

# Renewed Great Power Competition: Implications for Defense—Issues for Congress

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## Summary

The emergence of great power competition with China and Russia over the past several years, and the underscoring of that development for some observers by Russia's invasion of Ukraine beginning in late February 2022, have 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 element in the conversation, and the conversation now features a new or renewed emphasis on the following, all of which relate to China and/or Russia:

- grand strategy and the geopolitics of great power competition as a starting point for discussing U.S. defense issues;
- organizational changes within 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 foreign components, subcomponents, materials, and software; and
- capabilities for countering so-called hybrid warfare and gray-zone tactics.

In connection with some of the above-listed topics, Russia's invasion of Ukraine beginning in late February 2022 has become an additional factor in the discussion regarding the future size of the U.S. defense budget.

The issue for Congress is how U.S. defense planning should respond to the emergence of great power competition with China and Russia, and whether to approve, reject, or modify the Biden Administration's proposed defense funding levels, strategy, plans, and programs for addressing great power competition. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements.

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## Introduction

This report provides a brief overview of implications for U.S. defense of the emergence of great power competition with China and Russia. The issue for Congress is how U.S. defense planning should respond to the renewal of great power competition, and whether to approve, reject, or modify the Biden Administration's proposed defense funding levels, strategy, plans, and programs for addressing great power competition. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements.

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

## Background

### Shift to Renewed Great Power Competition

#### Overview

The post-Cold War era of international relations—which began in the early 1990s, following the end of the Cold War between the United States and the Soviet Union, and which is sometimes referred to as the unipolar moment (with the United States as the unipolar power)—showed initial signs of fading in 2006-2008, and by 2014 had given way to a fundamentally different situation of great power competition with China and Russia and challenges by these two countries and others to elements of the U.S.-led international order that has operated since World War II.<sup>1</sup> For some observers, the ending of the post-Cold War era and the shift to an era of great power competition and challenges by China and Russia to the post-World War II U.S.-led international order has been underscored by the increased strategic partnership (some observers use terms such as alignment, convergence, or alliance) between China and Russia, particularly since the start of 2022, and by Russia's invasion of Ukraine beginning in late February 2022.<sup>2</sup>

The renewal of great power competition was acknowledged alongside other considerations in the Obama Administration's June 2015 National Military Strategy.<sup>3</sup> It was placed at the center of the Trump Administration's December 2017 National Security Strategy (NSS)<sup>4</sup> and January 2018

<sup>&</sup>lt;sup>1</sup> For further discussion, see **Appendix A**. The term *international order* is generally used to refer to the collection of organizations, institutions, treaties, rules, and norms that are 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, see CRS Report R44891, *U.S. Role in the World: Background and Issues for Congress*, by Ronald O'Rourke and Michael Moodie.

<sup>&</sup>lt;sup>2</sup> See, for example, some of the articles dated from late February 2022 into March 2022 that are listed in Appendix B.

<sup>&</sup>lt;sup>3</sup> 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.

<sup>&</sup>lt;sup>4</sup> Office of the President, National Security Strategy of the United States of America, December 2017, 55 pp.

National Defense Strategy (NDS),<sup>5</sup> which formally reoriented U.S. national security strategy and U.S. defense strategy toward an explicit primary focus on great power competition with China and Russia.

The Biden Administration's March 2021 Interim National Security Strategy Guidance states that "we face a world of rising nationalism, receding democracy, growing rivalry with China, Russia, and other authoritarian states, and a technological revolution that is reshaping every aspect of our lives," and that protecting the security of the American people "requires us to meet challenges not only from great powers and regional adversaries, but also from violent and criminal non-state actors and extremists, and from threats like climate change, infectious disease, cyberattacks, and disinformation that respect no national borders."<sup>6</sup> The document further states (emphasis as in original)

We must also contend with the reality that the distribution of power across the world is changing, creating new threats. China, in particular, has rapidly become more assertive. It is the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to a stable and open international system. Russia remains determined to enhance its global influence and play a disruptive role on the world stage. Both Beijing and Moscow have invested heavily in efforts meant to check U.S. strengths and prevent us from defending our interests and allies around the world. Regional actors like Iran and North Korea continue to pursue gamechanging capabilities and technologies, while threatening U.S. allies and partners and challenging regional stability. We also face challenges within countries whose governance is fragile, and from influential non-state actors that have the ability to disrupt American interests. Terrorism and violent extremism, both domestic and international, remain significant threats. But, despite these steep challenges, the United States' enduring advantages—across all forms and dimensions of our power—enable us to shape the future of international politics to advance our interests and values, and create a freer, safer, and more prosperous world....

Defending America also means setting clear priorities within our defense budget. First and foremost, we will continue to invest in the people who serve in our all-volunteer force and their families. We will sustain readiness and ensure that the U.S. Armed Forces remain the best trained and equipped force in the world. In the face of strategic challenges from an increasingly assertive China and destabilizing Russia, we will assess the appropriate structure, capabilities, and sizing of the force, and, working with the Congress, shift our emphasis from unneeded legacy platforms and weapons systems to free up resources for investments in the cutting-edge technologies and capabilities that will determine our military and national security advantage in the future. We will streamline the processes for developing, testing, acquiring, deploying, and securing these technologies. We will ensure that we have the skilled workforce to acquire, integrate, and operate them. And we will shape ethical and normative frameworks to ensure these technologies are used responsibly. We will maintain the proficiency of special operations forces to focus on crisis response and priority counterterrorism and unconventional warfare missions. And we will develop capabilities to better compete and deter gray zone actions. We will prioritize defense investments in climate resiliency and clean energy. And we will work to ensure that the Department of Defense is a place of truly equal opportunity where our service members do not face discrimination or the scourge of sexual harassment and assault....

Taken together, this agenda will strengthen our enduring advantages, and allow us to prevail in strategic competition with China or any other nation. The most effective way for

<sup>&</sup>lt;sup>5</sup> 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.

<sup>&</sup>lt;sup>6</sup> White House, *Interim National Security Strategic Guidance*, March 2021, pp. 6, 9.

America to out-compete a more assertive and authoritarian China over the long-term is to invest in our people, our economy, and our democracy. By restoring U.S. credibility and reasserting forward-looking global leadership, we will ensure that America, not China, sets the international agenda, working alongside others to shape new global norms and agreements that advance our interests and reflect our values. By bolstering and defending our unparalleled network of allies and partners, and making smart defense investments, we will also deter Chinese aggression and counter threats to our collective security, prosperity, and democratic way of life.

At the same time, revitalizing our core strengths is necessary but not sufficient. In many areas, China's leaders seek unfair advantages, behave aggressively and coercively, and undermine the rules and values at the heart of an open and stable international system. When the Chinese government's behavior directly threatens our interests and values, we will answer Beijing's challenge.<sup>7</sup>

Department of Defense (DOD) officials have identified countering China's military capabilities as DOD's top priority.<sup>8</sup> They have described Russia a major additional defense-planning priority, particularly with regard to certain specific defense-planning concerns, such as strategic nuclear weapons, the military balance in Europe, and Russian military capabilities (such as electronic warfare and submarines, to cite two examples) where Russia is considered by DOD officials to be a technological pacing challenge or threat for the United States.

#### **Alternate Term: Strategic Competition**

An October 5, 2021, press report states

Goodbye, "great power competition." Hello, "strategic competition."

A Defense Department spokesperson confirmed to our own Daniel Lippman and Lara Seligman that the Pentagon will use the new phrase to describe its approach toward China—explicitly moving away from the Trump-era framework.

"Strategic competition" aligns more closely with the administration's thinking on China. The DOD spokesperson, Lt. Col. Martin Meiners, noted how the White House's Interim National Security Strategic Guidance specifically refers to "strategic competition with China or any other nation."...

<sup>&</sup>lt;sup>7</sup> White House, Interim National Security Strategic Guidance, March 2021, pp. 7-8, 14-15, 20. For more on the document, see CRS In Focus IF11798, *The Interim National Security Strategic Guidance*, by Kathleen J. McInnis.

<sup>&</sup>lt;sup>8</sup> See, for example, Mike Glenn, "U.S. Military Peeks Into the Future to See Its Most Daunting Threat: China," *Washington Times*, September 16, 2020; Mark Esper, "The Pentagon Is Prepared for China," *Wall Street Journal*, August 24, 2020; Abraham Mahshie, "Mark Esper Details 'Vigorous' Defense Department Reorientation to Confront China's Rise," *Washington Examiner*, August 5, 2020; Bill Gertz, "Pentagon: China Threat Increasing," *Washington Times*, February 26, 2020; Tom Rogan, "Defense Secretary Mark Esper: It's China, China, China," *Washington Examiner*, August 28, 2019; Melissa Leon and Jennifer Griffin, "Pentagon 'Very Carefully' Watching China, It's 'No. 1 Priority,' Defense Secretary Mark Esper Tells Fox News," *Fox News*, August 22, 2019; Missy Ryan and Dan Lamothe, "Defense Secretary Wants to Deliver on the Goal of Outpacing China. Can He Do It?" *Washington Post*, August 6, 2019; Sandra Erwin, "New Pentagon Chief Shanahan Urges Focus on China and 'Great Power Competition,'" *Space News*, January 2, 2019; Ryan Browne, "New Acting Secretary of Defense Tells Pentagon 'to Remember China, China, China,'" *CNN*, January 2, 2019; Paul McCleary, "Acting SecDef Shanahan's First Message: 'China, China,'" *Breaking Defense*, January 2, 2019.

For more on China's military modernization effort, see CRS Report R46808, *China's Military: The People's Liberation Army (PLA)*, by Caitlin Campbell; and CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke

But "strategic competition" as a phrase isn't new: the Trump administration even used it in its 2018 National Defense Strategy.<sup>9</sup>

For additional background information and a list of articles on the shift from the post-Cold War era to renewed great power competition, see **Appendix A** and **Appendix B**.

