

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

Updated October 29, 2020

Congressional Research Service

https://crsreports.congress.gov

R43838

Summary

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 renewed 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.

The renewal of great power competition was acknowledged alongside other considerations in the Obama Administration's June 2015 National Military Strategy, and was placed at the center of the Trump Administration's December 2017 National Security Strategy (NSS) and January 2018 National Defense Strategy (NDS). The December 2017 NSS and January 2018 NDS 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. Department of Defense (DOD) officials have subsequently identified countering China's military capabilities as DOD's top priority.

The renewal of great power competition has profoundly changed the conversation about U.S. defense issues from what it was during the post-Cold War era: Counterterrorist operations and U.S. military operations in the Middle East—which had moved to the center of discussions of U.S. defense issues following the terrorist attacks of September 11, 2001, and which continue to be conducted—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 and nuclear deterrence;
- the global allocation of U.S. military force deployments;
- 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 renewed great power competition, and whether to approve, reject, or modify the Trump Administration's proposed defense funding levels, strategy, plans, and programs for addressing renewed great power competition. Congress's decisions on these issues could have significant implications for U.S. defense capabilities and funding requirements.

Contents

Introduction	1
	1
Shift to Renewed Great Power Competition	1
Overview of Implications for Defense	
Grand Strategy and Geopolitics of Great Power Competition	2
Organizational Changes within DOD	4
Nuclear Weapons and Nuclear Deterrence	
	5
U.S. and NATO Capabilities in Europe	8
New Operational Concepts	
Capabilities for 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 Extended-Length Conflict	
Supply Chain Security	
Capabilities for Countering Hybrid Warfare and Gray-Zone Tactics	
January 2020 DOD Report on FY2021 Defense-Wide Review	
Issues for Congress	17
Appendixes	
	20
Appendix A. Shift from Post-Cold War Era to Renewed Great Power Competition	
Appendix B. Articles on Shift to Renewed Great Power Competition	
Appendix C. Articles on Grand Strategy and Geopolitics	32
Appendix D. Readings on Supply Chain Security	39
Appendix E. Articles on Russian and Chinse Irregular, Hybrid, and Gray-Zone Warfare	
Tactics	42
Appendix F. Congress and the Late 1980s/Early 1990s Shift to Post-Cold War Era	
Appendix 1. Congress and the Eate 1700s/Eatry 1770s Smit to 10st Cold War Ela	10
Contacts	
Author Information	50

Introduction

This report provides a brief overview of implications for U.S. defense of renewed great power competition with China and Russia. The issue for Congress is how U.S. defense planning should respond to renewed great power competition, and whether to approve, reject, or modify the Trump Administration's proposed defense funding levels, strategy, plans, and programs for addressing renewed 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 renewed great power competition for other policy areas, such as foreign policy and diplomacy, trade and finance, energy, and foreign assistance. A separate CRS report discusses the current debate over the future U.S. role in the world and the implications of this debate for both defense and other policy areas, particularly in light of the shift to renewed great power competition.¹

Background

Shift to Renewed Great Power Competition

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 renewed 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.²

The renewal of great power competition was acknowledged alongside other considerations in the Obama Administration's June 2015 National Military Strategy,³ and was placed at the center of the Trump Administration's December 2017 National Security Strategy (NSS)⁴ and January 2018 National Defense Strategy (NDS).⁵ The December 2017 NSS and January 2018 NDS formally reoriented U.S. national security strategy and U.S. defense strategy toward an explicit primary

¹ CRS Report R44891, U.S. Role in the World: Background and Issues for Congress, by Ronald O'Rourke and Michael Moodie.

² 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.

³ 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.

⁴ Office of the President, National Security Strategy of the United States of America, December 2017, 55 pp.

⁵ 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.

focus on great power competition with China and Russia. Department of Defense (DOD) officials have subsequently identified countering China's military capabilities as DOD's top priority.⁶

For additional background information and a list of articles on this shift, see **Appendix A** and **Appendix B**.

Overview of Implications for Defense

The renewal of great power competition has profoundly changed the conversation about U.S. defense issues from what it was during the post-Cold War era: Counterterrorist operations and U.S. military operations in the Middle East—which had moved to the center of discussions of U.S. defense issues following the terrorist attacks of September 11, 2001, and which continue to be conducted—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 strategy⁷ and the geopolitics⁸ 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.

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.

⁶ 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.

⁷ 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).

⁸ 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.

