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Great Power Competition: Implications for Defense—Issues for Congress

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Summary

The emergence over the past decade of intensified U.S. competition with the People's Republic of China (PRC or China) and the Russian Federation (Russia)—often referred to as great power competition (GPC) or strategic competition—has profoundly changed the conversation about U.S. defense issues from what it was during the post–Cold War era: Counterterrorist operations and U.S. military operations in the Middle East—which had been more at the center of discussions of U.S. defense issues following the terrorist attacks of September 11, 2001—are now a less prominent (but still present) element in the conversation, and the conversation now focuses more on the following elements, all of which relate largely to China and/or Russia:

- grand strategy and geopolitics as a starting point for discussing U.S. defense issues;
- the force-planning standard, meaning the number and types of simultaneous or overlapping conflicts or other contingencies that the U.S. military should be sized to be able to conduct—a planning factor that can strongly impact the size of the U.S. defense budget;
- organizational changes within the Department of Defense (DOD);
- nuclear weapons, nuclear deterrence, and nuclear arms control;
- global U.S. military posture;
- U.S. and allied military capabilities in the Indo-Pacific region;
- U.S. and NATO military capabilities in Europe;
- new U.S. military service operational concepts;
- capabilities for conducting so-called high-end conventional warfare;
- maintaining U.S. superiority in conventional weapon technologies;
- innovation and speed of U.S. weapon system development and deployment;
- mobilization capabilities for an extended-length large-scale conflict;
- supply chain security, meaning awareness and minimization of reliance in U.S. military systems on components, subcomponents, materials, and software from non-allied countries, particularly China and Russia; and
- capabilities for countering so-called hybrid warfare and gray-zone tactics.

The issue for Congress is how U.S. defense planning and budgeting should respond to GPC and whether to approve, reject, or modify the Biden Administration's defense strategy and proposed funding levels, plans, and programs for addressing GPC. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements and the U.S. defense industrial base.

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Introduction

This report provides a brief overview of some implications for U.S. defense of intensified U.S. competition with the People's Republic of China (PRC or China) and the Russian Federation (Russia), often referred to as great power competition (GPC) or strategic competition. The issue for Congress is how U.S. defense planning and budgeting should respond to GPC, and whether to approve, reject, or modify the Biden Administration's defense strategy and proposed funding levels, plans, and programs for addressing GPC. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements and the U.S. defense industrial base.

This report focuses on defense-related issues and does not discuss potential implications of GPC for other policy areas, such as foreign policy and diplomacy, trade and finance, energy, and foreign assistance.

Background

Great Power Competition

Overview

The post–Cold War era of international relations—which began in the early 1990s[1] and is generally characterized as having featured reduced levels of overt political, ideological, and military competition among major states—showed initial signs of fading in 2006-2008 and by 2014 had given way to a situation of intensified U.S. competition with China as well as Russia, as well as challenges by China and Russia to elements of the U.S.-led international order established after World War II.[2] For some observers, the ending of the post–Cold War era and emergence of GPC was underscored by China and Russia's announced strategic partnership[3] and by Russia's full-scale invasion of Ukraine starting on February 24, 2022.[4]

[1] As the term suggests, the post–Cold war era emerged following the end of the Cold War between the United States and the Soviet Union. As discussed in **Appendix A**, key events marking the end of the Cold War include the fall of the Berlin Wall in November 1989, the disbanding of the Soviet-led Warsaw Pact military alliance in March 1991, and the dissolution of the Soviet Union into Russia and the former Soviet republics in December 1991. The post–Cold War era is sometimes referred to as the unipolar moment, with the United States as the unipolar power.

[2] For further discussion of the transition from the post–Cold War era of international relations to the current situation of great power competition, including initial signs of the fading of the post–Cold War era in 2006-2008, see **Appendix A**. The term *international order* is generally used to refer to the collection of organizations, institutions, treaties, rules, and norms that are or were intended to organize, structure, and regulate international relations during a given historical period. Key features of the U.S.-led international order established at the end of World War II—also known as the liberal international order, postwar international order, or open international order, and often referred to as a rules-based order—are generally said to include the following: respect for the territorial integrity of countries, and the unacceptability of changing international borders by force or coercion; a preference for resolving disputes between countries peacefully, without the use or threat of use of force or coercion; strong international institutions; respect for international law and human rights; a preference for free markets and free trade; and the treatment of international waters, international air space, outer space, and (more recently) cyberspace as international commons. For additional discussion of the term *international order*, see CRS Report R44891, *U.S. Role in the World: Background and Issues for Congress*, by Ronald O'Rourke and Michael Moodie.

[3] For more on Russia-China cooperation, see CRS In Focus IF12100, *China-Russia Relations*, by Ricardo Barrios and Andrew S. Bowen.

[4] See, for example, some of the articles dated from late February 2022 into March 2022 that are listed in **Appendix B**. (continued...)

For additional background information and a list of articles on the transition from the post–Cold War era to GPC, see **Appendix A** and **Appendix B**.

Obama Administration and Trump Administration Strategy Documents

The emergence of GPC was acknowledged alongside other considerations in the Obama Administration's June 2015 National Military Strategy.[5] It was placed at the center of the Trump Administration's December 2017 National Security Strategy[6] and January 2018 National Defense Strategy,[7] which formally reoriented U.S. national security strategy and U.S. defense strategy toward an explicit primary focus on GPC.

Biden Administration October 2022 National Security Strategy

The Biden Administration's October 2022 National Security Strategy (NSS) states

> We face two strategic challenges. The first is that the post-Cold War era is definitively over and a competition is underway between the major powers to shape what comes next….
>
> The second is that while this competition is underway, people all over the world are struggling to cope with the effects of shared challenges that cross borders—whether it is climate change, food insecurity, communicable diseases, terrorism, energy shortages, or inflation.[8]

Regarding competition with China and Russia and challenges to the international order, the October 2022 NSS's first part, entitled "The Competition for What Comes Next," includes the following statements, among others:

- "The basic laws and principles governing relations among nations, including the United Nations Charter and the protection it affords all states from being invaded by their neighbors or having their borders redrawn by force, are under attack. The risk of conflict between major powers is increasing" (p. 7).
- "The most pressing strategic challenge facing our vision is from powers that layer authoritarian governance with a revisionist foreign policy. It is their behavior that poses a challenge to international peace and stability—especially waging or preparing for wars of aggression, actively undermining the democratic political processes of other countries, leveraging technology and supply chains for coercion and repression, and exporting an illiberal model of international order. Many non-democracies join the world's democracies in forswearing these behaviors. Unfortunately, Russia and the People's Republic of China (PRC) do not" (p. 8).

Some observers, in discussing China and Russia's announced strategic partnership, use terms other than *partnership*, such as *alignment*, *convergence*, *coordination*, or *alliance*. For more China and Russia's announced strategic partnership, see CRS In Focus IF12100, *China-Russia Relations*, by Ricardo Barrios and Andrew S. Bowen; and CRS In Focus IF12120, *China's Economic and Trade Ties with Russia*, by Karen M. Sutter and Michael D. Sutherland. See also CRS In Focus IF11885, *De-Dollarization Efforts in China and Russia*, by Rebecca M. Nelson and Karen M. Sutter; and CRS In Focus IF11514, *Power of Siberia: A Natural Gas Pipeline Brings Russia and China Closer*, by Michael Ratner and Heather L. Greenley.

[5] Department of Defense, *The National Military Strategy of the United States of America 2015, The United States Military's Contribution To National Security*, June 2015, pp. i, 1-4.

[6] Office of the President, *National Security Strategy of the United States of America*, December 2017, 55 pp.

[7] Department of Defense, *Summary of the 2018 National Defense Strategy of the United States of America: Sharpening the American Military's Competitive Edge*, undated but released January 2018, 11 pp.

[8] White House, *National Security Strategy*, October 2022, p. 6.

- "Russia and the PRC pose different challenges. Russia poses an immediate threat to the free and open international system, recklessly flouting the basic laws of the international order today, as its brutal war of aggression against Ukraine has shown. The PRC, by contrast, is the only competitor with both the intent to reshape the international order and, increasingly, the economic, diplomatic, military, and technological power to advance that objective" (p. 8).
- "In their own ways, [China and Russia] now seek to remake the international order to create a world conducive to their highly personalized and repressive type of autocracy" (pp. 8-9).
- The United States will, among other things, "modernize and strengthen [its] military so it is equipped for the era of strategic competition with major powers, while maintaining the capability to disrupt the terrorist threat to the homeland" (p. 11).
- "[T]his strategy recognizes that the PRC presents America's most consequential geopolitical challenge…. Russia poses an immediate and ongoing threat to the regional security order in Europe and it is a source of disruption and instability globally but it lacks the across the spectrum capabilities of the PRC" (p. 8).
- "This decade will be decisive, in setting the terms of our competition with the PRC, managing the acute threat posed by Russia, and in our efforts to deal with shared challenges, particularly climate change, pandemics, and economic turbulence" (pp. 12-13).

The October 2022 NSS's third part, entitled "Our Global Priorities," includes a section entitled "Out-Competing China and Constraining Russia" that includes the following statements, among others:

- "The PRC and Russia are increasingly aligned with each other but the challenges they pose are, in important ways, distinct. We will prioritize maintaining an enduring competitive edge over the PRC while constraining a still profoundly dangerous Russia" (p. 23).
- "The PRC is the only competitor with both the intent to reshape the international order and, increasingly, the economic, diplomatic, military, and technological power to do it. Beijing has ambitions to create an enhanced sphere of influence in the Indo-Pacific and to become the world's leading power. It is using its technological capacity and increasing influence over international institutions to create more permissive conditions for its own authoritarian model, and to mold global technology use and norms to privilege its interests and values" (p. 23).
- "Over the past decade, the Russian government has chosen to pursue an imperialist foreign policy with the goal of overturning key elements of the international order. This culminated in a full-scale invasion of Ukraine in an attempt to topple its government and bring it under Russian control. But, this attack did not come out of the blue; it was preceded by Russia's 2014 invasion of Ukraine, its military intervention in Syria, its longstanding efforts to destabilize its neighbors using intelligence and cyber capabilities, and its blatant attempts to undermine internal democratic processes in countries across Europe, Central Asia, and around the world" (p. 25).

The NSS's second part, entitled "Investing in Our Strength," includes a section entitled "Modernizing and Strengthening Our Military" that includes the following statements, among others:

- "The military will act urgently to sustain and strengthen deterrence, with the PRC as its pacing challenge " (p. 20).
- "The United States has a vital interest in deterring aggression by the PRC, Russia, and other states. More capable competitors and new strategies of threatening behavior below and above the traditional threshold of conflict mean we cannot afford to rely solely on conventional forces and nuclear deterrence. Our defense strategy must sustain and strengthen deterrence, with the PRC as our pacing challenge. Our National Defense Strategy relies on integrated deterrence: the seamless combination of capabilities to convince potential adversaries that the costs of their hostile activities outweigh their benefits" (p. 22).

Biden Administration October 2022 National Defense Strategy

The Biden Administration's October 2022 National Defense Strategy (NDS) states that it "directs the Department [of Defense] to act urgently to sustain and strengthen U.S. deterrence, with the People's Republic of China (PRC) as the Department's pacing challenge." The document states further that it

> advances a strategy focused on the PRC and on collaboration with our growing network of Allies and partners on common objectives. It seeks to prevent the PRC's dominance of key regions while protecting the U.S. homeland and reinforcing a stable and open international system. Consistent with the 2022 National Security Strategy (NSS), a key objective of the NDS is to dissuade the PRC from considering aggression as a viable means of advancing goals that threaten vital U.S. national interests. Conflict with the PRC is neither inevitable nor desirable. The Department's priorities support broader whole-of-government efforts to develop terms of interaction with the PRC that are favorable to our interests and values, while managing strategic competition and enabling the pursuit of cooperation on common challenges.
>
> Even as we focus on the PRC as our pacing challenge, the NDS also accounts for the acute threat posed by Russia, demonstrated most recently by Russia's unprovoked further invasion of Ukraine. The Department will support robust deterrence of Russian aggression against vital U.S. national interests, including our treaty Allies. We will work closely with the North Atlantic Treaty Organization (NATO) and our partners to provide U.S. leadership, develop key enabling capabilities, and deepen interoperability. In service of our strategic priorities, we will accept measured risk but remain vigilant in the face of other persistent threats, including those posed by North Korea, Iran, and violent extremist organizations (VEOs). We will also build resilience in the face of destabilizing and potentially catastrophic transboundary challenges such as climate change and pandemics, which increasingly strain the Joint Force [i.e., U.S. military].[9]

Regarding China, the October 2022 NDS states

> The most comprehensive and serious challenge to U.S. national security is the PRC's coercive and increasingly aggressive endeavor to refashion the Indo-Pacific region and the international system to suit its interests and authoritarian preferences. The PRC seeks to undermine U.S. alliances and security partnerships in the Indo-Pacific region, and leverage its growing capabilities, including its economic influence and the People's Liberation Army's (PLA)[10] growing strength and military footprint, to coerce its neighbors and

[9] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 2.

[10] China's military as a whole is referred to as the People's Liberation Army (PLA); the term thus refers not only to China's army but to the various military services that constitute China's military. For an overview of the PLA, see CRS (continued...)

> threaten their interests. The PRC's increasingly provocative rhetoric and coercive activity towards Taiwan are destabilizing, risk miscalculation, and threaten the peace and stability of the Taiwan Strait. This is part of a broader pattern of destabilizing and coercive PRC behavior that stretches across the East China Sea, the South China Sea, and along the Line of Actual Control [between China and India]. The PRC has expanded and modernized nearly every aspect of the PLA, with a focus on offsetting U.S. military advantages. The PRC is therefore the pacing challenge for the Department.
>
> In addition to expanding its conventional forces, the PLA is rapidly advancing and integrating its space, counterspace, cyber, electronic, and informational warfare capabilities to support its holistic approach to joint warfare. The PLA seeks to target the ability of the Joint Force [i.e., U.S. military] to project power to defend vital U.S. interests and aid our Allies in a crisis or conflict. The PRC is also expanding the PLA's global footprint and working to establish a more robust overseas and basing infrastructure to allow it to project military power at greater distances. In parallel, the PRC is accelerating the modernization and expansion of its nuclear capabilities. The United States and its Allies and partners will increasingly face the challenge of deterring two major powers with modern and diverse nuclear capabilities—the PRC and Russia—creating new stresses on strategic stability.[11]

The October 2022 NDS also states

> *Deterring PRC Attacks*. The Department will bolster deterrence by leveraging existing and emergent force capabilities, posture, and activities to enhance denial, and by enhancing the resilience of U.S. systems the PRC may seek to target. We will develop new operational concepts and enhanced future warfighting capabilities against potential PRC aggression. Collaboration with Allies and partners will cement joint capability with the aid of multilateral exercises, codevelopment of technologies, greater intelligence and information sharing, and combined planning for shared deterrence challenges. We will also build enduring advantages, undertaking foundational improvements and enhancements to ensure our technological edge and Joint Force [i.e., U.S. military] combat credibility.[12]

Regarding Russia, the October 2022 NDS states

> Even as the PRC poses the Department's pacing challenge, recent events underscore the acute threat posed by Russia. Contemptuous of its neighbors' independence, Russia's government seeks to use force to impose border changes and to reimpose an imperial sphere of influence. Its extensive track record of territorial aggression includes the escalation of its brutal, unprovoked war against Ukraine. Although its leaders' political and military actions intended to fracture NATO have backfired dramatically, the goal remains. Russia presents serious, continuing risks in key areas. These include nuclear threats to the homeland and U.S. Allies and partners; long-range cruise missile threats; cyber and information operations; counterspace threats; chemical and biological weapons (CBW); undersea warfare; and extensive gray zone campaigns targeted against democracies in particular. Russia has incorporated these capabilities and methods into an overall strategy that, like the PRC's, seeks to exploit advantages in geography and time backed by a mix of threats to the U.S. homeland and to our Allies and partners.[13]

In Focus IF11719, *China Primer: The People's Liberation Army (PLA)*, by Caitlin Campbell, and CRS Report R46808, *China's Military: The People's Liberation Army (PLA)*, by Caitlin Campbell.

[11] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 4.

[12] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 10. Italics as in original.

[13] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 5.

The October 2022 NDS also states

> *Deterring Russian Attacks*. The Department will focus on deterring Russian attacks on the United States, NATO members, and other Allies, reinforcing our iron-clad treaty commitments, to include conventional aggression that has the potential to escalate to nuclear employment of any scale. We will work together with our Allies and partners to modernize denial capabilities, increase interoperability, improve resilience against attack and coercion, share intelligence, and strengthen extended nuclear deterrence. Over time, the Department will focus on enhancing denial capabilities and key enablers in NATO's force planning, while NATO Allies seek to bolster their conventional warfighting capabilities. For Ally and partner countries that border Russia, the Department will support efforts to build out response options that enable cost imposition.[14]

The October 2022 NDS states that

> in support of a stable and open international system and our defense commitments, the Department's priorities are:
>
> — Defending the homeland, paced to the growing multi-domain threat posed by the PRC;
>
> — Deterring strategic attacks against the United States, Allies, and partners;
>
> — Deterring aggression, while being prepared to prevail in conflict when necessary—prioritizing the PRC challenge in the Indo-Pacific region, then the Russia challenge in Europe; and,
>
> — Building a resilient Joint Force [i.e., U.S. military] and defense ecosystem.[15]

Overview of Implications for Defense

The emergence of GPC has profoundly changed the conversation about U.S. defense issues from what it was during the post–Cold War era: Counterterrorist operations and U.S. military operations in the Middle East—which had been more at the center of discussions of U.S. defense issues following the terrorist attacks of September 11, 2001—are now a less prominent (but still present) element in the conversation, and the conversation now focuses more on the topics discussed briefly in the sections below, all of which relate largely to China and/or Russia.[16]

[14] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 10. Italics as in original.

[15] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 7. The document defines the defense ecosystem on page 2 as "the Department of Defense, the defense industrial base, and the array of private sector and academic enterprises that create and sharpen the Joint Force's [i.e., U.S. military's] technological edge."

[16] For a press report that provides an overview discussion of this shift in the conversation, see Michael R. Gordon, "The U.S. Is Not Yet Ready For 'Great Power' Conflict," *Wall Street Journal*, March 6, 2023. See also Eric Rosenbach, "How US Military Planning Has Shifted Away from Fighting Terrorism to Readying for Tensions and Conflict with China and Russia," *The Conversation*, August 26, 2024.

Grand Strategy and Geopolitics

Overview

The emergence of GPC has led to a renewed emphasis on grand strategy and geopolitics[17] as a starting point for discussing U.S. defense funding levels, strategy, plans, and programs. A November 2, 2015, press report, for example, stated the following:

> The resurgence of Russia and the continued rise of China have created a new period of great-power rivalry—and a corresponding need for a solid grand strategy, [then-]U.S. Deputy Defense Secretary Robert Work said Monday at the Defense One Summit in Washington, DC.
>
> "The era of everything [i.e., multiple international security challenges] is the era of grand strategy," Work said, suggesting that the United States must carefully marshal and deploy its great yet limited resources.[18]

For the United States, grand strategy can be viewed as strategy at a global or interregional level, as opposed to U.S. strategies for individual regions, countries, or issues. From a U.S. perspective on grand strategy and geopolitics, it can be noted that most of the world's people, resources, and economic activity are located not in the Western Hemisphere, but in the other hemisphere, particularly Eurasia. In response to this basic feature of world geography, U.S. policymakers for the last several decades have chosen to pursue, as a key element of U.S. national strategy, a goal of preventing the emergence of regional hegemons in Eurasia. Although U.S. policymakers do not often state explicitly in public the goal of preventing the emergence of regional hegemons in Eurasia, U.S. military operations in recent decades—both wartime operations and day-to-day operations—appear to have been carried out in no small part in support of this goal.

