

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

Updated February 22, 2022

Congressional Research Service

<https://crsreports.congress.gov>

R43838

Summary

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 were moved to the center of discussions of U.S. defense issues following the terrorist attacks of September 11, 2001—are now a less-dominant 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.

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.

Contents

Introduction	1
Background	1
Shift to Renewed Great Power Competition	1
Overview	1
Alternate Term: Strategic Competition	3
Overview of Implications for Defense	3
Grand Strategy and Geopolitics of Great Power Competition.....	4
Organizational Changes within DOD	5
Nuclear Weapons, Nuclear Deterrence, and Nuclear Arms Control	5
Global U.S. Military Posture	7
U.S. and Allied Capabilities in Indo-Pacific Region	13
U.S. and NATO Capabilities in Europe	15
New Operational Concepts	16
Capabilities for High-End Conventional Warfare.....	16
Maintaining U.S. Superiority in Conventional Weapon Technologies	18
Innovation and Speed of U.S. Weapon System Development and Deployment.....	19
Mobilization Capabilities for Extended-Length Conflict	21
Supply Chain Security	23
Capabilities for Countering Hybrid Warfare and Gray-Zone Tactics	24
Issues for Congress.....	24

Appendixes

Appendix A. Shift from Post-Cold War Era to Renewed Great Power Competition	27
Appendix B. Articles on Shift to Renewed Great Power Competition.....	34
Appendix C. Articles on Grand Strategy and Geopolitics.....	39
Appendix D. Readings on Supply Chain Security	50
Appendix E. Articles on Russian and Chinese Irregular, Hybrid, and Gray-Zone Warfare	55
Appendix F. Congress and the Late 1980s/Early 1990s Shift to Post-Cold War Era	63

Contacts

Author Information.....	65
-------------------------	----

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 and 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.¹

The renewal of great power competition was acknowledged alongside other considerations in the Obama Administration's June 2015 National Military Strategy.² It was placed at the center of the Trump Administration's December 2017 National Security Strategy (NSS)³ and January 2018 National Defense Strategy (NDS),⁴ 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

¹ 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.

² 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.

³ Office of the President, *National Security Strategy of the United States of America*, December 2017, 55 pp.

⁴ 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.

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.”⁵ 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 game-changing 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 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.

⁵ White House, *Interim National Security Strategic Guidance*, March 2021, pp. 6, 9.

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.⁶

Department of Defense (DOD) officials have identified countering China's military capabilities as DOD's top priority.⁷

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."...

But "strategic competition" as a phrase isn't new: the Trump administration even used it in its 2018 National Defense Strategy.⁸

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:

⁶ 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.

⁷ 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, China,'" *Breaking Defense*, January 2, 2019.

For more on China's military modernization effort, see CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke; and CRS Report R44196, *The Chinese Military: Overview and Issues for Congress*, by Ian E. Rinehart.

⁸ 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.

Counterterrorist operations and U.S. military operations in the Middle East—which were moved to the center of discussions of U.S. defense issues following the terrorist attacks of September 11, 2001—are now a less-dominant 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.

Grand Strategy and Geopolitics of Great Power Competition

The renewal of great power competition has led to a renewed emphasis on grand strategy⁹ and the geopolitics¹⁰ 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, D.C.

“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.¹¹

For the United States, grand strategy can be viewed as strategy at a global or interregional level, as opposed to U.S. strategies for individual regions, countries, or issues. From a U.S. perspective on grand strategy and geopolitics, it can be noted that most of the world’s people, resources, and economic activity are located not in the Western Hemisphere, but in the other hemisphere, particularly Eurasia. In response to this basic feature of world geography, U.S. policymakers for the last several decades have chosen to pursue, as a key element of U.S. national strategy, a goal of preventing the emergence of regional hegemony in Eurasia. Although U.S. policymakers do not often state explicitly in public the goal of preventing the emergence of regional hegemony 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 hegemony 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

⁹ 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).

¹⁰ 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>.

¹¹ Bradley Peniston, “Work: ‘The Age of Everything Is the Era of Grand Strategy’,” *Defense One*, November 2, 2015.

attack submarines, large surface combatants, large amphibious ships, and underway replenishment ships.¹²

The U.S. goal of preventing the emergence of regional hegemons in Eurasia, though long-standing, is not written in stone—it is a policy choice reflecting two judgments: (1) that given the 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 judgments—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 and the elevation of the U.S. Cyber Command to be its own combatant command.¹³ Another example of an area of potential organizational change within DOD is information operations.¹⁴

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

¹² For additional discussion, see CRS In Focus IF10485, *Defense Primer: Geography, Strategy, and U.S. Force Design*, by Ronald O'Rourke.

¹³ See, for example, Marcus Weisgerber, "Nothing's 'Irreversible,' But the Pentagon's New Bureaucracies Aim to Come Close," *Defense One*, February 19, 2020. See also CRS In Focus IF10337, *Challenges to the United States in Space*, by Stephen M. McCall; CRS In Focus IF10950, *Toward the Creation of a U.S. "Space Force,"* coordinated by Steven A. Hildreth, CRS In Focus IF11172, *"Space Force" and Related DOD Proposals: Issues for Congress*, by Kathleen J. McInnis and Stephen M. McCall, and CRS In Focus IF11203, *Proposed Civilian Personnel System Supporting "Space Force,"* by Alan Ott.

¹⁴ For additional discussion regarding information operations, see CRS In Focus IF10771, *Defense Primer: Information Operations*, by Catherine A. Theohary; CRS Report RL31787, *Information Operations, Cyberwarfare, and Cybersecurity: Capabilities and Related Policy Issues*, by Catherine A. Theohary; CRS In Focus IF11292, *Convergence of Cyberspace Operations and Electronic Warfare*, by Catherine A. Theohary and John R. Hoehn; CRS Report R43848, *Cyber Operations in DOD Policy and Plans: Issues for Congress*, by Catherine A. Theohary.

weapon power. 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.¹⁵ DOD, for example, currently has plans to acquire a new class of ballistic missile submarines¹⁶ and a next-generation long-range bomber.¹⁷

Regarding nuclear arms control,¹⁸ 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. withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty.¹⁹ The Trump Administration invited China to be a third participant, along with the United States and Russia, in negotiations on future limitations on nuclear arms.²⁰ China has reportedly refused to join such negotiations,²¹ unless the United States agrees to reduce its nuclear forces to China's much-lower level.²²

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

¹⁵ 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, 2015 to 2024*, January 2015, 7 pp.

¹⁶ CRS Report R41129, *Navy Columbia (SSBN-826) Class Ballistic Missile Submarine Program: Background and Issues for Congress*, by Ronald O'Rourke.

¹⁷ CRS Report RL34406, *Air Force Next-Generation Bomber: Background and Issues for Congress*, by Jeremiah Gertler.

¹⁸ 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.

¹⁹ For additional discussion, see CRS Insight IN10985, *U.S. Withdrawal from the INF Treaty*, by Amy F. Woolf.

²⁰ 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.

²¹ 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 Farge, "U.S. Says China Is Resisting Nuclear Arms Talks," *Reuters*, May 18, 2021; John Dotson, "Beijing Rejects Any Involvement in Nuclear Arms Limitation Talks," Jamestown Foundation, October 30, 2020; Associated Press, "China Calls US Invite to Nuclear Talks a Ploy to Derail Them," *Associated Press*, July 8, 2020; Robbie Gramer and Jack Detsch, "Trump Fixates on China as Nuclear Arms Pact Nears Expiration," *Foreign Policy*, April 29, 2020; Hal Brands, "China Has No Reason to Make a Deal on Nuclear Weapons," *Bloomberg*, April 29, 2020; Cheng Hanping, "US Attempt to Rope China into New START Negotiations Won't Succeed," *Global Times*, February 12, 2020; Steven Pifer, "Trump's Bid to Go Big on Nuclear Arms Looks Like a Fizzle," *Defense One*, February 5, 2020; Samuel Osborne, "China Refuses to Join Nuclear Talks with US and Russia in Blow for Trump," *Independent (UK)*, May 7, 2019; Ben Blanchard, "China Says It Won't Take Part in Trilateral Nuclear Arms Talks," *Reuters*, May 6, 2019; Ben Westcott, "China 'Will Not Participate' in Trump's Proposed Three-Way Nuclear Talks," *CNN*, May 6, 2019.

²² See, for example, Yew Lun Tian, "China Challenges U.S. to Cut Nuclear Arsenal to Matching Level," *Reuters*, July 7, 2020.

stability,” and that “it is now incumbent on us to think about the most productive way to carry it forward from here.”²³ 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.²⁴

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-deploying 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 longstanding issue in U.S. defense planning.²⁵

²³ 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.

²⁴ 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 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.

²⁵ See, for example, Billy Fabian, “Overcoming the Tyranny of Time: The Role of U.S. Forward Posture in Deterrence

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 simultaneously²⁶—a consideration that can complicate plans for shifting U.S. military capabilities from Europe or the Middle East to the Indo-Pacific. A key issue observers are currently debating is how much priority U.S. defense planning should give to Europe (to deter Russia) versus the Indo-Pacific (to deter China), how the U.S. response to Russia's actions in Ukraine might influence China's calculations regarding potential actions it might take toward Taiwan, and whether the tension about how to address concerns about both China and Russia should lead to changes in U.S. grand strategy and/or the size of the U.S. defense budget.

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.²⁷

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.²⁸ 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.²⁹ The Trump Administration's proposals for reducing force deployments to Africa and

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. McNinnis, and Derek E. Mix.

²⁶ 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.

²⁷ 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.

²⁸ 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. McNinnis, and Derek E. Mix.

²⁹ 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,

South America became 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.³⁰

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 national security, with Secretary Austin and Secretary Blinken working in close cooperation.”³¹ 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.

“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.

³⁰ 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.

³¹ White House, “Remarks by President Biden on America’s Place in the World,” February 4, 2021.

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.³²

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 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

³² 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.

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.³³

Details on the results of the global posture review are largely classified.³⁴ 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.”³⁵ 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.³⁶

Russian Actions Regarding Ukraine Complicate Plans for Shift to Indo-Pacific

As mentioned above, Russia’s actions toward Ukraine have prompted increased discussion of how much priority U.S. defense planning should give to Europe (to deter Russia) versus the Indo-Pacific (to deter China), how the U.S. response to Russia’s actions in Ukraine might influence China’s calculations regarding potential actions it might take toward Taiwan, and whether the tension about how to address concerns about both China and Russia should lead to changes in U.S. grand strategy and/or the size of the U.S. defense budget.³⁷

³³ Jim Garamone, “Biden Approves Global Posture Review Recommendations,” *DOD News*, November 29, 2021.

³⁴ 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.

³⁵ Gordon Lubold, “Pentagon Plans to Improve Airfields in Guam and Australia to Confront China,” *Wall Street Journal*, November 29, 2021.

³⁶ 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.

³⁷ See, for example, 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; Seth Cropsey, “Double-Down on the Indo-Pacific in the Midst of a Ukraine Crisis,” *The Hill*, February 1, 2022; Josh Rogin, “Putin Is Threatening to Wreck Biden’s Asia Strategy,” *Washington Post*, January 27,

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, 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.³⁸ The solidifying strategic partnership (some observers use terms such as alignment or alliance) between China and Russia 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.³⁹

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.⁴⁰ In April and June 2021, it was reported that the

2022; Simon Jackman, “Putin Tries to Trump Indo-Pacific,” United States Studies Centre, January 26, 2022.

³⁸ 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.

³⁹ See, for example, 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; Dov S. Zakheim, “The Biden Administration Faces a Dangerous Anti-American Triad,” *The Hill*, January 28, 2022.

⁴⁰ 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 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

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.⁴¹

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. As mentioned in the previous section, 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,⁴² and the unclassified summary of the January 2018 NDS mentioned the Indo-Pacific at several points.⁴³ 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.⁴⁴ 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."⁴⁵

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

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.

⁴¹ 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.

⁴² Office of the President, *National Security Strategy of the United States of America*, December 2017, pp. 45-47.

⁴³ 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.

⁴⁴ For more on the Indo-Pacific region, see CRS Insight IN10888, *Australia, China, and the Indo-Pacific*, by Bruce Vaughn; CRS In Focus IF10726, *China-India Rivalry in the Indian Ocean*, by Bruce Vaughn; and CRS In Focus IF10199, *U.S.-Japan Relations*, coordinated by Emma Chanlett-Avery. The FOIP concept is still being fleshed out by the Trump Administration; see White House, "President Donald J. Trump's Administration is Advancing a Free and Open Indo-Pacific," July 20, 2018, accessed August 21, 2018, at <https://www.whitehouse.gov/briefings-statements/president-donald-j-trumps-administration-advancing-free-open-indo-pacific/>; Department of State, "Advancing a Free and Open Indo-Pacific," July 30, 2018, accessed August 21, 2018, at <https://www.state.gov/r/pa/prs/ps/2018/07/284829.htm>; Department of State, "Briefing on The Indo-Pacific Strategy," April 2, 2018, accessed August 21, 2018, at <https://www.state.gov/r/pa/prs/ps/2018/04/280134.htm>; U.S. 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.

⁴⁵ White House, *Interim National Security Strategic Guidance*, March 2021, pp. 10, 15.

to more distributed force architectures and operational concepts,⁴⁶ 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.

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 ships, aircraft, and personnel to the region; is conducting increased operations, exercises, and warfighting experiments in the region; and is developing new weapons, unmanned vehicles, and other technologies that can be viewed as being aimed primarily at potential future operations in the region.⁴⁷ 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.⁴⁸

DOD activities in the Indo-Pacific region include those for competing strategically with China in the South and East China Seas.⁴⁹ 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.

