

Preventing Nuclear Escalation in U.S.–China Conflict

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- **CONVENTIONAL COUNTERFORCE AS A PATHWAY TO NUCLEAR ESCALATION.**
 When a state fears that its opponent is engaging in conventional counterforce—that is, employing conventional forces to destroy or degrade the state’s nuclear retaliatory capability—the state could use its nuclear weapons before it loses the ability to do so.
- **THE DANGERS OF NUCLEAR ESCALATION IN THE EVENT OF U.S.–CHINA CONFLICT.**
 Although war between the United States and China is unlikely, if it arose the United States likely would fight in a manner that China could perceive as an attempt at conventional counterforce. China might plausibly escalate to nuclear use in response, despite the country’s pledge not to be the first to use nuclear weapons.
- **POLICY ALTERNATIVES THAT REDUCE ESCALATORY RISK.**
 The United States and its allies could consider alternative conventional approaches that would not appear to China like an attempt at conventional counterforce, and therefore could reduce the risk of Chinese nuclear escalation.

By Caitlin Talmadge

Conventional Counterforce as a Pathway to Nuclear Escalation

Conventional war between the United States and China remains a low-probability event. But if such a war were to break out, the risk of nuclear escalation—that is, actual detonation of nuclear weapons—likely would be higher than many observers realize. Some aspects of a likely U.S. campaign in a conventional war against China could look to China like an attempt at conventional counterforce, pressuring China to escalate to nuclear use while it still could.

This escalation scenario is distinct from other possible pathways to nuclear use. For example, in the Cold War the classic scenario for escalation was pre-emption, the notion that one side might try to use its nuclear weapons to pre-emptively destroy the arsenal of the other. Other scenarios for nuclear escalation include mistaken launch based on faulty warning information, and unauthorized launch by a commander who is physically able to use nuclear weapons but does not have political permission to do so. In addition, some states develop doctrines that deliberately threaten to escalate to the first use of nuclear weapons in the event of rapid conventional losses.

Nuclear escalation in response to an opponent’s perceived attempt at conventional counterforce constitutes an alternative pathway to nuclear escalation. It can arise when one side’s conventional military campaign infringes or appears poised to infringe on the other side’s ability to use or control its nuclear arsenal. For example, conventional military attacks by one side against the other’s command and control networks, air defenses, early warning radars, submarines, and missile sites have

the potential not only to degrade that side’s conventional capabilities but also its nuclear capabilities. After all, command and control networks for conventional forces may also be relevant to the control of nuclear weapons; air defense systems may protect both conventional and nuclear assets; early warning radars are relevant to both conventional and nuclear operations; attack submarines and ballistic missile submarines share shore-based infrastructure, with the former often protecting the latter; and the same sites can house both conventional and nuclear missiles (called co-location).

For all of these reasons, a state subject to attack on these targets may have a difficult time distinguishing whether the adversary is merely conducting a normal conventional campaign, or is seeking to neuter the state’s nuclear capabilities. If the state fears the latter, it may wish to escalate to nuclear use while it still has the ability to do so. Such fears also could lead the state to engage in behaviors that make other pathways to escalation more likely. For example, the state could opt for more decentralized control of nuclear weapons, which would reduce vulnerability to conventional counterforce but heighten the danger of unauthorized launch.

Ultimately, escalation depends on how a state perceives an aggressive conventional campaign against it. The state waging the campaign might use conventional force to target the opponent’s nuclear capabilities inadvertently, not realizing that the conventional campaign was starting to look to the opponent like counterforce. Or it might do so deliberately, actively embracing this risk as a way to increase pressure on the adversary. Either way, the target state’s fear of disarmament could lead that state to use nuclear weapons.

The Dangers of Nuclear Escalation in the Event of U.S.–China Conflict

Five factors suggest that a U.S.–China conventional war could activate this escalatory mechanism.