### **Overview of Implications for Defense**

The emergence of great power competition with China and Russia 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 element in the conversation, and the conversation now features a new or renewed emphasis on the topics discussed briefly in the sections below, all of which relate to China and/or Russia. In connection with some of these topics, Russia's invasion of Ukraine beginning in late February 2022 has become an additional factor in the discussion regarding the future size of the U.S. defense budget.

#### Grand Strategy and Geopolitics of Great Power Competition

The renewal of great power competition has led to a renewed emphasis on grand strategy<sup>10</sup> and the geopolitics<sup>11</sup> of great power competition 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.<sup>12</sup>

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

<sup>&</sup>lt;sup>9</sup> Daniel Lippman, Lara Seligman, Alexander Ward, and Quint Forgey, "Biden's Era of 'Strategic Competition,'" *Politico*, October 5, 2021. See also Cornell Overfield, "Biden's 'Strategic Competition' Is a Step Back," *Foreign Policy*, October 13, 2021; Harlan Ullman and Arnaud de Borchgrave, "Great Power Competition with Russia, China Is a Fallacy," *United Press International*, October 13, 2021; Becca Wasser, "Why the Pentagon Should Abandon 'Strategic Competition,'" *Foreign Policy*, October 19, 2021.

<sup>&</sup>lt;sup>10</sup> 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).

<sup>&</sup>lt;sup>11</sup> 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.

<sup>&</sup>lt;sup>12</sup> Bradley Peniston, "Work: 'The Age of Everything Is the Era of Grand Strategy'," Defense One, November 2, 2015.

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.<sup>13</sup>

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

A renewal of great power competition does not axiomatically require an acceptance of both of these judgments as guideposts for U.S. defense in coming years—one might accept that there has been a renewal of great power competition, 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 no longer 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, a renewal of great power competition 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.

For a list of articles pertaining to the debate over U.S. grand strategy, see Appendix C.

#### **Organizational Changes within DOD**

The renewal of great power competition has led to increased discussion about whether and how to make organizational changes within DOD to better align DOD's activities with those needed to counter Chinese 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<sup>14</sup> and the elevation of the U.S. Cyber Command to be its own combatant command.<sup>15</sup>

<sup>&</sup>lt;sup>13</sup> For additional discussion, see CRS In Focus IF10485, *Defense Primer: Geography, Strategy, and U.S. Force Design*, by Ronald O'Rourke.

<sup>&</sup>lt;sup>14</sup> See CRS In Focus IF11495, *Defense Primer: The United States Space Force*, by Stephen M. McCall.

<sup>&</sup>lt;sup>15</sup> See CRS In Focus IF10537, *Defense Primer: Cyberspace Operations*, by Catherine A. Theohary.

#### Nuclear Weapons, Nuclear Deterrence, and Nuclear Arms Control

The renewal of great power competition has led to a renewed emphasis in discussions of U.S. defense on nuclear weapons, nuclear deterrence, and nuclear arms control. Russia's reassertion of its status as a 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. At the end of February 2022, during its invasion of Ukraine, Russia announced that it was increasing the alert level of its nuclear forces.<sup>16</sup> 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 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.<sup>17</sup> DOD, for example, currently has plans to acquire a new class of ballistic missile submarines<sup>18</sup> and a next-generation long-range bomber.<sup>19</sup>

Regarding nuclear arms control,<sup>20</sup> the topic of nuclear weapons in a context of great power competition with Russia and China was a key factor in connection with the U.S. decision to withdraw from the Intermediate-Range Nuclear Forces (INF) Treaty.<sup>21</sup> The Trump Administration invited China to be a third participant, along with the United States and Russia, in negotiations on

<sup>&</sup>lt;sup>16</sup> See, for example, Yuras Karmanau, Jim Heintz, Vladimir Isachenkov, and Dasha Litvinova, "Putin Puts Nuclear Forces on High Alert, Escalating Tensions," *Associated Press*, February 27, 2022; Isabelle Khurshudyan, Drew Harwell, Robyn Dixon, and Miriam Berger, "Putin Puts Russian Nuclear Forces on Alert as Ukrainian Civilian Deaths Mount," *Washington Post*, February 27, 2022; Hal Brands, "Putin Reminds Biden That Nuclear Deterrence Works," *Bloomberg*, March 2, 2022; Fred Lucas and Patty-Jane Geller, "Answers to 6 Big Questions About Putin's Nuclear Threats," Heritage Foundation, March 3, 2022; Azriel Bermant and Wyn Rees, "We Need to Talk About Nuclear Weapons Again, Vladimir Putin's Nuclear Threats Plunge the West into a Debate It's Not Ready For," *Foreign Policy*, March 7, 2022; Bryan Bender, "Crisis dynamics' Forcing a Rethink of Nuclear Deterrence, Top Commander Says, Russia's Invasion of Ukraine Has Highlighted Moscow's Willingness to Threaten the Use of Nuclear Weapons," *Politico Pro*, March 8, 2022.

<sup>&</sup>lt;sup>17</sup> See CRS Report RL33640, U.S. Strategic Nuclear Forces: Background, Developments, and Issues, by Amy F. Woolf, and Congressional Budget Office, Projected Costs of U.S. Nuclear Forces, 2021 to 2030, May 2021, 12 pp.

<sup>&</sup>lt;sup>18</sup> CRS Report R41129, Navy Columbia (SSBN-826) Class Ballistic Missile Submarine Program: Background and Issues for Congress, by Ronald O'Rourke.

<sup>&</sup>lt;sup>19</sup> See CRS Report R44463, Air Force B-21 Raider Long-Range Strike Bomber, by Jeremiah Gertler.

<sup>&</sup>lt;sup>20</sup> For discussions on arms control in the context of great power competition, see, for example, Rebecca K.C. Hersman, Heather Williams, and Suzanne Claeys, *Integrated Arms Control in an Era of Strategic Competition*, Center for Strategic and International Studies (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.

<sup>&</sup>lt;sup>21</sup> For additional discussion, see CRS Insight IN10985, U.S. Withdrawal from the INF Treaty, by Amy F. Woolf.

future limitations on nuclear arms.<sup>22</sup> China has reportedly refused to join such negotiations,<sup>23</sup> unless the United States agrees to reduce its nuclear forces to China's much-lower level.<sup>24</sup>

On November 16, 2021, following a virtual meeting the previous day between China's President Xi Jinping and President Biden, White House national security advisor Jake Sullivan stated that "the two leaders agreed that we would look to begin to carry forward discussions on strategic stability," and that "it is now incumbent on us to think about the most productive way to carry it forward from here."<sup>25</sup> A November 17, 2021, press report stated

The United States and China will aim to have 'conversations' on arms control, 'not formal talks', the White House National Security Council said on Wednesday [November 17], downplaying contact on the issue following a meeting between the two countries' leaders.

U.S. President Joe Biden and Chinese leader Xi Jinping agreed this week to "look to begin to carry forward discussions on strategic stability," national security advisor Jake Sullivan said on Tuesday [November 16], in a reference to U.S. concerns about China's nuclear and missile buildup. read more

Following Sullivan's remarks, the NSC cautioned in a statement against "overstating" the status of those conversations, emphasizing that they were not at the same level on which the United States and Russia have engaged for decades.

"It should be clear, as National Security Advisor Sullivan said, this is not the same as the talks we have with Russia, which are mature and have history," an NSC spokesman said.

"These are not arms control talks, but rather conversations with empowered interlocuters," he said without giving details on the format for future contact on the matter.<sup>26</sup>

<sup>23</sup> See, for example, 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 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.

<sup>&</sup>lt;sup>22</sup> See, for example, 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.

<sup>&</sup>lt;sup>24</sup> See, for example, Yew Lun Tian, "China Challenges U.S. to Cut Nuclear Arsenal to Matching Level," *Reuters*, July 7, 2020.

<sup>&</sup>lt;sup>25</sup> As quoted in Alex Leary, Lingling Wei, and Michael R. Gordon, "Biden, Xi Open to Nuclear-Arms Talks, White House Says," *Wall Street Journal*, November 16, 2021. See also Patrick Tucker, "Biden Launches Arms-Control Talks with China, Warns Xi on Taiwan," *Defense One*, November 16, 2021.

<sup>&</sup>lt;sup>26</sup> Michael Martina and David Brunnstrom, "U.S. Says It Is Not Engaged in Formal Arms Control Talks with China," *Reuters*, November 17, 2021. See also David E. Sanger and William J. Broad, "As China Speeds Up Nuclear Arms Race, the U.S. Wants to Talk," *New York Times*, November 28, 2021; Chao Deng and Alastair Gale, "U.S. Pushes Arms-Control Talks as China's Nuclear Arsenal Grows," *Wall Street Journal*, November 18, 2021; Demetri

A February 25, 2022, blog post stated: "The Biden administration has cut off arms control talks with Russia, sources familiar with the decision told Foreign Policy. The move came after Russian President Vladimir Putin sent troops into Ukraine's breakaway regions but before he launched the full-scale invasion of the country."<sup>27</sup>

#### **Global U.S. Military Posture**

#### Overview

The renewal of great power competition has led to increased discussion about global U.S. military posture, which includes, among other things,

- the portion of U.S. forces that are forward-deployed to distant regions on a sustained basis for purposes such as deterring potential regional aggressors, reassuring allies and partners, and rapidly responding to crises; and
- the day-to-day global distribution of U.S. military capabilities and force deployments across regions such as the Indo-Pacific (for countering Chinese 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 benefits, costs, and risks of forward-deploying U.S. forces to distant regions on a sustained basis rather than basing them in the United States and deploying them to distant regions in response to specific contingencies is a long-standing issue in U.S. defense planning.<sup>28</sup>

Regarding the regional distribution of U.S. military capabilities and force deployments, 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. On the other hand, Russia's recent 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<sup>29</sup>—a consideration that can complicate plans for shifting U.S. military capabilities from Europe or the Middle East to the Indo-Pacific.