"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.⁹

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

The goal of preventing the emergence of regional hegemons in Eurasia is a major reason why the U.S. military is structured with force elements that enable it to deploy from the United States, cross broad expanses of ocean and air space, and then conduct sustained, large-scale military operations upon arrival in Eurasia or the waters and airspace surrounding Eurasia. Force elements associated with this goal include, among other things, an Air Force with significant numbers of long-range bombers, long-range surveillance aircraft, long-range airlift aircraft, and aerial refueling tankers, and a Navy with significant numbers of aircraft carriers, nuclear-powered attack submarines, large surface combatants, large amphibious ships, and underway replenishment ships. ¹⁰

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 judgements—and the consequent U.S. goal of preventing the emergence of regional hegemons in Eurasia—are not valid as guideposts for U.S. defense in coming years.

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

⁹ Bradley Peniston, "Work: 'The Age of Everything Is the Era of Grand Strategy'," *Defense One*, November 2, 2015.

¹⁰ For additional discussion, see CRS In Focus IF10485, *Defense Primer: Geography, Strategy, and U.S. Force Design*, by Ronald O'Rourke.

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. Another example of an area of potential organizational change within DOD is information operations.

Nuclear Weapons and Nuclear Deterrence

The renewal of great power competition has led to a renewed emphasis in discussions of U.S. defense on nuclear weapons and nuclear deterrence. Russia's reassertion of its status as a major world power has included, among other things, recurring references by Russian officials to Russia's nuclear weapons capabilities and Russia's status as a major nuclear weapon power. China's nuclear-weapon capabilities are much more modest than Russia's, but China is modernizing its nuclear forces as part of its overall military modernization effort, and some observers believe that China may increase the size of its nuclear force in coming years.

The increased emphasis in discussions of U.S. defense and security on nuclear weapons and nuclear deterrence 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.¹³ DOD, for example, currently has plans to acquire a new class of ballistic missile submarines¹⁴ and a next-generation long-range bomber.¹⁵ The topic of nuclear weapons in a context of great power competition was a key factor in connection with the U.S. withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty.¹⁶ The Trump Administration has invited China to be a third participant, along with the United States and Russia, in negotiations on future limitations on

-

¹¹ 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.

¹² 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.

¹³ 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.

¹⁴ CRS Report R41129, Navy Columbia (SSBN-826) Class Ballistic Missile Submarine Program: Background and Issues for Congress, by Ronald O'Rourke.

¹⁵ CRS Report RL34406, Air Force Next-Generation Bomber: Background and Issues for Congress, by Jeremiah Gertler

¹⁶ For additional discussion, see CRS Insight IN10985, U.S. Withdrawal from the INF Treaty, by Amy F. Woolf.

nuclear arms, ¹⁷ but China reportedly has refused to join such negotiations, ¹⁸ unless the United States agrees to reduce its nuclear forces to China's much-lower level. ¹⁹

Global Allocation of U.S. Military Force Deployments

The renewal of great power competition has led to increased discussion about whether and how to change the global allocation of U.S. military force deployments so as to place more emphasis on deployments for countering Chinese and, secondarily, Russian military capabilities, and less emphasis on deployments that serve other purposes. 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. More recently, the Trump Administration has stated that a planned reduction of U.S. military personnel in Germany is intended, at least in part, to facilitate a reallocation of additional U.S. forces to what U.S. officials now refer to as the Indo-Pacific region. In addition, President Trump has expressed a desire to reduce U.S. military deployments to the Middle East, and Trump Administration officials have stated that the Administration is 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. China.

¹⁷ 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.

¹⁸ See, for example, 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; Samuel Osborne, "China Refuses to Join Nuclear Talks with US and Russia in Blow for Trump," *Independent (UK)*, May 7, 2019; Steven Pifer, "Trump's Bid to Go Big on Nuclear Arms Looks Like a Fizzle," *Defense One*, February 5, 2020; Cheng Hanping, "US Attempt to Rope China into New START Negotiations Won't Succeed," *Global Times*, February 12, 2020; Hal Brands, "China Has No Reason to Make a Deal on Nuclear Weapons," *Bloomberg*, April 29, 2020; Robbie Gramer and Jack Detsch, "Trump Fixates on China as Nuclear Arms Pact Nears Expiration," *Foreign Policy*, April 29, 2020. For an article discussing the idea of U.S.-Russia-China negotiations on military space capabilities, see Victoria Samson and Brian Weeden, "US Should Start Space Security Talks With Russia, China," *Breaking Defense*, May 12, 2020; Associated Press, "China Calls US Invite to Nuclear Talks a Ploy to Derail Them," *Associated Press*, July 8, 2020.

¹⁹ See, for example, Yew Lun Tian, "China Challenges U.S. to Cut Nuclear Arsenal to Matching Level," *Reuters*, July 7, 2020.

²⁰ 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.

