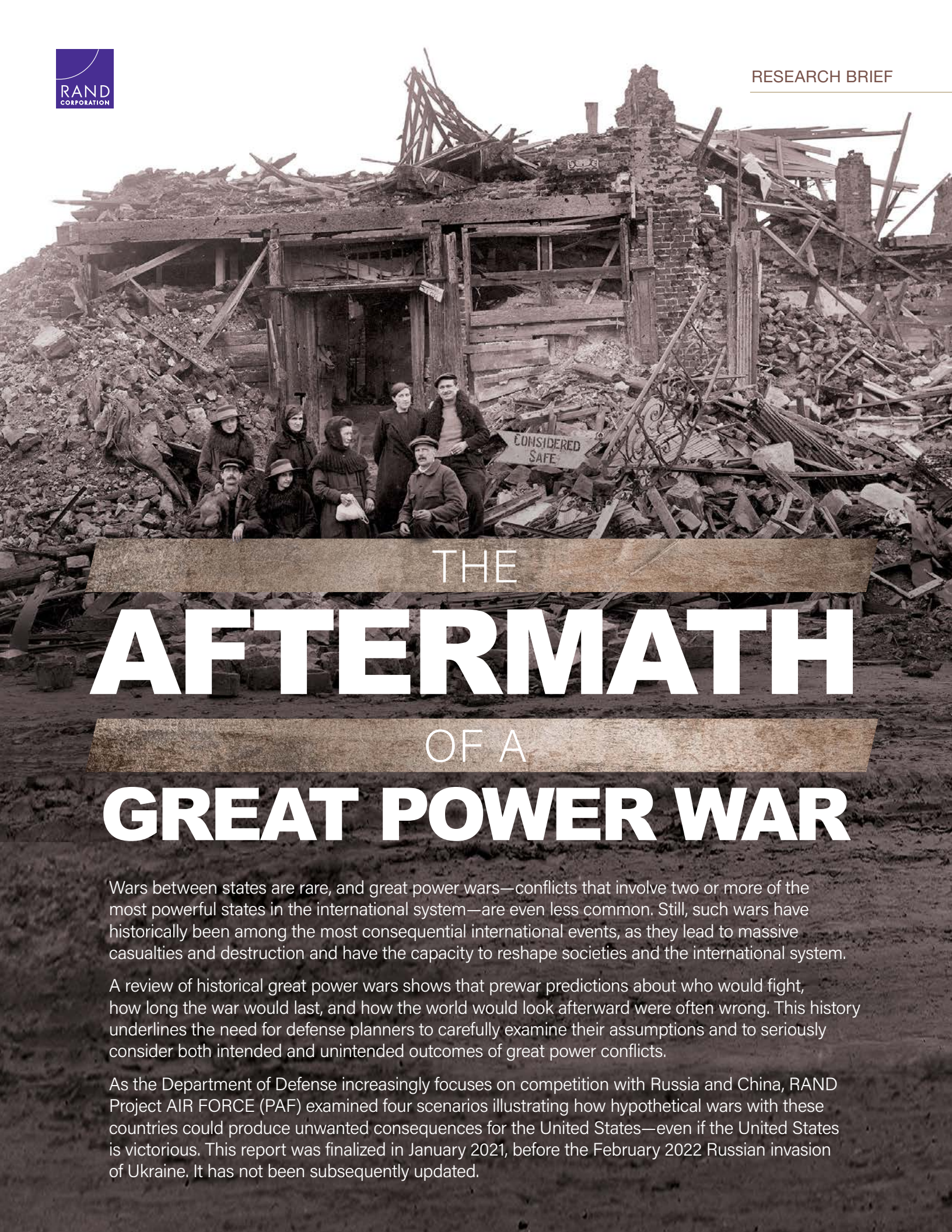




THE AFTERMATH OF A GREAT POWER WAR

Wars between states are rare, and great power wars—conflicts that involve two or more of the most powerful states in the international system—are even less common. Still, such wars have historically been among the most consequential international events, as they lead to massive casualties and destruction and have the capacity to reshape societies and the international system.

