

Can the U.S. Military Strengthen Deterrence by Becoming More Operationally Unpredictable?

The recent U.S. emphasis on strategic competition with China and Russia has renewed attention on how to dissuade adversaries from attacking U.S. allies, a concept known as *extended deterrence*.

Some in U.S. policymaking circles believe that U.S. military activities have become overly predictable, allowing potential adversaries to anticipate where, when, and how U.S. forces will operate.

The 2018 U.S. National Defense Strategy suggests that the United States might strengthen deterrence by becoming more *operationally unpredictable*—that is, by increasing adversary uncertainty about how the United States would fight.¹ To implement this guidance, the U.S. Army asked RAND Arroyo Center to examine how the United States could increase operational unpredictability and what the effect would be on extended deterrence.

The RAND team developed a definition of *operational unpredictability* and then detailed four potential approaches for increasing operational unpredictability, identifying the range of conditions under which each approach could enhance deterrence and the key trade-offs involved. These assessments were based on the limited publicly available information on Russian and Chinese intelligence capabilities, methods for predicting how the United States might fight, and decisionmaking about the use of force.

KEY FINDINGS

- Increasing Russian and Chinese perceptions of U.S. operational unpredictability to enhance deterrence might be possible but costly.
- The most promising approach would be to increase the range of U.S. capabilities and demonstrate that they give the United States multiple options for achieving its objectives.
- Activities and capabilities that contribute to operational unpredictability do not have to be hidden, and in some cases need to be public.
- There are risks and costs associated with increasing U.S. operational unpredictability, including the possibility of decreasing U.S. readiness or increasing China's and Russia's threat perceptions.

¹ U.S. Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge*, Washington, D.C., 2018, p. 5.

What Is Operational Unpredictability?

The RAND team defined *operational unpredictability* as *adversary uncertainty about how the United States would fight in the event of a conflict*. For an adversary to be uncertain about how the United States will fight, the adversary needs, first, to believe that the United States has multiple options for achieving its operational objectives (e.g., stop an amphibious landing, suppress enemy air defenses) in wartime and, second, to be uncertain which option the United States will choose.

The team assessed four approaches for increasing operational unpredictability.

- **Employ irregular deployment patterns.** For example, the United States could vary the length of deployments, the amount of time between them, and deployment locations, and it could employ stricter operations security procedures surrounding deployments.
- **Reveal and demonstrate new capabilities that enable additional ways of fighting.** For example, the United States could announce and publicly demonstrate capabilities that enable multiple courses of action, or it could engage in multidomain operations.
- **Bluff about U.S. ability to conduct multiple courses of action.** For example, the United States could use messaging, intelligence operations, or decoys to cause the adversary to detect false or inflated capabilities.
- **Regularly reveal covert capabilities.** The United States could increase the rate at which it develops new capabilities so that it can reveal new capabilities repeatedly. It could also change U.S. Department of Defense acquisitions and procurement processes that might hamper the speed at which new capabilities are generated, and develop more capabilities covertly.

The rationale behind each approach is as follows:

- **Employ irregular deployment patterns.** If the adversary is unsure where and when U.S. forces will be deployed, it will be uncertain about which U.S. forces will be available to respond to an attack at any given time and might thus delay an attack, devote more forces (increasing costs), or attack using approaches or in locations with lower chances of success.

- **Reveal and demonstrate capabilities that enable additional ways of fighting.** An adversary will have to increase spending to counter multiple courses of action or limit its focus to combating only a small number of courses of action, decreasing the likelihood of a successful attack.
- **Bluff about U.S. ability to conduct multiple courses of action.** If successful, this approach would have the same effect as generating actual capabilities, but with lower costs.
- **Regularly reveal covert capabilities.** The adversary will doubt whether it knows the full extent of U.S. capabilities and options for how to fight, causing it to delay offensive action.

Effect on Deterring Key Adversaries

The table shows the research team's assessment of the likely effectiveness of the four approaches in increasing Russia's and China's perceptions of U.S. operational unpredictability and thereby increasing the United States' ability to deter attacks on its allies.

Overall, the analysis found that increasing Russian and Chinese perceptions of U.S. operational unpredictability to enhance deterrence might be possible but costly. Many of the approaches would require major investments or other changes to U.S. military capabilities. Small changes to U.S. exercises, deployment patterns, capabilities, and other activities in the steady state would have low costs but are likely to have low impact.