Key issues observers are currently debating include how much priority U.S. defense planning should give to Europe (to deter or respond to Russian actions) versus the Indo-Pacific (to deter

Sevastopulo and Tom Mitchell, "Xi-Biden agreement on nuclear talks clouded by 'deep distrust," *Financial Times*, November 17, 2021; Demetri Sevastopulo and Tom Mitchell, "US and China Agree to Hold Talks on Nuclear Arsenals," *Financial Times*, November 16, 2021.

<sup>&</sup>lt;sup>27</sup> Jack Detsch and Robbie Gramer, "Biden Halts Russian Arms Control Talks Amid Ukraine Invasion," *Foreign Policy*, February 25, 2022. See also Peter Huessy, "Have Russia and China Killed Nuclear Arms Control?" *National Interest*, February 20, 2022.

<sup>&</sup>lt;sup>28</sup> See, for example, Billy Fabian, "Overcoming the Tyranny of Time: The Role of U.S. Forward Posture in Deterrence and Defense," Center for Strategic and International Studies (CSIS), September 21, 2020. As another example, see CRS In Focus IF11280, *U.S. Military Presence in Poland*, by Andrew Feickert, Kathleen J. McInnis, and Derek E. Mix.

<sup>&</sup>lt;sup>29</sup> See, for example, Sebastian Sprenger and Joe Gould, "US Military Readies to 'Walk and Chew Gum' as Multiple Crises Loom," *Defense News*, January 28, 2022.

China), how the U.S. response to Russia's invasion of 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.<sup>30</sup>

#### Obama Administration Strategic Rebalancing (Strategic Pivot) to Asia-Pacific

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.<sup>31</sup>

<sup>&</sup>lt;sup>30</sup> See, for example, Robert D. Blackwill and Richard Fontaine, "Ukraine War Should Slow But Not Stop the U.S. Pivot to Asia," Bloomberg, March 8, 2022; John Ferrari, "Tear Up the National Defense Strategy and Start Again, Recognizing Reality," Breaking Defense, March 8, 2022; Editorial Board, "Rebuilding U.S. Defenses After Ukraine, Biden Needs to Pivot to Meet Growing Threats as Jimmy Carter Did," Wall Street Journal, March 7, 2022; Catie Edmondson, "War in Ukraine Rallies Support in Congress for More Military Spending," New York Times, March 7, 2022; Glenn Hubbard, "NATO Needs More Guns and Less Butter, Russia's Invasion of Ukraine Will Require a Jolting Shift in the West's Spending Priorities," Wall Street Journal, March 7, 2022; Thomas Spoehr, "The Biden Administration Needs to get Serious About National Defense," *Newsweek*, March 7, 2022; Bradley Thayer, "Russia's War In Ukraine: A Balance Of Power Problem For America?" *19FortyFive*, March 7, 2022; Sebastian Sprenger, Joe Gould, Vivienne Machi, and Tom Kington, "Stunned by Putin's War, Nations Rewrite Their Playbooks on Defense," Defense News, March 4, 2022; Robert M. Gates, "We Need a More Realistic Strategy for the Post-Cold War Era," Washington Post, March 3, 2022; Connor O'Brien, Paul McLeary, and Lee Hudson, "Russia Crisis Forces Pentagon to Rework Defense Strategy on the Fly," Politico Pro, March 3 (updated March 4), 2022; John Ferrari and Elaine McCusker, "The Ukraine Invasion Shows Why America Needs to Get Its Defense Budget in Order," Breaking Defense, March 2, 2022; Tony Bertuca, "DOD official: New National Defense Strategy Will Keep China First, But Reflect New Reality with Russia," Inside Defense, February 28, 2022; Mackenzie Eaglen, "How the Ukraine Crisis Could Make the US Military Stronger," American Enterprise Institute, March 1, 2022; Joe Gould, "Pentagon Revisiting Long-Term US Troop Levels in Eastern Europe," Defense News, March 1, 2022; John M. Donnelly, "Russian Threat Is Forcing a Rewrite of US Defense Plans," CQ, February 25, 2022; Raphael S. Cohen, "The False Choice Between China and Russia," The Hill, February 21, 2022; Matthew Kroenig, "Washington Must Prepare for War With Both Russia and China, Pivoting to Asia and Forgetting About Europe Isn't an Option," Foreign Policy, February 18, 2022; Michael J. Green, and Gabriel Scheinmann, "Even an 'Asia First' Strategy Needs to Deter Russia in Ukraine, There Is No Indo-Pacific Strategy Without U.S. Pushback Against Russia," Foreign Policy, February 17, 2022; Barry Pavel, "Biden Should Shift US Troop Positions Worldwide, The Crisis in Europe Makes Clear that Biden's Team Should Rethink Their First National Defense Strategy, Quickly," Defense One, February 17, 2022; John Bolton, "Entente Multiplies the Threat From Russia and China, The Misguided Idea that the U.S. Needs to Ignore One to Focus on the Other Intensifies the Danger," Wall Street Journal, February 15, 2022; Walter Russell Mead, "Asia First' Misses the Point, The U.S. Needs a Coherent Strategy for Both Security and Economic Policy," Wall Street Journal, February 14, 2022; Elbridge Colby and Oriana Skylar Mastro, "Ukraine Is a Distraction From Taiwan, Getting Bogged Down in Europe Will Impede the U.S.'s Ability to Compete with China in the Pacific," Wall Street Journal, February 13, 2022; Ashley Townshend, "U.S. Indo-Pacific Power Depends on Restraint in Ukraine, Washington Must Reassure Quad Partners That It Won't Be Distracted in Europe," Foreign Policy, February 9, 2022; Walter Russell Mead, "Time to Increase Defense Spending, The U.S. Will Face Challenges from the New Alliance between China and Russia," Wall Street Journal, February 7, 2022; Seth Cropsey, "Double-Down on the Indo-Pacific in the Midst of a Ukraine Crisis," The *Hill*, February 1, 2022; Dov S. Zakheim, "The Biden Administration Faces a Dangerous Anti-American Triad," *The* Hill, January 28, 2022; Josh Rogin, "Putin Is Threatening to Wreck Biden's Asia Strategy," Washington Post, January 27, 2022; Simon Jackman, "Putin Tries to Trump Indo-Pacific," United States Studies Centre, January 26, 2022. See also some of the articles dated from January 2022 onward that are listed in Appendix C.

<sup>&</sup>lt;sup>31</sup> 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.

#### **Trump Administration Planned Actions**

The Trump Administration stated that a reduction of U.S. military personnel in Germany that it planned was intended, at least in part, to facilitate a reallocation of additional U.S. forces to the Indo-Pacific region.<sup>32</sup> In addition, President Trump expressed a desire to reduce U.S. military deployments to the Middle East, and Trump Administration officials stated that the Administration was considering reducing U.S. military deployments to Africa and South America, in part to facilitate an increase in U.S. force deployments to the Indo-Pacific region for countering China.<sup>33</sup> The Trump Administration's proposals for reducing force deployments to Africa and South America secame a subject of debate, in part because they were viewed by some observers as creating a risk of leading to increased Chinese or Russian influence in those regions.<sup>34</sup>

#### 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. It will be coordinated across all elements of our

<sup>&</sup>lt;sup>32</sup> Robert C. O'Brien, "Why the U.S. Is Moving Troops Out of Germany, Forces Are Needed in the Indo-Pacific. And Berlin Should Contribute More to European Security," *Wall Street Journal*, June 21, 2020; Jamie McIntyre, "Polish Leader Leaves with No New Commitment of US Troops as Pentagon Shifts Focus Away from Europe and Toward Countering China," *Washington Examiner*, June 25, 2020; Tsuyoshi Nagasawa and Shotaro Miyasaka, "Thousands of US Troops Will Shift to Asia-Pacific to Guard Against China, German Contingent to Redeploy to Guam, Hawaii, Alaska, Japan and Australia," *Nikkei Asian Review*, July 5, 2020. See also CRS In Focus IF11280, *U.S. Military Presence in Poland*, by Andrew Feickert, Kathleen J. McInnis, and Derek E. Mix.

<sup>&</sup>lt;sup>33</sup> See, for example, Glen Carey, "U.S. Pentagon Chief Wants to Reallocate Forces to Indo-Pacific," *Bloomberg*, December 7, 2019; Shawn Snow, "Esper Wants to Move Troops from Afghanistan to the Indo-Pacific to Confront China," *Military Times*, December 18, 2019; Helene Cooper, Thomas Gibbons-Neff, and Eric Schmitt, "Pentagon Eyes Africa Drawdown as First Step in Global Troop Shift," *New York Times*, December 24, 2019, Robert Burns, "Pentagon Sees Taliban Deal as Allowing Fuller Focus on China," *Associated Press*, March 1, 2020. See also Kyle Rempfer, "Soldiers Will Spend Longer Deployments in Asia," *Army Times*, February 20, 2020; Mike Sweeney, "Considering the 'Zero Option,' Cold War Lessons on U.S. Basing in the Middle East," Defense Priorities, March 2020.