The goal of preventing the emergence of regional hegemons in Eurasia is a major reason why the U.S. military is structured with force elements that enable it to deploy from the United States, cross broad expanses of ocean and air space, and then conduct sustained, large-scale military operations upon arrival in Eurasia or the waters and airspace surrounding Eurasia. Force elements associated with this goal include, among other things, an Air Force with significant numbers of long-range bombers, long-range surveillance aircraft, long-range airlift aircraft, and aerial refueling tankers, and a Navy with significant numbers of aircraft carriers, nuclear-powered attack submarines, large surface combatants, large amphibious ships, and underway replenishment ships.[19]

The U.S. goal of preventing the emergence of regional hegemons in Eurasia, though long-standing, is not written in stone—it is a policy choice reflecting two judgments: (1) that given the

[17] The term *grand strategy* generally refers to a country's overall strategy for securing its interests and making its way in the world, using all the national tools at its disposal, including diplomatic, information, military, and economic tools (sometimes abbreviated in U.S. government parlance as DIME). The term *geopolitics* is often used as a synonym for international politics or strategy relating to international politics. More specifically, it refers to the influence of basic geographic features on international relations, and to the analysis of international relations from a perspective that places a strong emphasis on the influence of such geographic features. Basic geographic features involved in geopolitical analysis include things such as the relative sizes and locations of countries or land masses; the locations of key resources such as oil or water; geographic barriers such as oceans, deserts, and mountain ranges; and key transportation links such as roads, railways, and waterways. For further discussion, see Daniel H. Deudney, "Geopolitics," *Encyclopedia Britannica*, June 12, 2013, accessed November 17, 2021, at https://www.britannica.com/topic/geopolitics.

[18] Bradley Peniston, "Work: 'The Age of Everything Is the Era of Grand Strategy'," *Defense One*, November 2, 2015.

[19] For additional discussion, see CRS In Focus IF10485, *Defense Primer: Geography, Strategy, and U.S. Force Design*, by Ronald O'Rourke.

amount of people, resources, and economic activity in Eurasia, a regional hegemon in Eurasia would represent a concentration of power large enough to be able to threaten vital U.S. interests; and (2) that Eurasia is not dependably self-regulating in terms of preventing the emergence of regional hegemons, meaning that the countries of Eurasia cannot be counted on to be able to prevent, though their own actions, the emergence of regional hegemons, and may need assistance from one or more countries outside Eurasia to be able to do this dependably.

An emergence of GPC does not require an acceptance of both of these judgments as guideposts for U.S. defense in coming years—one might accept that there has been an emergence of GPC but nevertheless conclude that one of these judgments or the other, while perhaps valid in the past, is no longer valid. A conclusion that one of these judgments is not valid could lead to a potentially major change in U.S. grand strategy that could lead to large-scale changes in U.S. defense funding levels, strategy, plans, and programs. By the same token, an emergence of GPC does not by itself suggest that these two judgements—and the consequent U.S. goal of preventing the emergence of regional hegemons in Eurasia—are not valid as guideposts for U.S. defense in coming years.

Debate Over Whether to Adopt an "Asia First" U.S. Grand Strategy

A prominent grand strategy issue that observers are debating is whether the United States should adopt a so-called "Asia first" U.S. grand strategy—meaning a strategy that focuses U.S. resources primarily on deterring and countering potential PRC aggression in Asia while limiting or reducing U.S. resources devoted to deterring and countering potential and actual Russian aggression in Europe—or, alternatively, adopt a U.S. grand strategy that allocates U.S. resources more evenly toward deterring and countering both China and Russia. The outcome of this debate could have significant implications for U.S. defense strategy, budgets, plans, and programs.

For a list of articles pertaining to debate over U.S. grand strategy, including articles regarding the debate over whether the United States should adopt an "Asia first" grand strategy, see **Appendix C**.

Force-Planning Standard

Related to the above issue of U.S. grand strategy, the emergence of GPC has prompted renewed discussion of the force-planning standard,[20] meaning the number and types of simultaneous or overlapping conflicts or other contingencies that the U.S. military should be sized to be able to conduct—a planning factor that can strongly impact the size of the U.S. defense budget.

In its section on force planning, the Biden Administration's October 2022 NDS states (emphasis added)

> Building on the 2018 NDS, **the 2022 NDS Force Planning Construct** sizes and shapes the Joint Force to simultaneously defend the homeland; maintain strategic deterrence; and deter and, if necessary, prevail in conflict. **To deter opportunistic aggression elsewhere, while the United States is involved in an all-domain conflict**, the Department will employ a range of risk mitigation efforts rooted in integrated deterrence. These include coordination with and contributions of Allies and partners, deterrent effects of U.S. nuclear posture, and leveraging posture and capabilities not solely engaged in **the primary warfight**—for example, cyber and space. **Additionally**, the Joint Force will be shaped to ensure **the ability to respond to small-scale, short-duration crises** without substantially impairing high-end warfighting readiness, and to **conduct campaigning activities** that

[20] Other terms for referring to the force-planning standard use *force-sizing* instead of *force-planning*, and *construct* or *metric* instead of *standard*.

> improve our position and reinforce deterrence while limiting or disrupting competitor activities that seriously affect U.S. interests.[21]

The emboldened parts of the above passage suggest that the force-planning construct in the October 2022 NDS calls for a force sized to conduct one major conflict while helping to deter a second major conflict, with additional capabilities for responding to small-scale, short-duration crises and for conducting campaigning activities (i.e., continuing, day-to-day operations that are intended to help shape the international security environment over time).[22]

One U.S. military official has testified that U.S. military is currently sized to be able to conduct something less than two simultaneous or overlapping major conflicts. At a May 12, 2022, hearing before the Senate Armed Services Committee, for example, Admiral Michael Gilday, who was then the Chief of Naval Operations, was asked what the impact would be on the Navy's ability to meet its operational requirements in Europe if Navy forces were withheld from Europe for the purpose of deterring PRC aggression in the Pacific. Gilday replied

> I think we'd be challenged. We'd have to take a look at how you squeeze the most out of the joint force [i.e., the overall U.S. military] you have and use it in the best—best possible way. But I think we'd be challenged. You know, right now the force is not sized to handle two simultaneous conflicts. It's—it's sized to fight one and to keep—keep a second adversary in check. But in terms of a two—two all-out conflicts, we are not sized for that.[23]

One observer stated in 2019

> During the post-Cold War era, the U.S. military had a force-planning construct (a scheme that matches the size and capabilities of the force to the key scenarios it is likely to face) focused on fighting two major regional contingencies more or less simultaneously. The idea was that the U.S. should be able to decisively defeat an adversary in the Middle East—Iraq or Iran—without fatally compromising its ability to take on North Korea. This two-war capability was deemed critical to preventing opportunistic aggression by one adversary while the U.S. was engaged with another, and thereby upholding a grand strategy premised on deterring war in multiple regions at once. The two-war strategy, Pentagon officials wrote in 1997, "is the sine qua non of a superpower."

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[21] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 17.

[22] One observer, writing about the October 2022 NDS, states

> What is the force sizing construct? The Trump administration said it was one major conflict and "deterring" a second conflict. It is not clear how the demonstration [sic: Biden Administration?] is sizing its forces. What size are the services aiming for? Budget documents give some indication … but budget numbers are not necessarily long-term strategic goals. It may be that the classified version of the [2022] NDS, which went to Congress in the spring [of 2022], has answers to all these questions. However, that does not help the public discussion about defense and strategy.
>
> (Mark F. Cancian, "Force Structure in the National Defense Strategy: Highly Capable but Smaller and Less Global," Center for Strategic and International Studies (CSIS), October 31, 2022.)

Regarding campaigning activities, the October 2022 NDS states

> The Department [of Defense] will also campaign day-to-day to gain and sustain military advantages, counter acute forms of our competitors' coercion, and complicate our competitors' military preparations. Campaigning is not business as usual—it is the deliberate effort to synchronize the Department's activities and investments to aggregate focus and resources to shift conditions in our favor. Through campaigning, the Department will focus on the most consequential competitor activities that, if left unaddressed, would endanger our military advantages now and in the future.
>
> (Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. iv.)

[23] Source: CQ transcript of hearing.

> After the onset of budgetary austerity in 2011, the two-war strategy gradually eroded as defense cuts made it harder to handle two regional adversaries at once. And after the Russian invasion of Ukraine in 2014, it was clear that the U.S. was facing a fundamentally different world, in which the country's foremost adversaries were not inferior rogue states but major powers fielding formidable military capabilities. Add in that any war against Russia or China is likely to occur in their geopolitical backyards, and that both rivals have spent considerable time, money and intellectual effort seeking to neutralize America's ability to project power, and the U.S. military would have enormous difficulty in winning even a single war against a great-power challenger.
>
> In the 2018 National Defense Strategy and subsequent statements, the Pentagon thus outlined a significantly different force-planning construct. It announced that the fully mobilized American military would be capable of *defeating* aggression by a great-power adversary, while also *deterring* (not necessarily defeating) aggression in a second theater. In other words, the U.S. is now building a force not around the demands of two regional conflicts with rogue states, but around the requirements of winning a high-intensity conflict with a single, top-tier competitor—a war with China over Taiwan, for instance, or a clash with Russia in the Baltic region.[24]

The emergence of GPC has prompted some observers to ask whether the force-planning standard should be changed to being able to fight two simultaneous or overlapping major conflicts with adversaries such as China and Russia—a so-called two-war or two-major-war standard—or something greater than a two-war standard.[25] Adopting and implementing a two-war standard relating to potential conflicts with adversaries such as China and Russia could entail substantially expanding the size of the U.S. military and the size of the U.S. defense budget. The July 2024 final report of a congressionally created commission on the national defense strategy states

> The 2022 NDS force construct does not sufficiently account for global competition or the very real threat of simultaneous conflict in more than one theater. We propose a Multiple Theater Force Construct. This is distinct from the bipolar Cold War construct and the two-war construct designed afterward for separate wars against less capable rogue states—essentially, one in northeast Asia and one in the Middle East. Neither model meets the

[24] Hal Brands, "What If the U.S. Could Fight Only One War at a Time?," *Bloomberg*, June 11, 2019. (Also published as Hal Brands, "What If the US Could Fight Only One War at a Time?," American Enterprise Institute, June 11, 2019.) Italics as in original. See also Dakota L. Wood, editor, *2023 Index of U.S. Military Strength*, Heritage Foundation, 2023 (released October 18, 2022), p. 323; Mark Gunzinger and Kamilla Gunzinger, "Ukraine Makes Clear the US Must Reconsider Its One-War Defense Strategy," *Defense News*, March 14, 2022.

[25] See, for example, Thomas G. Mahnken, "A Three-Theater Defense Strategy, How America Can Prepare for War in Asia, Europe, and the Middle East," *Foreign Affairs*, June 5, 2024; David J. Trachtenberg, *The Demise of the 'Two-War Strategy' and Its Impact on Extended Deterrence and Assurance*, National Institute for Public Policy, June 2024 (Occasional Paper, vol. 4, no. 6), 51 pp.; Ken Moriyasu, "U.S. Faces 4 Threats but Only Equipped for 1 War, Experts Say," *Nikkei Asia*, February 23, 2024; Eric S. Edelman and Franklin C. Miller, "We Must Return to and Maintain the Two Theater Defense Planning Construct," *Real Clear Defense*, August 17, 2023; Markus Garlauskas, "The United States and Its Allies Must Be Ready to Deter a Two-Front War and Nuclear Attacks in East Asia," Atlantic Council, August 16, 2023; Raphael S. Cohen, "Ukraine and the New Two War Construct," *War on the Rocks*, January 5, 2023; Dakota L. Wood, ed., *2023 Index of U.S. Military Strength*, Heritage Foundation, 2023 (released October 18, 2022), pp. 3, 10, 326, 330, 332; Kori Schake, "America Must Spend More on Defense, How Biden Can Align Resources and Strategy," *Foreign Affairs*, April 5, 2022; Mark Gunzinger and Kamilla Gunzinger, "Ukraine Makes Clear the US Must Reconsider Its One-War Defense Strategy," *Defense News*, March 14, 2022; Hal Brands and Evan Braden Montgomery, "One War Is Not Enough: Strategy and Force Planning for Great-Power Competition," *Texas National Security Review* (Spring 2020), pp. 80-92. See also Hal Brands, "Can the US Take on China, Iran and Russia All at Once?," *Bloomberg*, October 16, 2022.

dimensions of today's threat or the wide variety of ways in which and places where conflict could erupt, grow, and evolve.[26]

Organizational Changes within DOD

The emergence of GPC has led to increased discussion about whether and how to make organizational changes within the Department of Defense (DOD) to better align DOD's activities with those needed to counter PRC and, secondarily, Russian military capabilities. Among changes that have been made, among the most prominent have been the creation of the U.S. Space Force[27] and the elevation of the U.S. Cyber Command to be its own combatant command.[28] Additional changes are occurring within individual U.S. military services. For example, on February 12, 2024, the Department of the Air Force, which includes the Air Force and the Space Force, announced major reorganizations intended to better optimize the two services for GCP.[29]

Nuclear Weapons, Nuclear Deterrence, and Nuclear Arms Control

Overview

The emergence of GPC has led to a renewed emphasis in discussions of U.S. defense on nuclear weapons, nuclear deterrence, and nuclear arms control.[30] Russia's reassertion of its status as a

[26] Jane Harman, chair, et al., *[Final Report of the] Commission on the National Defense Strategy*, July 2024, p. viii. See also Chapter 6 of the report, entitled "Force Sizing, Capabilities, and Posture," on pages 37-49. See also Jack Detsch, "The U.S. Must Prepare to Fight Simultaneous Wars, Oversight Panel Says, A New Review Finds the Pentagon Isn't Ready to Wage War in Multiple Theaters at Once," *Foreign Policy*, July 29, 2024; Lee Ferran, "National Defense Commission: Pentagon Has 'Insufficient' Forces 'Inadequate' to Face China, Russia, Boldest Among the Report's Recommendations Is a Proposal for What It Calls a New 'Multiple Theater Force Construct' to Fix the Current, 'Out-of-Date' Version," *Breaking Defense*, July 29, 2024.

[27] See CRS In Focus IF12610, *Defense Primer: The United States Space Force*, by Jennifer DiMascio.

[28] See CRS In Focus IF10537, *Defense Primer: Cyberspace Operations*, by Catherine A. Theohary.

[29] U.S. Air Force, *The Case for Change, Optimizing the Air Force for Great Power Competition*, undated, released ca. February 12, 2024, 12 pp. See also Audrey Decker, "Air Force Announces Major Shakeup to Prep for War with China," *Air Force Times*, February 12, 2024; Dave Deptula, "The Department Of The Air Force Optimizes For Great Power Competition," *Forbes*, February 13, 2024; Courtney Mabeus-Brown and Rachel S. Cohen, "Air Force Unveils Command Changes, Wing Plans in Bid to Outpace China," *Air Force Times*, February 13, 2024.

[30] See, for example, Hal Brands, "Welcome to the New Era of Nuclear Brinkmanship," *Bloomberg*, August 27, 2023; Francis Gavin, "Time to Rethink America's Nuclear Strategy," *Foreign Affairs*, September 5, 2022; Jeffrey Lewis and Aaron Stein, "Who Is Deterring Whom? The Place of Nuclear Weapons in Modern War," *War on the Rocks*, June 16, 2022; Michael Auslin, "Learning to Think Nuclearly Again, A New Nuclear Era Demands Strategy, Not Just Arms Control," *Foreign Policy*, June 11, 2022; Shlomo Ben-Ami, "Russia's Nuclear Threat Has Worked," *Strategist (ASPI)*, June 8, 2022; Tom Nichols, "We Have No Nuclear Strategy, The U.S. Can't Keep Ignoring the Threat These Weapons Pose," *Atlantic*, June 1, 2022; David E. Sanger and William J. Broad, "Putin's Threats Highlight the Dangers of a New, Riskier Nuclear Era," *New York Times*, June 1, 2022; David Ignatius, "The Pentagon Plans Anew to Head Off an Old Worry: Nuclear War," *Washington Post*, April 28, 2022; Max Hastings, "With Nuclear Threat, Putin Makes the Unthinkable a Possibility, Most Westerners Thought the Peril of Apocalypse Disappeared with the 1991 Collapse of the Soviet Union. They Were Wrong," *Bloomberg*, March 27, 2022; Andreas Kluth, "When, Why and How Putin Might Use Nukes, The Newly Prominent Role of So-Called Tactical Nuclear Weapons Puts the World in the Greatest Danger Since the Cuban Missile Crisis," *Bloomberg*, March 23, 2022; David C. Gompert, "How Putin Exploits America's Fear of Nuclear War," *Wall Street Journal*, March 22, 2022; Patty-Jane Geller, "Putin's Nuclear Threats against Ukraine Demand a NATO Response, Once a Relic of the Cold War, Nuclear Weapons Are Salient Once Again," *Fox News*, March 16, 2022; Sarah Bidgood, "A New Nuclear Arms Race Is a Real Possibility: History Suggests the War in Ukraine Could Put an End to Arms Control As We Know It," *Foreign Policy*, March 15, 2022; Andrew Jeong, "Putin Has Brought Threat of Nuclear Conflict 'Back Within the Realm of Possibility,' U.N. Chief Says," *Washington Post*, March 15, 2022; Patty-Jane Geller, "It's Time to Reconsider Our Nuclear Forces," *Fox News*, March 14, 2022; John D. Maurer, "Maintaining America's Nuclear Deterrent," *War on the Rocks*, March 10, 2022.

major world power has included, among other things, recurring references by Russian officials to Russia's nuclear weapons capabilities and Russia's status as a major nuclear weapon power.[31]

China's nuclear-weapon capabilities are currently much more modest than Russia's, but China reportedly is now modernizing and rapidly increasing its nuclear forces as part of its overall military modernization effort. The expansion of China's nuclear forces is projected by U.S. officials and others to convert the traditional two-power strategic nuclear deterrent situation between the United States and Russia into a more complex three-power situation. Policymakers and deterrence theorists are currently examining how to address this emerging three-power strategic nuclear situation, particularly if it is not bounded and regulated, as the two-power situation was, by a strategic nuclear arms control agreement.[32]

[31] See, for example, David E. Sanger, "New Nuclear Threats From Putin, Timed for a Moment of Anxiety, Repeated Threats by President Vladimir Putin of Russia to Make Use of Nuclear Weapons Have Become the Background Theme of the War in Ukraine, Often Timed for Maximum Effect," *New York Time*s, February 29, 2024; Dmitry Adamsky, "Russia's New Nuclear Normal, How the Country Has Grown Dangerously Comfortable Brandishing Its Arsenal," *Foreign Affairs*, May 19, 2023.