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 FY2022 defense budget, while others have not yet been funded or had funding requested for them in the Administration's proposed FY2022 budget (but might have been included in DOD's FY2022 unfunded priority lists [UPLs]).⁵⁰

⁴⁶ 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."

⁴⁷ 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.

⁴⁸ For additional discussion, see CRS Insight IN11281, *New U.S. Marine Corps Force Design Initiatives*, 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.

⁴⁹ 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.

⁵⁰ 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

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 underscored by Russia's seizure and announced annexation of Ukraine in March 2014 (which the United States does not recognize)⁵¹ and Russia's subsequent actions in eastern Ukraine, led to a renewed focus in U.S. defense planning on strengthening U.S. and NATO military capabilities for countering potential Russian aggression in Europe.⁵² Russia's recent actions toward Ukraine have further strengthened this renewed focus. 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.⁵³ 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

U.S. Indo-Pacific Command (INDOPACOM), had submitted to Congress a \$20.1 billion plan for investments for improving U.S. military capabilities in the Indo-Pacific region. Davidson submitted the plan, entitled *Regain the Advantage*, in response to Section 1253 of the FY2020 National Defense Authorization Act (S. 1790/P.L. 116-92 of December 20, 2019), which required the Commander of INDOPACOM to submit to the congressional defense committees a report providing the Commander's independent assessment of the activities and resources required, for FY2022-FY2026, to implement the National Defense Strategy with respect to the Indo-Pacific region, maintain or restore the comparative U.S. military advantage relative to China, and reduce the risk associated with executing DOD contingency plans. Davidson's plan requested about \$1.6 billion in additional funding suggestions for FY2021 above what the Pentagon was requesting in its proposed FY2021 budget, and about \$18.5 billion in investments for FY2022-FY2026. Observers used the term Pacific Deterrence Initiative (PDI) or Indo-Pacific Deterrence Initiative (IPDI)—a Pacific or Indo-Pacific analog to the European Deterrence Initiative (EDI) discussed in the next section—to refer to proposals for making various investments for strengthening U.S. and allied military capabilities in the Pacific region. Section 1251 of the FY2021 National Defense Authorization Act (H.R. 6395/P.L. 116-283 of January 1, 2021) directed DOD to establish a Pacific Deterrence Initiative “to carry out prioritized activities to enhance the United States deterrence and defense posture in the Indo-Pacific region, assure allies and partners, and increase capability and readiness in the Indo-Pacific region.” The provision authorized \$2.235 billion to carry out the initiative in FY2021; directed DOD to submit a report not later than February 15, 2021, on future-year activities and resources for the initiative; directed DOD's annual budget submissions, starting with the submission for FY2022, to include a detailed budget display for the initiative; and directed DOD to brief Congress not later than March 1, 2021, and annually thereafter, on the budget proposal and programs for the initiative. Section 1251 of P.L. 116-283 also repealed Section 1251 of the FY2018 National Defense Authorization Act (H.R. 2810/P.L. 115-91 of December 12, 2017), as most recently amended by Section 12534 of the FY2019 National Defense Authorization Act (H.R. 5515/P.L. 115-232 of August 13, 2018). Section 1251 of P.L. 115-91 directed DOD to establish an Indo-Asia-Pacific Stability Initiative, and Section 1253 of P.L. 115-232 modified the initiative's name to Indo-Pacific Stability Initiative and made other changes to the initiative.

⁵¹ 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.)

⁵² See, for example, CRS In Focus IF11130, *United States European Command: Overview and Key Issues*, by Kathleen J. McInnis.

⁵³ See, for example, CRS In Focus IF11280, *U.S. Military Presence in Poland*, by Andrew Feickert, Kathleen J. McInnis, and Derek E. Mix.

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).⁵⁴

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.⁵⁵

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 Littoral Operations in a Contested Environment (LOCE) and Expeditionary Advanced Base Operations (EABO) for the Marine Corps.⁵⁶

These new operational concepts focus on more fully integrating U.S. military capabilities across multiple domains (i.e., land, air, sea, space, electromagnetic, information, and cyberspace), employing U.S. military forces that are less concentrated and more distributed in their architectures, making greater use of networking technologies to tie those distributed forces together into integrated battle networks, and making greater use of unmanned vehicles as part of the overall force architecture.

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.⁵⁷ Many 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 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

⁵⁴ For further discussion, see CRS In Focus IF10946, *The European Deterrence Initiative: A Budgetary Overview*, by Paul Belkin and Hibbah Kaileh.

⁵⁵ 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.

⁵⁶ 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.

⁵⁷ 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.

Fighter (JSF)⁵⁸ and the next-generation long-range bomber,⁵⁹ highly capable warships such as the Virginia-class attack submarine⁶⁰ and DDG-51 class Aegis destroyer,⁶¹ ballistic missile defense (BMD) capabilities,⁶² longer-ranged land-attack and anti-ship weapons, new types of weapons such as lasers,⁶³ new C4ISR (command, control, communications, computers, intelligence, surveillance, and reconnaissance) capabilities,⁶⁴ military space capabilities,⁶⁵ electronic warfare capabilities, military cyber capabilities,⁶⁶ hypersonic weapons, and the military uses of robotics and autonomous unmanned vehicles, quantum technology, and artificial intelligence (AI). Preparing for high-end conventional warfare could also involve making changes in U.S. military training and exercises⁶⁷ and reorienting the missions and training of U.S. special operations forces.⁶⁸

⁵⁸ For more on the F-35 program, see CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program*, by Jeremiah Gertler.

⁵⁹ CRS Report RL34406, *Air Force Next-Generation Bomber: Background and Issues for Congress*, by Jeremiah Gertler.

⁶⁰ For more on the Virginia-class program, see CRS Report RL32418, *Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress*, by Ronald O'Rourke.

⁶¹ For more on the DDG-51 program, see CRS Report RL32109, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke.

⁶² See, for example, CRS Report R43116, *Ballistic Missile Defense in the Asia-Pacific Region: Cooperation and Opposition*, by Ian E. Rinehart, Steven A. Hildreth, and Susan V. Lawrence, and CRS Report RL33745, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, by Ronald O'Rourke.

⁶³ See, for example, CRS Report R44175, *Navy Lasers, Railgun, and Gun-Launched Guided Projectile: Background and Issues for Congress*, by Ronald O'Rourke.

⁶⁴ See, for example, Rebecca K.C. Hersman and Reja Younis, *The Adversary Gets a Vote, Advanced Situational Awareness 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.

⁶⁵ See, for example, CRS In Focus IF10337, *Challenges to the United States in Space*, by Steven A. Hildreth and Clark Groves.

⁶⁶ See, for example, CRS Report R43848, *Cyber Operations in DOD Policy and Plans: Issues for Congress*, by Catherine A. Theohary.

⁶⁷ 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.

⁶⁸ 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: Ready for a Russia or China War? The Rise of Great Power Competition Means that the Entire Military Is Spending Less Time Training and

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 even 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 funding for new militarily applicable technologies such as artificial intelligence (AI), autonomous unmanned weapons, hypersonic weapons, directed-energy weapons, biotechnology, and quantum technology.⁶⁹ 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.”⁷⁰

Planning for Nation Building and Counter-Insurgency,” *National Interest*, March 11, 2021.

For more on U.S. special operations forces, see CRS Report RS21048, *U.S. Special Operations Forces (SOF): Background and Issues for Congress*, by Andrew Feickert, and CRS In Focus IF10545, *Defense Primer: Special Operations Forces*, by Barbara Salazar Torreon and Andrew Feickert.

⁶⁹ See, for example, Nathan Strout, “New Pentagon Budget Request Invests in 4 Advanced Technologies,” *C4ISRNet*, February 10, 2020. See also CRS In Focus IF11105, *Defense Primer: Emerging Technologies*, by Kelley M. Saylor; CRS Report R45178, *Artificial Intelligence and National Security*, by Kelley M. Saylor; CRS In Focus IF11150, *Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems*, by Kelley M. Saylor; and CRS Report R45811, *Hypersonic Weapons: Background and Issues for Congress*, by Kelley M. Saylor. See also Joe Gould, “Defense Innovation Experts to Congress: Put Money Where Pentagon’s Mouth Is,” *Defense News*, February 5, 2020; Paul Scharre and Ainikki Riikonen, “The Defense Department Needs a Real Technology Strategy,” *Defense One*, April 21, 2020.

⁷⁰ Courtney Albion, “New Strategy Will Harness Emerging Tech to Beat Adversaries,” *Defense News*, February 2, 2022.

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.⁷¹

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.⁷²

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.⁷³ In previewing the new framework in October 2019, DOD described it as "the most transformational acquisition policy change we've seen in decades."⁷⁴

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

⁷¹ 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. Ferreiro, "Outperforming With Doctrine, Not Science," Defense Acquisition University, November 1, 2018.

⁷² 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.

⁷³ 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.

⁷⁴ 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.

more or moving more quickly.⁷⁵ A January 2020 GAO report on weapon system reliability in defense acquisition, however, states

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.⁷⁶

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

⁷⁵ 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; 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.

⁷⁶ Government Accountability Office, *Defense Acquisitions[:] Senior Leaders Should Emphasize Key Practices to Improve Weapon System Reliability*, GAO-20-151, January 2020, summary page.

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.⁷⁷

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.⁷⁸ The term *mobilization* is often used to refer specifically to preparations for activating U.S. military reserve force personnel and inducting additional people into the Armed Forces. In this report, it is used more broadly, to refer to various activities, including those relating to the ability of the industrial base to support U.S. military operations in a larger-scale, extended-length conflict against China or Russia. Under this broader definition, mobilization capabilities include but are not limited to capabilities for

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

Some observers have expressed concern about the adequacy of U.S. mobilization capabilities, particularly since this was not a major defense-planning concern during the 20 to 25 years of the post-Cold War era, and have recommended various actions to improve those capabilities.⁷⁹ On

⁷⁷ 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 Chefetz, “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.

⁷⁸ See, for example, Hal Brands, “Win or Lose, U.S. War Against China or Russia Won’t Be Short,” *Bloomberg*, June 14, 2021.

⁷⁹ 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” Bebbler, “State of War, State of

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),⁸⁰ held two hearings on U.S. mobilization needs and how to meet them.⁸¹ DOD officials are now focusing more on actions to improve U.S. mobilization capabilities.⁸² 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....

Mind: Reconsidering Mobilization in the Information Age, Pt. 1," Center for International Maritime Security (CIMSEC), January 11, 2021 (drawn from Robert "Jake" Bebbler, "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.

⁸⁰ See Sections 551 through 557 of S. 2943/P.L. 114-328.

⁸¹ 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-service-hearing-how-meet-potential-national-mobilization-needs> (hearing from 1 pm to 4 pm).

⁸² See, for example, Sydney J. Freedberg Jr., "WW II On Speed: Joint Staff Fears Long War," *Breaking Defense*, January 11, 2017; Department of Defense, *Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States*, September 2018, 140 pp.; Joint Chiefs of Staff, *Joint Mobilization Planning*, Joint Publication 4-05, 137 pp., October 23, 2018; Memorandum from Michael D. Griffin, Under Secretary of Defense, Research and Engineering, for Chairman, Defense Science Board, Subject: Terms of Reference—Defense Science Board Task Force on 21st Century Industrial Base for National Defense, October 30, 2019. See also CRS In Focus IF11311, *Defense Primer: The National Technology and Industrial Base*, by Heidi M. Peters.

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.⁸³

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.⁸⁴ 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

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.⁸⁵

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 directs 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.⁸⁶

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

⁸³ 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.

⁸⁴ See CRS Report R44498, *National Security Space Launch at a Crossroads*, by Steven A. Hildreth.

⁸⁵ 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.

⁸⁶ White House, “Executive Order on America’s Supply Chains,” February 24, 2021.

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.⁸⁷ For a list of articles discussing this issue, see **Appendix E**.⁸⁸

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 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?⁸⁹
- **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?⁹⁰ If not, what grand strategy should the United States pursue? What is the Biden Administration's position on this issue?⁹¹

⁸⁷ See CRS Report R42784, *U.S.-China Strategic Competition in South and East China Seas: Background and Issues for Congress*, by Ronald O'Rourke.

⁸⁸ See also CRS In Focus IF10771, *Defense Primer: Information Operations*, by Catherine A. Theohary.

⁸⁹ For additional discussion relating to this issue, see CRS In Focus IF11798, *The Interim National Security Strategy Guidance*, by Kathleen J. McInnis.

⁹⁰ 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.

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.)

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.

⁹¹ 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

- **DOD organization.** Is DOD optimally organized for great power competition? What further changes, if any, should be made 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 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

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.)

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?
- **Supply 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 Seas⁹² and Russia's seizure and annexation of Crimea⁹³—the international environment had shifted to a fundamentally different

⁹² 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.

⁹³ 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 In Focus IF10552, *U.S. Sanctions on Russia Related to the Ukraine Conflict*, by Cory Welt, Rebecca M. Nelson, and Dianne E. Rennack.

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 21st-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,⁹⁴ 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....

⁹⁴ 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.⁹⁵

⁹⁵ 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.⁹⁶

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.⁹⁷

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 2006.⁹⁸
- 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.⁹⁹
- 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.¹⁰⁰ Also in that year, the financial crisis and resulting deep

⁹⁶ 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.

⁹⁷ Austin Doehler, "Great Power Competition Is Too Narrow a Frame," *Defense One*, December 6, 2020.

⁹⁸ 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.