<sup>&</sup>lt;sup>34</sup> See, for example, Scott D. Adamson, "Don't Discount America's Interest in Keeping Africa Safe," Defense One, December 21, 2020; Diana Stancy Correll, "Lawmakers Voice Concern About a Potential Troop Reduction in Africa," Military Times, January 14, 2020; Joe Gould, "Esper's Africa Drawdown Snags on Capitol Hill," Defense News, January 16, 2020; Ellen Mitchell, "Lawmakers Push Back at Pentagon's Possible Africa Drawdown," The Hill, January 19, 2020; K. Riva Levinson, "Broad, Bipartisan Rebuke for Proposal to Pull Troops from Africa," The Hill, January 21, 2020; Carley Petesch (Associated Press), "Allies Worry as US Ponders Cutting Military Forces in Africa," Military Times, January 29, 2020; Lara Seligman and Robbie Gramer, "Pentagon Debates Drawdown in Africa, South America," Foreign Policy, January 30, 2020; "Jacqueline Feldscher, "Esper Says Troop Presence in Africa, South America Could Grow," Politico Pro, January 30, 2020; Joe Gould, "Expect Congress to Block Africa Troop Cuts, Says Defense Panel Chairman," Defense News, February 27, 2020; Eric Schmitt, "Terrorism Threat in West Africa Soars as U.S. Weighs Troop Cuts," New York Times, February 27, 2020; Matthew Dalton, "The US Should Send More, Not Fewer, Troops to West Africa," Defense One, March 3, 2020; Robbie Gramer, "U.S. Congress Moves to Restrain Pentagon Over Africa Drawdown Plans," Foreign Policy, March 4, 2020; Sam Wilkins, "Does America Need an Africa Strategy?" War on the Rocks, April 2, 2020; Herman J. Cohen, "Pulling Troops Out of Africa Could Mean Another Endless War." War on the Rocks, May 13, 2020; Samuel Ramani, "France and the United States Are Making West Africa's Security Situation Worse, France's Unilateralism and the United States' Wavering Are Destabilizing the Sahel-and Creating An Opening for Russia and China," Foreign Policy, September 12, 2020; John Turner, "In America's Absence, China Is Taking Latin America By Storm," National Interest, September 21, 2020; Will Reno and Jesse Humpal, "As the US Slumps Away, China Subsumes African Security Arrangements," Defense One, October 21, 2020; Warren P. Strobel and Gordon Lubold, "Pentagon Draw-Down at U.S. Embassies Prompts Concern About Ceding Field to Global Rivals," Wall Street Journal, November 1, 2020; Samuel Ramani, "Trump's Plan to Withdraw From Somalia Couldn't Come at a Worse Time," Foreign Policy, November 2, 2020.

national security, with Secretary Austin and Secretary Blinken working in close cooperation."<sup>35</sup> 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.<sup>36</sup>

#### 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 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

<sup>&</sup>lt;sup>35</sup> White House, "Remarks by President Biden on America's Place in the World," February 4, 2021.

<sup>&</sup>lt;sup>36</sup> 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.

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.<sup>37</sup>

Details on the results of the global posture review are largely classified.<sup>38</sup> 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."<sup>39</sup> 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.<sup>40</sup>

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

As mentioned above, Russia's invasion of Ukraine has prompted incased 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

<sup>&</sup>lt;sup>37</sup> Jim Garamone, "Biden Approves Global Posture Review Recommendations," DOD News, November 29, 2021.

<sup>&</sup>lt;sup>38</sup> 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.

<sup>&</sup>lt;sup>39</sup> Gordon Lubold, "Pentagon Plans to Improve Airfields in Guam and Australia to Confront China," *Wall Street Journal*, November 29, 2021.

<sup>&</sup>lt;sup>40</sup> See, for example, Stacie L. Pettyjohn, "Spiking the Problem: Developing a Resilient Posture in the Indo-Pacific with 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.

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.<sup>41</sup>

In the past, 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 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. In a context of great power competition with China and Russia, and particularly in light of Russia's invasion of Ukraine beginning in late February 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.<sup>42</sup> The increased strategic partnership (some observers use terms such as alignment, convergence, or alliance) between China and Russia, particularly since the start of 2022, has led some U.S. observers to argue that avoiding unwanted tradeoffs between U.S. military investments for countering China and those for countering Russia could require increasing U.S. defense spending above current levels.<sup>43</sup>

#### 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.<sup>44</sup> In April and June 2021, it was reported that the

<sup>&</sup>lt;sup>41</sup> See the sources cited in footnote 30.

<sup>&</sup>lt;sup>42</sup> 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.

<sup>&</sup>lt;sup>43</sup> See the sources cited in footnote 30.

<sup>&</sup>lt;sup>44</sup> See, for example, 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; Aaron David Miller, "Israel and the Gulf States Are Becoming Closer. But It Won't Make Biden's Life Much Easier. The Thaw Between Israel and Gulf States Is Rare Welcome News in the Region. But Don't Expect America's Perpetual Iran Headache to Ease Up," Politico, December 16, 2021; Mike Watson, "Is the U.S. Repeating the Error of the Iraq Withdrawal? Regional Stability Declined after the 2011 Pullout, and the 'Pivot To Asia' Failed. Sounds Awfully Familiar," Wall Street Journal, December 16, 2021; Hal Brands, "Putin Isn't the Only Reason Biden's 'Pivot to Asia' Is Doomed, Three Consecutive Presidents Have Tried to Stabilize the World and Focus on China. But Reality Keeps Getting in the Way," Bloomberg, December 7, 2021; Bilal Y. Saab and Barry Pavel, "Diplomacy Is the Key to Reducing US Forces in the Mideast, The Pacific Pivot Need Not Reduce Middle East Security-If the U.S. Can Get Its Partners on Board," Defense One, December 6, 2021; Yonah Jeremy Bob, "Biden Won't Be Able to Pull US Forces from Middle East-Ex-Mossad Chief," Jerusalem Post, September 12, 2021; Hal Brands, "Biden Can Leave Afghanistan But Not the Middle East," Bloomberg, August 26, 2021; Michael Hirsh, "Raisi Will Yank Biden Back Into the Middle East," Foreign Policy, August 4, 2021; Bradley Bowman and Mark Montgomery, "Biden Gets It Wrong in the Pacific and Afghanistan," Foundation for Defense of Democracies, May 28, 2021; Lolita C. Baldor, "US General: As US Scales Back in Mideast, China May Step In," Associated Press, May 23, 2021; Anne Gearan, "Biden Wants to Focus on Asia. The Mideast Has Other Ideas," Washington Post, May 14, 2021; Ali Wyne, "Biden's Asia-Pacific Rebalancing Push," Lawfare, April 25, 2021; John W. Miller, "Biden's Mideast

Biden Administration had decided to withdraw certain U.S. forces, including fighter squadrons and Patriot and THAAD (Terminal High Altitude Area Defense) missile defense batteries, from the Middle East, so that some of them could be redeployed elsewhere.<sup>45</sup>

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

The emergence of great power competition 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. The discussion in the December 2017 NSS of regions of interest to the United States began with a section on the Indo-Pacific,<sup>46</sup> and the unclassified summary of the January 2018 NDS mentioned the Indo-Pacific at several points.<sup>47</sup> Strengthening U.S. military capabilities in the Indo-Pacific was a key component of the Free and Open Indo-Pacific (FOIP), which was the Trump Administration's overarching policy construct for that region.<sup>48</sup> The Biden Administration's March 2021 Interim National Security Strategic Guidance states that "our vital national interests compel the deepest connection to the Indo-Pacific, Europe, and the Western Hemisphere," and that "as we position ourselves to deter our adversaries and defend our interests, working alongside our partners, our presence will be most robust in the Indo-Pacific and Europe."<sup>49</sup>

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

Drawdown Poses Perils," *Defense News*, April 15, 2021; Paul Gadalla, "Congress Should Know There Are No Quick Fixes in the Middle East, Americans on Both Sides of the Political Spectrum Must Realize That the United States, One Way or Another, Will Continue to Be Involved in the Middle East for the Foreseeable Future," *National Interest*, April 1, 2021; Hal Brands, "Biden Isn't Ignoring the Middle East, and That's Good," *Bloomberg*, March 18 (updated March 21), 2021; Elise Labott, "Can Biden Finally Put the Middle East in Check and Pivot Already?" *Foreign Policy*, March 2, 2021; Joshua Keating, "Biden Just Can't Quit the Mideast," *Slate*, February 26, 2021; Lolita C. Baldor, "Defense Head Austin Weighs Warship Needs in Pacific, Mideast," *Associated Press*, February 25, 2021; Steven Stashwick, "The Asia-Pacific is Biden's Top Security Priority, But the U.S. Would Find It Difficult to Disentangle from Legacy Commitments in Middle East," *Diplomat*, February 23, 2021; Jon B. Alterman, "The Smart Way out of the Middle East," *The Hill*, February 22, 2021.

<sup>&</sup>lt;sup>45</sup> See Gordon Lubold and Warren P. Strobel, "Biden Trimming Forces Sent to Mideast to Help Saudi Arabia," *Wall Street Journal*, April 1, 2021; Oren Liebermann, "Pentagon Pulls Missile Defense, Other Systems from Saudi Arabia and Other Middle East Countries," *CNN*, June 18, 2021; Gordon Lubold, Nancy A. Youssef, and Michael R. Gordon, "U.S. Military to Withdraw Hundreds of Troops, Aircraft, Antimissile Batteries From Middle East," *Wall Street Journal*, June 18, 2021; Stephen Losey, "US to Pull Some Patriot Missile Batteries, Fighter Squadrons Out of Middle East," *Military.com*, June 21, 2021.

<sup>&</sup>lt;sup>46</sup> Office of the President, National Security Strategy of the United States of America, December 2017, pp. 45-47.

<sup>&</sup>lt;sup>47</sup> 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, pp. 2, 4, 6, 9. See also Eric Sayers, "15 Big Ideas to Operationalize America's Indo-Pacific Strategy," *War on the Rocks*, April 6, 2018; Lindsey Ford, "Promise vs. Experience: How to Fix the 'Free & Open Indo-Pacific," *War on the Rocks*, April 10, 2018.

<sup>&</sup>lt;sup>48</sup> 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 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.

<sup>&</sup>lt;sup>49</sup> White House, *Interim National Security Strategic Guidance*, March 2021, pp. 10, 15.

- shifting to more distributed force architectures;<sup>50</sup>
- 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 between 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 Chinese 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 Chinese weapons, and more quickly reconstitutable.