A review of historical great power wars shows that prewar predictions about who would fight, how long the war would last, and how the world would look afterward were often wrong. This history underlines the need for defense planners to carefully examine their assumptions and to seriously consider both intended and unintended outcomes of great power conflicts.

As the Department of Defense increasingly focuses on competition with Russia and China, RAND Project AIR FORCE (PAF) examined four scenarios illustrating how hypothetical wars with these countries could produce unwanted consequences for the United States—even if the United States is victorious. This report was finalized in January 2021, before the February 2022 Russian invasion of Ukraine. It has not been subsequently updated.



A HISTORY OF MISTAKEN PREDICTIONS

The history of great power conflict is littered with mistaken predictions. An examination of ten great power wars since 1815 found that, in all cases, politicians and military planners held poor assumptions and made inaccurate predictions about critical aspects of the war that would follow (Table 1). Some of those mistakes are described below.

Incorrect predictions about the parties to a conflict and adversaries' will to fight a long war:

Great powers have frequently misunderstood other states' interests and therefore failed to predict the likelihood of third-party interventions in a conflict. Noteworthy examples include Adolf Hitler's underestimation of French and British commitments to Poland in 1939 and Kim Il Sung and Joseph Stalin's assumptions that the United States would not fight to defend South Korea in 1950. In other instances, great powers recognized that their actions might provoke another state to get involved but underestimated that state's willingness to sustain a protracted and costly war.

Misunderstanding the effects of new technology:

Strategists often overlooked or discounted evidence that a new technology had altered the conduct of war or the distribution of power. Before World War I, for example, European planners misinterpreted or overlooked ample evidence that changes in technology, organization, and the conduct of war (e.g., trench warfare and chemical weapons) would make battles longer, costlier, and less decisive.

Incorrect predictions about the length, intensity, or cost of conflict: Great powers have frequently underestimated the conflict's duration and the scale of military losses. Perhaps the most infamous example is World War I and the European powers' prediction in July 1914 that the conflict would be over by Christmas.

Misunderstandings about the consequences of conflict: States have struggled to foresee the strategic consequences of a conflict, including the durability of wartime gains, the ease of restoring stability, the risk of a conflict recurring, and the long-term implications for the balance of power. Concentration on the task of



TABLE 1

Accuracy of Key Predictions Prior to Great Power Wars

Great Power Conflict	Length	Parties to conflict	Effects of new technology	Intensity of fighting and extent of damage	Consequences for regional and global balance of power
Crimean War 1853–1856	●	●	●	●	●
Austro-Prussian War 1866	●	●	●	●	●
Franco-Prussian War 1870–1871	●	●	●	●	●
Russo-Turkish War 1877–1878	●	●	●	●	●
Sino-Japanese War 1894	●	●	●	●	●
Russo-Japanese War 1904–1905	●	●	●	●	●
World War I 1914–1918	●	●	●	●	●
World War II Asia 1931–1945	●	●	●	●	●
World War II Europe 1939–1945	●	●	●	●	●
Korean War 1950–1953	●	●	●	●	●

- Accurate
- Partially accurate, or only some combatants' predictions were accurate
- Inaccurate

defeating a rival or securing territorial and political concessions has often led states to overestimate their ability to hold onto wartime gains, as Japan discovered after its wars with China in 1894 and Russia in 1905. Similarly, states have overestimated how decisive a war's outcome would be, or they have underestimated the risk of postwar instability. Territorial compromises and new governing arrangements can produce or inflame new flash points for later crises. For example, having allied to wrest Schleswig-Holstein from Denmark in 1864, Austria and Prussia went to war a mere two years later, partly over control of the same territory. A war's potential effect on the regional or international balance of power can be difficult to predict. For example, neither U.S. nor European strategists anticipated the scale of U.S. military, industrial, economic, and political domination that followed World War II.