[32] See, for example, Michael Mazza, "The Nuclear Arms Race Never Ended—and the US Must Not Cede the Lead," *The Hill*, August 26, 2024; Tong Zhao, *Political Drivers of China's Changing Nuclear Policy: Implications for U.S.-China Nuclear Relations and International Security*, Carnegie Endowment for International Peace, 2024 (published online July 17, 2024), 103 pp.; Heather Williams and Doreen Horschig, *House of Cards? Nuclear Norms in an Era of Strategic Competition*, Center for Strategic and International Studies (CSIS), July 2024, 24 pp.; Rebeccah L. Heinrichs, "America's New Nuclear Deterrence Era, Having Two Nuclear Peer Adversaries Heightens the Need for America to Update Its Nuclear Warheads and Weapon Systems," *The Dispatch*, June 18, 2024; Project on Nuclear Issues Mid-Career Cadre Task Force, *Understanding Opportunistic Aggression in the Twenty-First Century*, Center for Strategic and International Studies (CSIS), June 2024 (published online June 6, 2024), 29 pp.; Michael Albertson, Editor, *Aligning Arms Control with the New Security Environment*, Center for Global Security Research, Lawrence Livermore National Laboratory, May 2024, 134 pp.; Jyri Lavikainen, *China as the Second Nuclear Peer of the United States, Implications for Deterrence in Europe*, Finnish Institute of International Affairs (FIIA), February 2024, 8 pp.; Greg Weaver and Amy Woolf, *Requirements for Nuclear Deterrence and Arms Control in a Two-Nuclear-Peer Environment*, Atlantic Council and Los Alamos National Laboratory, February 2024 (posted online February 2, 2024), 19 pp.; Jason Sherman, "DOD to Solicit Independent Assessment of Multipolar Strategic Challenges," *Inside Defense*, January 16, 2024; Alyxandra Marine, "As the US Faces Down New Nuclear Threats, Will Cold War Solutions Work Once Again?" Atlantic Council, November 28, 2023; "Our Experts Explain What US Policymakers Should Know about Deterring Russia's and China's Nuclear Threats," Atlantic Council, November 28, 2023 (transcript of roundtable discussion moderated by Robert Soofer); J. Peter Scoblic, *The Uncertainty of the Unthinkable, Imagining the Future of Nuclear Dangers to the United States, New America*, November 2023, 40 pp.; Keir A. Lieber and Daryl G. Press, "The Return of Nuclear Escalation, How America's Adversaries Have Hijacked Its Old Deterrence Strategy," Foreign Affairs, November/December 2023 (posted online October 24, 2023); Department of State, International Security Advisory Board, *Report on Deterrence in a World of Nuclear Multipolarity*, October 2023, 33 pp.; Robert Peters, *Russia and China Are Running in a Nuclear Arms Race While the United States Is Jogging in Place, Heritage Foundation*, September 13, 2023, 9 pp.; Heather Williams et al., *Project Atom 2023, A Competitive Strategies Approach for U.S. Nuclear Posture through 2035*, Center for Strategic and International Studies (CSIS), September 2023, 94 pp.; William J. Broad, "The Terror of Threes in the Heavens and on Earth," *New York Times*, June 16 (updated June 30), 2023; Keir Lieber and Daryl G. Press, "US Strategy and Force Posture for an Era of Nuclear Tripolarity," Atlantic Council, May 1, 2023; Brad Roberts et al., *China's Emergence as a Second Nuclear Peer: Implications for U.S. Nuclear Deterrence Strategy*, Lawrence Livermore National Laboratory, Spring 2023, 74 pp.; David E. Sanger, William J. Broad, and Chris Buckley, "3 Nuclear Superpowers, Rather Than 2, Usher In a New Strategic Era," *New York Times*, April 19, 2023; Greg Torode and Eduardo Baptista, "China's Intensifying Nuclear-Armed Submarine Patrols Add Complexity for U.S., Allies," *Reuters*, April 3, 2023; Jonathan Tirone, "China, Russia Deepen Nuclear Concord That Concerns Pentagon," *Bloomberg*, March 22, 2023; Andrew F. Krepinevich Jr., "The Tripolar Problem," Yale University Press, March 13, 2023; John R. Bolton, "Putin Did the World a Favor by Suspending Russia's Participation in New START," *Washington Post*, March 6, 2023; Greg Torode and Martin Pollard, "Putin's Nuclear Treaty Move Raises Stakes over China's Growing Arsenal," *Reuters*, February 22, 2023; Andrew F. Krepinevich Jr., "How China's Nuclear Ambitions Will Change Deterrence Shifting from a Bipolar System to a Tripolar one," Hudson Institute, January 31, 2023; Robert S. Litwak, *Tripolar Instability, Nuclear Competition Among the United States, Russia, and China*, Wilson Center, 2023 124 pp; Matthew Kroenig, "Arms Racing Under (continued...)

The increased emphasis in discussions of U.S. defense and security on nuclear weapons, nuclear deterrence, and nuclear arms control comes at a time when DOD is in the early stages of a multiyear plan to spend scores of billions of dollars to modernize U.S. strategic nuclear deterrent forces.[33] DOD, for example, currently has plans to acquire a new class of ballistic missile submarines[34] a next-generation long-range bomber,[35] and a next-generation intercontinental ballistic missile (ICBM).[36]

One question regarding U.S. nuclear force modernization concerns the program to develop and acquire the next-generation ICBM. Another concerns the program to develop a new nuclear-armed sea-launched cruise missile (SLCM-N) for placement on U.S. Navy attack submarines.[37]

Regarding nuclear arms control,[38] GPC was an apparent key factor in connection with the U.S. decision to withdraw from the Intermediate-Range Nuclear Forces (INF) Treaty.[39] The United States has invited China to be a third participant, along with the United States and Russia, in negotiations on future limitations on nuclear arms.[40] China has reportedly refused to join such negotiations,[41] but in February 2024 reportedly invited the United States and other nuclear-

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Nuclear Tripolarity: Evidence for an Action-Reaction Cycle?" Atlantic Council, December 20, 2022; Editorial Board, "The Nuclear Arms Race Grows from Two to Three Major Competing Powers," *Washington Post*, November 11, 2022; Katherine Walla, "Inside the US Nuclear Posture Review's Approach to a New Era of Three-Power Nuclear Competition," *Washington Post*, November 3, 2022; Tara Copp, "US Military 'Furiously' Rewriting Nuclear Deterrence to Address Russia and China, STRATCOM Chief Says," *Defense One*, August 11, 2022; Andrew F. Krepinevich Jr., "The New Nuclear Age How China's Growing Nuclear Arsenal Threatens Deterrence," *Foreign Affairs*, May/June 2022 (published April 19, 2022).

[33] See CRS In Focus IF10519, *Defense Primer: Strategic Nuclear Forces*, by Anya L. Fink.

[34] CRS Report R41129, *Navy Columbia (SSBN-826) Class Ballistic Missile Submarine Program: Background and Issues for Congress*, by Ronald O'Rourke.

[35] See CRS Report R44463, *Air Force B-21 Raider Long-Range Strike Bomber*, coordinated by John R. Hoehn.

[36] See CRS In Focus IF11681, *Defense Primer: LGM-35A Sentinel Intercontinental Ballistic Missile*, by Anya L. Fink.

[37] See CRS In Focus IF12084, *Nuclear-Armed Sea-Launched Cruise Missile (SLCM-N)*, by Anya L. Fink.

[38] For discussions on arms control in the context of GPC, see, for example, Ulrich Kühn and Heather Williams, "A New Approach to Arms Control, How to Safeguard Nuclear Weapons in an Era of Great-Power Politics," *Foreign Affairs*, June 14, 2023; Rebecca K. C. Hersman, Heather Williams, and Suzanne Claeys, *Integrated Arms Control in an Era of Strategic Competition*, CSIS, January 2022, 65 pp.; Jeffrey Lewis, "China Is Radically Expanding Its Nuclear Missile Silos, With More Weapons Likely, It's Time to Go Back to Arms Talks," *Foreign Policy*, June 30, 2021; John Maurer, "Arms Control Among Rivals," American Enterprise Institute, February 11, 2021.

[39] For additional discussion, see CRS Insight IN10985, *U.S. Withdrawal from the INF Treaty*, by Amy F. Woolf.

[40] See, for example, Julian E. Barnes and David E. Sanger, "U.S. Will Try to Bring China Into Arms Control Talks," *New York Times*, June 2, 2023; Jack Detsch, "Trump Wants China on Board With New Arms Control Pact," *Foreign Policy*, July 23, 2020; Jeff Mason, Arshad Mohammed, Vladimir Soldatkin, and Andrew Osborne, "Trump Stresses Desire for Arms Control with Russia, China in Putin Call," *Reuters*, May 7, 2020; Emma Farge, "U.S. Urges China to Join Nuclear Arms Talks with Russia," *Reuters*, January 21, 2020; Michael R. Gordon, "U.S. Invites China for Talks on Nuclear Arms," *Wall Street Journal*, December 20, 2019; David Wainter, "Chinese Nuclear Stockpile Clouds Prospects for U.S.-Russia Deal," *Bloomberg*, October 18, 2019. See also Christian Le Miere, "How China Can Benefit from Joining US, Russia in Nuclear Arms Talks," *South China Morning Post*, July 9, 2021.

[41] See, for example, Jay Solomon, "China Rejects Nuclear Talks with the U.S. As It Looks to Strengthen Its Own Arsenal," *Semafor*, June 9, 2023; Kathrin Hille, "US and China Are Not Ready to Talk About Nuclear Arms Controls, China Wants to Tackle Growing Risk of Nuclear Conflict but Is Reluctant to Curb Its Nuclear Weapons Programme," *Financial Times*, January 11, 2022; Emma Frage, "U.S. Says China Is Resisting Nuclear Arms Talks," *Reuters*, May 18, 2021; John Dotson, "Beijing Rejects Any Involvement in Nuclear Arms Limitation Talks," Jamestown Foundation, October 30, 2020; Associated Press, "China Calls US Invite to Nuclear Talks a Ploy to Derail Them," *Associated Press*, July 8, 2020; Robbie Gramer and Jack Detsch, "Trump Fixates on China as Nuclear Arms Pact Nears Expiration," *Foreign Policy*, April 29, 2020; Hal Brands, "China Has No Reason to Make a Deal on Nuclear Weapons," *Bloomberg*, April 29, 2020; Cheng Hanping, "US Attempt to Rope China into New START Negotiations Won't Succeed," *Global Times*, February 12, 2020; Steven Pifer, "Trump's Bid to Go Big on Nuclear Arms Looks
(continued...)

weapon countries to negotiate a treaty in which the parties would pledge to not use nuclear weapons first against one another.[42] January 2024 press reports stated that Russia had rejected a September 2023 U.S. proposal for resuming negotiations on nuclear arms control.[43]

August 2024 Press Report About New U.S. Strategic Nuclear Weapon Strategy

An August 20, 2024, press report states

> President Biden approved in March [2024] a highly classified nuclear strategic plan for the United States that, for the first time, reorients America's deterrent strategy to focus on China's rapid expansion in its nuclear arsenal.
>
> The shift comes as the Pentagon believes China's stockpiles will rival the size and diversity of the United States' and Russia's over the next decade.
>
> The White House never announced that Mr. Biden had approved the revised strategy, called the "Nuclear Employment Guidance," which also newly seeks to prepare the United States for possible coordinated nuclear challenges from China, Russia and North Korea. The document, updated every four years or so, is so highly classified that there are no electronic copies, only a small number of hard copies distributed to a few national security officials and Pentagon commanders.
>
> But in recent speeches, two senior administration officials were allowed to allude to the change—in carefully constrained, single sentences—ahead of a more detailed, unclassified notification to Congress expected before Mr. Biden leaves office.
>
> "The president recently issued updated nuclear-weapons employment guidance to account for multiple nuclear-armed adversaries," Vipin Narang, an M.I.T. nuclear strategist who served in the Pentagon, said earlier this month before returning to academia. "And in particular," he added, the weapons guidance accounted for "the significant increase in the size and diversity" of China's nuclear arsenal.
>
> In June, the National Security Council's senior director for arms control and nonproliferation, Pranay Vaddi, also referred to the document, the first to examine in detail whether the United States is prepared to respond to nuclear crises that break out simultaneously or sequentially, with a combination of nuclear and nonnuclear weapons.
>
> The new strategy, Mr. Vaddi said, emphasizes "the need to deter Russia, the PRC and North Korea simultaneously," using the acronym for the People's Republic of China.[44]

October 2022 NSS

The October 2022 NSS states

Like a Fizzle," *Defense One*, February 5, 2020; Samuel Osborne, "China Refuses to Join Nuclear Talks with US and Russia in Blow for Trump," *Independent (UK)*, May 7, 2019; Ben Blanchard, "China Says It Won't Take Part in Trilateral Nuclear Arms Talks," *Reuters*, May 6, 2019; Ben Westcott, "China 'Will Not Participate' in Trump's Proposed Three-Way Nuclear Talks, CNN, May 6, 2019.

[42] W.J. Hennigan, "The U.S. Has Received a Rare Invitation From China. There Is Only One Right Answer," *New York Times*, April 15, 2024.

[43] See Vladimir Isachenkov, "Russia's Foreign Minister Rejects a US Proposal to Resume Talks on Nuclear Arms Control," *Associated Press*, January 18, 2024; Miranda Nazzaro, "Russia Shoots Down US Proposal to Restart Nuclear Arms Control Talks," *The Hill*, January 18, 2024; Sam Skove, "Russia Rejects US Proposal for Negotiations on Nuclear Arms Control," *Defense One*, January 18, 2024. See also Guy Faulconbridge and Dmitry Antonov, "Russia Responds Icily to U.S. Hint on Arms Control Talks with Moscow and Beijing," *Reuters*, March 20, 2024.

[44] David E. Sanger, "Biden Approved Secret Nuclear Strategy Refocusing on Chinese Threat," *New York Times*, August 20, 2024.

> Nuclear deterrence remains a top priority for the Nation and foundational to integrated deterrence. A safe, secure, and effective nuclear force undergirds our defense priorities by deterring strategic attacks, assuring allies and partners, and allowing us to achieve our objectives if deterrence fails. Our competitors and potential adversaries are investing heavily in new nuclear weapons. By the 2030s, the United States for the first time will need to deter two major nuclear powers, each of whom will field modern and diverse global and regional nuclear forces. To ensure our nuclear deterrent remains responsive to the threats we face, we are modernizing the nuclear Triad, nuclear command, control, and communications, and our nuclear weapons infrastructure, as well as strengthening our extended deterrence commitments to our Allies. We remain equally committed to reducing the risks of nuclear war. This includes taking further steps to reduce the role of nuclear weapons in our strategy and pursuing realistic goals for mutual, verifiable arms control, which contribute to our deterrence strategy and strengthen the global non-proliferation regime.[45]

October 2022 Nuclear Posture Review (NPR)

The Biden Administration's October 2022 Nuclear Posture Review (NPR), which was released in conjunction with its October 2022 NDS, states (emphasis as in original)

> By the 2030s the United States will, for the first time in its history, face two major nuclear powers as strategic competitors and potential adversaries. This will create new stresses on stability and new challenges for deterrence, assurance, arms control, and risk reduction....
>
> ***The PRC's nuclear expansion and the changes this could bring to its strategy present new complexities.*** In the near-term, we must factor this into our arms control and risk reduction approaches with Russia. We also recognize that as the security environment evolves, it may be necessary to consider nuclear strategy and force adjustments to assure our ability to achieve deterrence and other objectives for the PRC – even as we continue to do so for Russia. Our plans and capabilities must also account for the fact that the PRC increasingly will be able to execute a range of nuclear strategies to advance its goals.[46]

The October 2022 NPR also states

> In large part due to the actions of our strategic competitors, the international security environment has deteriorated in recent years. The People's Republic of China (PRC) is the overall pacing challenge for U.S. defense planning and a growing factor in evaluating our nuclear deterrent. The PRC has embarked on an ambitious expansion, modernization, and diversification of its nuclear forces and established a nascent nuclear triad. The PRC likely intends to possess at least 1,000 deliverable warheads by the end of the decade.
>
> While the end state resulting from the PRC's specific choices with respect to its nuclear forces and strategy is uncertain, the trajectory of these efforts points to a large, diverse nuclear arsenal with a high degree of survivability, reliability, and effectiveness. This could provide the PRC with new options before and during a crisis or conflict to leverage nuclear weapons for coercive purposes, including military provocations against U.S. Allies and partners in the region.
>
> Russia continues to emphasize nuclear weapons in its strategy, modernize and expand its nuclear forces, and brandish its nuclear weapons in support of its revisionist security policy. Its modern nuclear arsenal, which is expected to grow further, presents an enduring existential threat to the United States and our Allies and partners. For more than twenty

[45] White House, *National Security Strategy*, October 2022, p. 21.

[46] *2022 Nuclear Posture Review*, pp. 4, 5. The 2022 NPR was released as part of the same document that presents the October 2022 NDS. For more on the NPR, see CRS In Focus IF12357, *2022 Nuclear Posture Review: Selected Programmatic Issues*, by Alexandra G. Neenan.

> years, Russia has pursued a wide-ranging military modernization program that includes replacing legacy strategic nuclear systems and steadily expanding and diversifying nuclear systems that pose a direct threat to NATO and neighboring countries…. Similarly, Russia is pursuing several novel nuclear-capable systems designed to hold the U.S. homeland or Allies and partners at risk, some of which are also not accountable under New START.
>
> By the 2030s the United States will, for the first time in its history, face two major nuclear powers as strategic competitors and potential adversaries. This will create new stresses on stability and new challenges for deterrence, assurance, arms control, and risk reduction.[47]

The October 2022 NPR also states

> Russia's invasion of Ukraine underscores that nuclear dangers persist, and could grow, in an increasingly competitive and volatile geopolitical landscape. The Russian Federation's unprovoked and unlawful invasion of Ukraine in 2022 is a stark reminder of nuclear risk in contemporary conflict. Russia has conducted its aggression against Ukraine under a nuclear shadow characterized by irresponsible saber-rattling, out of cycle nuclear exercises, and false narratives concerning the potential use of weapons of mass destruction (WMD). In brandishing Russia's nuclear arsenal in an attempt to intimidate Ukraine and the North Atlantic Treaty Organization (NATO), Russia's leaders have made clear that they view these weapons as a shield behind which to wage unjustified aggression against their neighbors. Irresponsible Russian statements and actions raise the risk of deliberate or unintended escalation. Russia's leadership should have no doubt regarding the resolve of the United States to both resist nuclear coercion and act as a responsible nuclear power.[48]

The October 2022 NPR also states

> *The current and growing salience of nuclear weapons in the strategies and forces of our competitors heightens the risks associated with strategic competition and the stakes of crisis and military confrontation.* As the NDS notes, we must be able to deter conventional aggression that has the potential to escalate to nuclear employment of any scale. Russia presents the most acute example of this problem today given its significantly larger stockpile of regional nuclear systems and the possibility it would use these forces to try to win a war on its periphery or avoid defeat if it was in danger of losing a conventional war. Deterring Russian limited nuclear use in a regional conflict is a high U.S. and NATO priority.
>
> *The PRC's nuclear expansion and the changes this could bring to its strategy present new complexities. In the near-term, we must factor this into our arms control and risk reduction approaches with Russia.* We also recognize that as the security environment evolves, it may be necessary to consider nuclear strategy and force adjustments to assure our ability to achieve deterrence and other objectives for the PRC—even as we continue to do so for Russia. Our plans and capabilities must also account for the fact that the PRC increasingly will be able to execute a range of nuclear strategies to advance its goals.[49]

October 2023 Report of Commission on U.S. Strategic Posture

An October 2023 report from a congressional commission on U.S. strategic posture[50] states

[47] *2022 Nuclear Posture Review*, p. 4. The October 2022 NPR was released as part of the same document that presents the October 2022 NDS.

[48] *2022 Nuclear Posture Review*, pp. 1-2.

[49] *2022 Nuclear Posture Review*, p. 5. Italics as in original. See also page 11. See also Jonathan Landay and Arshad Mohammed, "US Does Not Need to Boost Nuclear Arsenal to Deter Russia, China," *Reuters*, June 2, 2023.

[50] For more on the commission, see CRS In Focus IF12621, *Congressional Commission on the U.S. Strategic Posture*, by Anya L. Fink.

> The United States faces a strategic challenge requiring urgent action. Given current threat trajectories, our nation will soon encounter a fundamentally different global setting than it has ever experienced: we will face a world where two nations possess nuclear arsenals on par with our own. In addition, the risk of conflict with these two nuclear peers is increasing. It is an existential challenge for which the United States is ill-prepared, unless its leaders make decisions now to adjust the U.S. strategic posture.
>
> The Congressional Commission on the Strategic Posture of the United States was established by the Fiscal Year (FY) 2022 National Defense Authorization Act (NDAA), and concludes that America's defense strategy and strategic posture must change in order to properly defend its vital interests and improve strategic stability with China and Russia. Decisions need to be made now in order for the nation to be prepared to address the threats from these two nuclear-armed adversaries arising during the 2027-2035 timeframe. Moreover, these threats are such that the United States and its Allies and partners must be ready to deter and defeat both adversaries simultaneously.[51]

Global U.S. Military Posture

Overview

The emergence of GPC has led to increased discussion about global U.S. military posture, including the day-to-day global distribution of U.S. military capabilities and force deployments across regions such as the Indo-Pacific (for countering PRC and North Korean military capabilities), Europe (for countering Russian military capabilities), the Middle East (for countering Iranian military capabilities and addressing other security concerns), and other regions (such as Africa, Latin America, and the Arctic). The earlier-mentioned debate over whether the United States should adopt an "Asia first" grand strategy could significantly affect discussion of global U.S. military posture.