As one service-oriented example of DOD actions to strengthen U.S. military capabilities in the Indo-Pacific, the Navy has shifted a greater part of its fleet to the region; is assigning its most capable new ships and aircraft and its best personnel to the Pacific; is maintaining or increasing general presence operations, training and developmental exercises, and engagement and cooperation with allied and other navies in the Indo-Pacific; is increasing the planned future size of the Navy; has initiated, increased, or accelerated numerous programs for developing new military technologies and acquiring new ships, aircraft, unmanned vehicles, and weapons; is developing new operational concepts; and has signaled that the Navy in coming years will shift to a more distributed fleet architecture.<sup>51</sup> As another example, the Marine Corps' current plan to redesign its forces, called Force Design 2030, is driven primarily by a need to better prepare the Marine Corps for potential operations against Chinese forces in a conflict in the Western Pacific.<sup>52</sup>

DOD activities in the Indo-Pacific region include those for competing strategically with China in the South and East China Seas.<sup>53</sup> 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 emerging security partners in the region, such as Vietnam.

<sup>&</sup>lt;sup>50</sup> 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."

<sup>&</sup>lt;sup>51</sup> For additional discussion, see CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke.

<sup>&</sup>lt;sup>52</sup> For additional discussion, see CRS Insight IN11281, New U.S. Marine Corps Force Design Initiative: Force Design 2030, by Andrew Feickert. See also CRS Report RL32665, Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress, by Ronald O'Rourke, and CRS Report R46374, Navy Light Amphibious Warship (LAW) Program: Background and Issues for Congress, by Ronald O'Rourke.

<sup>&</sup>lt;sup>53</sup> 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.

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]).<sup>54</sup>

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.

#### U.S. and NATO Capabilities in Europe

The emergence of great power 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)<sup>55</sup> and Russia's subsequent actions in eastern Ukraine, and then further underscored by Russia's invasion of Ukraine beginning in late February 2022—has led to a renewed focus in U.S. defense planning on strengthening U.S. and NATO military capabilities for

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.

<sup>&</sup>lt;sup>54</sup> 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 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.

<sup>&</sup>lt;sup>55</sup> 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.)

countering potential Russian aggression in Europe.<sup>56</sup> 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.

As a result of this renewed focus, the United States has taken a number of steps in recent years to strengthen the U.S. military presence and U.S. military operations in and around Europe. In mainland Europe, this has 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.<sup>57</sup> 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).<sup>58</sup> In response to Russia's invasion of Ukraine beginning in late February 2022, the United States has deployed additional Army and Air Force units to locations in NATO allied countries in Europe.

Renewed concern over NATO capabilities for deterring potential Russian aggression 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 and refocusing NATO away from "out of area" (i.e., beyond-Europe) operations, and back toward a focus on territorial defense and deterrence in Europe itself.<sup>59</sup> Following Russia's invasion of Ukraine beginning in late February 2022, some NATO allies have announced steps to increase their defense budgets or otherwise bolster their military capabilities.

#### **New Operational Concepts**

The renewal of great power competition 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 Chinese anti-access/area-denial (A2/AD) military forces in the Indo-Pacific region. These new operational concepts include Multi-Domain Operations (MDO) for the Army and Air Force, Agile Combat Employment for the Air Force, Distributed Maritime Operations (DMO) for the Navy and Marine Corps, and Expeditionary Advanced Base Operations (EABO) for the Marine Corps.<sup>60</sup> In general these new operational concepts are more distributed, 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).

<sup>&</sup>lt;sup>56</sup> See, for example, CRS In Focus IF11130, *United States European Command: Overview and Key Issues*, by Kathleen J. McInnis.

<sup>&</sup>lt;sup>57</sup> See, for example, CRS In Focus IF11280, *U.S. Military Presence in Poland*, by Andrew Feickert, Kathleen J. McInnis, and Derek E. Mix.

<sup>&</sup>lt;sup>58</sup> For further discussion, see CRS In Focus IF10946, *The European Deterrence Initiative: A Budgetary Overview*, by Paul Belkin and Hibbah Kaileh.

<sup>&</sup>lt;sup>59</sup> For additional discussion, see CRS Report R45652, *Assessing NATO's Value*, by Paul Belkin. See also CRS Report R46066, *NATO: Key Issues for the 117th Congress*, by Paul Belkin.

<sup>&</sup>lt;sup>60</sup> For more on EABO and DMO, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke.

#### **Capabilities for High-End Conventional Warfare**

The renewal of great power competition 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.<sup>61</sup> 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 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)<sup>62</sup> and the next-generation long-range bomber,<sup>63</sup> highly capable warships such as the Virginia-class attack submarine<sup>64</sup> and DDG-51 class Aegis destroyer,<sup>65</sup> ballistic missile defense (BMD) capabilities,<sup>66</sup> longer-ranged land-attack and anti-ship weapons,<sup>67</sup> new types of weapons such as lasers,<sup>68</sup> new C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) capabilities,<sup>69</sup> military space capabilities,<sup>70</sup> electronic warfare

<sup>&</sup>lt;sup>61</sup> 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.

<sup>&</sup>lt;sup>62</sup> See CRS Report RL30563, F-35 Joint Strike Fighter (JSF) Program, by Jeremiah Gertler.

<sup>&</sup>lt;sup>63</sup> See CRS Report R44463, Air Force B-21 Raider Long-Range Strike Bomber, by Jeremiah Gertler.

<sup>&</sup>lt;sup>64</sup> See CRS Report RL32418, Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress, by Ronald O'Rourke.

<sup>&</sup>lt;sup>65</sup> See CRS Report RL32109, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke.

<sup>&</sup>lt;sup>66</sup> See CRS In Focus IF10541, *Defense Primer: Ballistic Missile Defense*, by Stephen M. McCall; CRS In Focus IF11623, *Hypersonic Missile Defense: Issues for Congress*, by Kelley M. Sayler and Stephen M. McCall; and CRS Report RL33745, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, by Ronald O'Rourke.

<sup>&</sup>lt;sup>67</sup> See CRS In Focus IF11353, *Defense Primer: U.S. Precision-Guided Munitions*, by John R. Hoehn.

<sup>&</sup>lt;sup>68</sup> See CRS In Focus IF11882, *Defense Primer: Directed-Energy Weapons*, by Kelley M. Sayler and John R. Hoehn; 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 Lasers, Railgun, and Gun-Launched Guided Projectile: Background and Issues for Congress*, by Ronald O'Rourke.

<sup>&</sup>lt;sup>69</sup> 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*, Center for Strategic and International Studies, September 2021 (posted online September 27, 2021), 10 pp.

<sup>&</sup>lt;sup>70</sup> 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*, by Stephen M. McCall; CRS Report R46211, *National Security Space Launch*, by Stephen M. McCall; National Security Space Launch, by Stephen M. McCall; Nationa

capabilities,<sup>71</sup> military cyber capabilities,<sup>72</sup> hypersonic weapons,<sup>73</sup> and the military uses of robotics and autonomous unmanned vehicles, quantum technology, and artificial intelligence (AI).<sup>74</sup> Preparing for high-end conventional warfare could also involve making changes in U.S. military training and exercises<sup>75</sup> and reorienting the missions and training of U.S. special operations forces.<sup>76</sup>

#### 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 in recent years that are intended to help maintain or regain U.S. superiority in conventional weapon technologies, including increased research and development

<sup>75</sup> 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.

<sup>76</sup> See, for example, Stephen Watts, Sean M. Zeigler, Kimberly Jackson, Caitlin McCulloch, Joe Cheravitch, and Marta Kepe, Countering Russia, The Role of Special Operations Forces in Strategic Competition, RAND, 2021, 95 pp.; Meghann Myers, "How Army Special Ops Can Push Back Against Russian Aggression," Military Times, November 9, 2021; Valerie Insinna, "As the US Air Force Looks to the Future of Special Operations, Vertical Lift Takes Center Stage," Defense News, September 17, 2021; Stavros Atlamazoglou, "To Take on Russia and China, the US Navy Is Standing Up a New Unit to Do the Missions That Only SEALs Can Do," Business Insider, September 15, 2021; Stavros Atlamazoglou, "Taking on Russia and China Means US Special Operations Command Is Rethinking How It Fights the Propaganda War," Business Insider, August 12, 2021; Stavros Atlamazoglou, "Navy SEALs Have to Go 'Back to the Future' to Help US Warships Survive a Future Fight with Russia or China," Business Insider, July 28, 2021; Gidget Fuentes, "Naval Special Warfare in a 'Race for Relevancy' as Mission Shifts to High-end Conflict," USNI News, June 30, 2021; Hal Brands, "Pentagon's Special Forces Need to Go Back to the Future," Bloomberg, May 24, 2021; Barnett S. Koven and Chris Mason, "Back to the Future: Getting Special Forces Ready for Great-Power Competition," War on the Rocks, May 4, 2021; Lolita C. Baldor, "Navy SEALs to Shift from Counterterrorism to Global Threats," Associated Press, April 28, 2021; Stavros Atlamazoglou, "The US Military Is Turning to Special Operators to Fend off Russian and Chinese Influence in Its Neighborhood," Business Insider, April 22, 2021; Sandor Fabian, "Building and Enabling Urban Resistance Networks In Small Countries-A Crucial Role For U.S. Special Forces In Great Power Competition," Small Wars Journal, April 11, 2021; John Grady, "SOCOM Shifting To Great Power Competition Strategy, But Needs More ISR Capabilities, Commander Says," USNI News, March 25, 2021; Stavros Atlamazoglou, "A Historic Exercise Shows How Navy SEALs Will Keep Aircraft Carriers in a High-End Fight," Business Insider, March 22, 2021; Kris Osborn, "Air Force Special Operations Forces: Readying for a Russia or China War? The Rise of Great Power Competition Means that the Entire Military Is Spending Less Time Training and Planning for Nation Building and Counter-Insurgency.," National Interest, March 11, 2021.

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.

<sup>&</sup>lt;sup>71</sup> 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.

<sup>&</sup>lt;sup>72</sup> 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.