Why did politicians and military planners get it so wrong? In some cases, there were obvious shortcomings in analysis or decisionmaking. In

other cases, states that historically had been dominant overlooked new evidence, such as the consequences of changing military technology, that the distribution of power had shifted. Even states that avoided known decisionmaking pitfalls faced uncertainty because of a lack of information and the difficulty of predicting the complex interactions that might occur during and following a large-scale war. Regardless of the causes of these incorrect predictions, their legacy reinforces for today's planners and decisionmakers the importance of humility in predicting the course of a conflict or the postwar environment. Leaders and planners should question their own assumptions about the nature of the conflict, its outcome in terms of winners and losers, and the geostrategic aftermath. Examining a range of scenarios with different outcomes can help leaders and planners think about the choices they might face if future conflicts and their aftermaths do not turn out as expected.

A RANGE OF SCENARIOS

How can today's decisionmakers and military planners avoid the mistakes of earlier generations? Strategy and war planning involve great uncertainty, and there is no foolproof way to predict how conflicts will arise, the course they will take, who will win, and what the world will look like afterward. But planners can manage uncertainty by examining a broad range of plausible scenarios and outcomes, especially those that challenge their assumptions and expectations.

In 2020, the authors examined four unlikely but plausible scenarios that illustrate a range of outcomes resulting from hypothetical great power conflicts with China and/or Russia taking place within the next five years. For each, the authors analyzed how decisions made during those conflicts would affect the postwar strategic setting. The purpose is to challenge planners to think critically about their assumptions and to consider potential unintended outcomes.

TABLE 2

Hypothetical Great Power War Scenarios

Scenario	Key Parties to the Conflict	Role of Nuclear Weapons	Length of Conflict	Victor	Strategic Outcomes
China annexes Taiwan	- United States - Taiwan - China	Conflict ends with China's demonstration of an NSNW	8 months	China	- China solidifies control of Taiwan. - A U.S.-led multilateral counterbalancing alliance forms. - Japan and South Korea pursue nuclear weapons.
United States degrades China's military power in escalating East China Sea conflict	- United States - China - Japan - Russia	Possibility of nuclear escalation affects combatants' decisions	6 months	United States and Japan	- China commits to military rebuilding program. - Russia and China formalize a military alliance. - U.S. allies and partners continue to hedge.
Unexpected war over Taiwan ends in a frozen conflict	- United States - Taiwan - China	Possibility of nuclear escalation affects combatants' decisions	4 months	Indecisive	- The possibility of renewed conflict drives a regional arms race. - U.S. troops remain in Taiwan. - The PRC restarts conflict to take Taiwan four years later.
War caused by Russian misperception ends in restrictions on military forces in Northeastern Europe	- United States - many NATO allies - Russia	Russian losses lead to use of NSNWs and to U.S. use of NSNWs in response	3 months	Indecisive	- A NATO-Russia agreement limits foreign forces in the Baltic States, Poland, Belarus, and Kaliningrad. - Germany revokes U.S. basing access, forcing a posture realignment. - Poland initiates nuclear program and shifts toward authoritarianism.

NOTE: NATO = North Atlantic Treaty Organization; NSNW = nonstrategic nuclear weapon; PRC = People's Republic of China.

The authors intentionally developed scenarios that would lead to different outcomes, including a decisive U.S. win, a decisive adversary win, and an indecisive result. In each case, the authors worked backward to envision a prewar context and set of stakes that could reasonably end in that outcome; further, they structured the scenarios to include a range of nuclear dynamics (i.e., threatened, inadvertent, and deliberate use of nuclear weapons). Having determined these factors, the authors then systematically assessed how individual states would likely behave and how their choices would interact both over the course of the war and, crucially, in its aftermath. Certain aspects of the war scenarios were set as fixed, but the postwar behavior of states was based entirely on assessments of how states would be most likely to respond to the circumstances at the end of each war. To make these assessments, the authors drew on research of contemporary decisionmaking in each state: international relations literature on decisionmaking, interstate war, and alliances; and analogies from the conduct and aftermath of historical great power wars.