⁹⁹ For an English-language transcript of the speech, see "Putin's Prepared Remarks at 43rd Munich Conference on Security Policy," Washington Post, accessed January 25, 2022, at <https://www.washingtonpost.com/wp-dyn/content/article/2007/02/12/AR2007021200555.html>. See also Ted Galen Carpenter, "Did Putin's 2007 Munich Speech Predict the Ukraine Crisis?" *National Interest*, January 24, 2022; Rakesh Sood, "Putin is Forcing a Third Reordering of Europe," *Observer Research Foundation*, February 9, 2022; Daniel Fried and Kurt Volker, "The Speech In Which Putin Told Us Who He Was, In His 2007 Munich Address, the Russian Leader Firmly Rejected the Post-Cold War System He's Still Trying to Torpedo," *Politico*, February 18, 2022; David Ignatius, "Putin Warned the West 15 Years Ago. Now, in Ukraine, He's Poised to Wage War," *Washington Post*, February 20, 2022.

¹⁰⁰ See, for example, Robert Kagan, "Believe It or Not, Trump's Following a Familiar Script on Russia," *Washington Post*, August 7, 2018. For a response, see Condoleezza Rice, "Russia Invaded Georgia 10 Years Ago. Don't Say America Didn't Respond," *Washington Post*, August 8, 2018. See also 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.

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.¹⁰¹ 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 2006-2008.¹⁰²

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 described the era of renewed great power competition as a new Cold War (or Cold War II or 2.0). That term may have some utility in referring specifically to U.S.-Russian or U.S.-Chinese relations, because the era of renewed great power competition features competition and tension with Russia and China. Considered more broadly, however, the Cold War was a bipolar situation with the United States and Russia, while the era of renewed great power competition is a situation that also includes China as a major competing power. 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 Cold War as it has been since 9/11.

Other observers, viewing the renewal of great power competition, have drawn comparisons to the multipolar situation that existed in the 19th 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

¹⁰¹ See, for example, Howard W. French, "China's Dangerous Game," *Atlantic*, October 13, 2014.

¹⁰² 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.

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 have also used the term Cold War (or New Cold War, or Cold War II or 2.0). 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),¹⁰³ a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.¹⁰⁴ 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.¹⁰⁵ For additional discussion of Congress's response to the shift from the Cold War to the post-Cold War era, see **Appendix F**.

¹⁰³ See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

¹⁰⁴ Secretary of Defense Les Aspin's introduction to DOD's report on the 1993 BUR states the following:

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

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

¹⁰⁵ 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.

Citation from 2007

Robert Kagan, “End of Dreams, Return of History,” *Policy Review (Hoover Institution)*, July 17, 2007.

Citations from Late-2013 and 2014

Walter Russell Mead, “The End of History Ends,” *The American Interest*, December 2, 2013.

Paul David Miller, “Crimea Proves That Great Power Rivalry Never Left Us,” *Foreign Policy*, March 21, 2014.

Stephen M. Walt, “The Bad Old Days Are Back,” *Foreign Policy*, May 2, 2014.

Walter Russell Mead, “The Return of Geopolitics,” *Foreign Affairs*, May/June 2014.

Robert Kagan, “Superpowers Don’t Get to Retire,” *New Republic*, May 26, 2014.

James Kitfield, “The New Great Power Triangle Tilt: China, Russia Vs. U.S.,” *Breaking Defense*, June 19, 2014.

Lilia Shevtsova, “Putin Ends the Interregnum,” *The American Interest*, August 28, 2014.

David E. Sanger, “Commitments on Three Fronts Test Obama’s Foreign Policy,” *New York Times*, September 3, 2014.

Steven Erlanger, “NATO’s Hopes for Russia Have Turned to Dismay,” *New York Times*, September 12, 2014.

Richard N. Haass, “The Era of Disorder,” *Project Syndicate*, October 27, 2014.

Citations from January through June 2015

Bruce Jones, “What Strategic Environment Does the Transatlantic Community Confront?” German Marshall Fund of the United States, Policy Brief, January 15, 2015, 5 pp.

Chester A Crocker, “The Strategic Dilemma of a World Adrift,” *Survival*, February-March 2015: 7-30.

Robert Kagan, “The United States Must Resist A Return to Spheres of Interest in the International System,” Brookings Institution, February 19, 2015.

Richard Fontaine, “Salvaging Global Order,” *The National Interest*, March 10, 2015.

Barry Pavel and Peter Engelke with Alex Ward, *Dynamic Stability, US Strategy for a World in Transition*, Washington, Atlantic Council, April 2015, 57 pp.

Stewart Patrick and Isabella Bennett, “Geopolitics Is Back—and Global Governance Is Out,” *The National Interest*, May 12, 2015.

“Rise of the Regional Hegemons,” *Wall Street Journal*, May 25, 2015.

Frank G. Hoffman and Ryan Neuhard, “Is the World Getting Safer—or Not?” *Foreign Policy Research Institute*, June 2015.

Citations from July through December 2015

James Kitfield, “Requiem For The Obama Doctrine,” *Breaking Defense*, July 6, 2015.

Mathew Burrows and Robert A. Manning, “America’s Worst Nightmare: Russia and China Are Getting Closer,” *National Interest*, August 24, 2015.

Robert Farley, “Yes, America’s Military Supremacy Is Fading (And We Should Not Panic),” *National Interest*, September 21, 2015.

John McLaughlin, “The Geopolitical Rules You Didn’t Know About Are Under Siege,” *Ozy*, November 10, 2015.

Citations from January through June 2016

John E. McLaughlin, “US Strategy and Strategic Culture from 2017,” *Global Brief*, February 19, 2016.

H.R. McMaster, “Probing for Weakness,” *Wall Street Journal*, March 23, 2016.

Zbigniew Brzezinski, “Toward a Global Realignment,” *The American Interest*, April 17, 2016.

Michael J. Boyle, “The Coming Illiberal Order,” *Survival*, Vol. 58, April-May 2016: 35-66.

Kurt Campbell et al., *Extending American Power*, Center for a New American Security, May 2016, 18 pp.

Michael Mandelbaum, “America in a New World,” *The American Interest*, May 23, 2016.

Citations from July through December 2016

Michael Lind, “Can America Share Its Superpower Status?” *National Interest*, August 21, 2016.

Bret Stephens, “The New Dictators’ Club,” *Wall Street Journal*, August 22, 2016.

Gregory R. Copley, “The Era of Strategic Containment is Over,” *Defense & Foreign Affairs*, September 7, 2016.

Ulrich Speck, “The Crisis of Liberal Order,” *American Interest*, September 12, 2016.

Aaron Kliegman, “Robert D. Kaplan: Think Tragically to Avoid Tragedy,” *Washington Free Beacon*, September 16, 2016.

Lauren Villagran, “Former Defense Secretary Describes ‘New World Order,’” *Stars and Stripes*, September 14, 2016.

George F. Will, “Vladimir Putin Is Bringing Back the 1930s,” *Washington Post*, October 7, 2016.

Philip Stephens, “How the West Has Lost the World,” *Financial Times*, October 12, 2016.

John Sawers, “We Are Returning to a World of Great-Power Rivalry,” *Financial Times*, October 19, 2016.

Patrick Wintour, Luke Harding, and Julian Borger, “Cold War 2.0: How Russia and the West Reheated a Historic Struggle,” *The Guardian*, October 24, 2016.

John Schaus, “U.S. Leadership in an Era of Great Power Competition,” *Defense 360 (Center for Strategic & International Studies)*, December 2016.

Charles Krauthammer, “After a Mere 25 Years, the Triumph of the West Is Over,” *Washington Post*, December 1, 2016.

Julia Ioffe, “The End of the End of the Cold War,” *Foreign Policy*, December 21, 2016.

Citations from January through June 2017

Richard Haass, “World Order 2.0,” *Foreign Affairs*, January/February 2017: 2-9.

Joseph S. Nye Jr., “Will the Liberal Order Survive,” *Foreign Affairs*, January/February 2017: 10-16.

Molly K. McKew, “Putin’s Real Long Game,” *Politico Magazine*, January 1, 2017.

Robert J. Samuelson, “The New World Order, 2017,” *Washington Post*, January 1, 2017.

Martin Wolf, “Martin Wolf: The Long and Painful Journey to World Disorder,” *Financial Times*, January 5, 2017.

Kimberly Dozier, “U.S. Spies See a World of Trumps Ahead,” *Daily Beast*, January 9, 2017.

Kenneth Roth, “We Are on the Verge of Darkness,” *Foreign Policy*, January 12, 2017.

Thomas Donnelly, “Now for the Post-Post-Cold War Era,” *Weekly Standard*, January 23, 2017.

Evan Osnos, David Remnick, and Joshua Yaffa, “Trump, Putin, and the New Cold War,” *New Yorker*, March 6, 2017.

Paul Berman, “The Counterrevolution,” *Tablet*, March 7, 2017.

James Kirchick, “The Road to a Free Europe Goes Through Moscow,” *Politico Magazine*, March 17, 2017.

Andrew A. Michta, “The Deconstruction of the West,” *American Interest*, April 12, 2017.

Michael Mazarr and Hal Brands, “Navigating Great Power Rivalry in the 21st Century,” *War on the Rocks*, April 5, 2017.

Robert D. Kaplan, “The Return of Marco Polo’s World and the U.S. Military Response,” *Center for a New American Security*, undated but posted ca. May 12, 2017.

Hal Brands and Eric Edelman, “America and the Geopolitics of Upheaval,” *National Interest*, June 21, 2017.

Christopher Walker, “A New Era of Competition,” *International Reports (Konrad Adenauer Foundation)*, No. 2, 2017: 16-25.

Citations from July 2017 through December 2017

Hal Brands, Charles Edel, “The Gathering Storm vs. the Crisis of Confidence,” *Foreign Policy*, July 14, 2017.

Leon Hadar, “Why Washington’s Global Strategy Failed,” *National Interest*, July 30, 2017.

Paul Mason, “Democracy Is Dying—and It’s Startling How Few People Are Worried,” *The Guardian*, July 31, 2017.

Harvey M. Sapolsky, “America’s Endless Search for a Strategy,” *National Interest*, August 4, 2017.

Philip Zelikow, “Is the World Slouching Toward a Grave Systemic Crisis?” *Atlantic*, August 11, 2017.

Robert D. Kaplan, “America’s Darwinian Nationalism,” *National Interest*, August 13, 2017.

He Yafei, “The ‘American Century’ Has Come to Its End,” *Global Times*, August 20, 2017.

He Yafei, “New World Order is the Inevitable Trend,” *China Daily*, August 21, 2017.

Michael Lind, “There’s No Such Thing as ‘The’ Liberal World Order,” *National Interest*, September 5, 2017.

Thorsten Benner, “An Era of Authoritarian Influence? How Democracies Should Respond,” *Foreign Affairs*, September 15, 2017.

Hal Brands, “America’s New World Order Is Officially Dead,” *Bloomberg*, September 27, 2017.

Andrew A. Michta, “The Crisis of Elite Authority in the West,” *American Interest*, September 27, 2017.

Erica Frantz and Andrea Kendall-Taylor, “The Evolution of Autocracy: Why Authoritarianism Is Becoming More Formidable,” *Survival*, October-November 2017: 57-68.

Larry Diamond, “Is There a Crisis of Liberal democracy?” *American Interest*, October 13, 2017.

Colin Dueck and Ming Wan, “An Era of Great-Power Leaders,” *National Interest*, November 7, 2017.

Brendan Nicholson, “The Strategist Six: Thomas Mahnken,” *Strategist (ASPI)*, November 7, 2017. (Interview with Thomas Mahnken)

Citations from January 2018 through December 2020

“The Growing Danger of Great-Power Conflict,” *Economist*, January 25, 2018.

Alan Dupont, “New World Order: Momentum Is Shifting in Favour of Dictators,” *Australian*, February 10, 2018.

Gabriel Glickman, “Back to the Future: The Potential of Great-Power Conflict,” *National Interest*, February 12, 2018.

Eliot A. Cohen, “Witnessing the Collapse of the Global Elite,” *Atlantic*, February 19, 2018.

Hal Brands, “The ‘American Century’ Is Over, and It Died in Syria,” *Bloomberg*, March 8, 2018.

Richard N. Haass, “Liberal World Order, RIP,” *Strategist (ASPI)*, March 24, 2018.

Michael Lind, “America vs. Russia and China: Welcome to Cold War II,” *National Interest*, April 15, 2018.

Nick Danforth, “What’s So Disordered About Your World Order?” *War on the Rocks*, June 20, 2018.

Thomas P. Ehrhard, “Treating the Pathologies of Victory: Hardening the Nation for Strategic Competition,” Heritage Foundation, October 30, 2019.

Fred Kaplan, “The Decade Big Power Politics Returned,” *Slate*, December 16, 2019.

Elbridge A. Colby and A. Wess Mitchell, “The Age of Great-Power Competition,” *Foreign Affairs*, January/February 2020.

Lionel Beehner and Liam Collins, *Dangerous Myths, How the Crisis in Ukraine Explains Future Great Power Conflict*, Modern War Institute at West Point, August 18, 2020, 69 pp.

Citations from January 2021

Ian Ona Johnson, “How an International Order Died: Lessons from the Interwar Era,” *War on the Rocks*, August 5, 2021.

Mark N. Katz, “Great Power Clashes Will Reshape America, The End of the U.S.-Dominated Unipolar World Order Is Something that Has Been Predicted—Even Advocated—for Many Years,” *National Interest*, August 7, 2021.

Thomas Wright, “Putin Is Taking a Huge Gamble, His Decision to Assemble an Invasion Force Along Russia’s Border with Ukraine Suggests that We Are About to Enter a Dangerous New Phase of International Relations,” *Atlantic*, December 10, 2021.

Tom McTague, “Vladimir Putin Is a Product of Modernity, Why the Tension in Ukraine May Feel Deceptively Regressive,” *Atlantic*, February 9, 2022.

Rakesh Sood, “Putin is Forcing a Third Reordering of Europe,” Observer Research Foundation, February 9, 2022.