<sup>&</sup>lt;sup>73</sup> See CRS In Focus IF11459, *Defense Primer: Hypersonic Boost-Glide Weapons*, by Kelley M. Sayler and Amy F. Woolf; 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.

<sup>&</sup>lt;sup>74</sup> 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 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.

funding for new militarily applicable technologies such as artificial intelligence (AI), autonomous unmanned weapons, hypersonic weapons, directed-energy weapons, biotechnology, and quantum technology. 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."<sup>77</sup>

#### 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. The 2018 NDS places states

*Deliver performance at the speed of relevance.* Success no longer goes to the country that develops a new technology first, but rather to the one that better integrates it and adapts its way of fighting. Current processes are not responsive to need; the Department is over-optimized for exceptional performance at the expense of providing timely decisions, policies, and capabilities to the warfighter. Our response will be to prioritize speed of delivery, continuous adaptation, and frequent modular upgrades. We must not accept cumbersome approval chains, wasteful applications of resources in uncompetitive space, or overly risk-averse thinking that impedes change. Delivering performance means we will shed outdated management practices and structures while integrating insights from business innovation.<sup>78</sup>

<sup>&</sup>lt;sup>77</sup> Courtney Albon, "New Strategy Will Harness Emerging Tech to Beat Adversaries," *Defense News*, February 2, 2022. See also the CRS report cited in footnote 74.

<sup>&</sup>lt;sup>78</sup> 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, p. 10. See also Larrie D.

The individual military services have taken various actions in recent years to increase innovation and speed in their weapon acquisition programs. Some of these actions make use of special acquisition authorities provided by Congress in recent years 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.<sup>79</sup>

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.<sup>80</sup> In previewing the new framework in October 2019, DOD described it as "the most transformational acquisition policy change we've seen in decades."<sup>81</sup>

Some observers argue that DOD is not doing enough or moving quickly enough to generate and implement innovations in response to great power competition, and have proposed steps for doing more or moving more quickly.<sup>82</sup> A January 2020 GAO report on weapon system reliability in defense acquisition, however, states

<sup>80</sup> 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.

<sup>81</sup> 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.

Ferreiro, "Outperforming With Doctrine, Not Science," Defense Acquisition University, November 1, 2018.

<sup>&</sup>lt;sup>79</sup> 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.; Matt Donovan and Will Roper, "Section 804 Gives the US an Advantage in Great Power Competition with China and Russia," Defense News, August 7, 2019; Justin Doubleday, "Section 809 Panel Chair Warns Against 'Abuse' of Other Transaction Agreements," Inside Defense, October 3, 2019; Aaron Greg, "Seeking an Edge over Geopolitical Rivals, Pentagon Exploits an Obscure Regulatory Workaround," Washington Post, October 18, 2019; Scott Maucione, "Special Report: Failure Is an Option for DoD's Experimental Agency, But How Much?" Federal News Network, October 30, 2019; Colin Clark, "OTA Prototyping Nearly Triples To \$3.7B: GAO," Breaking Defense, November 26, 2019; Eric Lofgren, "Too Many Cooks in the DoD: New Policy May Suppress Rapid Acquisition," Defense News, January 2, 2020.

<sup>&</sup>lt;sup>82</sup> See, for example, 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 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; Mike Brest, "Chinese Military Progress 'Stunning' While US Slowed by 'Brutal' Bureaucracy, Joint Chief Warns," Washington Examiner, October 28, 2021; Sandra Erwin, "Hyten Blasts 'Unbelievably' Slow DoD Bureaucracy as China Advances Space Weapons," Space News, October 28, 2021; Alex Marquardt and Oren Liebermann, "Senior US General Warns China's Military Progress Is 'Stunning' as US Is Hampered by 'Brutal' Bureaucracy," CNN, October 28, 2021; Meghann Myers, "Risk Aversion and Secrecy Are Costing US Its Military Advantage, No. 2 General Says," Military Times, October 8, 2021; Ryan Tracy, "As Google, Microsoft and Amazon Seek Bigger Defense Role, Some Are Leery," Wall Street Journal, September 7, 2021; Peter Spiegel, "How America Found Itself Fighting the Last War-Again," Financial Times, August 18, 2021; Arnold Punaro, "Book Excerpt: Pruning The Acquisition Kudzu," Breaking Defense, July 29, 2021; Mike Glenn, "Pentagon Must Pick Up the Pace to Counter China, Top General Warns," Washington Times, July 26, 2021; Bryan Clark and Dan Patt, "Give Combatant Commanders the Tools to Innovate," *Defense News*, July 13, 2021; Elaine McCusker and Dan Patt, "Faster Weapon Buys: Try Evolutionary Innovation," *Breaking Defense*, July 2, 2021; Melissa Flagg and Jack Corrigan, "Ending Innovation Tourism, Rethinking the U.S. Military's Approach to Emerging Technology Adoption," Center for Security and Emerging Technology (CSET), July 2021, 22 pp.; Michèle A. Flournoy, "America's Military Risks Losing Its Edge, How to Transform the Pentagon for a Competitive Era," Foreign Affairs, May/June 2021; Missy Ryan, "The U.S. System Created the World's Most Advanced Military. Can It Maintain an Edge?" Washington Post, April 1, 2021;

DOD has taken steps to accelerate weapon system development, and decision-making authority has been delegated to the military services. In an environment emphasizing speed, without senior leadership focus on a broader range of key reliability practices, DOD runs the risk of delivering less reliable systems than promised to the warfighter and spending more than anticipated on rework and maintenance of major weapon systems.<sup>83</sup>

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.<sup>84</sup>

#### Mobilization Capabilities for Extended-Length Conflict

The renewal of great power competition has led to an increased emphasis in discussions of U.S. defense on U.S. mobilization capabilities for an extended-length conflict.<sup>85</sup> The term *mobilization* is often used to refer specifically to preparations for activating U.S. military reserve force

Chris Dougherty, "Want an Agile Pentagon? Don't Go Chasing 'Waterfalls,' Four-Year Strategy Reviews Aren't Good Enough. Biden's Pentagon Should Take a Page from Software Firms," *Defense One*, March 22, 2021; Matthew Beinart, "Pentagon Needs New Acquisition Authorities To Stay Ahead In AI Tech Race, Commission Officials Say," *Defense Daily*, March 12, 2021; Joe Gould, "Pentagon Processes 'Antithetical' to AI Development, Former Google CEO Warns," *C4ISRNet*, March 12, 2021; Bill Greenwalt, "Competing in Time: How DoD Is Losing The Innovation Race To China, Despite Reforms, the Pentagon and Congress Have Failed to Break Out of a Cold War, Central-Planning Model That's Stifled Innovation.," *Breaking Defense*, March 9, 2021; Joe Gould, "Pentagon's Dated Budget Process Too Slow to Beat China, New Report Says," *Defense News*, February 25, 2021; Sydney J. Freedberg Jr., "Experts Tell Congress How To Turn Innovation Into Reality," *Breaking Defense,* February 23, 2021; Bryan Clark and Dan Patt, "The Pentagon Needs Budget Agility to Compete with China," *Defense One*, February 12, 2021; Nate Ashton, "Urgently Needed: Tech-Savvy Defense Leaders," *Defense News*, February 10, 2020; William Greenwalt and Dan Patt, *Competing in Time: Ensuring Capability Advantage and Mission Success through Adaptable Resource Allocation*, Hudson Institute, February 2021, 64 pp.

<sup>&</sup>lt;sup>83</sup> Government Accountability Office, *Defense Acquisitions[:] Senior Leaders Should Emphasize Key Practices to Improve Weapon System Reliability*, GAO-20-151, January 2020, summary page.

<sup>&</sup>lt;sup>84</sup> See, for example, 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.

<sup>&</sup>lt;sup>85</sup> See, for example, Hal Brands, "Win or Lose, U.S. War Against China or Russia Won't Be Short," *Bloomberg*, June 14, 2021.

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.<sup>86</sup> On April 24, 2019, the National Commission on Military, National, and Public Service, a commission created by the FY2017 National Defense Authorization Act (S. 2943/P.L. 114-328 of December 23, 2016),<sup>87</sup> held two hearings on U.S. mobilization needs and how to meet them.<sup>88</sup> DOD officials

<sup>87</sup> See Sections 551 through 557 of S. 2943/P.L. 114-328.

<sup>88</sup> The commission's web pages for the two hearings, which include links to the prepared statements of the witnesses and additional statements submitted by other parties, are at https://inspire2serve.gov/hearings/selective-service-hearing-future-mobilization-needs-nation (hearing from 9 am to 12 noon) and https://inspire2serve.gov/hearings/selective-

<sup>&</sup>lt;sup>86</sup> See, for example, Maiya Clark, "Revitalizing the National Defense Stockpile for an Era of Great-Power Competition," Heritage Foundation, January 4, 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 (CIMSEC), 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, Center for Strategic and International Studies (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; David Barno and Nora Bensahel, "Preparing for the next Big War," War on the Rocks, January 26, 2016; Robert Haddick, "Competitive Mobilization: How Would We Fare Against China?" War on the Rocks, March 15, 2016; David Barno and Nora Bensahel, "Mirages of War: Six Illusions from Our Recent Conflicts," War on the Rocks, April 11, 2017; Mark Cancian, "Long Wars and Industrial Mobilization," War on the Rocks, August 8, 2017; Joseph Whitlock, "The Army's Mobilization Problem," U.S. Army War College War Room, October 13, 2017; Alan L. Gropman, "America Needs to Prepare for a Great Power War," National Interest, February 7, 2018; Elsa B. Kania and Emma Moore, "The US Is Unprepared to Mobilize for Great Power Conflict," Defense One, July 21, 2019. 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.

in recent years have begun to focus more on actions to improve U.S. mobilization capabilities.<sup>89</sup> 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.<sup>90</sup>

#### **Supply Chain Security**

The renewal of great power competition, combined with the globalization of supply chains for many manufactured items, has led to an increased emphasis in U.S. defense planning on supply chain security, meaning (in this context) awareness and minimization of reliance in U.S. military systems on components, subcomponents, materials, and software from other countries, particularly China and Russia. An early example concerned the Russian-made RD-180 rocket engine, which was incorporated into certain U.S. space launch rockets, including rockets used by DOD to put military payloads into orbit.<sup>91</sup> More recent examples include the dependence of various U.S. military systems on rare earth elements from China, Chinese-made electronic components, software that may contain Chinese- or Russian-origin elements, DOD purchases of Chinese-made drones, and the use of Chinese-made surveillance cameras at U.S. military installations. A November 5, 2019, press report, for example, states

service-hearing-how-meet-potential-national-mobilization-needs (hearing from 1 pm to 4 pm).