The most promising way to enhance deterrence would be to increase the range of U.S. capabilities and demonstrate that they give the United States multiple options for achieving its key objectives. If alternative U.S. courses of action were to require substantially different adversary countermeasures, the adversary might conclude that it would face higher costs to prepare for conflict and/or have a lower likelihood of success. Increasing U.S. interoperability across services and improving the flexibility and agility of U.S. forces would be consistent with this approach. Other approaches, such as irregular deployment patterns, are less promising because of Russian and Chinese intelligence capabilities, as well as U.S. institutional and bureaucratic hurdles.

Likely Effectiveness of Alternative Approaches to Increasing Unpredictability

Approach	Likelihood of Increasing U.S. Ability to Deter Attacks on U.S. Allies		Key Findings
	Russia	China	
Employ irregular deployment patterns	Low	Low	<ul style="list-style-type: none"> To succeed, the number of forces involved would have to be significant. Limited available information on Russian and Chinese intelligence capabilities suggests that they could predict large-scale movements of U.S. forces in advance.
Reveal and demonstrate capabilities that enable additional ways of fighting	Moderate	Moderate	<ul style="list-style-type: none"> U.S. demonstration of more than one operational course of action could plausibly lead Russia or China to update its assessment of how the United States fights, thus increasing the costs and risks of any attack against U.S. interests. However, much remains unknown about the operational assessment and decisionmaking processes of these adversaries.
Bluff about U.S. ability to conduct multiple courses of action	Moderate	Low	<ul style="list-style-type: none"> Russian and Chinese analysts and decisionmakers are familiar with military deceptions and might be adept at detecting them. Sophisticated deception efforts might be effective against Russia, which tends to overstate U.S. capabilities. China is more likely to verify information it receives from U.S. messaging or deception efforts with information it collects from U.S. government and allied and partner sources.
Regularly reveal covert capabilities	Low	Low	<ul style="list-style-type: none"> This approach would require major changes to U.S. capability development programs. Russia and China have sophisticated collection capabilities, making it likely that they would detect key aspects of covert programs and would not be caught off guard.

Activities and capabilities that contribute to operational unpredictability do not have to be hidden, and in some cases need to be public. Publicized investments in new capabilities, security cooperation, exercises, and deployments that enable a new course of action could make U.S. alternative ways of fighting more credible to the adversary. Public messaging, especially by senior leaders, might even shape adversaries' interpretations of U.S. activities.

There are risks and costs associated with increasing U.S. operational unpredictability. For example, increasing perceptions of U.S. operational unpredictability could entail significant resource commitments. In addition, activities that increase operational unpredictability could have negative side effects, such as reducing the effectiveness of preferred U.S. courses of action or increasing China's and Russia's threat perceptions.

Recommendations

The RAND team made the following recommendations for the Joint Force:

- Compare the use of operational unpredictability with alternative approaches to deterring U.S. adversaries.
- Develop a clear logic linking activities intended to enhance U.S. operational unpredictability to desired outcomes, and consider potential trade-offs.
- Review existing intelligence and consider increased collection on Russia's and China's intelligence, military planning, and decision-making processes.
- Continue initiatives on Army and U.S. Department of Defense flexibility and agility, which might also increase U.S. operational unpredictability.

This brief describes research conducted in RAND Arroyo Center and documented in *Operational Unpredictability and Deterrence: Evaluating Options for Complicating Adversary Decisionmaking*, by Miranda Priebe, Angela O'Mahony, Bryan Frederick, Alyssa Demus, Bonny Lin, Michelle Gris , Derek Eaton, and Abby Doll, RR-A448-1, 2021 (available at www.rand.org/t/RR-A448-1). To view this brief online, visit www.rand.org/t/RBA448-1. The RAND Corporation is a research organization that develops solutions to public policy challenges to help make communities throughout the world safer and more secure, healthier and more prosperous. RAND is nonprofit, nonpartisan, and committed to the public interest. RAND's publications do not necessarily reflect the opinions of its research clients and sponsors. **RAND**® is a registered trademark.

Limited Print and Electronic Distribution Rights: This document and trademark(s) contained herein are protected by law. This representation of RAND intellectual property is provided for noncommercial use only. Unauthorized posting of this publication online is prohibited. Permission is given to duplicate this document for personal use only, as long as it is unaltered and complete. Permission is required from RAND to reproduce, or reuse in another form, any of our research documents for commercial use. For information on reprint and linking permissions, please visit www.rand.org/pubs/permissions.

  2021 RAND Corporation