Michael Beckley, “Enemies of My Enemy, How Fear of China Is Forging a New World Order,” *Foreign Affairs*, March/April 2022 (posted online February 14, 2022).

David Brooks, “The Dark Century,” *New York Times*, February 17, 2022.

Max Fisher, “Putin’s Baseless Claims of Genocide Hint at More Than War, The Invocations Serve to Justify Not Just Moscow’s Actions in Ukraine, but Also Its Wider Quest for a New Imperial Identity Rooted in Russian Ethnicity,” *New York Times*, February 19, 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.

Anton Troianovski, “In Ukraine Crisis, the Looming Threat of a New Cold War,” *New York Times*, February 19, 2022.

Robin Wright, “Does the U.S.-Russia Crisis Over Ukraine Prove That the Cold War Never Ended? Putin’s Aggression in Europe Has Triggered a New Debate about Whether American Presidents and Policymakers Have Misunderstood Decades of History,” *New Yorker*, February 19, 2022.

David Ignatius, “Putin Warned the West 15 Years Ago. Now, in Ukraine, He’s Poised to Wage War,” *Washington Post*, February 20, 2022.

Bryan Bender and Paul McLeary, “‘Cold War, Part 2’: How Putin Is Dragging America Back to the Bad Old Days,” *Politico Pro*, February 21, 2022.

Tom Nichols, “Putin Chooses a Forever War, His Partition of Ukraine Is An Attack on Global Peace,” *Atlantic*, February 21, 2022.

Appendix C. Articles on Grand Strategy and Geopolitics

This appendix presents citations to articles discussing grand strategy and geopolitics for the United States in a context of renewed great power competition.

Citations from 2012 through 2014

- William C. Martel, “Why America Needs a Grand Strategy,” *Diplomat*, June 18, 2012.
- Aaron David Miller, “The Naiveté of Distance,” *Foreign Policy*, March 31, 2014.
- Robert Kaplan, “The Gift of American Power,” *Real Clear World*, May 15, 2014.
- William C. Martel, “America’s Grand Strategy Disaster,” *The National Interest*, June 9, 2014.
- Adam Garfinkle, “The Silent Death of American Grand Strategy,” *American Review*, 2014.
- Christopher A. Ford, “Ending the Strategic Holiday: U.S. Grand Strategy and a ‘Rising’ China,” *Asia Policy*, Number 18 (July 2014): 181-189.
- William Ruger, “A Realist’s Guide to Grand Strategy,” *The American Conservative*, August 26, 2014.
- Barry R. Posen, *Restraint: A New Foundation for U.S. Grand Strategy*, Cornell University Press, 2014, 256 pp. (Cornell Studies in Security Affairs).
- R. D. Hooker, *The Grand Strategy of the United States*, Washington, National Defense University Press, October 2014, 35 pp. (INSS Strategic Monograph, Institute for National Strategic Studies).
- F.G. Hoffman, “Grand Strategy: The Fundamental Considerations,” *Orbis*, Volume 58, Issue 4 (Fall 2014), 2014: 472–485.
- Michael Page, “Is ‘Restraint’ a Realistic Grand Strategy?” *Cicero Magazine*, October 21, 2014.
- Bryan McGrath, “Unconstrained Grand Strategy,” *War on the Rocks*, October 28, 2014.
- Joseph Sarkisian, “American Grand Strategy or Grand Illusion?” *Cicero*, December 1, 2014.

Citations from January through June 2015

- Chris Miller, “State of Disunion: America’s Lack of Strategy is its Own Greatest Threat,” *Cicero*, January 27, 2015.
- Jerry Hendrix, *Avoiding Trivia: A Strategy for Sustainment and Fiscal Responsibility*, Center for a New American Security, February 2015, 36 pp.
- Jim Mattis, “A New American Grand Strategy,” Hoover Institution, February 26, 2015.
- Stewart Patrick and Isabella Bennett, “Geopolitics Is Back—and Global Governance Is Out,” *The National Interest*, May 12, 2015.
- Alfred McCoy, “The Geopolitics of American Global Decline,” *Real Clear World*, June 8, 2015.
- Steve LeVine, “How China Is Building the Biggest Commercial-Military Empire in History,” *Defense One*, June 9, 2015.
- Thomas Vien, “The Grand Design of China’s New Trade Routes,” *Stratfor*, June 24, 2015.

Citations from July through December 2015

John R. Deni, “General Dunford Is Right About Russia, But Not Because of Their Nukes,” *War on the Rocks*, July 13, 2015.

Frederick W. Kagan and Kimberly Kagan, “Putin Ushers in a New Era of Global Geopolitics,” *AEI Warning Intelligence Update*, September 27, 2015.

Gideon Rachman, “A Global Test of American Power,” *Financial Times*, October 12, 2015.

Joschka Fischer, “The Return of Geopolitics to Europe,” *Project Syndicate*, November 2, 2015.

Marian Leighton, “Go South, Young Russian,” *Weekly Standard*, December 28, 2015.

Citations from January through June 2016

John E. McLaughlin, “US Strategy and Strategic Culture from 2017,” *Global Brief*, February 19, 2016.

Michael Auslin, “Asia’s Mediterranean: Strategy, Geopolitics, and Risk in the Seas of the Indo-Pacific,” *War on the Rocks*, February 29, 2016.

Eliot Cohen, Eric S. Edelman, and Brian Hook, “Presidential Priority: Restore American Leadership,” *World Affairs*, Spring 2016.

H.R. McMaster, “Probing for Weakness,” *Wall Street Journal*, March 23, 2016.

Parag Khanna, “The Brilliance of China’s Grand Strategy: Don’t ‘Own’ Land, Just ‘Use’ It,” *The National Interest*, April 11, 2016.

Seth Cropsey, “New American Grand Strategy,” *Real Clear Defense*, April 13, 2016.

Zbigniew Brzezinski, “Toward a Global Realignment,” *The American Interest*, April 17, 2016.

Michael Mandelbaum, “America in a New World,” *The American Interest*, May 23, 2016.

Robert D. Blackwell, “China’s Strategy for Asia: Maximize Power, Replace America,” *National Interest*, May 26, 2016.

John J. Mearsheimer and Stephen M. Walt, “The Case for Offshore Balancing,” *Foreign Affairs*, June 13, 2016.

Stephen Sestanovich, “Do Americans Want a New ‘Grand Strategy’ or Less Overseas Engagement?” *Wall Street Journal*, June 16, 2016.

Denny Roy, “A More-Selective US Grand Strategy,” *PacNet #53 (Pacific Forum CSIS)*, June 29, 2016.

Citations from July through September 2016

Frank G. Hoffman, “Retreating Ashore: The Flaws of Offshore Balancing,” *Foreign Policy Research Institute*, July 5, 2017.

James Holmes, “Why Offshore Balancing Won’t Work,” *National Interest*, July 18, 2016.

Schuyler Foerster and Ray Raymond, “Balanced Internationalism: 5 Core Principles to Guide U.S. National Security Policy,” *National Interest*, July 31, 2016.

Robert D. Kaplan, “Is Primacy Overrated?” *National Interest*, August 7, 2016.

Barry R. Posen, “The High Costs and Limited Benefits of America’s Alliances,” *National Interest*, August 7, 2016.

Christopher Preble, Emma Ashford, and Travis Evans, “Let’s Talk about America’s Strategic Choices,” *War on the Rocks*, August 8, 2016.

Ted Galen Carpenter and Eric Gomez, “East Asia and a Strategy of Restraint,” *War on the Rocks*, August 10, 2016.

Michael Lind, “Can America Share Its Superpower Status?” *National Interest*, August 21, 2016.

Doug Bandow, “Why Washington Is Addicted to Perpetual War,” *National Interest*, August 28, 2016.

Andrew J. Bacevich, “Ending Endless War,” *Foreign Affairs*, September/October 2016.

Frank Hoffman, “The Consistent Incoherence of Grand Strategy,” *War on the Rocks*, September 1, 2016.

Gregory R. Copley, “The Era of Strategic Containment is Over,” *Defense & Foreign Affairs*, September 7, 2016.

Barry F. Lowenkron and Mitchell B. Reiss, “Pragmatic Primacy: How America Can Move Forward in a Changing World,” *National Interest*, September 11, 2016.

William Ruger, “The Myth of American Retreat,” *American Conservative*, September 13, 2016.

Christopher Preble, “New Rules for U.S. Military Intervention,” *War on the Rocks*, September 20, 2016.

Anders Fogh Rasmussen, “Free Nations of the World, Unite!” *National Review*, September 22, 2016.

Citations from October through December 2016

Michael J. Mazarr, “The World Has Passed the Old Grand Strategies By,” *War on the Rocks*, October 5, 2016.

Max Fisher and Amanda Taub, “Syria Provokes an American Anxiety: Is U.S. Power Really So Special?” *New York Times*, October 8, 2016.

Uri Friedman, “Donald Trump and the Coming Test of International Order,” *Atlantic*, November 9, 2016.

Robert Kagan, “Trump Marks the End of America As World’s ‘Indispensable Nation,’” *Financial Times*, November 19, 2016.

Hugh White, “What’s So Great About American World Leadership?” *Atlantic*, November 23, 2016.

Peter Feaver, “A Grand Strategy Challenge Awaits Trump,” *Foreign Policy*, November 29, 2016.

Hal Brands and Peter Feaver, “Stress-Testing American Grand Strategy,” *Survival*, vol. 58, 2016, Issue 6: 93-120 (published online November 21, 2016) (see also Hal Brands and Peter Feaver, “Stress-Testing the Foundations of American Grand Strategy,” *War on the Rocks*, December 13, 2016).

Christopher A. Preble, “Should the United States Wage War for Friends?” *National Interest*, December 15, 2016.

Citations from January through June 2017

- Andrew F. Krepinevich, *Preserving the Balance, A U.S. Eurasia Defense Strategy*, Center for Strategic and Budgetary Assessments, 2017, 117 pp.
- Hal Brands et al., *Critical Assumptions and American Grand Strategy*, Center for Strategic and Budgetary Assessments, 2017, 57 pp.
- Kori Schake, “Will Washington Abandon the Order?” *Foreign Affairs*, January/February 2017: 41-46.
- Robert D. Kaplan, “Why Trump Can’t Disengage America From the World,” *New York Times*, January 6, 2017.
- Frank Hoffman, “The Case for Strategic Discipline During the Next Presidency,” *War on the Rocks*, January 10, 2017.
- Robert “Jake” Bebbler and Richard J. Harknett, “Thoughts on Grand Strategy,” *The Navalist*, January 12, 2017.
- Colin Kahl and Hal Brands, “Trump’s Grand Strategic Train Wreck,” *Foreign Policy*, January 31, 2017.
- Robert Kaplan, “America Is a Maritime Nation,” *Real Clear Defense*, January 24, 2017.
- Robert Kagan, “Backing Into World War III,” *Foreign Policy*, February 6, 2017.
- David H. Petraeus, “America Must Stand Tall,” *Politico Magazine*, February 6, 2017.
- Randall L. Schweller, “A Third-Image Explanation for Why Trump Now: A Response to Robert Jervis’s ‘President Trump and IR Theory,’” *ISSF Policy Series*, February 8, 2017.
- Stephen M. Walt, “The Donald versus ‘The Blob,’” *ISSF Policy Series*, February 14, 2017.
- Ash Jain et al., *Strategy of “Constraint:” Countering Russia’s Challenge to the Democratic Order*, Atlantic Council, March 2017, 23 pp.
- Robert C. Rubel, “Exporting Security: China, the United States, and the Innovator’s Dilemma,” *Naval War College Review*, Spring 2017, pp. 11-28.
- Paul Miller, “Reassessing Obama’s Legacy of Restraint,” *War on the Rocks*, March 6, 2017.
- Mercy A. Kuo, “Statecraft and Grand Strategy: Assessing the US and China,” *Diplomat*, March 31, 2017.
- Patrick Cronin, “Maritime Power and U.S. Strategic Influence in Asia,” *War on the Rocks*, April 11, 2017.
- Hal Brands, “America’s Allies Are in Decline. Here’s How the US Should Adjust,” *Defense One*, May 5, 2017.
- Robert D. Kaplan, “The Return of Marco Polo’s World and the U.S. Military Response,” *Center for a New American Security*, undated but posted ca. May 12, 2017.
- Jane Perlez and Yufan Huang, “Behind China’s \$1 Trillion Plan to Shake Up the Economic Order,” *New York Times*, May 13, 2017.
- Jane Perlez and Keith Bradsher, “Xi Jinping Positions China at Center of New Economic Order,” *New York Times*, May 14, 2017.

Citations from July 2017 through December 2017

Prince Michael of Liechtenstein, “Opinion: Control of Trade Routes Is Decisive,” Geopolitical Intelligence Services, July 21, 2017.

Andrew Beddow, “America Cannot Become a Global Rome,” *National Interest*, July 25, 2017.

Enea Gjoza, “America Historically Had a Restrained Foreign Policy: It’s Time to Return to It,” *National Interest*, July 25, 2017.

Leon Hadar, “Why Washington’s Global Strategy Failed,” *National Interest*, July 30, 2017.

Harvey M. Sapolsky, “America’s Endless Search for a Strategy,” *National Interest*, August 4, 2017.

David Haas and Jack McKechnie, “U.S. Peacetime Strategy with China,” EastWest Institute, August 11, 2017.

Robert D. Kaplan, “America’s Darwinian Nationalism,” *National Interest*, August 13, 2017.

Andrew A. Michta, “The West Needs a Strategy,” *American Interest*, August 25, 2017.

Nina Silove, “Beyond the Buzzword: The Three Meanings of ‘Grand Strategy,’” *Security Studies*, Vol. 27, No. 1, 2018. (Published online August 28, 2017.)