U.S. officials since at least 2006 have expressed desires (or announced plans) for bolstering U.S. military capabilities and force deployments in the Indo-Pacific region so as to counter China's growing military capabilities. The Obama Administration, as part of an initiative it referred to as strategic rebalancing or the strategic pivot, sought to reduce U.S. force deployments in Iraq and Afghanistan, in part to facilitate an increase in U.S. force deployments to the Asia-Pacific region for countering China.[52] Some observers have argued that in practice, the pivot to the Asia-Pacific region was unrealized or only partially realized.[53]

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[51] Madelyn R. Creedon, chair, Jon L. Kyl, vice chair et al., *The Final Report of the Congressional Commission on the Strategic Posture of the United States*, October 2023, p. vii. For press reports about the commission's final report, see, for example, Tony Bertuca, "Congressional Commission Urges DOD to Prep Two-War Nuclear Deterrence Strategy," *Inside Defense*, October 12, 2023; Bryant Harris, "Congressional Commission Calls for More Nuclear Arsenal Expansion," *Defense News*, October 12, 2023; Hans Kristensen, Matt Korda, Eliana Johns, and Mackenzie Knight, "Strategic Posture Commission Report Calls For Broad Nuclear Buildup," Federation of American Scientists (FAS), October 12, 2023; Jonathan Landay, US Must Be Ready for Simultaneous Wars with China, Russia, Report Says," *Reuters*, October 12, 2023; Demetri Sevastopulo, "US 'Ill-Prepared' for Nuclear Challenge from China and Russia, Says Report," Financial Times, October 12, 2023. See also Charles L. Glaser, James M. Acton, and Steve Fette, "The U.S. Nuclear Arsenal Can Deter Both China and Russia, Why America Doesn't Need More Missiles," *Foreign Affairs*, October 5, 2023.

[52] For more on the Obama Administration's strategic rebalancing initiative, which included political and economic dimensions as well as planned military force redeployments, see CRS Report R42448, *Pivot to the Pacific? The Obama Administration's "Rebalancing" Toward Asia*, coordinated by Mark E. Manyin, and CRS In Focus IF10029, *China, U.S. Leadership, and Geopolitical Challenges in Asia*, by Susan V. Lawrence.

[53] See, for example, Mercy A. Kuo, "The 'Lost Decade' of the US Pivot to Asia, Insights from Richard Fontaine," *Diplomat*, March 18, 2024.

Russia's actions in Europe and developments in the Middle East pose their own security challenges, and some observers express concern about a scenario in which the United States could face major military contingencies in multiple parts of Eurasia in rapid succession or simultaneously[54]—a consideration that can complicate plans for shifting U.S. military capabilities from Europe or the Middle East to the Indo-Pacific.

2021 Biden Administration Global Posture Review

On February 4, 2021, President Biden announced that "Defense Secretary Austin will be leading a Global Posture Review of our forces so that our military footprint is appropriately aligned with our foreign policy and national security priorities."[55] A DOD news report the next day that

> The global posture review will examine the U.S. military's footprint, resources and strategies. "This review will help inform the secretary's advice to the commander-in-chief about how we best allocate military forces in pursuit of our national interests," [Pentagon Press Secretary John F.] Kirby said.
>
> The global posture review will be led by the acting undersecretary of defense for policy in close coordination with the chairman of the Joint Chiefs of Staff.
>
> U.S. officials will consult often with allies and partners around the world as they perform the review, Kirby said. The review should be finished by mid-year.
>
> The review will use American defense strategy and look where service members are based, and if this is the best place to be based. This will, of course, take into consideration any treaty or agreement. Commitments—like the rotational forces in Poland and Korea—will be considered and those deployments will continue even as the review goes on. President Biden said the movement of U.S. forces from Germany will stop until the review is completed.
>
> It is not just forward-deployed land or air forces that will be considered. Naval forces and where they operate will be part of the equation, Kirby said.[56]

On November 29, 2021, DOD announced that

> President Joe Biden has accepted the recommendations formed by Secretary of Defense Lloyd J. Austin III on the global posture review, Mara Karlin, performing the duties of deputy undersecretary of defense for policy, announced today....
>
> It is no surprise that the Indo-Pacific is the priority region for the review, given the secretary's focus on China as America's pacing challenge. The review directs additional cooperation with allies and partners to advance initiatives that contribute to regional stability and deter Chinese military aggression and threats from North Korea, Karlin said.
>
> These initiatives include seeking greater regional access for military partnership activities, enhancing infrastructure in Guam and Australia and prioritizing military construction

[54] See, for example, Ken Moriyasu, "U.S. Faces 4 Threats but Only Equipped for 1 War, Experts Say," *Nikkei Asia*, February 23, 2024; Thomas G. Mahnken, "Could America Win a New World War? What It Would Take to Defeat Both China and Russia," *Foreign Affairs*, October 27, 2022; Hal Brands, "Can the US Take on China, Iran and Russia All at Once?" *Bloomberg*, October 16, 2022; Sebastian Sprenger and Joe Gould, "US Military Readies to 'Walk and Chew Gum' as Multiple Crises Loom," *Defense News*, January 28, 2022.

[55] White House, "Remarks by President Biden on America's Place in the World," February 4, 2021.

[56] Jim Garamone, "Global Posture Review Will Tie Strategy, Defense Policy to Basing," *DOD News*, February 5, 2021. See also Lolita C. Baldor, "Biden Halts Trump-Ordered US Troops Cuts in Germany," *Associated Press*, February 4, 2021; Ed Adamczyk, "Defense Secretary Austin Announces Global Force Posture Review," *United Press International*, February 5, 2021; Robert Burns, "Pentagon Rethinking How to Array Forces to Focus on China," *Associated Press*, February 17, 2021; Christopher Woody, "Biden Wants the Military's Footprint to be 'Correctly Sized,' and It May Mean Deciding Which Bases Really Matter," *Business Insider*, March 18, 2021.

> across the Pacific Islands. They also include new U.S. rotational aircraft deployments and logistics cooperation in Australia, which DOD announced in September.
>
> The review also approved the stationing of a previously rotational attack helicopter squadron and an artillery division headquarters in the Republic of Korea.
>
> More initiatives are forthcoming in the region, but these require more discussions among the allies and remain classified, Karlin said.
>
> In Europe, the review looks to strengthen the U.S. combat deterrent against Russia, and enable NATO forces to operate more effectively, she said. DOD has already instituted a couple of recommendations including lifting the 25,000-man cap on active duty troops in Germany imposed by the previous administration and the decision to permanently base a multi-domain task force and theater fires command—a total of 500 U.S. Army personnel—in Wiesbaden, Germany. DOD will also retain seven sites previously designated for return to Germany and Belgium under the European infrastructure consolidation plan. The review identified additional capabilities that will enhance U.S. deterrence posture in Europe, and these will be discussed with allies in the near future, Karlin said.
>
> In the Middle East, again, there have already been some posture review changes including the redeployment of critically strained missile defense capabilities, and reallocation of certain maritime assets back to Europe and the Indo-Pacific. In Iraq and Syria, the review indicates that DOD posture will continue to support the defeated Islamic State campaign and build the capacity of partner forces, Karlin said.
>
> "Looking ahead, the global posture review directs the department to conduct an additional analysis on enduring posture requirements in the Middle East," she said. "As Secretary Austin noted … we have global responsibilities and must ensure the readiness and modernization of our forces. These considerations require us to make continuous changes to our Middle East posture, but we always have the capability to rapidly deploy forces to the region based on the threat environment."
>
> In considering forces in Africa, analysis from the review supports several ongoing interagency reviews to ensure DOD has an appropriately scoped posture to monitor threats from regional violent extremist organizations, support American diplomatic activities and enable allies and partners, according to the official.
>
> Finally, in Central and South America and the Caribbean, the review looks at DOD posture in support of national security objectives, including humanitarian assistance, disaster relief and counterdrug missions. "The GPR directs that DOD posture continue to support U.S. government efforts on the range of transnational challenges and to add to defense partnership activities in the region," the official said.[57]

Details on the results of the global posture review are largely classified.[58] One press report stated that the review "plans to make improvements to airfields in Guam and Australia to counter China but contains no major reshuffling of forces as the U.S. moves to take on Beijing while deterring Russia and fighting terrorism in the Middle East and Africa."[59] Some observers criticized the review for apparently not recommending larger-scale changes, particularly for strengthening U.S. posture in the Indo-Pacific region for countering China.[60]

[57] Jim Garamone, "Biden Approves Global Posture Review Recommendations," *DOD News*, November 29, 2021.

[58] See, for example, Meghann Myers, "Pentagon's Military Presence Review Done, but Details Lacking on New Deployments, Troop Plus-Ups or Home-Port Shifts," *Military Times*, November 29, 2021.

[59] Gordon Lubold, "Pentagon Plans to Improve Airfields in Guam and Australia to Confront China," *Wall Street Journal*, November 29, 2021.

[60] See, for example, Stacie L. Pettyjohn, "Spiking the Problem: Developing a Resilient Posture in the Indo-Pacific with (continued...)

Russia's Invasion of Ukraine Complicates Plans for Shift to Indo-Pacific

Russia's full-scale invasion of Ukraine starting on February 24, 2022, prompted increased discussion of how much priority U.S. defense planning should give to Europe (to deter and respond to Russian actions) versus the Indo-Pacific (to deter China), how the U.S. response to Russia's actions in Ukraine might influence China's calculations regarding potential actions it might take toward Taiwan, and whether the tension about how to address concerns about both China and Russia should lead to changes in U.S. grand strategy or defense strategy, and/or the size of the U.S. defense budget.[61]

Discussions within NATO about the so-called burden-sharing issue—which focuses on comparisons of U.S. versus allied contributions toward the common defense of NATO—have often centered to a large degree on U.S. concerns about equity within the alliance and whether some of the NATO allies are free riding within the alliance.[62] In a context of GPC, and particularly in light of Russia's full-scale invasion of Ukraine starting on February 24, 2022, discussions about whether NATO allies should increase their contributions toward the common defense of NATO could additionally focus on a question of compensating for potential limits on U.S. defense resources that are available for Europe.[63]

Developments in Middle East Complicate Plans for Shift to Indo-Pacific

Developments in the Middle East affecting U.S. interests are viewed as complicating plans or desires that U.S. leaders might have for reducing U.S. force deployments to that region so as to make them available for deployment elsewhere.[64]

Passive Defenses," *War on the Rocks*, January 10, 2022; Becca Wasser, "The Unmet Promise of the Global Posture Review," *War on the Rocks*, December 30, 2021; Dakota Wood, "Joe Biden's Global Posture Review Was a Nothingburger," Heritage Foundation, December 13, 2021; Dov S. Zakheim, "A Disappointing Global Posture Review from Defense," *The Hill*, December 3, 2021; Jack Detsch, "'No Decisions, No Changes': Pentagon Fails to Stick Asia Pivot, The Long-Anticipated Review Was, for Some, a 'Complete Waste of time.'" *Foreign Policy*, November 29, 2021; Editorial Board, "The Pentagon's Bureaucratic Posture Review," *Wall Street Journal*, December 1, 2021; Daniel DePetris, "Biden's Pentagon Wants to Keep the Military Overstretched," *Spectator World*, November 30, 2021. See also Kelley Beaucar Vlahos, "Pentagon: U.S. Military Footprint Staying Right Where It Is," *Responsible Statecraft*, November 30, 2021.

[61] See some of the articles dated after February 24, 2022, in **Appendix C**.

[62] See, for example, Emma Ashford and Matthew Kroenig, "Is Europe Serious About Self-Defense, or Free-Riding?" *Foreign Policy*, June 2, 2023.

[63] If observers assess that, in light of finite U.S. defense resources and the scale of the security challenge posed in the Indo-Pacific by China's growing military capabilities, the United States might not have sufficient resources to adequately counter China's growing military capabilities while at the same time maintaining historic U.S. levels of investment for countering Russian forces in Europe, then adequately countering China could require reducing U.S. expenditures for countering Russia, which in turn could require NATO allies to compensate by increasing their own investments within the NATO alliance for countering Russia. See, for example, Robert Kelly, "America's Great Security Challenge Is China. Why Can't Europe Handle Ukraine?" *19FortyFive*, February 7, 2022; Dov S. Zakheim, "The Biden Administration Faces a Dangerous Anti-American Triad," *The Hill*, January 28, 2022.

[64] See, for example, Sefa Secen, "US Military Presence in Syria Carries Substantial Risks, but So Does Complete Withdrawal," *The Conversation*, August 16, 2024; Steve Hendrix, Susannah George, and Missy Ryan, "As Gaza War Rages, U.S. Military Footprint Expands across Middle East," *Washington Post*, March 17, 2024; Daniel Byman, "Why the Middle East Still Needs America, The U.S. Military Keeps a Volatile Region From Descending Into Chaos," *Foreign Affairs*, March 12, 2024; Russell A. Berman, "October 7 and American Grand Strategy," Hoover Institution, March 5, 2024; Cole Bunzel, "Defense Of The Middle East, No Recent U.S. President Has Wanted Greater Military Involvement in the Middle East. None Has Been Able to Avoid It," Hoover Institution, March 5,m 2024; Kenneth F. McKenzie Jr., "It's Not Time for Our Troops to Leave the Middle East," *New York Times*, February 14, 2024; Hal Brands, "The US Can't—and Shouldn't—Escape the Middle East," *Bloomberg*, February 4, 2024; Erin Banco, "The (continued...)

U.S. and Allied Capabilities in Indo-Pacific Region

The emergence of GPC with China has led to a major U.S. defense-planning focus on strengthening U.S. military capabilities in the Indo-Pacific region. U.S. officials since 2006 have expressed desires (or announced plans) for bolstering U.S. military capabilities and force deployments in the Indo-Pacific region for the purpose of countering China's growing military capabilities. Strengthening U.S. military capabilities in the Indo-Pacific is a key component of the Free and Open Indo-Pacific (FOIP), an overarching U.S. policy construct for the region that emerged during the Trump Administration[65] and has continued during the Biden Administration.[66] As mentioned earlier, the Biden Administration's October 2022 NDS states that DOD's priorities include "Deterring aggression, while being prepared to prevail in conflict when necessary—prioritizing the PRC challenge in the Indo-Pacific region, then the Russia challenge in Europe."[67] The NDS also states

> *The Indo-Pacific Region*. The Department will reinforce and build out a resilient security architecture in the Indo-Pacific region in order to sustain a free and open regional order, and deter attempts to resolve disputes by force. We will modernize our Alliance with Japan and strengthen combined capabilities by aligning strategic planning and priorities in a more integrated manner; deepen our Alliance with Australia through investments in posture, interoperability, and expansion of multilateral cooperation; and foster advantage through advanced technology cooperation with partnerships like AUKUS and the Indo-Pacific Quad. The Department will advance our Major Defense Partnership with India to enhance

US Pulled Resources out of the Middle East. Now It Is Rethinking that Decision," *Politico Pro*, January 29, 2024; Henry Storey, "America's Re-Balance to Asia Delayed … Again," *Interpreter*, December 8, 2024; Gordon Lubold, Nancy A. Youssef, and Michael R. Gordon, "War in the Middle East Challenges Biden's Defense Strategy, The U.S. Is Faced with Re-establishing Some of Its Military Footprint in a Region It Has Been Trying to Draw Away From," *Wall Street Journal*, October 17, 2023; Michael Kimmage and Hanna Notte, "The Age of Great-Power Distraction, What Crises in the Middle East and Elsewhere Reveal About the Global Order," *Foreign Affairs*, October 12, 2023; Suzanne Maloney, "The End of America's Exit Strategy in the Middle East, Hamas's Assault—and Iran's Role in It—Lays Bare Washington's Illusions," *Foreign Affairs*, October 10, 2023; Jon B. Alterman, "A U.S. Pivot Away from the Middle East: Fact or Fiction?" Center for Strategic and International Studies (CSIS), May 23, 2023; Michael R. Gordon, Dion Nissenbaum, and Jared Malsin, "Mideast Challenges Mount for U.S. as Its Forces Come Under Renewed Fire, The Middle East's Shifting Geopolitics, Coming amid Gains by China and Russia, Are Complicating Washington's Plans in the Region," *Wall Street Journal*, March 25, 2023; Michael R. Gordon, "U.S. to Send Aging Attack Planes to Mideast and Shift Newer Jets to Asia, Europe, As Stretched Military Moves Toward 'Great Power' Competition with China and Russia, It Looks to Avoid Shortfall in Middle East," *Wall Street Journal*, March 23, 2023; Walter Russell Mead, "The Peril of Ignoring the Middle East," *Wall Street Journal*, January 9, 2023; Jon B. Alterman, "The Middle East's Coming Centrality," CSIS, September 20, 2022; Danielle Pletka, "The U.S. Can't Just Quit the Middle East, We Have Genuine Geopolitical Interests in the Region, and So We Must Repair the Relationships We've Damaged," *Dispatch*, March 30, 2022; Saeed Ghasseminejad, "Is the Future of the Persian Gulf Chinese?" *National Interest*, February 2, 2022; Edward White and Andrew England, "China Pours Money into Iraq as US Retreats from Middle East," *Financial Times*, February 2, 2022; Ben Hubbard and Amy Qin, "As the U.S. Pulls Back From the Mideast, China Leans In," *New York Times*, February 1 (updated February 2), 2022; Jane Arraf and Ben Hubbard, "As Islamic State Resurges, U.S. Is Drawn Back Into the Fray," *New York Times*, January 25, 2022; Bradley Bowman, "Biden Can No Longer Ignore Growing Iran-China Ties, Washington May Be Tired of the Middle East, But Beijing Is Just Getting Started," *Foreign Policy*, January 13, 2022.

[65] See CRS Report R45396, *The Trump Administration's "Free and Open Indo-Pacific": Issues for Congress*, coordinated by Bruce Vaughn; and CRS Report R46217, *Indo-Pacific Strategies of U.S. Allies and Partners: Issues for Congress*, coordinated by Ben Dolven and Bruce Vaughn. See also White House, "President Donald J. Trump's Administration Is Advancing a Free and Open Indo-Pacific," July 20, 2018, Department of State, "Advancing a Free and Open Indo-Pacific," July 30, 2018, Department of State, "Briefing on the Indo-Pacific Strategy," April 2, 2018, Department of State, "Remarks on 'America's Indo-Pacific Economic Vision,'" remarks by Secretary of State Michael R. Pompeo, Indo-Pacific Business Forum, U.S. Chamber of Commerce, Washington, DC, July 30, 2018.

[66] See, for example, White House, *National Security Strategy*, October 2022, pp. 37-38.

[67] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 7.

> its ability to deter PRC aggression and ensure free and open access to the Indian Ocean region. The Department will support Taiwan's asymmetric self-defense commensurate with the evolving PRC threat and consistent with our one China policy. We will work with the ROK to continue to improve its defense capability to lead the Alliance combined defense, with U.S. forces augmenting those of the ROK. We will invigorate multilateral approaches to security challenges in the region, to include by promoting the role of the Association of Southeast Asian Nations in addressing regional security issues. The Department will work with Allies and partners to ensure power projection in a contested environment. The Department will also support Ally and partner efforts, in accordance with U.S. policy and international law, to address acute forms of gray zone coercion from the PRC's campaigns to establish control over the East China Sea, Taiwan Strait, South China Sea, and disputed land borders such as with India. At the same time, the Department will continue to prioritize maintaining open lines of communication with the PLA and managing competition responsibly.[68]

In discussions about strengthening U.S. military capabilities in the Indo-Pacific region for countering China, actual or potential U.S. measures that are frequently mentioned include

- shifting to more distributed force architectures;[69]
- shifting to new operational concepts (i.e., ways of employing military forces) that are more distributed, make greater use of unmanned vehicles, and employ a higher degree of integration of operating domains (i.e., space, cyberspace, air, land, sea, and undersea);
- increasing numbers of longer-ranged aircraft and missiles;
- hardening air bases and other facilities in the Indo-Pacific that are within range of PRC weapons;
- exploiting areas (such as undersea warfare) where the United States has an advantage that China cannot quickly overcome; and
- making U.S. C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) and logistics capabilities more resilient against attack by PRC weapons, and more quickly reconstitutable.