Table 2 lists the scenarios that were developed and analyzed. The scenarios are not meant to be exhaustive, and a different set of scenarios could emphasize different issues for decisionmakers.

A Note on Nuclear Escalation

Wars between nuclear powers are rare, and it is difficult to assess the likelihood that a war between the United States and a great power rival would escalate to a nuclear exchange. The devised scenarios consider limited nuclear use, and the possibility of nuclear escalation affects the decisionmaking of states. Scenarios involving widespread use of nuclear weapons are outside the scope of this research, but, in future wars, U.S. decisionmakers will need to always be alert to the possibility of further nuclear escalation, whether accidental, inadvertent, or deliberate.

THREE PATHWAYS FOR NUCLEAR ESCALATION



CHINA ANNEXES TAIWAN

CONFLICT

- Taiwan, increasingly concerned by the mainland's handling of Hong Kong and the coronavirus disease 2019 (COVID-19) crisis, takes steps toward independence. China chooses to force unification by attacking Taiwan at a time of its own choosing. The United States decides to defend Taiwan. Japan, Australia, and the United Kingdom support the United States. The Philippines and Thailand refuse to provide U.S. basing access, and South Korea grants only limited access.
- China attacks Taiwan with missiles and air strikes and undertakes an amphibious invasion. China attacks U.S. bases and carrier strike groups.
- The United States blockades China, causing massive turbulence in the Chinese economy and a global financial crisis.
- Despite resistance from U.S. and Taiwanese forces, China establishes a beachhead on Taiwan. The Chinese military performs better than U.S. analysts had expected.
- Both sides escalate the conflict. China and the United States attack each other's space assets and launch cyberattacks on military, commercial, and infrastructure targets. China attacks U.S. bomber bases in Hawaii, prompting the United States to expand its attacks on mainland China. This inadvertently threatens China's nuclear command and control systems.
- China captures Taipei, but the United States continues to support surviving Taiwanese forces.
- China detonates an NSNW in the Pacific to compel the United States to accept Chinese gains and stop fighting.
- The sides agree to a cease-fire that leaves China in complete control of Taiwan but lacks a broader political settlement that could ease future relations.

AFTERMATH

- Although China achieves a notable and long-sought victory in Taiwan, it pays a substantial strategic price in the postwar regional environment.
- Worried about China's capabilities and intentions and the United States' ability to guarantee security, Japan and South Korea develop nuclear weapons. Other countries in the region embark on massive military buildups.
- The United States reduces commitments elsewhere in the world, to focus on countering Chinese hegemony in East Asia. It brings about the first true multilateral security alliance in Asia, the Pacific Alliance Treaty Organization (PATO), committed to limiting further Chinese aggression and involving most of the United States' remaining allies.
- China, for its part, behaves cautiously, focusing on consolidating its control over Taiwan, reconstructing the island, and rebuilding its own economy. But this caution does not assuage regional concerns over potential further Chinese aggression.
- Political and economic relations between the United States and China remain strained for years, forcing other states to make difficult choices in an increasingly divided international system.

IMPLICATIONS FOR THE JOINT FORCE

The United States refocuses its military around the challenge of defending PATO and preventing China from using coercion to force other states into Beijing's orbit. This means

- replacing losses of fifth-generation aircraft and undersea forces
- replenishing and expanding missile inventories
- investing in active and passive airbase defenses
- investing in more NSNW programs to create additional options in future conflicts
- developing concepts and capabilities to project airpower with less reliance on fixed operating locations
- helping regional allies strengthen their own security forces
- developing distributed satellite systems that are more resilient to attack.