Auston Long, Linda Robinson, and Seth G. Jones, “Managing Chaos in an Era of Great Power Competition,” *War on the Rocks*, September 5, 2017.

Daniel Kliman, “Wanted: A U.S. Strategic Response to China’s Belt and Road Initiative,” *National Interest*, September 7, 2017.

James Jay Carafano, *America Desperately Needs a New Grand Strategy for its Role in the World*, Heritage Foundation, September 11, 2017.

Thorsten Benner, “An Era of Authoritarian Influence? How Democracies Should Respond,” *Foreign Affairs*, September 15, 2017.

Dean Cheng, *Confronting the Eurasian Powers of Russia and China*, Heritage Foundation, September 28, 2017.

Matthew Kroenig and Miyeon Oh, *A Strategy for the Trans-Pacific Century: Final Report of the Atlantic Council’s Asia-Pacific Strategy Task Force*, Atlantic Council, October 2017, 58 pp. (Atlantic Council Strategy Paper No. 12)

Gal Luft, *Silk Road 2.0: US Strategy toward China’s Belt and Road Initiative*, Atlantic Council, October 2017, 59 pp. (Atlantic Council Strategy Paper No. 11)

Mercy A. Kuo, “US Leadership in Asia and the Future of Geopolitics, Insights from Jamie Fly,” *Diplomat*, October 11, 2017.

David Santoro, “Collective Security Is America’s Only Hope,” *National Interest*, October 15, 2017.

C. Raja Mohan, “The Confluence of Two Seas,” *Indian Express*, October 26, 2017.

Ionut Popescu, “Grand Strategy Is Overrated,” *Foreign Policy*, December 11, 2017.

Citations from January 2018 through June 2018

- Francis P. Sempa, “Needed: A National Security Strategy Rooted in Geopolitics,” *Real Clear Defense*, January 9, 2018.
- Benn Steil, “How to Win a Great-Power Competition,” *Foreign Affairs*, February 9, 2018.
- Alasdair Roberts, “Grand Strategy Isn’t Grand Enough,” *Foreign Policy*, February 20, 2018.
- Francis P. Sempa, “Mackinder’s Century,” *Real Clear Defense*, March 2, 2018.
- Jennifer Loy, “Mackinder and Mahan: The Chinese Geopolitics in South Asia,” *Real Clear Defense*, March 15, 2018.
- Ionut Popescu, “Trump Doesn’t Need a Grand Strategy,” *Foreign Affairs*, May 21, 2018.
- Thomas P. Cavanna, “What Does China’s Belt and Road Initiative Mean for US Grand Strategy?” *Diplomat*, June 5, 2018.

Citations from July 2018 through December 2019

- John Schuessler, “Making Grand Strategy Grand Again,” *National Interest*, July 25, 2018.
- Paul C. Avey, Jonathan N. Markowitz, Robert J. Reardon, “Disentangling Grand Strategy: International Relations Theory and U.S. Grand Strategy,” *Texas National Security Review*, November 2018.
- Andrew Erickson, “Make China Great Again: Xi’s Truly Grand Strategy,” *War on the Rocks*, October 30, 2019.

Citations from January 2020 through December 2020

- Jasen J. Castillo, “Don’t Leave Grand Strategy to the Generals,” *National Interest*, October 31, 2019.
- Elizabeth Cobbs and Kimberly C. Field, “Why Did the U.S. Kill Suleimani? The Attack Illustrates America’s Lack of a Clear Grand Strategy—and Why We Need One Immediately,” *New York Times*, January 7, 2020.
- Amy Zegart, “The Race for Big Ideas Is On, The United States Faces Genuinely New Global Challenges—But Tries to Understand Them Using Outmoded Theories from a Bygone Era,” *Atlantic*, January 13, 2020.
- John T. Kuehn, “Revisiting Grand Strategy,” *Journal of Political Risk*, May 2020.
- Daniel W. Drezner, Ronald R. Krebs, and Randall Schweller, “The End of Grand Strategy, America Must Think Small,” *Foreign Affairs*, May/June 2020.
- James Holmes, “Is U.S. Grand Strategy Dead Thanks to Donald Trump?” *National Interest*, May 16, 2020.
- Andrew Ehrhardt and Maeve Ryan, “Grand Strategy Is No Silver Bullet, But It Is Indispensable,” *War on the Rocks*, May 19, 2020.
- David H. McCormick, Charles E. Luftig, and James M. Cunningham, “Economic Might, National Security, and the Future of American Statecraft,” *Texas National Security Review*, Summer 2020.
- Anthony H. Cordesman, “Ending America’s Grand Strategic Failures,” Center for Strategic and International Studies (CSIS), June 22, 2020.

Ryan Dukeman, “Can Congressional Diplomacy Work for Grand Strategy?” LegBranch.org, June 25, 2020.

Adam Yang, “A US Vision Beyond Great Power Competition,” *East Asia Forum*, July 22, 2020.

Frank Hoffman, “Distilling the Essence of Strategy,” *War on the Rocks*, August 4, 2020.

Micah Zenko and Rebecca Lissner, “This Is What America Looks Like Without Grand Strategy,” *Foreign Policy*, August 18, 2020.

Rodger Baker, “China, the U.S., and the Geography of the 21st Century,” *Stratfor*, August 21, 2020.

Francis J. Gavin, “Blame It on the Blob? How to Evaluate American Grand Strategy,” *War on the Rocks*, August 21, 2020.

Zachary Tyson Brown, “The United States Needs a New Strategic Mindset,” *Foreign Policy*, September 22, 2020.

Stephen M. Walt, “Is the Blob Really Blameless? How Not to Evaluate American Grand Strategy,” *Foreign Policy*, September 22, 2020.

Ionut Popescu, “It’s Too Soon For America To Kill Its Grand Strategy,” *National Interest*, September 22, 2020.

Michael Shurkin, “Grand Strategy Is Total: French Gen. André Beaufre on War in the Nuclear Age,” *War on the Rocks*, October 8, 2020.

Robert D. Kaplan, “The Afterlife of Empire,” *National Interest*, October 16, 2020.

Luke Nicaastro, “To Fix U.S. Foreign Policy, Look to the Balance of Power,” *Real Clear Defense*, October 14, 2020.

George Beebe, “Balancing Great Power Politics in 2021 and Beyond,” *National Interest*, October 17, 2020.

Michael Lind, “Thanks to China’s Rise, the Age of Dealignment Is Here,” *National Interest*, October 17, 2020.

James A. Winnefeld, Michael J. Morell, and Graham Allison, “Why American Strategy Fails, Ending the Chronic Imbalance Between Ends and Means,” *Foreign Affairs*, October 28, 2020.

Bradley Bowman and Shane Praiswater, “Great Power Competition Comes Home to America,” *Defense One*, November 3, 2020.

Austin Doehler, “Great Power Competition Is Too Narrow a Frame,” *Defense One*, December 6, 2020.

Citations from January 2021 through June 2021

Mark F. Cancian, *Inflicting Surprise, Gaining Competitive Advantage in Great Power Conflicts*, Center for Strategic and International Studies (CSIS), January 2021, 112 pp.

Erica D. Borghard, “A Grand Strategy Based on Resilience,” *War on the Rocks*, January 4, 2021.

Francis P. Sempa, “Is China the 21st Century’s Great ‘Going Concern’? Halford Mackinder Is Famous for His ‘Heartland’ Theory, but Another of His Major Theoretical Constructs May Be More Relevant to China’s Rise,” *Diplomat*, January 5, 2021.

Kevin Bilms, “Avoid ‘Great-Power Competition’ in Future Security Strategies, Let’s Ditch ‘Great-Power Competition,’ Call the Framing Idea ‘Strategic Competition’—As It Is Referred to by the NDS—and Unpack the Implications of the Term,” *National Interest*, January 6, 2021.

Clementine Starling and Matthew R. Crouch, “America’s Next National Defense Strategy: Regaining the Advantage is the Name of the Game,” *National Interest*, February 3, 2021.

Daniel H. Nexon, “Against Great Power Competition, The U.S. Should Not Confuse Means for Ends,” *Foreign Affairs*, February 15, 2021.

Robert Farley, “Welcome to the All-Consuming Great Power Competition, The Rhetoric of Great Power Competition Threatens to Devour Every Other Aspect of U.S. Foreign Policy,” *Diplomat*, February 23, 2021.

C. Anthony Pfaff, “‘Great Power Competition’ Is a Dangerously Simple Frame,” *Defense One*, February 24, 2021.

Robert A. Manning and Peter A. Wilson, “Offshore Balancing Strategy Can Correct America’s Middle East Approach,” *National Interest*, February 26, 2021.

Zack Cooper and Hal Brands, “America Will Only Win When China’s Regime Fails, There Are Two Possible Outcomes of U.S.-China Competition—But Washington Should Prepare for the More Turbulent One,” *Foreign Policy*, March 11, 2021.

Mathew Burrows and Robert Manning, “Humility in American Grand Strategy,” *War on the Rocks*, March 17, 2021.

James Traub, “Biden’s ‘Foreign Policy for the Middle Class’ Is a Revolution, The New Administration Is Trying to Forge a New National Consensus on Grand Strategy That Doesn’t Privilege the Rich,” *Foreign Policy*, March 17, 2021.

Elbridge Colby, “Biden’s Global, Muscular Liberalism Is an Indefensible Foreign Policy in 2021,” *Washington Post*, March 21, 2021.

Hal Brands and Charles Edel, “A Grand Strategy of Democratic Solidarity,” *Washington Quarterly*, Spring 2021: 29-47. (Published online March 23, 2021.)

Daniel W. Drezner, “If there is going to be a grand strategy focused on China ... Do Not Turn America’s Greatest Strength into Its Greatest Weakness,” *Washington Post*, March 23, 2021.

Robert A. Manning, “The U.S. Doesn’t Need China’s Collapse to Win, A Misguided Theory of Great-Power Competition Will Only Lead to Grief,” *Foreign Policy*, March 24, 2021.

Leon Hadar, “Status Quo Joe: Why Biden’s Grand Strategy Is MIA, Unfortunately, Much of What Happens in the Foreign-Policy Arena under U.S. Presidents, Including Important Decisions, Amounts to Ad Hoc Responses to Outside Events at Home and Abroad,” *National Interest*, March 26, 2021.

Michael Beckley and Hal Brands, “America Needs to Rediscover Strategic MacGyverism, The United States Has Typically Relied on Strategic MacGyverism in Cases Where Novel Problems Spurred Fresh, High-Level Thinking While Creating Fierce Operational Urgency,” *National Interest*, March 27, 2021.

Emma Ashford, “Great-Power Competition Is a Recipe for Disaster, The Latest Poorly Defined Buzzword in Washington Is Leading Pundits and Policymakers Down a Dangerous Path,” *Foreign Policy*, April 1, 2021.

Daniel DePetris, “Don’t Divide the World Between Democracies and Autocracies,” *Defense One*, April 1, 2021.

Octavian Manea, “The West Needs to Redevelop the Tools and Mindset of Strategic Competition,” *Small Wars Journal*, April 5, 2021. (Interview with Dr. A. Wess Mitchell.)

Stephen M. Walt, “What Comes After the Forever Wars, An Era of U.S. Grand Strategy Is Now Ending. Here’s What Should Come Next,” *Foreign Policy*, April 28, 2021.

Citations from July 2021 through December 2021

James Stavridis, “Great Power Competition Requires Theater Deterrence,” *U.S. Naval Institute Proceedings*, July 2021.

Robert L. Wilkie, “America Needs a Grand Strategy,” Heritage Foundation, July 23, 2021.

Michael J. Mazarr, “Time for a New Approach to Defense Strategy,” *War on the Rocks*, July 29, 2021.

Joseph S. Nye, “America Needs a New Great-Power Strategy,” *Strategist (ASPI)*, August 4, 2021.

Anna Simons, “Finessing Primacy—Some Military Considerations Before Subversion Does Us In, Part One,” *Small Wars Journal*, August 11, 2021; and Anna Simons, “Finessing Primacy—Some Military Considerations Before Subversion Does Us In, Part Two,” *Small Wars Journal*, August 11, 2021.

A. Wess Mitchell, “A Strategy for Avoiding Two-Front War,” *National Interest*, August 22, 2021.

Heritage Foundation, “Freedom’s Global Force Posture: A Grand Strategy For The 21st Century,” *19FortyFive*, September 2, 2021.

Wyatt Olson, “‘Strategic Distraction’: 9/11 Took America’s Eye off Asia as China Hit Its Military Stride,” *Stars and Stripes*, September 9, 2021.

James Jay Carafano, “Getting a Game Plan for the Guardian of America’s Global Interests, If the United States Can’t Prevent China from Dominating Asia, Then the United States Loses,” *National Interest*, September 12, 2021.

Robert L. Wilkie, *America Needs a Grand Strategy*, Heritage Foundation, November 3, 2021, 8 pp.

David T. Pyne, “To Counter Russia and China, Make ‘Spheres of Influence’ Great Again,” *National Interest*, October 11, 2021.

Walter Russell Mead, “The Campaign to Distract Biden From Asia, China and Russia Form an Entente to Hobble America, with a Little Help from Iran,” *Wall Street Journal*, November 22, 2021.

Hal Brands, “Containment Can Work Against China, Too, There Are Important Differences between Xi Jinping’s China and the Soviet Union, but the Cold War Still Offers Clear Strategic Guidance for the U.S.,” *Wall Street Journal*, December 3, 2021.

Daniel DePetris, “Hedging US Strategy Against an Emerging China-Russia Partnership,” *Defense News*, December 22, 2021.

Arnel P. David, Sean A. Acosta, and Nicholas Krohley, “Getting Competition Wrong: The US Military’s Looming Failure,” *Modern War Institute*, December 3, 2021.