<sup>&</sup>lt;sup>89</sup> 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 21<sup>st</sup> 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.

<sup>&</sup>lt;sup>90</sup> 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.

<sup>&</sup>lt;sup>91</sup> See CRS Report R44498, National Security Space Launch at a Crossroads, by Steven A. Hildreth.

The US navy secretary has warned that the "fragile" American supply chain for military warships means the Pentagon is at risk of having to rely on adversaries such as Russia and China for critical components.

Richard Spencer, [who was then] the US navy's top civilian, told the Financial Times he had ordered a review this year that found many contractors were reliant on single suppliers for certain high-tech and high-precision parts, increasing the likelihood they would have to be procured from geostrategic rivals.

Mr Spencer said the US was engaged in "great power competition" with other global rivals and that several of them—"primarily Russia and China"—were "all of a sudden in your supply chain, [which is] not to the best interests of what you're doing" through military procurement.<sup>92</sup>

The supply-chain impacts of Russia's invasion of Ukraine beginning in late February 2022 have put an additional spotlight on the issue of supply chain security.<sup>93</sup>

In response to concerns like those above, 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 reports "reviewing the actions taken over the previous year and making recommendations" for additional actions.<sup>94</sup> In February 2022, the Biden Administration released a report on the results of the review.<sup>95</sup>

For a list of articles and reports 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. 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.<sup>96</sup> For a list of articles discussing this issue, see **Appendix E**.

## **Issues for Congress**

Potential policy and oversight issues for Congress include the following:

• March 2021 Interim National Security Strategy Guidance. Does the March 2021 Interim National Security Strategic Guidance correctly describe or diagnose

<sup>&</sup>lt;sup>92</sup> Peter Spiegel and Andrew Edgecliffe-Johnson, "Us Navy Secretary Warns of 'Fragile' Supply Chain," *Financial Times*, November 5, 2019. Material in brackets as in original.

<sup>&</sup>lt;sup>93</sup> See, for example, Christian Davenport, "Russia Cuts Off Rocket Engine Supply and Threatens Space Station Partnership," *Washington Post*, March 3, 2022.

<sup>&</sup>lt;sup>94</sup> White House, "Executive Order on America's Supply Chains," February 24, 2021. The executive order was number 14017.

<sup>&</sup>lt;sup>95</sup> 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.

<sup>&</sup>lt;sup>96</sup> See CRS Report R42784, U.S.-China Strategic Competition in South and East China Seas: Background and Issues for Congress, by Ronald O'Rourke.

the renewal of great power competition in the context of other U.S. national security concerns? As a strategic guidance document, does it lay out an appropriate U.S. national security strategy and national defense strategy for responding to the renewal of great power competition?<sup>97</sup>

- **Defense funding levels.** In response to the renewal of great power competition, should defense funding levels in coming years be increased, reduced, or maintained at about the current level?
- 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?<sup>98</sup> If not, what grand strategy should the United States pursue? What is the Biden Administration's position on this issue?<sup>99</sup>
- **DOD organization.** Is DOD optimally organized for great power competition? What further changes, if any, should be made to better to better align DOD's activities with those needed to counter Chinese and Russian military capabilities?
- Nuclear weapons and nuclear deterrence. 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 great power competition?
- 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 the Biden Administration's proposals for changing the global distribution of U.S. military force deployments be approved, rejected, or modified?
- 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

Ultimately, however, we concluded that the United States has a strong interest in precluding the emergence of another bipolar world—as in the Cold War—or a world of many great powers, as existed before the two world wars. Multipolarity led to two world wars and bipolarity resulted in a protracted worldwide struggle with the risk of nuclear annihilation. To avoid a return such circumstances, Secretary of Defense Dick Cheney ultimately agreed that our objective must be to prevent a hostile power to dominate a "critical region," which would give it the resources, industrial capabilities and population to pose a global challenge. This insight has guided U.S. defense policy throughout the post–Cold War era.

(Zalmay Khalilzad, "4 Lessons about America's Role in the World," *National Interest*, March 23, 2016.)

<sup>&</sup>lt;sup>97</sup> For additional discussion relating to this issue, see CRS In Focus IF11798, *The Interim National Security Strategic Guidance*, by Kathleen J. McInnis.

<sup>&</sup>lt;sup>98</sup> One observer states that this question was reviewed in 1992, at the beginning of the post-Cold War era:

As a Pentagon planner in 1992, my colleagues and I considered seriously the idea of conceding to great powers like Russia and China their own spheres of influence, which would potentially allow the United States to collect a bigger "peace dividend" and spend it on domestic priorities.

See also Hal Brands, "Don't Let Great Powers Carve Up the World, Spheres of Influence Are Unnecessary and Dangerous," *Foreign Affairs*, April 20, 2020.

<sup>&</sup>lt;sup>99</sup> The *Interim National Security Strategy Guidance* states that "at its root, ensuring our national security requires us to.... Promote a favorable distribution of power to deter and prevent adversaries from directly threatening the United States and our allies, inhibiting access to the global commons, or dominating key regions...." (White House, *Interim National Security Strategic Guidance*, March 2021, p. 9.)

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 Europe? 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 Europe?
- 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 renewal of great power competition, particularly against improving Chinese 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 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 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? 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?
- Supple chain security. To what degree are Chinese 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 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 Chinese 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 in eastern Ukraine, Russia's information operations, and China's so-called salami-slicing tactics in the South and East China Seas?

## Appendix A. Shift from Post-Cold War Era to Renewed Great Power Competition

This appendix presents additional background information on the shift in the international security environment from the post-Cold War era to an era of renewed great power competition. For a list of articles on this shift, see **Appendix B**.

### **Previous International Security Environments**

#### Cold War Era

The Cold War era, which is generally viewed as lasting from the late 1940s until the late 1980s or early 1990s, was generally viewed as a strongly bipolar situation featuring two superpowers—the United States and the Soviet Union—engaged 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 generally featured reduced levels of overt political, ideological, and military competition among major states.

The post-Cold War era is generally viewed 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 nonstate actors, particularly Al Qaeda.

### Era of Renewed Great Power Competition

#### Overview

The post-Cold War era of international relations showed initial signs of fading in 2006-2008, and by 2014—following Chinese actions in the South and East China Seas<sup>100</sup> and Russia's seizure and annexation of Crimea<sup>101</sup>—the international environment had shifted to a fundamentally different

<sup>&</sup>lt;sup>100</sup> 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.

<sup>&</sup>lt;sup>101</sup> For discussion Russia's seizure and annexation of Crimea, see CRS Report R45008, *Ukraine: Background, Conflict with Russia, and U.S. Policy*, by Cory Welt, and CRS Report R44775, *Russia: Background and U.S. Policy*, by Cory Welt.

situation of great power competition with China and Russia and challenges by these two countries and others to elements of the U.S.-led international order that has operated since World War II.

#### Some Key Features

Observers view the era of renewed great power competition 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 features of the current situation of renewed great power competition include but are not necessarily limited to the following:

- 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, ambiguous warfare, among other terms, in the case of Russia's actions, and salami-slicing tactics or gray-zone warfare, among other terms, in the case of China's actions;
- renewed ideological competition, this time against 21<sup>st</sup>-century forms of authoritarianism and illiberal democracy in Russia, China, and other countries;
- the promotion by China and Russia through their state-controlled media of nationalistic historical narratives,<sup>102</sup> 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 principle that force or threat of force should not be used as a routine or first-resort measure for settling disputes between countries, and the principle of freedom of the seas (i.e., that the world's oceans are to be treated as an international commons); 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 have emerged as significant nonstate actors (now including the Islamic State organization, among other groups); 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) nonstate actors, and become potential locations of intervention by stronger states, including major powers.

The December 2017 NSS states the following:

Following the remarkable victory of free nations in the Cold War, America emerged as the lone superpower with enormous advantages and momentum in the world. Success, however, bred complacency.... As we took our political, economic, and military advantages for granted, other actors steadily implemented their long-term plans to challenge America and to advance agendas opposed to the United States, our allies, and our partners....

<sup>&</sup>lt;sup>102</sup> See for example, Jessica Chen Weiss, "The Stories China Tells: The New Historical Memory Reshaping Chinese Nationalism," *Foreign Affairs*, March/April 2021.

The United States will respond to the growing political, economic, and military competitions we face around the world.

China and Russia challenge American power, influence, and interests, attempting to erode American security and prosperity. They are determined to make economies less free and less fair, to grow their militaries, and to control information and data to repress their societies and expand their influence. At the same time, the dictatorships of the Democratic People's Republic of Korea and the Islamic Republic of Iran are determined to destabilize regions, threaten Americans and our allies, and brutalize their own people. Transnational threat groups, from jihadist terrorists to transnational criminal organizations, are actively trying to harm Americans. While these challenges differ in nature and magnitude, they are fundamentally contests between those who value human dignity and freedom and those who oppress individuals and enforce uniformity.

These competitions require the United States to rethink the policies of the past two decades—policies based on the assumption that engagement with rivals and their inclusion in international institutions and global commerce would turn them into benign actors and trustworthy partners. For the most part, this premise turned out to be false....