Day-to-day DOD activities in the Indo-Pacific region include those for competing strategically with China in the South and East China Seas.[70] They also include numerous activities to help strengthen the military capabilities of U.S. allies in the region, particularly Japan and Australia, and also South Korea, the Philippines, and New Zealand, as well as activities to improve the ability of forces from these countries to operate effectively with U.S. forces (referred to as military interoperability) and activities to improve the military capabilities of other countries in the region, such as Vietnam. The Australia-UK-U.S. (AUKUS) trilateral security agreement

[68] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, pp. 14-15.

[69] In general, more distributed force architectures would include a smaller portion of larger and individually more expensive platforms (such as larger ships) and a larger proportion of smaller and individually less expensive platforms, including unmanned vehicles. A primary aim in shifting a force to a more distributed architecture is to reduce the force's vulnerability to attack by complicating the adversary's task of detecting, identifying, and tracking the force's components and avoiding a situation of having "too many eggs in one basket."

[70] For more on this competition, see CRS Report R42784, *U.S.-China Strategic Competition in South and East China Seas: Background and Issues for Congress*, by Ronald O'Rourke.

announced in September 2021 is a prominent example of an activity intended in part to help strengthen the military capabilities of Australia.[71]

Much of the conversation about strengthening U.S. military capabilities in the Indo-Pacific region revolves around the Pacific Deterrence Initiative (PDI), which is a term used to refer to a collection of DOD investments that DOD officials and policymakers have identified as important for bolstering U.S. military capabilities in the region. The PDI is broadly modeled after the European Deterrence Initiative (or EDI—see the next section). Some PDI items are new initiatives, while others are existing DOD programs that have been brought under the PDI rubric. Some have been funded or are requested for funding in the Administration's proposed defense budget, while others have not yet been funded or had funding requested for them in the Administration's proposed budget (but might have been included in DOD's unfunded priority lists [UPLs]).[72]

As noted earlier, given finite U.S. defense resources, strengthening U.S. military force deployments in the Indo-Pacific region could involve reducing U.S. force deployments to other locations.

[71] For more on AUKUS, see CRS Report RL32418, *Navy Virginia-Class Submarine Program and AUKUS Submarine (Pillar 1) Project: Background and Issues for Congress*, by Ronald O'Rourke; CRS Report R47599, *AUKUS Pillar 2 (Advanced Capabilities): Background and Issues for Congress*, by Luke A. Nicastro; CRS In Focus IF12483, *U.S. Arms Transfer Restrictions and AUKUS Cooperation*, by Paul K. Kerr.

[72] For more on the PDI, see CRS In Focus IF12303, *The Pacific Deterrence Initiative: A Budgetary Overview*, by Luke A. Nicastro. UPLs are lists of programs that DOD officials submit to Congress in conjunction with each year's defense budget submission to show what additional programs those officials would like to see funded, if additional funding could be made available.

Regarding the origin of the PDI, in April 2020, it was reported that Admiral Philip (Phil) Davidson, Commander of U.S. Indo-Pacific Command (INDOPACOM), had submitted to Congress a $20.1 billion plan for investments for improving U.S. military capabilities in the Indo-Pacific region. Davidson submitted the plan, entitled Regain the Advantage, in response to Section 1253 of the FY2020 National Defense Authorization Act (S. 1790/P.L. 116-92 of December 20, 2019), which required the Commander of INDOPACOM to submit to the congressional defense committees a report providing the Commander's independent assessment of the activities and resources required, for FY2022-FY2026, to implement the National Defense Strategy with respect to the Indo-Pacific region, maintain or restore the comparative U.S. military advantage relative to China, and reduce the risk associated with executing DOD contingency plans. Davidson's plan requested about $1.6 billion in additional funding suggestions for FY2021 above what the Pentagon was requesting in its proposed FY2021 budget, and about $18.5 billion in investments for FY2022-FY2026. Observers used the term Pacific Deterrence Initiative (PDI) or Indo-Pacific Deterrence Initiative (IPDI)—a Pacific or Indo-Pacific analog to the European Deterrence Initiative (EDI) discussed in the next section—to refer to proposals for making various investments for strengthening U.S. and allied military capabilities in the Pacific region.

Section 1251 of the FY2021 National Defense Authorization Act (H.R. 6395/P.L. 116-283 of January 1, 2021) directed DOD to establish a Pacific Deterrence Initiative "to carry out prioritized activities to enhance the United States deterrence and defense posture in the Indo-Pacific region, assure allies and partners, and increase capability and readiness in the Indo-Pacific region." The provision authorized $2.235 billion to carry out the initiative in FY2021; directed DOD to submit a report not later than February 15, 2021, on future-year activities and resources for the initiative; directed DOD's annual budget submissions, starting with the submission for FY2022, to include a detailed budget display for the initiative; and directed DOD to brief Congress not later than March 1, 2021, and annually thereafter, on the budget proposal and programs for the initiative. Section 1251 of P.L. 116-283 also repealed Section 1251 of the FY2018 National Defense Authorization Act (H.R. 2810/P.L. 115-91 of December 12, 2017), as most recently amended by Section 12534 of the FY2019 National Defense Authorization Act (H.R. 5515/P.L. 115-232 of August 13, 2018). Section 1251 of P.L. 115-91 directed DOD to establish an Indo-Asia-Pacific Stability Initiative, and Section 1253 of P.L. 115-232 modified the initiative's name to Indo-Pacific Stability Initiative and made other changes to the initiative.

U.S. and NATO Capabilities in Europe

The emergence of intensified competition with Russia—which was made more observable by Russia's seizure and announced annexation of Ukraine in March 2014 (which the United States does not recognize)[73] and Russia's subsequent actions in eastern Ukraine, and then further underscored by Russia's full-scale invasion of Ukraine starting on February 24, 2022—has led to a renewed focus in U.S. defense planning on strengthening U.S. and NATO military capabilities for countering potential Russian aggression in Europe.[74] Some observers have expressed particular concern about the ability of the United States and its NATO allies to defend the Baltic members of NATO in the event of a fast-paced Russian military move into one or more of those countries. The Biden Administration's October 2022 NDS states

> *Europe*. The Department will maintain its bedrock commitment to NATO collective security, working alongside Allies and partners to deter, defend, and build resilience against further Russian military aggression and acute forms of gray zone coercion. As we continue contributing to NATO capabilities and readiness—including through improvements to our posture in Europe and our extended nuclear deterrence commitments—the Department will work with Allies bilaterally and through NATO's established processes to better focus NATO capability development and military modernization to address Russia's military threat. The approach will emphasize ready, interoperable combat power in contested environments across NATO forces, particularly air forces and other joint precision strike capabilities, and critical enablers such as intelligence, surveillance, and reconnaissance (ISR) and electronic warfare platforms. The Department will collaborate with Allies and partners to build capacity along Europe's eastern flank, strengthening defensive anti-area/access-denial capabilities and indications and warning; expanding readiness, training, and exercises; and promoting resilience, including against hybrid and cyber actions.[75]

The United States has taken a number of steps to strengthen the U.S. military presence and U.S. military operations in and around Europe. In mainland Europe, these actions have included steps to reinforce Army and Air Force capabilities and operations in central Europe, including actions to increase the U.S. military presence in countries such as Poland.[76] In northern Europe, U.S. actions have included presence operations and exercises by the Marine Corps in Norway and by the U.S. Navy in northern European waters. In southern Europe, the Mediterranean has re-emerged as an operating area of importance for the Navy. Some of these actions, particularly for mainland Europe, are assembled into an annually funded package within the overall DOD budget originally called the European Reassurance Initiative and now called the European Deterrence Initiative (EDI).[77] In response to Russia's full-scale invasion of Ukraine starting on February 24, 2022, the United States deployed additional Army and Air Force units to locations in NATO allied countries in Europe.

[73] The State Department states that "the United States does not, and will never, recognize Russia's purported annexation of Crimea." (State Department, "Crimea Is Ukraine," press statement, Antony J. Blinken, Secretary of State, February 25, 2021.)

[74] See, for example, CRS In Focus IF11130, *United States European Command: Overview and Key Issues*, by Kathleen J. McInnis, Brendan W. McGarry, and Paul Belkin.

[75] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 15.

[76] See, for example, CRS In Focus IF11280, *U.S. Military Presence in Poland*, by Andrew Feickert, Kathleen J. McInnis, and Derek E. Mix.

[77] For further discussion, see CRS In Focus IF10946, *The European Deterrence Initiative: A Budgetary Overview*, by Paul Belkin and Hibbah Kaileh.

Renewed concern over NATO capabilities for deterring potential Russian aggression against NATO countries in Europe has been a key factor in U.S. actions intended to encourage the NATO allies to increase their own defense spending levels. NATO leaders since 2014 have announced a series of initiatives for increasing their defense spending. Following Russia's full-scale invasion of Ukraine starting on February 24, 2022, some NATO allies have announced steps to increase their defense budgets or otherwise bolster their military capabilities.[78]

New Operational Concepts

The emergence of GPC has led to a focus by U.S. military services on the development of new operational concepts—that is, new ways of employing U.S. military forces—particularly for countering improving PRC anti-access/area-denial (A2/AD) forces[79] in the Indo-Pacific region. These new operational concepts include Multi-Domain Operations (MDO) for the Army and Air Force,[80] Agile Combat Employment (ACE) for the Air Force,[81] Distributed Maritime Operations (DMO) for the Navy and Marine Corps,[82] and Expeditionary Advanced Base Operations (EABO) for the Marine Corps.[83] In general, these new operational concepts are more distributed and networked, make greater use of unmanned vehicles, and employ a higher degree of integration between operating domains (i.e., space, cyberspace, air, land, sea, and undersea). In February 2023, the Joint Chiefs of Staff released a new joint concept for competing.[84]

Capabilities for High-End Conventional Warfare

The emergence of GPC has led to a renewed emphasis in U.S. defense planning on capabilities for conducting so-called high-end conventional warfare, meaning large-scale, high-intensity, technologically sophisticated conventional warfare against adversaries with similarly sophisticated military capabilities.[85] Capabilities for high-end conventional warfare can differ, sometimes significantly, from capabilities required or optimized for the kinds of counterterrorism or counter-insurgency operations that were more at the center of U.S. defense planning and operations following the terrorist attacks of September 11, 2001. Many current DOD acquisition programs, exercises, and warfighting experiments have been initiated, accelerated, increased in

[78] For additional discussion, see CRS Report R48121, *NATO's July 2024 Washington, DC Summit: In Brief*, by Paul Belkin; CRS Insight IN12192, *NATO's 2023 Vilnius Summit*, by Paul Belkin.

[79] The term *anti-access/area-denial (A2/AD) forces* generally refers to military forces that are intended to keep opposing military forces from entering and operating within certain areas or regions, particularly areas or regions that are inside or adjacent to the homeland of the country deploying the A2/AD forces. In discussions of naval forces, such forces in the past have been referred to as sea-denial forces.

[80] For more on MDO, see CRS In Focus IF11409, *Defense Primer: Army Multi-Domain Operations (MDO)*, by Andrew Feickert.

[81] For more on ACE, see CRS In Focus IF12694, *Defense Primer: Agile Combat Employment (ACE) Concept*, by Sarah Gee and Luke A. Nicastro.

[82] For more on DMO, see CRS In Focus IF12599, *Defense Primer: Navy Distributed Maritime Operations (DMO) Concept*, by Ronald O'Rourke.

[83] For more on EABO, see CRS Report R46374, *Navy Medium Landing Ship (LSM) (Previously Light Amphibious Warship [LAW]) Program: Background and Issues for Congress*, by Ronald O'Rourke.

[84] Joint Chiefs of Staff, *Joint Concept for Competing*, February 10, 2023, 75 pp. Some observers have argued that DOD should be able to modify its planning rapidly to adapt to evolving international security requirements. See Joe Gould, "Is Pentagon Planning up to the Job for Great Power Competition?" *Military Times*, February 17, 2023, which discusses Peter C. Combe II, Benjamin Jensen, and Adrian Bogart, "Rethinking Risk in Great Power Competition," Center for Strategic and International Studies (CSIS), February 17, 2023.

[85] See, for example, Connie Lee, "ASC NEWS: U.S. Military Re-Emphasizing Large Warfighting Exercises (UPDATED)," *National Defense*, September 14, 2020. See also Christopher Layne, "Coming Storms, The Return of Great-Power War," *Foreign Affairs*, November/December 2020.

scope, given higher priority, or had their continuation justified as a consequence of the renewed U.S. emphasis on high-end conventional warfare.

Weapon acquisition programs that can be linked to preparing for high-end warfare include (to mention only a few examples) those for procuring advanced aircraft such as the F-35 Joint Strike Fighter (JSF)[86] and the next-generation B-21 long-range bomber,[87] highly capable warships such as the Virginia-class attack submarine[88] and DDG-51 class Aegis destroyer,[89] ballistic missile defense (BMD) capabilities,[90] longer-ranged land-attack and anti-ship weapons,[91] new types of weapons such as lasers,[92] new C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) capabilities,[93] military space capabilities,[94] electronic warfare capabilities,[95] military cyber capabilities,[96] hypersonic weapons,[97] and the military uses of robotics and autonomous unmanned vehicles, quantum technology, and artificial intelligence (AI).[98]

[86] See CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program*, by John R. Hoehn.

[87] See CRS Report R44463, *Air Force B-21 Raider Long-Range Strike Bomber*, coordinated by John R. Hoehn.

[88] See CRS Report RL32418, *Navy Virginia-Class Submarine Program and AUKUS Submarine Proposal: Background and Issues for Congress*, by Ronald O'Rourke.

[89] See CRS Report RL32109, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke.

[90] See CRS In Focus IF10541, *Defense Primer: Ballistic Missile Defense*, coordinated by Kelley M. Sayler; CRS In Focus IF11623, *Hypersonic Missile Defense: Issues for Congress*, by Kelley M. Sayler; and CRS Report RL33745, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, by Ronald O'Rourke.

[91] See CRS In Focus IF11353, *Defense Primer: U.S. Precision-Guided Munitions*, coordinated by Nathan J. Lucas.

[92] See CRS In Focus IF11882, *Defense Primer: Directed-Energy Weapons*, by Kelley M. Sayler; CRS Report R46925, *Department of Defense Directed Energy Weapons: Background and Issues for Congress*, coordinated by Kelley M. Sayler; CRS Report R45098, *U.S. Army Weapons-Related Directed Energy (DE) Programs: Background and Potential Issues for Congress*, by Andrew Feickert; and CRS Report R44175, *Navy Shipboard Lasers: Background and Issues for Congress*, by Ronald O'Rourke.

[93] CRS In Focus IF11493, *Joint All-Domain Command and Control (JADC2)*, by John R. Hoehn; CRS Report R46725, *Joint All-Domain Command and Control: Background and Issues for Congress*, by John R. Hoehn; and CRS In Focus IF11866, *Advanced Battle Management System (ABMS)*, by John R. Hoehn. See also Rebecca K.C. Hersman and Reja Younis, *The Adversary Gets a Vote, Advanced Situational Awsareness and Implications for Integrated Deterrence in an Era of Great Power Competition*, CSIS, September 2021 (posted online September 27, 2021), 10 pp.

[94] See CRS In Focus IF11895, *Space as a Warfighting Domain: Issues for Congress*, by Stephen M. McCall; CRS In Focus IF10337, *Challenges to the United States in Space*, by Stephen M. McCall; CRS In Focus IF11531, *Defense Primer: National Security Space Launch*, coordinated by Kelley M. Sayler; and CRS Report R46211, *National Security Space Launch*, by Stephen M. McCall.

[95] See CRS In Focus IF11118, *Defense Primer: Electronic Warfare*, by John R. Hoehn; and CRS Insight IN11705, *FY2022 Electronic Warfare Funding Trends*, by John R. Hoehn.

[96] See CRS In Focus IF11995, *Use of Force in Cyberspace*, by Catherine A. Theohary; CRS In Focus IF10537, *Defense Primer: Cyberspace Operations*, by Catherine A. Theohary; and CRS In Focus IF11292, *Convergence of Cyberspace Operations and Electronic Warfare*, by Catherine A. Theohary and John R. Hoehn.

[97] See CRS In Focus IF11459, *Defense Primer: Hypersonic Boost-Glide Weapons*, by Kelley M. Sayler; CRS Report R45811, *Hypersonic Weapons: Background and Issues for Congress*, by Kelley M. Sayler; and CRS In Focus IF11991, *The U.S. Army's Long-Range Hypersonic Weapon (LRHW)*, by Andrew Feickert.

[98] See CRS In Focus IF11105, *Defense Primer: Emerging Technologies*, by Kelley M. Sayler; CRS Report R46458, *Emerging Military Technologies: Background and Issues for Congress*, by Kelley M. Sayler; CRS In Focus IF12611, *DOD Replicator Initiative: Background and Issues for Congress*, by Kelley M. Sayler; CRS In Focus IF11150, *Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems*, by Kelley M. Sayler; CRS Report R46458, *Emerging Military Technologies: Background and Issues for Congress*, by Kelley M. Sayler; CRS In Focus IF11836, *Defense Primer: Quantum Technology*, by Kelley M. Sayler; and CRS Report R45178, *Artificial Intelligence and National Security*, by Kelley M. Sayler.

Preparing for high-end conventional warfare could also involve making changes in U.S. military training and exercises[99] and reorienting the missions and training of U.S. special operations forces.[100]

Maintaining U.S. Superiority in Conventional Weapon Technologies

As part of the renewed emphasis on capabilities for high-end conventional warfare, DOD officials have expressed concern that U.S. superiority in conventional weapon technologies has narrowed or in some cases been eliminated by China and (in certain areas) Russia. In response, DOD has taken a number of actions that are intended to help maintain or regain U.S. superiority in conventional weapon technologies, including increased research and development funding for new militarily applicable technologies such as artificial intelligence (AI), autonomous unmanned weapons, hypersonic weapons, directed-energy weapons, biotechnology, and quantum technology.[101] Controls on exports to China, Russia, and other countries of advanced technologies with potential military uses form another part of this effort.[102] The Biden Administration's October 2022 NDS states

> *Make the Right Technology Investments*. The United States' technological edge has long been a foundation of our military advantage. The Department will support the innovation ecosystem, both at home and in expanded partnerships with our Allies and partners. We will fuel research and development for advanced capabilities, including in directed energy, hypersonics, integrated sensing, and cyber. We will seed opportunities in biotechnology, quantum science, advanced materials, and clean-energy technology. We will be a fast-follower where market forces are driving commercialization of militarily-relevant capabilities in trusted artificial intelligence and autonomy, integrated network system-of-

[99] See, for example, Tom Greenwood and Owen Daniels, "The Pentagon Should Train for—and Not Just Talk About—Great-Power Competition," *War on the Rocks*, May 8, 2020.