Citations from January 2022

Daniel Blumenthal, “Beijing’s Grand Strategy: A Sino-centric Order,” Jewish Policy Center, Winter 2021 (posted online January 4, 2022).

Andreas Kluth, “The West Is Right to Deny Russia a ‘Sphere of Influence,’ NATO, the U.S. and the EU Can’t Just Hand Eastern Europe to Vladimir Putin as His Fief. It’s Not Theirs to Give,” *Bloomberg*, January 13, 2022.

James P. Farwell and Michael Miklaucic, “America Needs a New Grand Strategy to Navigate the 21st Century,” *Defense News*, January 25, 2022.

Joshua Rovner, “How Long Can Biden Muddle Through on China?” *War on the Rocks*, January 26, 2022.

Stephen M. Walt, “America Has an Unhealthy Obsession With Credibility, There’s No Reason U.S. Grand Strategy Should Be So Concerned With Its Own Reputation,” *Foreign Policy*, January 29, 2022.

Stephen S Roach, “China’s Triangulation Gambit,” *Project Syndicate*, February 10, 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.

Tucker Hamilton, “Comparing Russian, Chinese, and U.S. Overstretch,” *American Security Project*, February 14, 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.

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.

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.

Michael Hirsh, “What Biden Can Learn From Nixon About China, Fifty Years Later, Washington May Be Reversing a Diplomatic Masterstroke by Driving Beijing and Moscow Together,” *Foreign Policy*, February 18, 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.

Farah Stockman, “This Is the Russia-China Friendship That Nixon Feared,” *New York Times*, February 20, 2022.

Edward Wong, “Bond Between China and Russia Alarms U.S. and Europe Amid Ukraine Crisis,” *New York Times*, February 20, 2022.

Raphael S. Cohen, “The False Choice Between China and Russia,” *The Hill*, February 21, 2022.

Robert Kagan, “What We Can Expect After Putin’s Conquest of Ukraine,” *Washington Post*, February 21, 2022.

Appendix D. Readings on Supply Chain Security

This appendix presents citations for further reading on the issue of supply chain security.

Executive Branch Documents and Documents Produced for the Executive Branch

Jon Boyens et al., *Supply Chain Risk Management Practices for Federal Information Systems and Organizations*, National Institute of Standards and Technology, NIST Special Publication 800-161, April 2015, 282 pp.

Defense Science Board, *[Report of] Task on Cyber Supply Chain*, February 2017, 69 pp.

National Defense Industrial Association, *Implementing Cybersecurity in DoD Supply Chains*, White Paper, July 2018, 17 pp.

Chris Nissen et al., *Deliver Uncompromised, A Strategy for Supply Chain Security and Resilience in Response to the Changing Character of War*, MITRE Corporation, August 2018, 55 pp.

Department of Defense, Inspector General, *Air Force Space Command Supply Chain Risk Management of Strategic Capabilities*, DODIG-2018-143, August 13, 2018, 36 pp.

Department of Defense, *Assessing and Strengthening the Manufacturing and Defense Industrial Base and Supply Chain Resiliency of the United States*, September 2018, 140 pp.

Defense Logistics Agency, *Supply Chain Security Strategy, Strengthening Operational Resiliency*, Appendix 1 to DLA's 2018-2026 Strategic Plan, undated (although the main part of DLA's strategic plan, as amended, is dated April 2019), 9 pp.

Memorandum from Michael D. Griffin, Under Secretary of Defense, Research and Engineering, for Chairman, Defense Science Board, Subject: Terms of Reference—Defense Science Board Task Force on 21st Century Industrial Base for National Defense, October 30, 2019.

Congressional Report

House Armed Services Committee, *Report of the Defense Critical Supply Chain Task Force*, July 22, 2021, 23 pp.

GAO Reports

GAO has issued several reports over the years addressing supply chain issues, including supply chain security. Examples include the following:

Government Accountability Office, *Defense Supplier Base[:] Challenges and Policy Considerations Regarding Offshoring and Foreign Investment Risks*, GAO-19-516, September 2019, 41 pp.

Government Accountability Office, *Nuclear Supply Chain: NNSA Should Notify Congress of Its Recommendations to Improve the Enhanced Procurement Authority*, GAO-19-606R, August 8, 2019, 11 pp.

Government Accountability Office, *Nuclear Supply Chain: DOE Has Not Used Its Enhanced Procurement Authority but Is Assessing Potential Use*, GAO-18-572R, August 2, 2018, 8 pp.

Government Accountability Office, *Information Security[:]* *Supply Chain Risks Affecting Federal Agencies*, Testimony before the Subcommittees on Counterterrorism and Intelligence, and Oversight and Management Efficiency, Committee on Homeland Security, House of Representatives, Statement of Gregory C. Wilshusen Director, Information Security Issues, GAO-18-667T, July 12, 2018, 12 pp.

Government Accountability Office, *Nuclear Supply Chain[:]* *DOE Should Assess Circumstances for Using Enhanced Procurement Authority to Manage Risk*, GAO-16-710, August 2016, 18 pp.

Government Accountability Office, *Rare Earth Materials[:]* *Developing a Comprehensive Approach Could Help DOD Better Manage National Security Risks in the Supply Chain*, GAO-16-161, February 2016, 34 pp.

Government Accountability Office, *Telecommunications Networks[:]* *Addressing Potential Security Risks of Foreign-Manufactured Equipment*, Testimony Before the Subcommittee on Communications and Technology, Committee on Energy and Commerce, House of Representatives, Statement of Mark L. Goldstein, Director Physical Infrastructure Issues, May 21, 2013, 49 pp.

Government Accountability Office, *IT Supply Chain[:]* *Additional Efforts Needed by National Security-Related Agencies to Address Risks*, GAO-12-579T, March 27, 2012 (Testimony Before the Subcommittee on Oversight and Investigations, Committee on Energy and Commerce, House of Representatives, Statement of Gregory C. Wilshusen, Director Information Security Issues), 10 pp.

Government Accountability Office, *IT Supply Chain[:]* *National Security-Related Agencies Need to Better Address Risks*, GAO-12-361, March 2012, 40 pp.

CRS Reports

Some examples of CRS reports discussing aspects of the issue include the following:

CRS In Focus IF10920, *Cyber Supply Chain Risk Management: An Introduction*, by Chris Jaikaran.

CRS In Focus IF11226, *Defense Primer: Acquiring Specialty Metals and Sensitive Materials*, by Heidi M. Peters.

CRS In Focus IF11259, *Trade Dispute with China and Rare Earth Elements*, by Wayne M. Morrison.

CRS Report R41347, *Rare Earth Elements: The Global Supply Chain*, by Marc Humphries.

CRS Report R43864, *China's Mineral Industry and U.S. Access to Strategic and Critical Minerals: Issues for Congress*, by Marc Humphries.

CRS Report R45810, *Critical Minerals and U.S. Public Policy*, by Marc Humphries.

CRS Report R44544, *U.S. Semiconductor Manufacturing: Industry Trends, Global Competition, Federal Policy*, by Michaela D. Platzer and John F. Sargent Jr. (see the section entitled “National Security Concerns”).

Press Reports and Other Readings

Michael Peck, “The U.S. Military’s Greatest Weakness? China ‘Builds’ a Huge Chunk of It,” *National Interest*, May 26, 2018.

- Robert Metzger, “Federal Supply-Chain Threats Quietly Growing,” *Federal Times*, August 13, 2018.
- Peter Navarro, “America’s Military-Industrial Base Is at Risk,” *New York Times*, October 4, 2018.
- Carla Babb and Hong Xie, “US Military Still Buying Chinese-Made Drones Despite Spying Concerns,” *VOA News*, September 17, 2019.
- Carla Babb, “US Military Still Buying Chinese-Made Drones Despite Spying Concerns,” *VOA News*, September 17, 2019.
- Peter Spiegel and Andrew Edgecliffe-Johnson, “US Navy Secretary Warns of ‘Fragile’ Supply China,” *Financial Times*, November 5, 2019.
- Nicole Hong, “A Military Camera Said ‘Made in U.S.A. The Screen Was in Chinese,’” *New York Times*, November 7, 2019.
- Scott Maucione, “Top DoD Scientist Sets Up Task Forces to Look at Industrial Base, Infrastructure,” *Federal News Network*, November 25, 2019.
- Lance Noble, “Defense Drives US Decoupling,” *Gavekal Dragonomics*, January 13, 2020, 4 pp.
- James Kynge and Mercedes Ruehl, “US-China Decoupling Hits Taiwan Chip Giant,” *Financial Times*, January 15, 2020.
- Asa Fitch, Kate O’Keeffe, and Bob Davis, “Trump and Chip Makers Including Intel Seek Semiconductor Self-Sufficiency,” *Wall Street Journal*, May 11, 2020.
- Thomas Ayres, “The US Needs to Rethink Its Overseas Supply Chain,” *Defense News*, May 22, 2020.
- Keith Johnson and Robbie Gramer, “U.S. Falters in Bid to Replace Chinese Rare Earths,” *Foreign Policy*, May 25, 2020.
- Adam A. Scher and Peter L. Levin, “Imported Chips Make America’s Security Vulnerable,” *Wall Street Journal*, May 25, 2020.
- Matthew Beinart, “Lord Focused On Bolstering DoD’s Domestic Supply Chain For Microelectronics, Rare Earth Mineral Processing,” *Defense Daily*, July 8, 2020.
- Justin Doubleday, “Pentagon Acquisition Chief Calls to ‘Re-shore As Much As Possible’ in Wake of COVID Supply Chain Challenges,” *Inside Defense*, July 8, 2020.
- Jacqueline Feldscher, “Pandemic’s ‘Silver Lining’: A New Push to Build Equipment in the U.S.,” *Politico Pro*, July 8, 2020.
- “The Challenge of Reshoring the Defense Department Supply Chain,” Govini, August 2020.
- Jacob Helberg, “In the New Cold War, Deindustrialization Means Disarmament,” *Foreign Policy*, August 12, 2020.
- Rob Rosenberg, “Great Power Competition and Global Supply Chains,” *The Hill*, August 19, 2020.
- Jerry McGinn, “Reshoring Does Not Mean ‘Buy America’ Only,” *Defense News*, September 15, 2020.
- Paul McLeary, “Worried About Chinese Backdoors, Lord Pushes For New Tech Strategy,” *Breaking Defense*, September 29, 2020.
- Eli Nachmany, “Securing the Critical Minerals Supply Chain,” *Lawfare*, October 21, 2020.

Justin Doubleday, “Pentagon Acquisition Chief Proposes ‘Step-by-Step process’ to Bring Microelectronics Back to U.S.,” *Inside Defense*, November 10, 2020.

Ben Wolfgang, “‘Reshore’: U.S. Military’s Reliance on China, Other Foreign Suppliers Exposed by Pandemic,” *Washington Times*, December 10, 2020.

Sydney J. Freedberg Jr., “‘Made In USA’ Won’t Secure Supply Chain Vs. China: Solarium,” *Breaking Defense*, January 19, 2021.

Hiroyuki Suzuki, *Building Resilient Global Supply Chains, The Geopolitics of the Indo-Pacific Region*, Center for Strategic and International Studies (CSIS), February 2021, 7 pp.

Justin Doubleday, “Pentagon Acquisition CISO: 2021 ‘The Year of Supply Chain Risk Management,’” *Inside Defense*, February 2, 2021.

Demetri Sevastopulo, “Biden to Order Review of Critical US Supply Chains,” *Financial Times*, February 2, 2021.

Paul McLeary, “China Supply Chain, Backdoor Money ‘Huge Priority’ For Biden Pentagon,” *Breaking Defense*, February 11, 2021.

Peggy Hollinger and Helen Warrell, “MPs Call for Ban on China and Russia Investing in UK Defence Supply Chain,” *Financial Times*, February 13, 2021.

United Kingdom, House of Commons, Defense Committee, *Foreign Involvement in the Defence Supply Chain*, Fourth Report of Session 2019–21, HC 699, ordered to be printed February 9, 2021, published on February 14, 2021, 38 pp.

Aviation Week, “Halt Supply Chains Linked To China, UK Defense Committee Says,” *Aviation Week*, February 15, 2021.

Sun Yu in Beijing and Demetri Sevastopulo, “China Targets Rare Earth Export Curbs to Hobble US Defence Industry, Beijing Asks Industry Executives If Proposed Restrictions Will Harm Western Contractors,” *Financial Times*, February 16, 2021.

Theresa Hitchens, “US Industry Struggles To Strip Chinese Tech From Networks,” *Breaking Defense*, February 22, 2021.

Taisei Hoyama and Yu Nakamura, “US and Allies to Build ‘China-free’ Tech Supply Chain,” *Nikkei Asia*, February 24, 2021.

Demetri Sevastopulo and Aime Williams, “Joe Biden Orders Review of Critical Foreign Supply chains,” *Financial Times*, February 24, 2021.

Maiya Clark, “Biden’s Supply Chain Executive Order Doesn’t Boost the Defense Industrial Base—And That’s OK, Joe Biden Has Wisely Opted Not to Start from Scratch But Instead to Build upon Donald Trump’s Executive Order,” *National Interest*, March 2, 2021.

Eric Onstad, “Five Eyes Alliance Urged to Forge Ties with Greenland to Secure Minerals,” *Reuters*, March 4, 2021.

Justin Doubleday, “After ‘searing’ COVID shortfalls, House lawmakers eye foreign dependencies in defense supply chain,” *Inside Defense*, March 10, 2021.

Jane Nakano, *The Geopolitics of Critical Minerals Supply Chains*, Center for Strategic and International Studies (CSIS), March 2021, 33 pp. (Posted March 11, 2021.)

Robert Morgus and John Costello, “What the Biden Administration Gets Right and Wrong on ICT in the New Supply Chain Executive Order,” *Lawfare*, March 18, 2021. (ICT is information and communications technology.)