UNITED STATES DEGRADES CHINA'S MILITARY POWER IN ESCALATING EAST CHINA SEA CONFLICT

CONFLICT

- China, assuming the United States is weakened by domestic instability and economic hardship, initiates a gray zone operation to wrest control of the Senkaku/Diaoyu Islands from Japan. China deploys fishing boats, militia vessels, and Coast Guard ships to surround the islands. Conflict breaks out between Japanese and Chinese vessels.
- To China's surprise, the United States intervenes militarily to defend Japan. Despite this miscalculation, China does not feel it can back down from further fighting.
- The conflict escalates into a large-scale air and naval conflict in the Western Pacific.
- The United States expands its war aims beyond defending Japan to include degrading Chinese military power and preventing future aggression.
- Concerned that large-scale destruction of Chinese capabilities could alter the global balance of power, Russia enters the conflict to defend China. U.S. strategists fail to anticipate how the expansion of U.S. war aims and U.S. wartime success would affect Russian calculations.
- After a further brief but destructive conventional exchange, the belligerents agree to negotiate a cease-fire to avoid the risk of nuclear escalation.

AFTERMATH

- The United States and Japan achieve their war aims of preventing Chinese occupation of the Senkaku/Diaoyu Islands and degrading China's military power. However, the effects of the war are much more complex than the U.S. military victory would seem to suggest.
- Chinese anger at the U.S. expansion of war aims proves irreconcilable. China undertakes a massive military reconstruction and strengthens its nuclear capabilities.
- China and Russia put aside their prewar differences and formalize a mutual defense pact. Russia casts itself as the war's peacemaker to enhance its global stature.
- Anticipating a likely future confrontation with a rearmed, antagonistic China, the United States increases defense spending to maintain its military edge.
- Australia and Japan align more closely with the United States. But South Korea, the Philippines, Indonesia, and Malaysia hedge, not wanting to jeopardize economic ties with China.
- The United States faces the risk of a repeat conflict with a less-committed coalition of partners.





IMPLICATIONS FOR THE JOINT FORCE

- China suffers heavier military losses than the United States during the conflict, giving the U.S. joint force a short-term advantage in the Indo-Pacific.
- U.S. military access in the Indo-Pacific is increasingly restricted as states are forced to choose between U.S. military cooperation and Chinese economic access.
- The prospect of another war and China's defense spending put pressure on the joint force to maintain its advantage.
- The China-Russia alliance raises new concerns for European security and forces the United States to face politically difficult choices about how to prioritize investments across multiple theaters.

UNEXPECTED WAR OVER TAIWAN ENDS IN A FROZEN CONFLICT

CONFLICT

- China and the United States are caught off guard when Taiwan's president announces a referendum that would be a step toward independence.
- Despite misgivings about its preparedness, China feels it must act swiftly and forcefully. China launches air and missile strikes and institutes a blockade of Taiwan while preparing for a possible amphibious invasion.
- The United States intervenes to defend Taiwan, inflicting substantial damage on Chinese naval and air assets and imposing its own blockade on the mainland.
- The scope of the conflict expands to include attacks on U.S. and Chinese bases, space assets, infrastructure, communications, and financial systems.
- After three months of fighting, China concludes that it is unlikely to change Taiwanese behavior and cannot be sure of success in an amphibious invasion. It contents itself with the conquest of Taiwan's offshore islands and agrees to a cease-fire.
- The conflict ends in a "frozen war" without a decisive winner and with both sides on edge. Taiwan refrains from an official declaration of independence, but the possibility remains a potential flash point for renewed conflict.

AFTERMATH

- The postwar situation remains unstable, with both sides expecting and preparing for a return to war.
- The United States explicitly commits to Taiwan's defense and maintains a long-term presence on the island.
- Taipei invests in hardened infrastructure and survivable forces with short-range weapons to resist conquest.
- China invests heavily in capabilities to ensure a successful amphibious assault in the face of U.S. intervention. Worried about the fiscal and strategic opportunity costs of a drawn-out frozen conflict, China resolves to solve the Taiwan issue on its own terms as quickly as possible, using whatever forces are necessary.
- When a pro-independence candidate wins the next Taiwanese presidential election, China invades again, starting a second war four years after the first.