[100] See, for example,

Clementine G. Starling and James Cartwright, "Too Few Planners Understand What Special Operators Can Do Today, No Less Than in Yesterday's Era of Counter-Terrorism, SOF Are Indispensable in Today's Great Power Competition," *Defense One*, May 5, 2024; Clementine G. Starling and Alyxandra Marine "Stealth, Speed, and Adaptability: The Role of Special Operations Forces in Strategic Competition," Atlantic Council, March 7, 2024; Bryan P. Fenton, "How Special Operations Forces Must Meet the Challenges of a New Era," *Defense One*, May 11, 2023; Lee Ferran, "The 'Morale Challenge' Facing Some Special Operators in the Era of Great Power Competition," *Breaking Defense*, May 11, 2023; Todd South, "Special Operations Role in Great Power Competition Needs Work," *Military Times*, May 11, 2023; Sam Skove, "With Lessons from Ukraine, US Special Forces Reinvents Itself for a Fight with China," *Defense One*, May 1, 2023; Drew F. Lawrence, "Defending a Mock Invasion of Taiwan Signals Shift for Army Special Operations After Years of Counterinsurgency," *Military.com*, April 29, 2023; David Ucko, "Indispensable but Insufficient: The Role and Limits of Special Operations in Strategic Competition," *Lawfare*, February 19, 2023; Spencer Reed, "Recalibrating Special Operations Risk Tolerance for the Future Fight," *War on the Rocks*, January 31, 2023; Elizabeth Howe, "Special Operators Lack 'Seat at the Table' in Post-Counterterror Pentagon, SOF Leaders Say," *Defense One*, November 18, 2022; Stavros Atlamazoglou, "US Special Operators Are Picking Up a Softer Skill as They Refocus on Countering China," *Business Insider*, June 28, 2022; Tom Hammerle and Mike Pultusker, "Special Operations Are Deterrence Operations: How United States Special Operations Forces Should Be Used in Strategic Competition," *Small Wars Journal*, May 24, 2022; Stew Magnuson, "Special Ops Tech Pivots to Indo-Pacific Challenges," *National Defense*, May 20, 2022; Stephen Watts et al., *Countering Russia, The Role of Special Operations Forces in Strategic Competition*, RAND, 2021, 95 pp. For more on U.S. special operations forces, see CRS In Focus IF10545, *Defense Primer: Special Operations Forces*, by Barbara Salazar Torreon and Andrew Feickert; and CRS Report RS21048, *U.S. Special Operations Forces (SOF): Background and Issues for Congress*, by Andrew Feickert.

[101] See the CRS reports cited in footnote 97 and footnote 98.

[102] For additional discussion, see CRS In Focus IF11627, *U.S. Export Controls and China*, by Karen M. Sutter and Christopher A. Casey; CRS In Focus IF11154, *Export Controls: Key Challenges*, by Christopher A. Casey; CRS Report R46814, *The U.S. Export Control System and the Export Control Reform Act of 2018*, by Paul K. Kerr and Christopher A. Casey. See also John Schaus and Elizabeth Hoffman, "Is ITAR Working in an Era of Great Power Competition?" Center for Strategic and International Studies (CSIS), February 24, 2023.

> systems, microelectronics, space, renewable energy generation and storage, and human-machine interfaces. Because Joint Force operations increasingly rely on data-driven technologies and integration of diverse data sources, the Department will implement institutional reforms that integrate our data, software, and artificial intelligence efforts and speed their delivery to the warfighter.[103]

A February 2, 2022, press report stated

> The Pentagon's research and engineering chief is crafting a new strategy for investment in 14 critical technology areas, writing in a new memo that "creative application" of emerging concepts is key to maintaining an edge over adversaries.
>
> The Feb. 1 memo, first reported by *Inside Defense*, does not lay out a timeline for when the strategy will be complete, but notes the work will be informed by the 2022 National Defense Strategy and structured around three pillars: Mission focus, foundation building and succeeding through teamwork.
>
> "Successful competition requires imagining our military capability as an ever-evolving collective, not a static inventory of weapons in development or sustainment," Undersecretary of Defense for Research and Engineering Heidi Shyu wrote in the memo, obtained by C4ISRNET. "In many cases, effective competition benefits from sidestepping symmetric arms races and instead comes from the creative application of new concepts with emerging science and technology."
>
> The technologies identified in the memo ranges from "seed areas"—like quantum science, biotechnology, advanced materials and future-generation wireless technology—to commercially available capabilities such as artificial intelligence, space, microelectronics, integrated networks, renewable energy, human-machine interfaces and advanced computing and software.
>
> The memo also highlights technology needs that are specific to the Defense Department, including hypersonic weapons, directed energy, cyber and integrated sensing.
>
> "By focusing efforts and investments into these 14 critical technology areas, the department will accelerate transitioning key capabilities to the military services and combatant commands," Shyu writes. "As the department's strategy evolves and technologies change, the department will update its critical technology priorities."[104]

Innovation and Speed of U.S. Weapon System Development and Deployment

In addition to the above-mentioned efforts for maintaining U.S. superiority in conventional weapon technologies, DOD is placing new emphasis on innovation and speed in weapon system development and deployment, so as to more quickly and effectively transition new weapon technologies into fielded systems.[105] The Biden Administration's October 2022 NDS states

> *Transform the Foundation of the Future Force*. Building the Joint Force [i.e., U.S. military] called for by this strategy requires overhauling the Department's force development, design, and business management practices. Our current system is too slow and too focused on acquiring systems not designed to address the most critical challenges we now face. This orientation leaves little incentive to design open systems that can rapidly incorporate

[103] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 19.

[104] Courtney Albon, "New Strategy Will Harness Emerging Tech to Beat Adversaries," *Defense News*, February 2, 2022. See also the CRS reports cited in footnote 98.

[105] See, for example, Briana Reilly, "With Rapid Experimentation Effort, DOD Looks to Build Up Tech Transition Pathways," *Inside Defense*, April 13, 2022; Matthew Beinart, "Hicks Says RDER Will Help Address DoD's 'Complicated System' for Advancing Promising Tech," *Defense Daily*, April 12, 2022.

> cutting-edge technologies, creating longer-term challenges with obsolescence, interoperability, and cost effectiveness. The Department will instead reward rapid experimentation, acquisition, and fielding. We will better align requirements, resourcing, and acquisition, and undertake a campaign of learning to identify the most promising concepts, incorporating emerging technologies in the commercial and military sectors for solving our key operational challenges. We will design transition pathways to divest from systems that are less relevant to advancing the force planning guidance, and partner to equip the defense industrial base to support more relevant modernization efforts.[106]

The individual military services have taken various actions to increase innovation and speed in their weapon acquisition programs. Some of these actions make use of special acquisition authorities provided by Congress that are intended in part to reduce the time needed to transition new weapon technologies into fielded systems, including Other Transaction Authority (OTA) and what is known as Section 804 Middle Tier authority.[107]

On January 23, 2020, DOD released a new defense acquisition framework, called the Adaptive Acquisition Framework, that is intended to substantially accelerate the DOD's process for developing and fielding new weapons.[108] In previewing the new framework in October 2019, DOD described it as "the most transformational acquisition policy change we've seen in decades."[109]

Some observers argue that DOD is not doing enough or moving quickly enough to generate and implement innovations in response to GPC, and have proposed steps for doing more or moving more quickly.[110] A June 2024 GAO report—the 2024 edition of an annual GAO report assessing selected DOD weapon acquisition programs—states

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[106] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 19.

[107] See, for example, CRS Report R45521, *Department of Defense Use of Other Transaction Authority: Background, Analysis, and Issues for Congress*, by Heidi M. Peters; Government Accountability Office, *Defense Acquisitions[:] DOD's Use of Other Transactions for Prototype Projects Has Increased*, GAO-20-84, November 2019, 31 pp.

[108] See, for example, Tony Bertuca, "Pentagon releases New Guidelines to Accelerate Acquisition," *Inside Defense*, January 24, 2020. The operation of the framework is set forth in DOD Instruction (DODI) 5000.02, *Operation of the Adaptive Acquisition Framework*, January 23, 2020, 17 pp.

[109] See, for example, Tony Bertuca, "[Ellen] Lord: Pentagon Is 'On the Brink' of Acquisition Transformation," *Inside Defense*, October 18, 2019. See also Richard Sisk, "Pentagon Debuts Yet Another Plan to Speed Up Weapons Buys," *Military.com*, October 8, 2020.

[110] See, for example, Arun Seraphin and Diem Salmon, "How the Pentagon Can More Rapidly Buy and Field the Latest Tech," *Defense News*, April 29, 2024; Michael J. Mazarr, "Beating the Ossification Trap: Why Reform, Not Spending, Will Salvage American Power," *War on the Rocks*, February 15, 2024; Jerry McGnn, "How to Use the 'MRAP mindset' to Get US Industrial Base on a Wartime Footing," *Breaking Defense*, January 3, 2024; Charles Beames, "In Race with China, Pentagon Must Prioritize Speed in Acquisition," *Breaking Defense*, July 19, 2023; Mark Esper and Deborah Lee James, "To Deter Conflict, the Pentagon Must Accelerate Innovation Adoption," *The Hill*, March 9, 2023; Thomas G. Mahnken, Evan B. Montgomery, and Tyler Hacker, *Innovating for Great Power Competition An Examination of Service and Joint Innovation Efforts*, Center for Strategic and Budgetary Assessments, 2023, 82 pp.; Lauren C. Williams, "Is the Pentagon Changing Fast Enough?" *Defense One*, November 14, 2023; Jules Hurst, "Fixing Defense Innovation: Rewriting Acquisition and Security Regulations," *War on the Rocks*, October 7, 2022; Melissa Flagg, "No Time to Waste: The Pentagon Needs an Innovation Overhaul, A Technological Transition Will Take Time, but the United States Cannot Fight and Win in This New Multipolar World Unless It Begins Today," *National Interest*, August 21, 2022; Thomas Newdick, "China Acquiring New Weapons Five Times Faster Than U.S. Warns Top Official," *The Drive*, July 6, 2022; Dan Ward and Matt MacGregor, *Arming the Eagle, Outpacing the Dragon: Understanding and Out Competing China's Defense Acquisition And Innovation*, Mitre Corporation, June 2022, 29 pp.; Elaine McCusker and Emily Coletta, "Is the U.S. Military Ready to Defend Taiwan?" *National Interest*, February 6, 2022; Christopher Zember, "Change How OTAs Are Used to Make Them an Essential Tool Against China," *Breaking Defense*, February 3, 2022; Robert A. McDonald Sr., M. Sam Araki, and Robert Wilkie, "These Seven Principles (continued...)

> While the Department of Defense (DOD) plans to invest more than $2 trillion to develop and acquire its costliest weapon programs, it continues to struggle with delivering innovative technologies quickly. Weapon systems are more complex and driven by software than ever before. Recent reforms were intended to lead to faster results, but slow, linear development approaches persist. In July 2023,[111] GAO found that leading commercial companies deliver complex, innovative products with speed through iterative cycles of design, development, and production….
>
> The average MDAP [major defense acquisition program] that has yet to deliver initial capability plans to take over 10 years to do so—slightly longer than last year. This continues a trend of increased cycle times. GAO also found that, for MDAPs that have delivered capability, the average amount of time it took to do so increased from 8 years to 11 years—an average increase of 3 years from their original planned date.[112]

DOD officials and other observers argue that to facilitate greater innovation and speed in weapon system development and deployment, U.S. defense acquisition policy and the oversight paradigm for assessing the success of acquisition programs will need to be adjusted to place a greater emphasis on innovation and speed as measures of merit in defense acquisition policy, alongside more traditional measures of merit such as minimizing cost growth, schedule delays, and problems in testing. As a consequence, they argue, defense acquisition policy and the oversight paradigm for assessing the success of acquisition programs should place more emphasis on time as a risk factor and feature more experimentation, risk-taking, and tolerance of failure during development, with a lack of failures in testing potentially being viewed in some cases not as an indication of success, but of inadequate innovation or speed of development.[113]

Mobilization Capabilities for Extended-Length Conflict

The emergence of GPC has led to an increased emphasis in discussions of U.S. defense on U.S. mobilization capabilities for an extended-length conflict.[114] The term *mobilization* is often used to

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Could Help DoD Acquisition in the Face of the China Threat," *Defense News*, February 1, 2022; Daniel K. Lim, "Startups and the Defense Department's Compliance Labyrinth," *War on the Rocks*, January 3, 2022.

[111] This is a reference to Government Accountability Office, *Leading Practices: Iterative Cycles Enable Rapid Delivery of Complex, Innovative Products*, GAO-23-106222, July 2023, 53 pp.

[112] Government Accountability Office, *Weapon Systems Annual Assessment[:] DOD Is Not Yet Well-Positioned to Field Systems with Speed*, GAO-24-106831, June 2024, highlights page.

[113] See, for example, Joel Gehrke, "China's Military Planners Move Faster Than Pentagon Bureaucrats, Official Says," *Washington Examiner*, May 3, 2022; Sean Carberry, "Air Force Must Embrace Risk to Counter China," *National Defense*, May 2, 2022; Tate Nurkin, "To Catch China and Russia in Hypersonic Race, US Must Embrace Risk Now," *Breaking Defense*, February 9, 2022; Corey Dickstein, "Vice Chairman Nominee Says US Military Must Adapt New Tech Faster to Compete with China, Russia," *Stars and Stripes*, December 8, 2021; Sam LaGrone, "Eliminating 'Risk Aversion' Key to Weapons Development, Says Vice Chair Nominee Grady," *USNI News*, December 8, 2021; Bryan Clark, "Pentagon And Congress Risk Bungling Drive To Modernize U.S. Military," *Forbes*, July 8, 2020; John Grady, "Officials: U.S. Must Move Faster in Testing and Fielding Hypersonics, 5G Networks," *USNI News*, June 30, 2020; Michèle A. Flournoy and Gabrielle Chefitz, "Breaking the Logjam: How the Pentagon Can Build Trust with Congress," *Defense News*, April 1, 2020; Ankit Panda, "Getting Critical Technologies Into Defense Applications," *National Interest*, February 1, 2020; Ankit Panda, "Critical Technologies and Great Power Competition," *Diplomat*, January 29, 2020; Michael Rubin, "The Simple Reason Why America Could Lose the Next Cold War to Russia or China," *National Interest*, January 14, 2020; George Franz and Scott Bachand, "China and Russia Beware: How the Pentagon Can Win the Tech Arms Race," *National Interest*, November 29, 2019; Scott Maucione, "Special Report: Failure Is an Option for DoD's Experimental Agency, But How Much?" *Federal News Week*, October 30, 2019; Sydney J. Freedberg Jr., "Stop Wasting Time So We Can Beat China: DoD R&D Boss, Griffin," *Breaking Defense*, August 9, 2018.

[114] See, for example, Raphael S. Cohen, "The U.S. Should Get Over Its Short War Obsession," *Foreign Policy*, March 28, 2023; Hal Brands, "Win or Lose, U.S. War Against China or Russia Won't Be Short," *Bloomberg*, June 14, 2021. (continued...)

refer specifically to preparations for activating U.S. military reserve force personnel and inducting additional people into the Armed Forces. In this report, it is used more broadly, to refer to various activities, including those relating to the ability of the industrial base to support U.S. military operations in a larger-scale, extended-length conflict against China or Russia. Under this broader definition, mobilization capabilities include but are not limited to capabilities for

- inducting and training additional military personnel to expand the size of the force or replace personnel who are killed or wounded;
- producing new weapons and supplies to replace those expended in the earlier stages of a conflict, and delivering those weapons and supplies to distantly deployed U.S. forces in a timely manner;
- repairing battle damage to ships, aircraft, and vehicles;
- replacing satellites or other support assets that are lost in combat; and
- manufacturing spare parts and consumable items.

Some observers have expressed concern about the adequacy of U.S. mobilization capabilities, particularly since this was not a major defense-planning concern during the 20 to 25 years of the post–Cold War era, and have recommended various actions to improve those capabilities.[115]

See also Rhyannon Bartlett-Imadegawa, "China Preparing for 'Protracted' War, Says Think Tank," *Nikkei Asia*, February 14, 2024.

[115] See, for example, Christopher Mahoney, "Depth of Magazine: Preparing the Joint Force for Protracted Conflict," *Military Times*, August 6, 2024; Seth G. Jones and Alexander Palmer, *Rebuilding the Arsenal of Democracy, The U.S. and Chinese Defense Industrial Bases in an Era of Great Power Competition*, Center for Strategic and International Studies (CSIS), March 2024 (published online March 6, 2024), 65 pp.; Adrian Wooldridge, "The Old Military-Industrial Complex Won't Win a New Cold War," *Bloomberg*, November 28, 2023; Jonathan Caverley, Ethan Kapstein, and Jennifer Kavanagh, "One Size Fits None: The United States Needs a Grand Defense Industrial Strategy," *War on the Rocks*, November 16, 2023; A. Wess Mitchell, "America Is a Heartbeat Away From a War It Could Lose, Global War Is Neither a Theoretical Contingency Nor the Fever Dream of Hawks and Militarists," *Foreign Policy*, November 16, 2023; Andrew Metrick, *Rolling the Iron Dice, The Increasing Chance of Conflict Protraction*, Center for a News American Security (CNAS), November 2023, 32 pp.; Andrew A. Michta, "Pivot to the Pacific? That Misses the Point, We Need a Rebuilt Defense Industrial Base to Make Our Forces Ready for Combat in Any Theater," *Wall Street Journal*, June 23, 2023; Cynthia Cook, "Reviving the Arsenal of Democracy: Steps for Surging Defense Industrial Capacity," Center for Strategic and International Studies (CSIS), March 14, 2023; Aaron Friedberg and Michael Wessel, "With China, America Faces a Preparedness Crisis," *The Hill*, January 6, 2023; Maiya Clark, "Revitalizing the National Defense Stockpile for an Era of Great-Power Competition," Heritage Foundation, January 4, 2022; Elbridge A. Colby and Alexander B. Gray, "America's Industrial Base Isn't Ready for War with China, Washington Must Invest Immediately in a Domestic Capacity to Build and Repair Military Hardware," *Wall Street Journal*, August 18, 2022; Hal Brands and Michael Beckley, "Washington Is Preparing for the Wrong War With China, A Conflict Would Be Long and Messy," *Foreign Affairs*, December 16, 2021; Seth Cropsey and Harry Halem, "The U.S. Is Wholly Unequipped to Resupply Forces in a Great-Power Conflict," *Defense News*, October 21, 2021; Marcus Weisgerber, "Digital Engineering Could Speed Wartime Arms Production," *Defense One*, June 8, 2021; Government Accountability Office, *Navy Ships[:] Timely Actions Needed to Improve Planning and Develop Capabilities for Battle Damage Repair*, GAO-21-246, June 2021, 46 pp.; Tristan Abbey, "America's Stockpiles Are Hardly Strategic," *Defense One*, February 9, 2021; Mark Cancian and Adam Saxton, "US War Surge Production Too Slow, CSIS Finds," *Breaking Defense*, January 19, 2021; Robert "Jake" Bebber, "State of War, State of Mind: Reconsidering Mobilization in the Information Age, Pt. 1," Center for International Maritime Security, January 11, 2021 (drawn from Robert "Jake" Bebber, "State of War, State of Mind: Reconsidering Mobilization in the Information Age," *Journal of Political Risk*, October 20, 2020); Mark F. Cancian, Adam Saxton, Owen Helman, Lee Ann Bryan, and Nidal Morrison, *Industrial Mobilization: Assessing Surge Capabilities, Wartime Risk, and System Brittleness*, CSIS, January 2021, 57 pp.; Ryan Pickrell, "China Is the World's Biggest Shipbuilder, and Its Ability to Rapidly Produce New Warships Would Be a 'Huge advantage' in a Long Fight with the US, Experts Say," *Business Insider*, September 8, 2020; Marcus Weisgerber, "US Shipyards Lack Needed Repair Capacity, Admiral Says," *Defense One*, August 27, 2020; Megan Eckstein, "Lack of U.S. Warship Repair Capacity Worrying Navy," *USNI News*, August 26, 2020; Paul McLeary, "Navy Plans For Wartime Ship Surge; Looks To Small Commercial Yards," *Breaking Defense*, August 25, 2020; (continued...)