Paul McLeary, “DoD’s New Pushback Against Chinese Money In US Defense Industry,” *Breaking Defense*, April 12, 2021.

Chris Peters, “It’s More Than Chips: Other Risks Exist in Defense Electronics Supply Chain,” *C4ISRNet*, June 23, 2021.

Colin Clark, “HASC Task Force: Six Ways To Limit DoD’s Dependence On Chinese Parts,” *Breaking Defense*, July 22, 2021.

William R. Hawkins, “Supply Chains Must Adjust to Great Power Competition,” *National Interest*, August 1, 2021.

Brad D. Williams, “Congressional Report Could Be Major Step To Strengthen US Defense Supply Chain,” *Breaking Defense*, August 4, 2021.

Brad D. Williams, “DoD Forms New Task Force To Shore Up Supply Chain,” *Breaking Defense*, September 7, 2021.

Jaspreet Gill, “DARPA Launches New Rare Earth Project to Reduce Reliance on China,” *Inside Defense*, September 9, 2021.

Stephanie Halcrow, “Want To Solve Supply Chain Security? Do Business Differently, It’s Time to Make Real Changes to the DFARS Requirements, Writes Stephanie Halcrow,” *Breaking Defense*, September 17, 2021.

Robert Dohner, “The United States Must Ensure Semiconductor Supply-Chain Resilience—Not Allocate Short Supplies,” *Atlantic Council*, January 3, 2022.

Ellen Lord and Mira Ricardel, “America Needs a Robust, Resilient Supply Chain for Semiconductors,” *Defense News*, February 11, 2022.

Appendix E. Articles on Russian and Chinese Irregular, Hybrid, and Gray-Zone Warfare

This appendix presents citations to articles discussing Russian and Chinese irregular, hybrid, and gray-zone warfare tactics and possible U.S. strategies for countering those tactics.

Citations from July through September 2015

Thomas Gibbons-Neff, “The ‘New’ Type of War That Finally Has The Pentagon’s Attention,” *Washington Post*, July 3, 2015.

Mark Galeotti, “Time to Think About ‘Hybrid Defense,’” *War on the Rocks*, July 30, 2015.

A. Wess Mitchell, “The Case for Deterrence by Denial,” *American Interest*, August 12, 2015.

Audrey Kurth Cronin, “The Changing Face Of War In The 21st Century,” *Real Clear Defense*, August 18, 2015.

Aapo Cederberg and Pasi Eronen, “Wake Up, West! The Era of Hybrid Warfare Is Upon Us,” *Overt Action*, August 25, 2015.

Marcus Weisgerber, “Now NATO’s Prepping for Hybrid War,” *Defense One*, August 27, 2015.

Maria Snegovaya, *Putin’s Information Warfare in Ukraine*, Washington, Institute for the Study of War, September 2015, 26 pp.

Citations from October through December 2015

Jan Joel Andersson and Thierry Tardy, *Hybrid: What’s In a Name?*, European Union Institute for Security Studies, October 2015, 4 pp.

Megan Eckstein, “U.S. Naval Commander in Europe: NATO Needs to Adapt to Russia’s New Way of Hybrid Warfare,” *USNI News*, October 6, 2015.

Tony Wesolowsky and Mark Krutov, “Activist Says Russia Using ‘Hybrid Warfare’ in Syria,” *Radio Free Europe/Radio Liberty*, November 11, 2015.

Howard Altman, “‘Gray Zone Conflicts Far More Complex to Combat, Says Socom Chief Votel,” *Tampa Tribune*, November 28, 2015 (updated November 29, 2015).

Jordan Chandler Hirsch and Peter Feaver, “Obama’s Thin Gray Line,” *Foreign Policy*, December 2, 2015.

Eric Olsen, “America’s Not Ready for Today’s Gray Wars,” *Defense One*, December 10, 2015.

Adam Elkus, “50 Shades of Gray: Why Gray Wars Concept Lacks Strategic Sense,” *War on the Rocks*, December 15, 2015.

Peter Pomerantsev, “Fighting While Friending: The Grey War Advantage of ISIS, Russia, and China,” *Defense One*, December 29, 2015.

Citations from January through June 2016

David S. Maxwell, “Congress Has Embraced Unconventional Warfare: Will the US Military and The Rest of the US Government?” *Small Wars Journal*, December 29, 2016.

Joseph L. Votel et al., “Unconventional Warfare in the Gray Zone,” *Joint Force Quarterly*, 1st Quarter 2016: 101-109.

Julian E. Barnes, “NATO Works to Adapt to More Ambiguous Warfare Techniques,” *Wall Street Journal*, February 8, 2016.

Andreas Umland, *Russia’s Pernicious Hybrid War Against Ukraine*, Atlantic Council, February 22, 2016.

Maxim Trudolyubov, “Russia’s Hybrid War,” *New York Times*, February 24, 2016.

Bret Perry, “How NATO Can Disrupt Russia’s New Way of War,” *Defense One*, March 3, 2016; Michael Kofman, “Russian Hybrid Warfare and Other Dark Arts,” *War on the Rocks*, March 11, 2016.

Eerik-Niiles Kross, “Putin’s War of Smoke and Mirrors,” *Politico*, April 9, 2016.

Molly McKew, “Estonian Report Details Russia’s ‘Hybrid Threat’ to Europe,” *Washington Free Beacon*, April 18, 2016.

David Barno and Nora Bensahel, “A New Generation of Unrestricted Warfare,” *War on the Rocks*, April 19, 2016.

Nathan Freier and Christopher Compton, “Gray Zone: Why We’re Losing the New Era of National Security,” *Defense One*, June 9, 2016.

Citations from July through December 2016

Dan Goure, “NATO vs. Russia: How to Counter the Hybrid Warfare Challenge,” *National Interest*, July 7, 2016.

Dominik P. Jankowski, “Hybrid Warfare: A Known Unknown?” *Foreign Policy Blogs*, July 18, 2016.

Nicholas Fedyk, “Russian ‘New Generation’ Warfare: Theory, Practice, and Lessons for U.S. Strategists,” *Small Wars Journal*, August 25, 2016.

Martin N. Murphy, *Understanding Russia’s Concept for Total War in Europe*, Heritage Foundation, September 12, 2016.

Robert Caruso, “To Counter Russian Disinformation, Look to Cold War Tactics,” *Defense One*, September 20, 2016.

Max Boot, “How to Wage Hybrid War on the Kremlin,” *Foreign Policy*, December 13, 2016.

Citations from January through June 2017

Raine Tiessalo, “Finland Prepares for ‘Manifold Warfare’ as Russia Feeds Paranoia,” *Bloomberg*, January 19, 2017.

Tim Mak, “U.S. Preps for Infowar on Russia,” *Daily Beast*, February 6, 2017.

Joe Gould, “European Diplomats Urge Support for U.S. Soft Power Against Russia,” *Defense News*, March 7, 2017.

Jakub Janda, *Six Immediate Steps to Stop Putin’s Aggression*, Atlantic Council, March 13, 2017.

Jussi Rosendahl and Tuomas Forsell, “EU, NATO Countries Kick Off Center to Counter ‘Hybrid’ Threats,” *Reuters*, April 11, 2017.

Jen Judson, “Countering ‘Little Green Men’: Pentagon Special Ops Studies Russia ‘Gray Zone’ Conflict,” *Defense News*, May 15, 2017.

Peter Kreko and Lorant Gyori, *From Russia with Hate: The Kremlin’s Support for Violent Extremism in Central Europe*, Atlantic Council, May 17, 2017.

Molly K. McKew, “Forget Comey: The Real Story Is Russia’s War on America,” *Politico*, June 11, 2017.

Ben Schreckinger, “How Russia Targets the U.S. Military,” *Politico*, June 12, 2017.

Van Jackson, “Tactics of Strategic Competition,” *Naval War College Review*, Summer 2017: 39-61.

James J. Wirtz, “Life in the ‘Gray Zone’: Observations for Contemporary Strategists,” *Defense & Security Analysis*, vol. 33, no. 2, 2017: 106-114.

Citations from July 2017 through December 2017

Daniel Calingaert, “How Dictators Use Our Open Society Against Us,” *The Hill*, July 6, 2017.

Christopher Walker, “A New Era of Competition, The Growing Threat from Authoritarian Internationalism as a Global Challenge to Democracy,” *International Reports*, Issue 2, 2017 (July 13, 2017): 16-25.

Maxim Eristavi, *Why the US Keeps Losing the Fight Against Disinformation*, Atlantic Council, July 24, 2017.

Anne Applebaum, “Maybe the A.I. Dystopia Is Already Here,” *Washington Post*, July 28, 2017.

Sean Illing, “China Is Perfecting A New Method for Suppressing Dissent on the Internet,” *Vox*, August 2, 2017.

Jim Rutenberg, “RT, Sputnik and Russia’s New Theory of War,” *New York Times*, September 13, 2017.

Susan Landau, “Russia’s Hybrid Warriors Got the White House. Now They’re Coming for America’s Town Halls,” *Foreign Policy*, September 26, 2017.

Karina Orlova, “Make America Vigilant Again,” *American Interest*, September 29, 2017.

Patrick M. Cronin and Harry Krejsa, “5 Ways America Can Defend Itself from ‘Nonphysical’ Attacks,” *National Interest*, October 3, 2017.

“Baltics Battle Russia in Online Disinformation War,” *Deutsche Welle (DW)*, October 8, 2017.

Reid Standish, “Russia’s Neighbors Respond to Putin’s ‘Hybrid War,’” *Foreign Policy*, October 12, 2017.

Max Boot, “Russia Has Invented Social Media Blitzkrieg,” *Foreign Policy*, October 13, 2017.

David Ignatius, “Russia Is Pushing to Control Cyberspace. We Should All Be Worried,” *Washington Post*, October 24, 2017.

Patrick Tucker, “How NATO Is Preparing to Fight Tomorrow’s Information Wars,” *Defense One*, October 26, 2017.

Dan Lamothe, “In Finland, Mattis Backs Creation of a Hybrid Warfare Center Focused on Russia,” *Washington Post*, November 6, 2017.

Citations from January 2018 through June 2018

David Ignatius, “Russia’s Radical New Strategy for Information Warfare,” *Washington Post*, January 18, 2018.

Reid Standish, “Inside a European Center to Combat Russia’s Hybrid Warfare,” *Foreign Policy*, January 18, 2018.

Ihor Kabanenko, “Russian ‘Hybrid War’ Tactics at Sea: Targeting Underwater Communications Cables,” *Eurasia Daily Monitor*, January 23, 2018.

Joshua Stowell, “What is Hybrid Warfare?” *Global Security Review*, February 2, 2018.

Mark Pomerleau, “Why DoD Leaders Are Increasingly Worried About the ‘Gray Zone,’” *C4ISRNet*, February 5, 2018.

Dan Mahaffee, “We’ve Lost the Opening Info Battle against Russia; Let’s Not Lose the War,” *Defense One*, February 23, 2018.

Max Boot, “Russia’s Been Waging War on the West for Years. We Just Haven’t Noticed,” *Washington Post*, March 15, 2018.

Chris Meserole and Alina Polyakova, “Disinformation Wars,” *Foreign Policy*, May 25, 2018.

Max Boot, “The United States Is Preparing for the Wrong War,” *Washington Post*, March 29, 2018.

Giorgi Menabde, “Russia Employs New ‘Hybrid War’ Methods Against Georgia,” *Eurasia Daily Monitor*, March 29, 2018.

Abigail Tracy, “‘A Different Kind of Propaganda’: Has America Lost the Information War,” *Vanity Fair*, April 23, 2018.

Hal Brands, “Putin Is Playing With Fire and We All May Get Burned,” *Bloomberg*, May 8, 2018.

John Grady, “Panel: U.S. Needs Non-Military Options to Handle ‘Gray Zone’ Warfare from Russia, China, Iran,” *USNI News*, May 15, 2018.

Jed Willard, “What Europe Can Teach America About Russian Disinformation,” *Atlantic*, June 9, 2018.

Janusz Bugajski, *Moscow’s Anti-Western Social Offensive*, Center for European Policy Analysis (CEPA), June 13, 2018.

Sydney J. Freedberg Jr., “Russia, China Are Outmaneuvering US: Generals Recommend New Authorities, Doctrine,” *Breaking Defense*, June 15, 2018.

Citations from July 2018 through December 2019

Nicole Ng and Eugene Rumer, “The West Fears Russia’s Hybrid Warfare. They’re Missing the Bigger Picture.” Carnegie Endowment for International Peace, July 3, 2019.

Joe Pappalardo, “Now NATO Says Russian ‘Hybrid Warfare’ Could Start a Real War,” *Popular Mechanics*, July 13, 2018.

Richard A. Bitzinger, “Russia’s Trump Card: Hybrid Warfare,” *Asia Times*, July 18, 2018.

Nathan Freier, *The Darker Shade of Gray: A New War Unlike Any Other*, Center for Strategic and International Studies, July 27, 2018.

Stanislaw Zaryn, “Russia’s Hybrid Warfare Toolkit Has More to Offer Than Propaganda,” *Defense News*, August 9, 2019.

Andrew Chuter, “NATO to Define Plan to Counter Russia’s Hybrid Warfare Tactics,” *Defense News*, December 3, 2019.

Citations from January 2020 through December 2020

Donald Stoker and Craig Whiteside, “Blurred Lines: Gray-Zone Conflict and Hybrid War—Two Failures of American Strategic Thinking,” *Naval War College Review*, Winter 2020.

Robert C. Rubel, “Canary In The Coal Mine: The US Navy’s Dilemmas As An Indication Of A Culminating Point In National Grand Strategy,” *Journal of Political Risk*, April 2020.