Three main sets of challengers—the revisionist powers of China and Russia, the rogue states of Iran and North Korea, and transnational threat organizations, particularly jihadist terrorist groups—are actively competing against the United States and our allies and partners. Although differing in nature and magnitude, these rivals compete across political, economic, and military arenas, and use technology and information to accelerate these contests in order to shift regional balances of power in their favor. These are fundamentally political contests between those who favor repressive systems and those who favor free societies.

China and Russia want to shape a world antithetical to U.S. values and interests. China seeks to displace the United States in the Indo-Pacific region, expand the reaches of its state-driven economic model, and reorder the region in its favor. Russia seeks to restore its great power status and establish spheres of influence near its borders. The intentions of both nations are not necessarily fixed. The United States stands ready to cooperate across areas of mutual interest with both countries....

The United States must consider what is enduring about the problems we face, and what is new. The contests over influence are timeless. They have existed in varying degrees and levels of intensity, for millennia. Geopolitics is the interplay of these contests across the globe. But some conditions are new, and have changed how these competitions are unfolding. We face simultaneous threats from different actors across multiple arenas—all accelerated by technology. The United States must develop new concepts and capabilities to protect our homeland, advance our prosperity, and preserve peace....

Since the 1990s, the United States displayed a great degree of strategic complacency. We assumed that our military superiority was guaranteed and that a democratic peace was inevitable. We believed that liberal-democratic enlargement and inclusion would fundamentally alter the nature of international relations and that competition would give way to peaceful cooperation....

In addition, after being dismissed as a phenomenon of an earlier century, great power competition returned. China and Russia began to reassert their influence regionally and globally. Today, they are fielding military capabilities designed to deny America access in times of crisis and to contest our ability to operate freely in critical commercial zones during peacetime. In short, they are contesting our geopolitical advantages and trying to change the international order in their favor.<sup>103</sup>

<sup>&</sup>lt;sup>103</sup> Office of the President, *National Security Strategy of the United States of America*, December 2017, pp. 2-3, 25, 26-27.

The unclassified summary of the January 2018 NDS states the following:

Today, we are emerging from a period of strategic atrophy, aware that our competitive military advantage has been eroding. We are facing increased global disorder, characterized by decline in the long-standing rules-based international order—creating a security environment more complex and volatile than any we have experienced in recent memory. Inter-state strategic competition, not terrorism, is now the primary concern in U.S. national security.

China is a strategic competitor using predatory economics to intimidate its neighbors while militarizing features in the South China Sea. Russia has violated the borders of nearby nations and pursues veto power over the economic, diplomatic, and security decisions of its neighbors. As well, North Korea's outlaw actions and reckless rhetoric continue despite United Nation's censure and sanctions. Iran continues to sow violence and remains the most significant challenge to Middle East stability. Despite the defeat of ISIS's physical caliphate, threats to stability remain as terrorist groups with long reach continue to murder the innocent and threaten peace more broadly....

The central challenge to U.S. prosperity and security is the *reemergence of long-term*, *strategic competition* by what the National Security Strategy classifies as revisionist powers. It is increasingly clear that China and Russia want to shape a world consistent with their authoritarian model—gaining veto authority over other nations' economic, diplomatic, and security decisions....

Another change to the strategic environment is a *resilient, but weakening, post-WWII international order....* China and Russia are now undermining the international order from within the system by exploiting its benefits while simultaneously undercutting its principles and "rules of the road."

Rogue regimes such as North Korea and Iran are destabilizing regions through their pursuit of nuclear weapons or sponsorship of terrorism....

*Challenges to the U.S. military advantage* represent another shift in the global security environment. For decades the United States has enjoyed uncontested or dominant superiority in every operating domain. We could generally deploy our forces when we wanted, assemble them where we wanted, and operate how we wanted. Today, every domain is contested—air, land, sea, space, and cyberspace....

The security environment is also affected by *rapid technological advancements and the changing character of war....* 

States are the principal actors on the global stage, but *non-state actors* also threaten the security environment with increasingly sophisticated capabilities. Terrorists, trans-national criminal organizations, cyber hackers and other malicious non-state actors have transformed global affairs with increased capabilities of mass disruption. There is a positive side to this as well, as our partners in sustaining security are also more than just nation-states: multilateral organizations, non-governmental organizations, corporations, and strategic influencers provide opportunities for collaboration and partnership. Terrorism remains a persistent condition driven by ideology and unstable political and economic structures, despite the defeat of ISIS's physical caliphate.

It is now undeniable that the *homeland is no longer a sanctuary*. America is a target, whether from terrorists seeking to attack our citizens; malicious cyber activity against personal, commercial, or government infrastructure; or political and information subversion....

Long-term strategic competitions with China and Russia are the principal priorities for the Department, and require both increased and sustained investment, because of the magnitude of the threats they pose to U.S. security and prosperity today, and the potential for those threats to increase in the future. Concurrently, the Department will sustain its

efforts to deter and counter rogue regimes such as North Korea and Iran, defeat terrorist threats to the United States, and consolidate our gains in Iraq and Afghanistan while moving to a more resource-sustainable approach.<sup>104</sup>

One observer has argued that the concept of great power competition, though valid in some respects, is too narrow a concept around which to organize U.S. foreign policy.<sup>105</sup>

#### Markers of Shift to Renewed Great Power Competition

The sharpest single marker of the shift from the post-Cold War era to an era of renewed great power competition 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 II. Other markers of the shift—such as Russia's actions in eastern Ukraine and elsewhere in Eastern Europe since March 2014, China's economic growth and military modernization over the last several years, and China's actions in the South and East China Seas over the last several years—have been more gradual and cumulative.

The beginnings of the shift from the post-Cold War era to renewed great power competition 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.<sup>106</sup>
- 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.<sup>107</sup>
- 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.<sup>108</sup> Also in that year, the financial crisis and resulting deep

<sup>&</sup>lt;sup>104</sup> 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, pp. 1-4. Emphasis as in original.

<sup>&</sup>lt;sup>105</sup> Austin Doehler, "Great Power Competition Is Too Narrow a Frame," *Defense One*, December 6, 2020.

<sup>&</sup>lt;sup>106</sup> 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.

<sup>&</sup>lt;sup>107</sup> For an English-language transcript of the speech, see "Putin's Prepared Remarks at 43<sup>rd</sup> 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.

<sup>&</sup>lt;sup>108</sup> See, for example, Robert Kagan, "Believe It or Not, Trump's Following a Familiar Script on Russia," Washington
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 Chinese sense of self-confidence or triumphalism.<sup>109</sup> 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 shift to renewed great power competition further, to years prior to 2006-2008.<sup>110</sup>

#### **Comparisons to Past International Security Environments**

Some observers seek to better understand the era of renewed great power competition 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.

Some observers are describing the era of renewed great power competition as a new Cold War (or Cold War II or 2.0), particularly since Russia's invasion of Ukraine starting in late February 2022. That term may have utility in referring specifically to current U.S.-Russian or U.S.-Chinese relations. The original Cold War, however, was a bipolar situation with the United States and Russia, while the era of renewed great power competition is a three-power situation that also includes both China and Russia as major powers in competition with the United States. 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.

*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 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.

<sup>&</sup>lt;sup>109</sup> See, for example, Howard W. French, "China's Dangerous Game," Atlantic, October 13, 2014.

<sup>&</sup>lt;sup>110</sup> See, for example, 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 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 (AEI), 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.

Other observers, viewing the renewal of great power competition, have drawn comparisons to the multipolar situation that existed in the 19<sup>th</sup> century and 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, have drawn comparisons to the 1930s. Those two earlier situations, however, did not feature a strong focus on countering globally significant transnational terrorist groups, and the military and other technologies available then differ vastly from those available today. The current era of renewed great power competition 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.

#### 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 invasion of Ukraine starting in late February 2022. Other terms that have been used include competitive world order, multipolar era, tripolar era, and disorderly world (or era), and strategic competition.

#### **Congress and the Previous Shift**

The previous major change in the international security environment—the shift in the late 1980s and early 1990s from the Cold War to the post-Cold War era—prompted a broad reassessment by the 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),<sup>111</sup> a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.<sup>112</sup> 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.<sup>113</sup> For additional discussion of Congress's response to the shift from the Cold War to the post-Cold War era, see **Appendix F**.

<sup>&</sup>lt;sup>111</sup> See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

<sup>&</sup>lt;sup>112</sup> 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.

<sup>(</sup>Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, p. iii.)

<sup>&</sup>lt;sup>113</sup> 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 the author of this report).

# **Appendix B. Articles on Shift to Renewed Great Power Competition**

This appendix presents citations to articles about the shift from the post-Cold War era to an era of renewed great power competition.

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# **Appendix F. Congress and the Late 1980s/Early 1990s Shift to Post-Cold War Era**

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

This shift prompted a broad reassessment by the 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),<sup>114</sup> a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.<sup>115</sup> 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.<sup>116</sup>

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.<sup>117</sup>

(Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, p. iii.)

<sup>116</sup> 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 the author of this report).

<sup>117</sup> See, for example, the following:

<sup>&</sup>lt;sup>114</sup> See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

<sup>&</sup>lt;sup>115</sup> 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.

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;

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,<sup>118</sup> 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.<sup>119</sup>

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-sizing construct 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.<sup>120</sup> Aspin's effort included a series of policy papers in January and February 1992<sup>121</sup> 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,<sup>122</sup> the effort arguably proved

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.

<sup>118</sup> See, for example, Clifford Krauss, "New Proposal for Military Cut," *New York Times*, January 7, 1992: A11 (discussing a proposal by Senator 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.

<sup>119</sup> Senator John McCain, Matching A Peace Dividend With National Security, A New Strategy For The 1990s, November 1991, 32 pp.

<sup>120</sup> 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 the author of this report).

<sup>121</sup> 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, 2991, 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.

<sup>122</sup> 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.

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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;

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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