First, the United States embraces highly offensive conventional concepts of operations in the Pacific, despite the nuclear pressures these approaches might place on China. A U.S. campaign in a conventional war with China could target Chinese submarines, missile sites, command and control systems, air defense networks, and other sites well inside the Chinese mainland. From China's perspective these assets may be relevant to China's assured retaliation capability. Thus what the United States may view as a purely conventional operation might look to China like the prelude to a counterforce strike, creating strong use-or-lose pressures. Indeed, some Chinese statements indicate that conventional attacks on China's nuclear capabilities could vitiate China's no-first-use pledge.

Second, U.S. alliance commitments could further exacerbate this danger. The Pacific Ocean may insulate the United States from much of China's striking power, but U.S. allies, particularly Japan and Taiwan, would be much more militarily and economically exposed in the event of a U.S.–China war. Even if the United States believed it could achieve security through a slower and more limited conventional campaign, U.S. allies might not share that conviction. This reality again suggests that U.S. conventional operations could quickly expand in ways that could appear to impinge on Chinese nuclear capabilities.

Third, the U.S. military's organizational tendencies also tilt in the direction of a more conventionally aggressive campaign. For understandable reasons, militaries have a well-developed general preference for the offense. Militaries also tend to pursue tactical and operational advantages at the expense of broader strategic and political objectives. Historically this behavior has resulted in a U.S. approach that is very good at general deterrence (preventing the outbreak of war) but less adept at intra-war deterrence (that is, preventing ongoing wars from escalating).

Fourth, civilian control of the U.S. military is unlikely to check these tendencies. Some civilian policymakers may not be fully aware of the potentially escalatory implications of such approaches, while others may actually embrace these approaches. The historical record suggests that civilian oversight of conventional operations with nuclear implications has not always been robust.

Fifth, situational awareness is likely to deteriorate rapidly for the United States and especially China during a conventional conflict, in ways that further compound all of the escalatory pressures just discussed. After all, denying China knowledge of the battle space through the destruction of intelligence, surveillance, and reconnaissance assets (ISR) and command and control networks is likely to be one of the primary objectives of any U.S. military strategy. These sorts of attacks will be essential to U.S. conventional success but also will make it increasingly difficult for China to feel confident that U.S. aims are limited and that China's nuclear retaliatory capabilities remain intact. Similarly, the United States may cross Chinese nuclear tripwires without realizing it.

Policy Alternatives That Reduce Escalatory Risk

The United States and its allies could examine alternative conventional approaches that would not appear to China like an attempt at conventional counterforce and therefore would reduce the risk of Chinese nuclear escalation.

Several studies have highlighted means by which the United States could signal restraint even in an expansive conventional campaign that involved attacks on the Chinese mainland. For example, the United States might be able to geographically constrain its incursions into China as a somewhat arbitrary but clear way of communicating limited aims. It also could attack targets on the Chinese mainland using stand-off weapons only, so that a major air defense suppression campaign would not be necessary. In addition, the United States could make a serious peacetime effort to develop target sets inside China that do not have nuclear functions.

Alternatively, the United States could adopt highly defensive approaches in which it would refrain from all attacks on mainland China. For example, the United States could work with allies to cut off China's access to vital waterways. Though such an approach might still entail very aggressive conventional military operations within the first island chain, it could be less escalatory in the nuclear realm.

In addition, the United States and its regional allies and partners, such as Japan and Taiwan, could consider investing much more heavily in passive defenses: these might include hardening, dispersal, redundancy, and resistance efforts that would significantly raise the cost of Chinese attack and lower the probability that such an attack would deliver benefits to China. This so-called "porcupine strategy" could be combined with additional asymmetric defenses that would use anti-access tactics and operations to impose disproportionate costs on attacking Chinese forces, rather than confronting them head-on.

This alternative approach could be conventionally effective, but China would be unlikely to mistake it for an attempt at counterforce. As such, it could sharply reduce the possibility of nuclear escalation in the event of a U.S.–China conventional war. In addition, it could help deter China from engaging in conventional aggression in the first place. ♦

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This policy brief is based on a longer article: Caitlin Talmadge, "Preventing nuclear Escalation in the U.S.-China Conflict." That article is one in a series written for the project "U.S. Strategic Nuclear Policy Toward China," which was funded by the Carnegie Corporation of New York. For more on the project, please visit iscs.elliott.gwu.edu.