Hal Brands, “Don’t Let Great Powers Carve Up the World, Spheres of Influence Are Unnecessary and Dangerous,” *Foreign Affairs*, April 20, 2020.

Joshua Tallis, “To Compete With Russia and China at Sea, Think Small,” *Defense One*, May 12, 2020.

Jeff Goodson, “Irregular Warfare in a New Era of Great-Power Competition,” Modern War Institute, May 20, 2020.

Seth Cropsey, “Can We Keep Our ‘Grey Zone’ Edge Over Our Enemies?” *The Hill*, June 16, 2020.

Anthony H. Cordesman with the assistance of Grace Hwang, *Chronology of Possible Chinese Gray Area and Hybrid Warfare Operations*, Center for Strategic and International Studies (CSIS), working draft, July 2, 2020, 20 pp.

Anthony H. Cordesman with the assistance of Grace Hwang, *Chronology of Possible Russian Gray Area and Hybrid Warfare Operations*, Center for Strategic and International Studies (CSIS), working draft, July 2, 2020, 17 pp.

Christopher England, “How Great-Power Politics Will Be Used in an Asymmetric Era,” *National Interest*, August 5, 2020.

Alexander Lott, “What Does Hybrid Warfare Mean for Maritime Security?” *National Interest*, August 9, 2020.

Anthony H. Cordesman with the assistance of Grace Hwang, *U.S. Competition with China and Russia: The Crisis-Driven Need to Change U.S. Strategy*, Center for Strategic and International Studies (CSIS), working draft, August 11, 2020, 154 pp.

Jim Mitre and Andre Gellerman, “Defining DoD’s Role in Gray Zone Competition,” Center for a New American Security, August 24, 2020.

Eric Robinson, “The Missing, Irregular Half of Great Power Competition,” Modern War Institute, September 8, 2020.

Aaron Mehta, “Irregular Warfare Strategies Must Move Beyond Special Forces, Pentagon Says,” *Defense News*, October 2, 2020.

Sean McFate, “Irregular Warfare with China, Russia: Ready or Not, It’s Coming—If Not Already Here,” *The Hill*, October 11, 2020.

Hal Brands, “Pentagon’s New Plan to Fight China and Russia in the Gray Zone,” *Bloomberg*, October 21, 2020.

Elisabeth Braw, “The West Is Surprisingly Well-Equipped for Gray-Zone Deterrence,” *Defense One*, October 28, 2020.

Sam Mullins, “Great Power Competition Versus Counterterrorism: A False Dichotomy,” *Just Security*, October 23, 2020.

Stephen Tinkel and Tommy Ross, “Retooling U.S. Security Sector Assistance,” *War on the Rocks*, October 28, 2020.

Raffaello Pantucci, “Beijing Aims to Avoid Battle But Win War with New Dark Arts,” *Times (UK)*, December 26, 2020.

Citations from January 2021 through June 2021

Michael J. Mazarr, Joe Cheravitch, Jeffrey W. Hornung, and Stephanie Pezard, *What Deters and Why, Applying a Framework to Assess Deterrence of Gray Zone Aggression*, RAND, 2021, 140 pp.

Kevin Bilms, “Better Understanding Irregular Warfare in Competition,” *Military Times*, January 1, 2021.

Kevin Bilms, “What’s in a Name? Reimagining Irregular Warfare Activities for Competition,” *War on the Rocks*, January 15, 2021.

Mathieu Boulègue and Alina Polyakova, “The Evolution of Russian Hybrid Warfare: Introduction,” Center for European Policy Analysis (CEPA), January 29, 2021.

Precious Chatterje-Doody, “The Evolution of Russian Hybrid Warfare: United Kingdom,” Center for European Policy Analysis (CEPA), January 29, 2021.

Kalev Stoicescu, “The Evolution of Russian Hybrid Warfare: Estonia,” Center for European Policy Analysis (CEPA), January 29, 2021.

Kateryna Zarembo and Sergiy Solodkyy, “The Evolution of Russian Hybrid Warfare: Ukraine,” Center for European Policy Analysis (CEPA), January 29, 2021.

Justin Baumann, “Using Hybrid War Theory to Shape Future U. S. Generational Doctrine,” *Small Wars Journal*, February 3, 2021.

Seth G. Jones, “The Future of Competition: U.S. Adversaries and the Growth of Irregular Warfare,” Center for Strategic and International Studies (CSIS), February 4, 2021.

Phil W. Reynolds, “Building Partner Capacity Is Great Power Competition: The Future of 333 Funds,” *Small Wars Journal*, February 6, 2021.

Mark Voyager, “What is “Hybrid Warfare,” Really?” Center for European Policy Analysis (CEPA), February 24, 2021.

Tom O’Connor and Naveed Jamali, “As China Gray Zone Warfare Escalates, U.S. May Stand to Lose First Shooting Battle,” *Newsweek*, March 4, 2021.

Robert C. Rubel, “Whispers from Wargames about the Gray Zone,” *War on the Rocks*, March 8, 2021.

Elisabeth Braw, *Producing Fear in the Enemy’s Mind: How to Adapt Cold War Deterrence for Gray-Zone Aggression*, American Enterprise Institute, March 2021 (posted online March 9, 2021), 18 pp.

John A. Tirpak, “U.S. Poorly Integrates CCMDs, Hasn’t Figured Out Hybrid, Hyten Says,” *Air Force Magazine*, March 10, 2021. (CCMDs are U.S. regional combatant commands.)

Michael Rühle, “NATO’s Unified Response to Hybrid Threats,” Center for European Policy Analysis (CEPA), March 22, 2021.

Bridget Bachman, “Hybrid: An Adjective Describing the Current War,” *Small Wars Journal*, March 25, 2021.

Elisabeth Braw, *Building A Wall of Denial Against Gray-Zone Aggression*, American Enterprise Institute, April 2021 (posted online April 12, 2021), 24 pp.

Adam Taylor, “Irregular Conflict in a Great Power World: A Word of Caution for the Marine Corps,” *Small Wars Journal*, April 6, 2021.

David Knoll, Kevin Pollpeter, and Sam Plapinger, “China’s Irregular Approach to War: The Myth of a Purely Conventional Future Fight,” Modern War Institute, April 27, 2021.

Alex Hollings, “America Needs New Covert Options for Great Power Competition,” *Sandboxx*, May 21, 2021.

Lesley Seebeck, “Zeroing In on the Grey Zone in the Indo-Pacific,” *Strategist (ASPI)*, June 24, 2021.

Citations from July 2021 through December 2021

Peter Layton, *China’s Enduring Grey-Zone Challenge*, Air and Space Power Centre (Royal Australian Air Force, Australian Department of Defence), July 2021 (posted online July 13, 2021), 97 pp.

Hal Brands, “Russian and Iranian Proxy Forces Are Baffling the U.S., Drones, Mercenaries and Cyberattacks Give Rivals Plausible Deniability for Damaging American Interests,” *Bloomberg*, July 22, 2021.

Matthew Sussex, “Learning in the Grey Zone: How Democracies Can Meet the Authoritarian Challenge,” *Strategist (ASPI)*, July 22, 2021.

James Holmes, “To Beat China In The Gray Zone, You Have To Be There,” *19FortyFive*, July 28, 2021.

Heather A. Conley and Colin Wall, *Hybrid Threats in the Arctic: Scenarios and Policy Options in a Vulnerable Region*, European Centre of Excellence for Countering Hybrid Threats (Hybrid CoE), 7 pp. (Hybrid CoE Strategic Analysis 28, posted online August 26, 2021.)

Hall Gardner, “Why America and Europe Need a Transatlantic Strategic Council, Stronger U.S.-EU Strategic Coordination Is Urgently Needed to Prevent the Possibility that Regional Conflicts Could Draw the United States and the Europeans into New Forms of ‘Hybrid Warfare’ Against a Eurasian Axis of Predominantly ‘Authoritarian’ States,” *National Interest*, August 27, 2021.

Elisabeth Braw, “Zapad-2021: Russia is Perfecting the Art of Grey-Zone Warfare,” *Reaction*, September 10, 2021.

Dan Altman, “The Future of Conquest, Fights Over Small Places Could Spark the Next Big War,” *Foreign Affairs*, September 24, 2021.

Ashley Townshend, Thomas Lonergan, and Toby Warden, “The U.S.-Australian Alliance Needs a Strategy to Deter China’s Gray-Zone Coercion,” *War on the Rocks*, September 29, 2021.

Sean M. Zeigler, Dara Massicot, Elina Treyger, Naoko Aoki, Chandler Sachs, and Stephen Watts, *Analysis of Russian Irregular Threats*, RAND, 2021, 22 pp.

Peter Layton, “Countering China’s Gray Zone Strategy,” *Small Wars Journal*, October 10, 2021.

Gabriel Lloyd, “Hybrid Warfare and Active Measures,” *Small Wars Journal*, October 10, 2021.

Elisabeth Braw, “Countering Aggression in the Gray Zone,” American Enterprise Institute, November 18, 2021.

Andrés Ortega, “All Wars Are Hybrid, but War and the Notion of Hybrid Have Changed,” Real Instituto Elcano, November 30, 2021.

Danny Pronk, *Fifty Shades of Grey, 21st Century Strategic Competition with Russia and China*, Clingendael Institute (Netherlands Institute of International Relations), December 2021 (posted online December 2, 2021), 10 pp.

Ben Hall, Sam Fleming, and James Shotter, “How Migration Became a Weapon in a ‘Hybrid War,’ Governments Are Increasingly Using Displaced People to Exploit Europe’s Divisions and Fears over Migrants,” *Financial Times*, December 5, 2021.

Jake Harrington and Riley McCabe, *Detect and Understand, Modernizing Intelligence for the Gray Zone*, Center for Strategic and International Studies, December 2021 (posted online December 7 2021), 13 pp.

Megan Price, “Taming the ‘Grey Zone,’ It Has Become Something of a Catch-All Phrase. But if Everything Is a Grey Zone Tactic, to What Extent Is This Helpful?” *Interpreter*, December 7, 2021.

Brahma Chellaney, “China’s Global Hybrid War,” *Strategist (ASPI)*, December 10, 2021.

Sean Monaghan, “Bad Idea: Winning the Gray Zone,” *Defense 360 (Center for Strategic and International Studies [CSIS])*, December 17, 2021.

Max Hastings, “In Today’s Wars, Everything Is a Weapon, It’s Not Just Gray Zones and Putin’s Little Green Men: Conflict Is Now Carried Out in Banks, Courts and Even Movie Theaters,” *Bloomberg*, December 19, 2021.

Citations from January 2022

Joe Gould and Mark Pomerleau, “Why the US Should Fight Russia, China in the ‘Gray Zone,’” *C4ISRNet*, January 4, 2022.

Elisabeth Braw, “Biden’s Gray-Zone Gaffe Highlights a Real Dilemma, It’s High Time for NATO and Its Member Governments to Define what Kinds of Aggression Short of War Require a Unified Response,” *Defense One*, January 20, 2022.

Jake Harrington and Riley McCabe, “Keeping Pace in the Gray Zone: Three Recommendations for the U.S. Intelligence Community,” *War on the Rocks*, February 1, 2022.

Marc Polymeropoulos and Arun Iyer, “US Adversaries Have Been Mastering Hybrid Warfare. It’s Time to Catch Up,” *Atlantic Council*, February 8, 2022.

Charity S. Jacobs and Kathleen M. Carley, “Taiwan: China’s Gray Zone Doctrine in Action,” *Small Wars Journal*, February 11, 2022.

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),¹⁰⁶ a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.¹⁰⁷ 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.¹⁰⁸

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.¹⁰⁹

¹⁰⁶ See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

¹⁰⁷ Secretary of Defense Les Aspin's introduction to DOD's report on the 1993 BUR states

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

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

¹⁰⁸ 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).

¹⁰⁹ See, for example, the following:

the House Armed Services Committee's report on the FY1991 National Defense Authorization Act (H.Rept. 101-665 of August 3, 1990, on H.R. 4739), pp. 7-14;

the Senate Armed Services Committee's report on the FY1991 National Defense Authorization Act (S.Rept. 101-384 of July 20 (legislative day, July 10), 1990, on S. 2884), pp. 8-36;

the House Armed Services Committee's report on the FY1992 and FY1993 National Defense Authorization Act (H.Rept. 102-60 of May 13, 1991, on H.R. 2100), pp. 8 and 13;

the Senate Armed Services Committee's report on the FY1992 and FY1993 National Defense Authorization Act (S.Rept. 102-113 of July 19 (legislative day, July 8), 1991, on S. 1507), pp. 8-9;

the House Armed Services Committee's report on the FY1993 National Defense Authorization Act (H.Rept. 102-527 of May 19, 1992, on H.R. 5006), pp. 8-10, 14-15, and 22;

the Senate Armed Services Committee's report on the FY1993 National Defense Authorization Act (S.Rept. 102-352 of July 31 (legislative day, July 23), 1992, on S. 3114), pp. 7-12;

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,¹¹⁰ 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.¹¹¹

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.¹¹² Aspin's effort included a series of policy papers in January and February 1992¹¹³ 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,¹¹⁴ the effort arguably proved

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

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

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

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

¹¹⁰ 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.

¹¹¹ Senator John McCain, *Matching A Peace Dividend With National Security, A New Strategy For The 1990s*, November 1991, 32 pp.

¹¹² 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).

¹¹³ 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, 1991, 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.

¹¹⁴ See, for example, "Aspin Defense Budget Plans Rebuffed By Committee," *Defense Daily*, February 24, 1992: 289; "Pentagon Spurns Aspin's Budget Cuts as 'Political,'" *Washington Post*, February 28, 1992: A14.

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

Author Information

Ronald O'Rourke
Specialist in Naval Affairs

Disclaimer

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.