire nuclear weapons after the United States made nuclear threats against China during both the Korean War (1950–1953) and the Taiwan Strait crises of 1954–1955 and 1958<sup>19</sup> in order to escape vulnerability to nuclear coercion in the future.<sup>20</sup> Mao's belief that only a few nuclear weapons were needed to deter effectively<sup>21</sup> led Beijing to seek a small nuclear force that could survive a first strike and still deliver a devastating retaliatory strike against the attacker, and has driven Beijing's historical focus on maintaining a small, secretive, survivable force arrayed against countervalue (city) targets and kept at a low level of readiness.<sup>22</sup> For the first several decades of China's nuclear history, the PRC nuclear posture appeared consistent with a purely defensive strategy.<sup>23</sup>

However, starting in the late 2010s up to the present, several developments in China's nuclear posture have elicited alarm in Washington. One is the establishment of a full though nascent nuclear triad. DoD assesses that China currently fields around 400 intercontinental ballistic missiles (ICBMs), and the U.S.-China Economic and Security Review Commission suggests that nearly 100 are capable of striking the continental United States.<sup>24</sup> China is also working to put multiple independently targetable reentry vehicles (MIRVs) on its legacy siloed ICBMs, which, though too imprecise for counterforce operations, can, with MIRV capability, increase potential retaliatory damage.<sup>25</sup> China is also enhancing its sea-based deterrent. It is expected to operate eight Jin-class Type 094 ballistic missile submarines (SSBNs) by 2030 and is also making plans for a next-generation SSBN, the Type 096.<sup>26</sup> This SSBN will carry the JL-3 submarine-launched ballistic missile, which, with a range of over 9,000 km,<sup>27</sup> will enable subs to range the continental United States without leaving China's littoral waters.<sup>28</sup> In 2019, China unveiled the nuclear-capable H6-N bomber, providing an air component for its nuclear force.<sup>29</sup> China is also currently developing a long-range nuclear-capable strategic stealth bomber, the H-20, and an accompanying nuclear-capable air-launched ballistic missile to further mature its strategic air leg.<sup>30</sup>

A second significant revelation is China's accelerating warhead stockpile expansion. Between 2000 and 2020, generous rough estimates of China's warhead arsenal remained in the 350–400 range,<sup>31</sup> but China is now rapidly expanding its arsenal. DoD estimates that China surpassed the 600-warhead mark as of 2024 and is expected, at the current pace, to reach 1,000 warheads by 2030.<sup>32</sup>

## China's Nuclear Innovations

A third worrisome development is force improvements that could potentially support a higher level of readiness. In 2021, open source satellite imagery discovered hundreds of new ICBM silos under construction in China.<sup>33</sup> Because siloed ICBMs are more responsive than tunneled ones, China's expansion of silos may indicate an interest in moving to a launch-on-warning



(LOW) posture and a pre-emptive strike capability.<sup>34</sup> China also continues to transition its land-based strategic missile force from liquid fuel to solid fuel, further enhancing its prospects for rapid response.<sup>35</sup> Furthermore, China is more technologically capable than in the past of adopting a LOW position given investments in improved nuclear command, control, and communications and intelligence, surveillance, and reconnaissance capabilities.<sup>36</sup>

A fourth effort which has garnered considerable outside attention is China's development of hypersonic glide vehicles (HGV). HGVs do not follow predictable flight trajectories as ballistic missiles do but are designed to maneuver in flight, making it very difficult for warning systems to determine the intended target.<sup>37</sup> In addition to their unpredictability, HGVs also fly at low altitudes, sometimes not even leaving the atmosphere, making them exceedingly challenging for current missile defense systems to detect and intercept.<sup>38</sup> In July 2021, news broke that China completed a fractional orbital launch of an ICBM with an HGV that circumnavigated the globe before returning to China.<sup>39</sup> Although the vehicle missed its target by 24 miles, the whole event nonetheless captured the Pentagon's (and the world's) attention in that it represented the first time a nation had combined a fractional orbital system with a nuclear-capable HGV.<sup>40</sup> An orbital conveyance capability would allow China to potentially launch a nuclear attack against the United States over the South Pole, avoiding detection by U.S. missile defense early warning radars.<sup>41</sup>

A fifth development of note is China's nuclear-capable regional missile force.<sup>42</sup> China is developing road-mobile, solid-fueled, nuclear-capable theater strike systems, including the DF-21 medium-range ballistic missile.<sup>43</sup> The DF-21 family of missiles includes the DF-21D, a conventional road-mobile, medium-range, anti-ship ballistic missile, which entered service in 2012, and while it is a conventional missile, some suspect it is nuclear-capable or could become so in the future.<sup>44</sup> The road-mobile, "hot-swappable" DF-26 intermediate-range ballistic missile, fielded in 2016, is the first Chinese nuclear-capable precision-strike weapon, meaning it could potentially be used for missions targeting U.S. Indo-Pacific military assets.<sup>45</sup>

## Conclusion

These developments hold sobering implications for U.S. national security interests. Together they point to Beijing's increasing ability, and likely Beijing's intention, to move beyond an assured retaliation nuclear strategy to a regional warfighting nuclear posture.<sup>46</sup> More specifically, the particular conventional and nuclear capabilities Beijing is acquiring suggest preparation to coerce regional powers while deterring the United States from interfering in a conflict.<sup>47</sup> The overall implication is that China is in a greater position than ever before to deter and coerce the United States in order to work its own will in the Pacific, and with Taiwan in particular, and as China expands the range of highly coercive options at its disposal, including limited first-use options,<sup>48</sup> it will likely become more confident in challenging the United States over this regional flashpoint.<sup>49</sup>

Moreover, China's expanding and increasingly survivable long-range strategic capabilities give it a range of options for holding the U.S. homeland at risk, strengthening its deterrent and





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coercive potential against the United States and U.S. allies and partners. China's aggressive conventional and nuclear expansion and overall aggressive foreign policy have already introduced new levels of uncertainty and distrust into the broader Pacific region and eroded nuclear stability in East Asia,<sup>50</sup> and as it continues its ambitious nuclear arsenal development, it will grow increasingly capable of deterring U.S. and other outside intervention in potential crises or conflicts all over the Pacific.<sup>51</sup> Furthermore, because the United States relies only on strategic deterrence to dissuade nuclear threats against the U.S. homeland,<sup>52</sup> and because the current national missile defense system is ineffective against China, China's nuclear buildup increases the likelihood that China will attempt to deter the United States from intervening in the Pacific by holding the U.S. homeland hostage. Such threats could not only deter the United States from helping Taiwan against a potential Chinese invasion<sup>53</sup> but also divide the United States from its East Asian allies by challenging the credibility of U.S. extended deterrence commitments – and if U.S. credibility does indeed weaken, China will be in a strong position to contest U.S. primacy in the Indo-Pacific and globally.

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