Concerns over U.S. industrial mobilization capabilities have been reinforced by the U.S. and allied response to Russia's full-scale invasion of Ukraine starting on February 24, 2022, which has spotlighted

- how rapidly certain weapons (particularly precision-guided munitions) can be expended in modern warfare;
- the finite U.S. and allied inventories of precision-guided munitions, air-defense systems, and other equipment; and
- limits on existing U.S. and allied industrial capacity for producing new weapons and equipment to replace those transferred to Ukraine and to increase the size of U.S. and allied inventories to levels higher than those that were planned prior to Russia's invasion.[116]

Patrick Savage, What If It Doesn't End Quickly? Reconsidering US Preparedness for Protracted Conventional War," Modern War Institute, July 23, 2020; Elsa B. Kania and Emma Moore, "The US Is Unprepared to Mobilize for Great Power Conflict," *Defense One*, July 21, 2019; Alan L. Gropman, "America Needs to Prepare for a Great Power War," *National Interest*, February 7, 2018; Joseph Whitlock, "The Army's Mobilization Problem," U.S. Army War College War Room, October 13, 2017; Mark Cancian, "Long Wars and Industrial Mobilization," *War on the Rocks*, August 8, 2017; David Barno and Nora Bensahel, "Mirages of War: Six Illusions from Our Recent Conflicts," *War on the Rocks*, April 11, 2017; Robert Haddick, "Competitive Mobilization: How Would We Fare Against China?" *War on the Rocks*, March 15, 2016; David Barno and Nora Bensahel, "Preparing for the Next Big War," *War on the Rocks*, January 26, 2016. See also William Greenwalt, *Leveraging the National Technology Industrial Base to Address Great-Power Competition: The Imperative to Integrate Industrial Capabilities of Close Allies*, Atlantic Council, April 2019, 58 pp.

[116] See, for example, Tyler Hacker, *Beyond Precision: Maintaining America's Strike Advantage in Great Power Conflict*, Center for Strategic and Budgetary Assessments (CSBA), 2023 (posted online June 12, 2023), 134 pp.; Vasabjit Banerjee and Benjamin Tkach, "Munitions Return to a Place of Prominence in National Security," *War on the Rocks*, March 16, 2023; Paul McLeary and Alexander Ward, "New Pentagon Office Looks to Speed Up Weapons Buys," *Politico Pro*, March 15, 2023; Marcus Weisgerber, "Pentagon Creates Cell to Oversee Expansion of Weapon Production Lines," *Defense One*, March 15, 2023; Marcus Weisgerber, "Memo Details Effort to Boost Production of Weapons Sent to Ukraine," *Defense One*, February 8, 2023; Caroline Coudriet, "Lawmakers Worry About Weapons-Makers' Ability to Meet Demand," *CQ*, February 6, 2023; Seth G. Jones, "Empty Bins in a Wartime Environment: The Challenge to the U.S. Defense Industrial Base," Center for Strategic and International Studies (CSIS), January 23, 2023; Gordon Lubold, "U.S. Weapons Industry Unprepared for a China Conflict, Report Says," *Wall Street Journal*, January 23, 2023; Tony Bertuca, "Ukraine conflict sharpens industrial policy debate among top U.S. defense players," *Inside Defense*, January 5, 2023; Chris Laudati, "The Precarious State of U.S. Defense Stockpiles," *National Defense*, November 18, 2022; Eric Lofgren, "Precision Guided Munitions Production Is Totally Inadequate," *Acquisition Talk*, November22, 2022; Mike Stone, "Pentagon, U.S. Arms Makers to Talk Russia, Labor and Supply Chain," *Reuters*, November 4, 2022; Thomas G. Mahnken, "Could America Win a New World War? What It Would Take to Defeat Both China and Russia," *Foreign Affairs*, October 27, 2022; John Ferrari, "Four Steps the Pentagon Can Take to Fix the Munitions Industrial Base," *The Hill*, October 17, 2022; Bradley Bowman and Mark Montgomery, "America's Arsenal Is in Need of Life Support," *Defense News*, October 12, 2022; John Ferrari, "Cannibalizing the Arsenal of Democracy in Turbulent Times," *Military Times*, October 12, 2022; John Ismay and Lara Jakes, "Meeting in Brussels Signifies a Turning Point for Allies Arming Ukraine, Defense Officials Responsible for Purchasing Weapons for More Than 40 Nations Discussed How to Ramp Up Production for a Potentially Yearslong War," *New York Times*, September 28, 2022; Andrew White, "Ukraine Shows Need for NATO 'Magazine Depth': Raytheon Exec," *Breaking Defense*, July 20, 2022; David Johnson, "A Modern-Day Frederick The Great? The End of Short, Sharp Wars," *War on the Rocks*, July 5, 2022; Daniel Michaels, "Lessons of Russia's War in Ukraine: You Can't Hide and Weapons Stockpiles Are Essential," *Wall Street Journal*, July 4, 2022; Alex Vershinin, "The Return of Industrial Warfare," RUSI, June 17, 2022; Trae Stephens, "Rebooting the Arsenal of Democracy," *War on the Rocks*, June 6, 2022; Conrad Crane, "Too Fragile to Fight: Could the U.S. Military Withstand a War of Attrition?," *War on the Rocks*, May 9, 2022; "Because of Ukraine, America's Arsenal of Democracy Is Depleting, The War Raises Worries about America's Ability to Arm Its Friends," *Economist*, May 7, 2022; Bill Greenwalt and Dustin Walker, "How Biden's 'Buy American' Is Undermining the Arsenal of Democracy," *Breaking Defense*, May 3, 2022; Thomas G. Mahnken, "The US Needs a New Approach to Producing Weapons. Just Look at Ukraine," *Defense News*, April 26, 2022.

DOD officials have begun to focus more on actions to improve U.S. mobilization capabilities.[117] A February 2, 2022, press report stated

> If a war against a major adversary breaks out, it's going to require the military to resupply troops at a pace it hasn't seen in a long time, Air Force Gen. Jacqueline Van Ovost, head of U.S. Transportation Command, said on Wednesday [February 2].
>
> And to keep up with that frenetic tempo, TRANSCOM is going to have to use machine learning and artificial intelligence to streamline its logistics operations, Van Ovost said in an online conversation hosted by the Center for Strategic and International Studies.
>
> "We can't afford to sift through reams and reams of data" in a major war, Van Ovost said. "We really do need to apply machine learning and artificial intelligence to turn that data into knowledge, for which we can make decisions. Creating that decision advantage is going to give us that time and space and options for senior leaders to come up with different options to reduce risk, to increase effectiveness."
>
> Van Ovost said American allies and partners, as well as its potential competitors, are already making fast progress in these areas, and the U.S. must do the same at all levels to be more effective and efficient....
>
> Van Ovost expressed interest in recent work studying the feasibility of using rockets to rapidly move large cargo loads anywhere in the world. TRANSCOM has signed research agreements with companies such as SpaceX and xArc to see how the technology might work, including cargo loading and determining flight frequency.[118]

Supply Chain Security

The emergence of GPC has led to an increased emphasis in U.S. defense planning on supply chain security, meaning (in this context) awareness of, and minimization of reliance in U.S. military systems on, components, subcomponents, materials, and software from non-allied countries, particularly China and Russia. Examples include the dependence of various U.S. military systems on rare earth elements from China, PRC-made electronic components, software that may contain PRC- or Russian-origin elements, DOD purchases of PRC-made drones, and the use of PRC-made surveillance cameras at U.S. military installations. The supply-chain impacts of Russia's full-scale invasion of Ukraine starting on February 24, 2022, have put an additional spotlight on the issue of supply chain security.[119]

DOD officials have begun to focus more on actions to improve supply chain security. On February 24, 2021, President Biden issued an executive order on strengthening the resilience of U.S. supply chains. The executive order directed a "complete a review of supply chain risks," to be completed within 100 days of the date of the executive order, and several sectoral supply chain assessments to be submitted within one year of the date of the executive order, to be followed by

[117] See, for example, Sydney J. Freedberg Jr., "WW II On Speed: Joint Staff Fears Long War," *Breaking Defense*, January 11, 2017; Department of Defense, *Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States*, September 2018, 140 pp.; Joint Chiefs of Staff, *Joint Mobilization Planning*, Joint Publication 4-05, 137 pp., October 23, 2018; Memorandum from Michael D. Griffin, Under Secretary of Defense, Research and Engineering, for Chairman, Defense Science Board, Subject: Terms of Reference—Defense Science Board Task Force on 21st Century Industrial Base for National Defense, October 30, 2019. See also CRS In Focus IF11311, *Defense Primer: The National Technology and Industrial Base*, by Heidi M. Peters and Luke A. Nicastro.

[118] Stephen Losey, "Data and Rockets: US Military Eyes New Tech to Supply Far-Flung Forces," *Defense News*, February 2, 2022. See also James Foggo, "How to Lose the Next War: Ignore the Supply Chain," *The Hill*, January 25, 2022.

[119] See, for example, Christian Davenport, "Russia Cuts Off Rocket Engine Supply and Threatens Space Station Partnership," *Washington Post*, March 3, 2022.

reports "reviewing the actions taken over the previous year and making recommendations" for additional actions.[120] In February 2022, the Biden Administration released a report on the results of the review.[121]

For a list of reports and articles on this issue, see **Appendix D**.

Capabilities for Countering Hybrid Warfare and Gray-Zone Tactics

Russia's seizure and purported annexation of Crimea in 2014, as well as subsequent Russian actions in eastern Ukraine and elsewhere in Eastern Europe and Russia's information operations, have led to a focus among policymakers on how to counter Russia's so-called hybrid warfare or ambiguous warfare tactics.[122] China's actions in the South and East China Seas have similarly prompted a focus among policymakers on how to counter China's so-called salami-slicing or gray-zone tactics in those areas.[123] The Biden Administration's October 2022 NDS states

> *Competitors' Gray Zone Activities*. Competitors now commonly seek adverse changes in the status quo using gray zone methods—coercive approaches that may fall below perceived thresholds for U.S. military action and across areas of responsibility of different parts of the U.S. Government. The PRC employs state-controlled forces, cyber and space operations, and economic coercion against the United States and its Allies and partners. Russia employs disinformation, cyber, and space operations against the United States and our Allies and partners, and irregular proxy forces in multiple countries. Other state actors, particularly North Korea and Iran, use similar if currently more limited means. The proliferation of advanced missiles, uncrewed aircraft systems, and cyber tools to military proxies allows competitors to threaten U.S. forces, Allies, and partners, in indirect and deniable ways.[124]

For a list of articles discussing this issue, see **Appendix E**.

Issues for Congress

Potential policy and oversight issues for Congress include the following:

- **October 2022 NSS and NDS.** Do the Biden Administration's October 2022 NSS and NDS accurately describe GPC and place it in appropriate context relative to other U.S. national security concerns? Do the October 2022 NSS and NDS present an appropriate national security strategy and national defense strategy for responding to GPC?
- **U.S. grand strategy.** Should the United States continue to include, as a key element of U.S. grand strategy, a goal of preventing the emergence of a regional hegemon in one part of Eurasia or another? Should the United States adopt an

[120] White House, "Executive Order on America's Supply Chains," February 24, 2021. The executive order was number 14017.

[121] Department of Defense, *Securing Defense-Critical Supply Chains, An Action Plan Developed in Response to President Biden's Executive Order 14017*, February 2022, 74 pp.

[122] For a CRS report on the related topic of irregular warfare, see CRS In Focus IF12565, *Defense Primer: What Is Irregular Warfare?*, by Catherine A. Theohary.

[123] See CRS Report R42784, *U.S.-China Strategic Competition in South and East China Seas: Background and Issues for Congress*, by Ronald O'Rourke.

[124] Department of Defense, *2022 National Defense Strategy of the United States of America*, cover letter dated October 27, 2022, p. 6.

"Asia first" grand strategy? What are the Biden Administration's positions on these issues?[125]

- **Force-planning standard.** Should the United States adopt a two-war force-planning standard relating to potential conflicts with China and Russia, or the multiple theater force construct proposed by the congressionally created commission on the national defense strategy? What would be the potential benefits, costs, and risks of adopting and implementing a two-war or multiple theater force standard?
- **DOD organization.** Is DOD optimally organized for GPC? What further organizational changes, if any, should be made to better to better align DOD's activities with those needed to counter PRC and Russian military capabilities?
- **Nuclear weapons, nuclear deterrence, and nuclear arms control.** Are current DOD plans for modernizing U.S. strategic nuclear weapons, and for numbers and basing of nonstrategic (i.e., theater-range) nuclear weapons, aligned with the needs of GPC? How should U.S. policy relating to strategic nuclear weapons respond to the projected emergence of a three-power strategic nuclear situation? What role can or should nuclear arms control play in a situation of GPC?
- **U.S. global military posture.** Should U.S. global military posture be altered, and if so, how? What are the potential benefits and risks of shifting U.S. military capabilities and force deployments out of some areas and into others? Should Congress approve, reject, or modify the Biden Administration's proposals for the global distribution of U.S. military force deployments?
- **U.S. and allied military capabilities in the Indo-Pacific region.** Are the United States and its allies in the Indo-Pacific region taking appropriate and sufficient steps for countering China's military capabilities in the Indo-Pacific region? To what degree will countering China's military capabilities in the Indo-Pacific region require reductions in U.S. force deployments to other parts of the world?
- **U.S. and NATO military capabilities in Europe.** Are the United States and its NATO allies taking appropriate and sufficient steps regarding U.S. and NATO military capabilities and operations for countering potential Russian military aggression in parts of Europe other than Ukraine? What potential impacts would a strengthened U.S. military presence in Europe have on DOD's ability to allocate additional U.S. forces to the Indo-Pacific region? To what degree can or should the NATO allies in Europe take actions to strengthen deterrence against potential Russian aggression in parts of Europe other than Ukraine?
- **New operational concepts.** Are U.S. military services moving too slowly, too quickly, or at about the right speed in their efforts to develop new operational concepts in response to the emergence of GPC, particularly against improving PRC anti-access/area-denial (A2/AD) forces? What are the potential merits of these new operational concepts, and what steps are the services taking in terms of experiments and exercises to test and refine these concepts? To what degree are

[125] Regarding a goal of preventing the emergence of a regional hegemon in one part of Eurasia or another, the Biden Administration's October 2022 NSS states "If one region descends into chaos or is dominated by a hostile power, it will detrimentally impact our interests in the others." Regarding the Middle East, it states that "the United States will not allow foreign or regional powers to jeopardize freedom of navigation through the Middle East's waterways, including the Strait of Hormuz and the Bab al Mandab, nor tolerate efforts by any country to dominate another—or the region—through military buildups, incursions, or threats" (White House, *National Security Strategy*, October 2022, pp. 11, 42).

the services working to coordinate and integrate their new operational concepts on a cross-service basis?

- **Capabilities for high-end conventional warfare.** Are DOD's plans for acquiring capabilities for high-end conventional warfare appropriate and sufficient? In a situation of finite defense resources, how should trade-offs be made in balancing capabilities for high-end conventional warfare against other DOD priorities?
- **Maintaining U.S. superiority in conventional weapon technologies.** Are DOD's steps for maintaining U.S. superiority in conventional weapon technologies appropriate and sufficient? What impact will funding these technologies have on funding available for nearer-term DOD priorities, such as maintaining U.S. force structure (i.e., numbers of military units) or redressing deficiencies in force readiness?
- **Innovation and speed in weapon system development and deployment.** To what degree should defense acquisition policy and the paradigm for assessing the success of acquisition programs be adjusted to place greater emphasis on innovation and speed of development and deployment, and on experimentation, risk taking, and greater tolerance of failure during development? Are DOD's steps for doing this appropriate and sufficient? What new legislative authorities, if any, might be required (or what existing provisions, if any, might need to be amended or repealed) to achieve greater innovation and speed in weapon development and deployment? What implications might placing a greater emphasis on speed of acquisition have on familiar congressional paradigms for conducting oversight and judging the success of defense acquisition programs?
- **Mobilization capabilities.** What actions is DOD taking regarding mobilization capabilities for an extended-length conflict against an adversary such as China or Russia, and are these actions appropriate? What are current industrial capacity limits for producing key weapons and equipment, including precision-guided munitions? How quickly could industrial capacity for producing key weapons and equipment be increased, and how much would it cost to create the additional production capacity? More generally, how much funding is being devoted to mobilization capabilities, and how are mobilization capabilities projected to change as a result of these actions in coming years?
- **Supply chain security.** To what degree are PRC or Russian components, subcomponents, materials, or software incorporated into DOD equipment? How good of an understanding does DOD have of this issue? What implications might this issue have for the effectiveness, reliability, maintainability, and reparability of U.S. military systems, particularly in time of war? What actions is DOD taking or planning to take to address supply chain security, particularly with regard to PRC or Russian components, subcomponents, materials, and software? What impact might this issue have on U.S.-content requirements (aka Buy America requirements) for U.S. military systems?
- **Hybrid warfare and gray-zone tactics.** Do the United States and its allies and partners have adequate strategies for countering Russia's so-called hybrid warfare, Russia's information operations, and China's so-called salami-slicing tactics in the South and East China Seas?

Appendix A. Transition from Post–Cold War Era to GPC

This appendix presents additional background information on the transition from the post–Cold War era to GPC. For a list of articles on this shift, see **Appendix B**.

Previous International Security Environments

Cold War Era

The Cold War era of international relations is generally viewed as having lasted from the late 1940s until the late 1980s or early 1990s and is generally characterized as having been a strongly bipolar situation in which two superpowers—the United States and the Soviet Union—engaged, along with their allies, in a political, ideological, and military competition for influence across multiple geographic regions. The military component of that competition was often most acutely visible in Europe, where the U.S.-led NATO alliance and the Soviet-led Warsaw Pact alliance faced off against one another with large numbers of conventional forces and theater nuclear weapons, backed by longer-ranged strategic nuclear weapons.

Post–Cold War Era

The post–Cold War era is generally viewed as having begun in the late 1980s and early 1990s, following the fall of the Berlin Wall in November 1989, the disbanding of the Soviet-led Warsaw Pact military alliance in March 1991, and the dissolution of the Soviet Union into Russia and the former Soviet republics in December 1991, which were key events marking the ending of the Cold War. Compared to the Cold War, the post–Cold War era is generally characterized as having featured reduced levels of overt political, ideological, and military competition among major states.

The post–Cold War era is also sometimes characterized as having tended toward a unipolar situation, with the United States as the world's sole superpower. Neither Russia, China, nor any other country was viewed as posing a significant challenge to either the United States' status as the world's sole superpower or the U.S.-led international order. Following the terrorist attacks of September 11, 2001 (aka 9/11), the post–Cold War era was additionally characterized by a strong focus (at least from a U.S. perspective) on countering transnational terrorist organizations that had emerged as significant non-state actors, particularly Al Qaeda.

Great Power Competition

Overview

The post–Cold War era showed initial signs of fading in 2006-2008 (see "Markers of Shift to GPC" below). By 2014—following PRC actions in the South and East China Seas[126] and Russia's seizure and annexation of Crimea[127]—the post–Cold War era was viewed as having given way to

[126] For discussions of these actions, see CRS Report R42784, *U.S.-China Strategic Competition in South and East China Seas: Background and Issues for Congress*, by Ronald O'Rourke, and CRS Report R42930, *Maritime Territorial Disputes in East Asia: Issues for Congress*, by Ben Dolven, Mark E. Manyin, and Shirley A. Kan.

[127] For discussion Russia's seizure and annexation of Crimea, see CRS Report R45008, *Ukraine: Background, Conflict* (continued...)

a new situation, often referred to as great power competition, of intensified U.S. competition with China and Russia, as well as challenges by those two countries and others to elements of the U.S.-led international order established after World War II.