IMPLICATIONS FOR THE JOINT FORCE

During the “frozen war” period, the joint force remains active and alert to the likelihood of a return to conflict. This means

- stepping up security cooperation with countries likely to fight alongside the United States in the next war (e.g., Taiwan, Japan, Australia)
- reducing security cooperation with countries that did not come to Taiwan’s defense in the first war (e.g., the Philippines)
- taking care that exercises, deployments, and other activities do not inadvertently trigger another conflict
- shifting forces and attention from Europe and the Middle East toward Taiwan
- focusing on short-term innovation to maintain a competitive edge in the accelerated arms race with China.

WAR CAUSED BY RUSSIAN MISPERCEPTION ENDS IN RESTRICTIONS ON MILITARY FORCES IN NORTHEASTERN EUROPE

CONFLICT

- Russia, fearing that NATO is strengthening its northeastern front in preparation for an attack on Russia, begins an escalating unconventional conflict. When a Russian airplane is shot down over Lithuania, Russia imposes a de facto no-fly zone over parts of Poland and Lithuania and begins mobilizing ground forces.
- NATO prepares local ground, naval, and air forces to respond, while Lithuania blocks the transit of Russian forces to Kaliningrad.
- Despite NATO efforts to defuse the situation diplomatically, Russia misinterprets NATO steady state activities as preparations to seize Kaliningrad. Russia launches preemptive strikes against Poland and Lithuania. NATO counterattacks, but some NATO allies distance themselves from the conflict for fear of Russian economic and military retaliation.
- The conflict escalates to include conventional strikes across Europe and on the Russian mainland. Russia's conventional forces in the Western Military District take heavy losses and its long-range precision strike capabilities are depleted.
- Fearing it cannot sustain further losses, Russia threatens to use NSNWs to stop the conflict. NATO leaders are divided about how to respond, but the United States continues conventional operations.
- Russia uses NSNWs against military targets in the United Kingdom, Poland, Germany, and the North Sea. The United States retaliates by using an NSNW against a Russian heavy bomber base.
- With a strategic nuclear exchange appearing imminent, both sides agree to an immediate cease-fire.

AFTERMATH

- Participants are shaken by how the conflict escalated and are eager to avoid a renewal of hostilities. Russia and NATO agree to remove foreign troops from a wide area including Belarus, the Baltic States, and Poland; and Russia accepts limitations on its own forces in Kaliningrad and along its borders with Estonia and Latvia.
- NATO is weakened. Germany, blaming the United States for provoking the Russian nuclear strikes, demands that all U.S. forces leave its territory within a year. Poland, feeling abandoned by its allies in the peace settlement, begins its own nuclear weapons program and turns sharply towards authoritarianism.
- The United States loses standing because of wartime actions that its allies perceive as having escalated the conflict.
- Russia is increasingly dissatisfied with the peace settlement and concerned about Kaliningrad's vulnerability. Within a few years, it begins to consider steps to violate the agreement.
- China is the war's greatest beneficiary because the United States and Russia are economically, militarily, and diplomatically weakened. China presents itself as a responsible international actor, emphasizing its no-first-use nuclear policy and selling itself as a safe destination for trade and investment.

IMPLICATIONS FOR THE JOINT FORCE

- The joint force faces the task of rebuilding lost capabilities while substantially changing its global posture. Loss of bases in Germany and Turkey requires moving forces and headquarters.
- Given heavy losses of conventional forces in the war, the United States decides it has little choice but to slowly reduce its involvement in Europe and prioritize the Indo-Pacific to ensure the security of its Asian allies.
- Although the near-term risk of war with Russia seems to have been reduced by the postwar settlement, U.S. commitment to NATO means the joint force must still be able to deter—and, if necessary, prevail in—such a conflict.



R U S S I A

This report was finalized in January 2021, before the February 2022 Russian invasion of Ukraine. It has not been subsequently updated.