Some Key Apparent Features

Observers view GPC not as a bipolar situation (like the Cold War) or a unipolar situation (like the post–Cold War era) but as a situation characterized in substantial part by renewed competition among three major world powers—the United States, China, and Russia. Key apparent features of the current situation of GPC include (but are not necessarily limited to) the following:

- renewed ideological competition, this time against 21st-century forms of authoritarianism and illiberal democracy in Russia, China, and other countries;
- competition for allies and partner states;
- technological competition, particularly between the United States and China;
- the promotion by China and Russia of nationalistic historical narratives,[128] some emphasizing assertions of prior humiliation or victimization by Western powers, and the use of those narratives to support revanchist or irredentist foreign policy aims;
- challenges by Russia and China to key elements of the U.S.-led international order, including the unacceptability of changing international borders by force or coercion and a preference for resolving disputes between countries peacefully without the use or threat of use of force or coercion;
- the use by Russia and China of new forms of aggressive or assertive military, paramilitary, information, and cyber operations—sometimes called hybrid warfare, gray-zone operations, or ambiguous warfare, among other terms, in the case of Russia's actions and salami-slicing tactics or gray-zone operations, among other terms, in the case of China's actions; and
- additional features alongside those listed above, including
  - continued regional security challenges from countries such as Iran and North Korea;
  - a continued focus (at least from a U.S. perspective) on countering transnational terrorist organizations that emerge as significant non-state actors; and
  - weak or failed states, and resulting weakly governed or ungoverned areas that can contribute to the emergence of (or serve as base areas or sanctuaries for) non-state actors, and become potential locations of intervention by stronger states, including major powers.

Markers of Shift to GPC

The sharpest single marker of the transition from the post–Cold War era to GPC arguably was Russia's seizure and annexation of Crimea in March 2014, which represented the first forcible seizure and annexation of one country's territory by another country in Europe since World War

with Russia, and U.S. Policy, by Cory Welt, and CRS Report R44775, *Russia: Background and U.S. Policy*, by Cory Welt.

[128] See, for example, Jessica Chen Weiss, "The Stories China Tells: The New Historical Memory Reshaping Chinese Nationalism," *Foreign Affairs*, March/April 2021.

II. Other markers of the shift—such as China's economic growth and military modernization and China's actions in the South and East China Seas—were more gradual and cumulative.

The beginnings of the transition from the post–Cold War era to GPC can be traced to the period 2006-2008:

- Freedom House's annual report on freedom in the world states that, by the organization's own analysis, countries experiencing net declines in freedom have outnumbered countries experiencing net increases in freedom every year since in 2006.[129]
- In February 2007, in a speech at an international security conference in Munich, Russian President Vladimir Putin criticized and rejected the concept of a unipolar power, predicted a shift to multipolar order, and affirmed an active Russian role in international affairs. Some observers view the speech in retrospect as prefiguring a more assertive and competitive Russian foreign policy.[130]
- In 2008, Russia invaded and occupied part of the former Soviet republic of Georgia without provoking a strong cost-imposing response from the United States and its allies.[131] Also in that year, the financial crisis and resulting deep recessions in the United States and Europe, combined with China's ability to weather that crisis and its successful staging of the 2008 Summer Olympics, are seen by observers as having contributed to a perception in China of the United States as a declining power, and to a PRC sense of self-confidence or triumphalism.[132] China's assertive actions in the South and East China Seas can be viewed as having begun (or accelerated) soon thereafter.

Other observers trace the roots of the transition to GPC further to years prior to 2006-2008.[133]

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[129] See, for example, Sarah Repucci, General Editor, *Freedom in the World 2020, The Annual Survey of Political Rights & Civil Liberties*, Freedom House, 2021, p. 2.

[130] For an English-language transcript of the speech, see "Putin's Prepared Remarks at 43rd Munich Conference on Security Policy," Washington Post, accessed January 25, 2022, at https://www.washingtonpost.com/wp-dyn/content/article/2007/02/12/AR2007021200555.html. See also Ted Galen Carpenter, "Did Putin's 2007 Munich Speech Predict the Ukraine Crisis?" *National Interest*, January 24, 2022; Rakesh Sood, "Putin is Forcing a Third Reordering of Europe," *Observer Research Foundation*, February 9, 2022; Daniel Fried and Kurt Volker, "The Speech In Which Putin Told Us Who He Was, In His 2007 Munich Address, the Russian Leader Firmly Rejected the Post-Cold War System He's Still Trying to Torpedo," *Politico*, February 18, 2022; David Ignatius, "Putin Warned the West 15 Years Ago. Now, in Ukraine, He's Poised to Wage War," *Washington Post*, February 20, 2022; Michael R. Gordon, Stephen Fidler, and Alan Cullison, "How the West Misread Vladimir Putin, The Former KGB Officer Spent Years Assailing the Post-Cold War Order and Sent Repeated Signals He Intended to Widen Russia's Sphere Of Influence," *Wall Street Journal*, February 25, 2022. See also Kim Ghattas, "What a Decade-Old Conflict Tells Us About Putin, One Can Trace a Straight Line from the Overthrow of Libya's Dictator Muammar Gaddafi to Today's Devastating War in Ukraine," *Atlantic*, March 6, 2022.

[131] See, for example, Robert Kagan, "Believe It or Not, Trump's Following a Familiar Script on Russia," *Washington Post*, August 7, 2018. For a response, see Condoleezza Rice, "Russia Invaded Georgia 10 Years Ago. Don't Say America Didn't Respond." *Washington Post*, August 8, 2018. See also Ben Smith, "U.S. Pondered Military Use in Georgia," *Politico*, February 3, 2010; Mikheil Saakashvili, "When Russia Invaded Georgia," *Wall Street Journal*, August 7, 2018; Lahav Harkov, "2 Years On, Georgian Ambassador Sees War with Russia as Warning to Europe," *Jerusalem Post*, August 5, 2020; Rakesh Sood, "Putin is Forcing a Third Reordering of Europe," *Observer Research Foundation*, February 9, 2022.

[132] See, for example, Howard W. French, "China's Dangerous Game," *Atlantic*, October 13, 2014.

[133] See, for example, David Ignatius, "The Moment when Putin Turned Away from the West," *Washington Post*, March 9, 2023; Paul Blustein, "The Untold Story of How George W. Bush Lost China," *Foreign Policy*, October 2, 2019; Walter Russell Mead, "Who's to Blame for a World in Flames?" *The American Interest*, October 6, 2014; Robert (continued...)

Comparisons to Past International Security Environments

Some observers seek to better understand the current situation of GPC in part by comparing it to past international security environments. Each international security environment features its own combination of major actors, dimensions of competition and cooperation among those actors, and military and other technologies available to them. A given international security environment can have some similarities to previous ones, but it will also have differences, including, potentially, one or more features not present in any other international security environment. In the early years of a new international security environment, some of its features may be unclear, in dispute, not yet apparent, or subject to evolution. In attempting to understand an international security environment, comparisons to other ones are potentially helpful in identifying avenues of investigation. If applied too rigidly, however, such comparisons can act as intellectual straightjackets, making it more difficult to achieve a full understanding of a given international security environment's characteristic features, particularly those that differentiate it from previous ones.[134]

Some observers are describing the current situation of GPC as a new Cold War (or Cold War II or 2.0), particularly since Russia's full-scale invasion of Ukraine starting on February 24, 2022. That term may have utility in referring specifically to current U.S.-Russia or U.S.-China relations. The original Cold War, however, was a bipolar situation with the United States and Russia, while the current situation of GPC is a three-power situation involving the United States, China, and Russia. The bipolarity of the Cold War, moreover, was reinforced by the opposing NATO and Warsaw Pact alliances, whereas in contrast, neither Russia nor China today lead an equivalent of the Warsaw Pact. And while terrorists were a concern during the Cold War, the U.S. focus on countering transnational terrorist groups was not nearly as significant during the original Cold War as it has been since 9/11.

Other observers, viewing the emergence of GPC, have drawn comparisons to the multipolar situation that existed in the 19th century or the years prior to World War I. Still others, observing the promotion in China and Russia of nationalistic historical narratives supporting revanchist or irredentist foreign policy aims, China's military modernization, and Russia-China strategic cooperation, have drawn comparisons to the 1930s.[135] The military and other technologies available in those earlier situations, however, differ vastly from those available today. The current situation of GPC may be similar in some respects to previous situations, but it also differs from previous situations in certain respects, and might be best understood by direct observation and identification of its key features.[136]

Kagan, "End of Dreams, Return of History," *Policy Review (Hoover Institution)*, July 17, 2007. See also Thomas P. Ehrhard, "Treating the Pathologies of Victory: Hardening the Nation for Strategic Competition," p. 23, in *2020 Index of U.S. Military Strength*, Heritage Foundation, 2020; Michael Rubin, "Russia Was a Rogue State Long Before Ukraine and Georgia," American Enterprise Institute, February 18, 2022; Jade McGlynn, "Why Putin Keeps Talking About Kosovo, For the Kremlin, NATO's 1999 War Against Serbia Is the West's Original Sin—and a Humiliating Affront that Russia Must Avenge," *Foreign Policy*, March 3, 2022.

[134] See, for example, Christopher David LaRoche, "Ukraine Isn't Munich—or Vietnam or Berlin," *Foreign Policy*, October 15, 2022; Josh Kerbel, "By Calling It a 'Cold War' We Risk Containing Ourselves," *The Hill*, October 3, 2022; Jonah Goldberg, "A Tale of Two Cold Wars, The Differences between the Cold War Era and Today Are Profound," *Dispatch*, March 16, 2022; Ross Douthat, "The Ukraine War and the Retro-Future," *New York Times*, March 12, 2022.

[135] See, for example, Gideon Rachman, "China, Japan and the Ukraine War, The Merging of Geopolitical rivalries in Asia and Europe Has Disturbing Echoes of the 1930s," *Financial Times*, March 27, 2023.

[136] See also Joseph Stieb, "History Has No Lessons for You: A Warning for Policymakers," *War on the Rocks*, February 6, 2024.

Naming the Current Situation

Observers viewing the current situation have given it various names, but names using some variation of great power competition or renewed great power competition appear to have become the most commonly used in public policy discussions. As noted earlier, some observers are using the term Cold War (or New Cold War, or Cold War II or 2.0), particularly since Russia's full-scale invasion of Ukraine starting on February 24, 2022. Other terms that have been used include multipolar era, tripolar era, competitive world order, disorderly world (or era), and strategic competition.

Congress and the Previous Shift

The previous major change in the international security environment—the transition in the late 1980s and early 1990s from the Cold War to the post–Cold War era—prompted a broad reassessment by DOD and Congress of defense funding levels, strategy, and missions that led to numerous changes in DOD plans and programs. Many of these changes were articulated in the 1993 Bottom-Up Review (BUR),[137] a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.[138] In general, the BUR reshaped the U.S. military into a force that was smaller than the Cold War U.S. military, and oriented toward a planning scenario being able to conduct two major regional contingencies (MRCs) rather than the Cold War planning scenario of a NATO-Warsaw Pact conflict.[139] For additional discussion of Congress's response to the shift from the Cold War to the post–Cold War era, see **Appendix F**.

[137] See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

[138] Secretary of Defense Les Aspin's introduction to DOD's report on the 1993 BUR states the following:

> In March 1993, I initiated a comprehensive review of the nation's defense strategy, force structure, modernization, infrastructure, and foundations. I felt that a department-wide review needed to be conducted "from the bottom up" because of the dramatic changes that have occurred in the world as a result of the end of the Cold War and the dissolution of the Soviet Union. These changes in the international security environment have fundamentally altered America's security needs. Thus, the underlying premise of the Bottom-Up Review was that we needed to reassess all of our defense concepts, plans, and programs from the ground up.
>
> (Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, p. iii.)

[139] For additional discussion of the results of the BUR, see CRS Report 93-839 F, *Defense Department Bottom-Up Review: Results and Issues*, October 6, 1993, 6 pp., by Edward F. Bruner, and CRS Report 93-627 F, *Defense Department Bottom-Up Review: The Process*, July 2, 1993, 9 pp., by Cedric W. Tarr Jr. (both nondistributable and available to congressional clients from CRS).

Appendix B. Articles on Transition to GPC and GPC in General

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Appendix F. Congress and the Late 1980s/Early 1990s Transition to Post–Cold War Era

This appendix provides additional background information on the role of Congress in responding to the transition in the late 1980s and early 1990s from the Cold War to the post–Cold War era.

This transition prompted a broad reassessment by DOD and Congress of defense funding levels, strategy, and missions that led to numerous changes in DOD plans and programs. Many of these changes were articulated in the 1993 Bottom-Up Review (BUR),[140] a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.[141] In general, the BUR reshaped the U.S. military into a force that was smaller than the Cold War U.S. military, and oriented toward a planning scenario being able to conduct two major regional contingencies (MRCs) rather than the Cold War planning scenario of a NATO-Warsaw Pact conflict.[142]

Through both committee activities and the efforts of individual Members, Congress played a significant role in the reassessment of defense funding levels, strategy, plans, and programs that was prompted by the end of the Cold War. In terms of committee activities, the question of how to change U.S. defense plans and programs in response to the end of the Cold War was, for example, a major focus for the House and Senate Armed Services Committees in holding hearings and marking up annual national defense authorization acts in the early 1990s.[143]

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[140] See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

[141] Secretary of Defense Les Aspin's introduction to DOD's report on the 1993 BUR states

> In March 1993, I initiated a comprehensive review of the nation's defense strategy, force structure, modernization, infrastructure, and foundations. I felt that a department-wide review needed to be conducted "from the bottom up" because of the dramatic changes that have occurred in the world as a result of the end of the Cold War and the dissolution of the Soviet Union. These changes in the international security environment have fundamentally altered America's security needs. Thus, the underlying premise of the Bottom-Up Review was that we needed to reassess all of our defense concepts, plans, and programs from the ground up.
>
> (Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, p. iii.)

[142] For additional discussion of the results of the BUR, see CRS Report 93-839 F, *Defense Department Bottom-Up Review: Results and Issues*, October 6, 1993, 6 pp., by Edward F. Bruner, and CRS Report 93-627 F, *Defense Department Bottom-Up Review: The Process*, July 2, 1993, 9 pp., by Cedric W. Tarr Jr. (both nondistributable and available to congressional clients from CRS).

[143] See, for example, the following:

> the House Armed Services Committee's report on the FY1991 National Defense Authorization Act (H.Rept. 101-665 of August 3, 1990, on H.R. 4739), pp. 7-14;
>
> the Senate Armed Services Committee's report on the FY1991 National Defense Authorization Act (S.Rept. 101-384 of July 20 (legislative day, July 10), 1990, on S. 2884), pp. 8-36;
>
> the House Armed Services Committee's report on the FY1992 and FY1993 National Defense Authorization Act (H.Rept. 102-60 of May 13, 1991, on H.R. 2100), pp. 8 and 13;
>
> the Senate Armed Services Committee's report on the FY1992 and FY1993 National Defense Authorization Act (S.Rept. 102-113 of July 19 (legislative day, July 8), 1991, on S. 1507), pp. 8-9;
>
> the House Armed Services Committee's report on the FY1993 National Defense Authorization Act (H.Rept. 102-527 of May 19, 1992, on H.R. 5006), pp. 8-10, 14-15, and 22;
>
> the Senate Armed Services Committee's report on the FY1993 National Defense Authorization Act (S.Rept. 102-352 of July 31 (legislative day, July 23), 1992, on S. 3114), pp. 7-12;

(continued...)

In terms of efforts by individual Members, some Members put forth their own proposals for how much to reduce defense spending from the levels of the final years of the Cold War,[144] while others put forth detailed proposals for future U.S. defense strategy, plans, programs, and spending. Senator John McCain, for example, issued a detailed, 32-page policy paper in November 1991 presenting his proposals for defense spending, missions, force structure, and weapon acquisition programs.[145]

Perhaps the most extensive individual effort by a Member to participate in the reassessment of U.S. defense following the end of the Cold War was the one carried out by Representative Les Aspin, the chairman of the House Armed Services Committee. In early 1992, Aspin, supported by members of the committee's staff, devised a force-planning standard and potential force levels and associated defense spending levels U.S. defense for the new post–Cold War era. A principal aim of Aspin's effort was to create an alternative to the "Base Force" plan for U.S. defense in the post–Cold War era that had been developed by the George H. W. Bush Administration.[146] Aspin's effort included a series of policy papers in January and February 1992[147] that were augmented by press releases and speeches. Aspin's policy paper of February 25, 1992, served as the basis for his testimony that same day at a hearing on future defense spending before the House Budget Committee. Although DOD and some other observers (including some Members of Congress) criticized Aspin's analysis and proposals on various grounds,[148] the effort arguably proved

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the House Armed Services Committee's report on the FY1994 National Defense Authorization Act (H.Rept. 103-200 of July 30, 1993, on H.R. 2401), pp. 8-9 and 18-19;

the House Armed Services Committee's report on the FY1995 National Defense Authorization Act (H.Rept. 103-499 of May 10, 1994, on H.R. 4301), pp. 7 and 9;

the Senate Armed Services Committee's report on the FY1995 National Defense Authorization Act (S.Rept. 103-282 of June 14 (legislative day, June 7), 1994, on S. 2182), pp. 8-9; and

the House Armed Services Committee's report on the FY1996 National Defense Authorization Act (H.Rept. 104-131 of June 1, 1995, on H.R. 1530), pp. 6-7 and 11-12.

[144] See, for example, Clifford Krauss, "New Proposal for Military Cut," *New York Times*, January 7, 1992: A11 (discussing a proposal by Sen. Phil Gramm for reducing defense spending by a certain amount); "Sen. Mitchell Proposes $100 Billion Cut in Defense," *Aerospace Daily*, January 17, 1992: 87; John Lancaster, "Nunn Proposes 5-Year Defense Cut of $85 Billion," *Washington Post*, March 25, 1992: A4.

[145] Sen. John McCain, Matching A Peace Dividend With National Security, A New Strategy For The 1990s, November 1991, 32 pp.

[146] See, for example, "Arms Panel Chief Challenges Ending Use of Threat Analysis," *Aviation Week & Space Technology*, January 13, 1992: 28; Patrick E. Tyler, "Top Congressman Seeks Deeper Cuts in Military Budget," *New York Times*, February 23, 1991: 1; Barton Gellman, "Debate on Military's Future Crystallizes Around 'Enemies List,'" *Washington Post*, February 26, 1992: A20; Pat Towell, "Planning the Nation's Defense," *CQ*, February 29, 1992: 479. For more on the Base Force, see CRS Report 92-493 S, *National Military Strategy, The DoD Base Force, and U.S. Unified Command Plan*, June 11, 1992, 68 pp., by John M. Collins (nondistributable and available to congressional clients from CRS).

[147] These policy papers included the following:

- National Security in the 1990s: Defining a New Basis for U.S. Military Forces, Rep. Les Aspin, chairman, House Armed Services Committee, Before the Atlantic Council of the United States, January 6, 1992, 23 pp.;
- An Approach to Sizing American Conventional Forces For the Post-Soviet Era, Rep. Les Aspin, chairman, House Armed Services Committee, January 24, 1992, 20 pp.;
- Tomorrow's Defense From Today's Industrial Base: Finding the Right Resource Strategy For A New Era, by Rep. Les Aspin, chairman, House Armed Services Committee, Before the American Defense Preparedness Association, February 12, 1992, 20 pp.; and
- An Approach to Sizing American Conventional Forces For the Post-Soviet Era, Four Illustrative Options, Rep. Les Aspin, chairman, House Armed Services Committee, February 25, 1992, 27 pp.

[148] See, for example, "Aspin Defense Budget Plans Rebuffed By Committee," *Defense Daily*, February 24, 1992: 289; "Pentagon Spurns Aspin's Budget Cuts as 'Political,'" *Washington Post*, February 28, 1992: A14.

consequential the following year, when Aspin became Secretary of Defense in the new Clinton Administration. Aspin's 1992 effort helped inform his participation in DOD's 1993 BUR. The 1993 BUR in turn created a precedent for the subsequent Quadrennial Defense Review (QDR) process (renamed Defense Strategy Review in 2015) that remained in place until 2016.

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