OBSERVATIONS

Although the hypothetical scenarios do not consider the full range of conflicts that the United States could face, they highlight plausible consequences that U.S. decisionmakers and planners should consider.

Wartime victory may not produce a favorable postwar setting. For example, a difficult and costly conflict can weaken the victor, providing advantages to other states that were not parties to the conflict. A victor also

Strategy and war planning involve great uncertainty. There is no foolproof way to predict how conflicts will arise, the course they will take, who will win, and what the world will look like afterwards. But planners can manage uncertainty by examining a broad range of plausible scenarios and outcomes, especially those that challenge their assumptions and expectations.

might face stronger balancing coalitions as other states become more concerned about the victor's enhanced capabilities or intentions. Victors also could have to contend with domestic crises as civilian populations grapple with the high costs of the war. Finally, the terms of the peace settlement or the failure to address enduring issues can increase the risk of renewed conflict.

A U.S. victory could drive China and Russia closer together. Mutual mistrust and disputes have prevented China and Russia from forging deeper military ties, but the countries could overcome these differences and fight together

to prevent the United States from achieving a massive victory over either. Even if they do not fight together, they may see a partnership as the best way to deter U.S. opportunism in a postwar phase.

The Indo-Pacific is likely to be a postwar priority for the United States.

China would benefit from a European war that weakens the United States and Russia, heightening postwar U.S. security concerns in Asia. Should a direct conflict between China and the United States occur instead, China would likely remain an important international actor and strategic competitor with the United States, even in defeat. By contrast, a defeated Russia would likely struggle to rebuild and would pose a lesser threat to the United States than would a defeated China. Thus, in each of the great power conflict scenarios assessed, the United States was likely to sharpen its postwar focus on the Indo-Pacific.

Although wars can strengthen bonds between allies, postwar alliance cohesion could suffer.

Disagreements about war aims or willingness to risk escalation could cause allies to rethink their commitments even after the war is won. Moreover, U.S. allies and partners might face new incentives to develop nuclear weapons if they feel the United States can no longer guarantee their security.

Allied contributions to a U.S.-led war with Russia or China might vary.

Each country would need to grapple with competing considerations, such as the desires to sustain a relationship with the United States, to balance against aggression, and to avoid economic or military retaliation by Russia or China. The United States should develop multiple basing options for key contingencies, in case allies choose not to grant access.



RECOMMENDATIONS

Military planners should evaluate whether existing war plans support long-term U.S. interests.

This means assessing the postwar consequences of conflicts that go according to assumptions as well as those that do not. This type of analysis would help reveal possible tensions between short- and long-term postwar goals.

The services and the joint force should consider setting a “futures game” in a period following a great power war.

Futures games allow planners to consider how new concepts and systems would fare in a hypothetical conflict. Setting a futures game after a great power war would allow the services to evaluate whether programs are robust in postwar strategic environments that might be very different from what the United States faces today.

U.S. and allied decisionmakers should be fully briefed and educated about the potential operational and strategic consequences of nuclear weapons use.

These topics have not been emphasized since the end of the Cold War, and relatively few wargames involve the use of nuclear weapons as a warfighting tool. U.S. and allied decisionmakers should also consider potential responses to reduce the risk of surprise or hasty reactions in the (hopefully unlikely) event that nuclear weapons are threatened or used in a conflict.



This brief describes work done in RAND Project AIR FORCE and documented in *Alternative Futures Following a Great Power War*, Vol. 1, *Scenarios, Findings, and Recommendations*, by Miranda Priebe, Bryan Frederick, Anika Binnendijk, Alexandra T. Evans, Karl P. Mueller, Cortez A. Cooper III, James Benkowski, Asha Clark, and Stephanie Anne Pillion, RR-A591-1, 2023 (available at www.rand.org/t/RR-A591-1) and in *Alternative Futures Following a Great Power War*, Vol. 2, *Supporting Material on Historical Great Power Wars*, by Alexandra T. Evans, RR-A591-2, 2023 (www.rand.org/t/RR-A591-2).

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