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

²² 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

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.²³ The Trump Administration's proposals for reducing force deployments to Africa and South America have become a subject of debate, in part because they are viewed by some observers as creating a risk of leading to increased Chinese or Russian influence in those regions.²⁴ The benefits, costs, and risks of forward-deploying U.S. forces in Europe and the Western Pacific for purposes of deterring and responding to Russian or Chinese aggression forms another element of this discussion.²⁵ Although it is not yet clear in what ways or to what degree there will be a global reallocation of U.S. military force deployments, the discussion of the potential benefits and risks of such a reallocation is now substantially influenced by the renewal of great power competition.

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. The discussion in the December 2017 NSS of regions of interest to the United States begins with a section on the Indo-Pacific, ²⁶ and the unclassified summary of the January 2018 NDS mentions the Indo-Pacific at

Sees Taliban Deal as Allowing Fuller Focus on China," *Associated Press*, March 1, 2020. See also Kyle Rempfer, "Soldiers Will Spend Longer Deployments in Asia," *Army Times*, February 20, 2020; Mike Sweeney, "Considering the 'Zero Option,' Cold War Lessons on U.S. Basing in the Middle East," Defense Priorities, March 2020.

²³ See, for example, Adam Taylor, "Why U.S. Presidents Find It So Hard to Withdraw Troops from the Mideast," *Washington Post*, October 22, 2019; Yaroslav Trofimov, "America Can't Escape the Middle East," *Wall Street Journal*, October 25, 2019; Hal Brands, "Why America Can't Quit The Middle East," *Hoover Institution*, March 21, 2019; Seth Cropsey and Gary Roughead, "A U.S. Withdrawal Will Cause a Power Struggle in the Middle East," *Foreign Policy*, December 17, 2019; Connor O'Brien and Jacqueline Feldscher, "The Pentagon Wants Money for China, But Troops Are Stuck in the Sand," *Politico Pro*, February 4, 2020; Alia Awadallah, "How to Get the National Defense Strategy Out of Its Mideast Rut," *Defense One*, February 7, 2020; John Hannah, and Bradley Bowman, "The Pentagon Tries to Pivot out of the Middle East—Again," *Foreign Policy*, May 19, 2020; David Ignatius, "There's No Sign the U.S. Is Leaving the Middle East Soon. And That's a Good Thing," *Washington Post*, July 16, 2020; Jamil Anderlini, "China's Middle East Strategy Comes at a Cost to the US; Beijing Gains in Oil and Influence as Successive Presidents in Washington Withdraw," *Financial Times*, September 8, 2020.

²⁴ See, for example, 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.

²⁵ See, for example, Billy Fabian, "Overcoming the Tyranny of Time: The Role of U.S. Forward Posture in Deterrence and Defense," Center for Strategic and International Studies (CSIS), September 21, 2020. See also CRS In Focus IF11280, U.S. Military Presence in Poland, by Andrew Feickert, Kathleen J. McInnis, and Derek E. Mix.

²⁶ Office of the President, *National Security Strategy of the United States of America*, December 2017, pp. 45-47.

several points.²⁷ Strengthening U.S. military capabilities in the Indo-Pacific is a key component of the Free and Open Indo-Pacific (FOIP), the Trump Administration's overarching policy construct for that region.²⁸

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.²⁹ 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.³⁰

DOD activities in the Indo-Pacific region include those for competing strategically with China in the South and East China Seas.³¹ They also include numerous activities to help strengthen the military capabilities of U.S. allies in the region, particularly Japan and Australia, as well as 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. As noted earlier, DOD officials have stated that strengthening U.S. military force deployments in the Indo-Pacific region could involve reducing U.S. force deployments to other locations.

In April 2020, it was reported that Admiral Philip (Phil) Davidson, Commander of U.S. Indo-Pacific Command (INDOPACOM), had submitted to Congress a \$20.1 billion plan for investments for improving U.S. military capabilities in the Indo-Pacific region. Davidson submitted the plan, entitled *Regain the Advantage*, in response to Section 1253 of the FY2020 National Defense Authorization Act (S. 1790/P.L. 116-92 of December 20, 2019), which required the Commander of INDOPACOM to submit to the congressional defense committees a report

²⁷ 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.

²⁸ 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.

²⁹ 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.

³⁰ 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.

³¹ 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.

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 requests about \$1.6 billion in additional funding suggestions for FY2021 above what the Pentagon is requesting in its proposed FY2021 budget, and about \$18.5 billion in investments for FY2022-FY2026.³²

Some observers are using 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.³³

U.S. and NATO Capabilities in Europe

The renewal of great power competition with Russia, which was underscored by Russia's seizure and annexation of Ukraine in March 2014 and Russia's subsequent actions in eastern Ukraine, has led to a renewed focus in U.S. defense planning on strengthening U.S. and NATO military capabilities for countering potential Russian aggression in Europe.³⁴ 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.³⁵ In northern Europe, U.S. actions have included presence operations and exercises by the Marine Corps in Norway and by the U.S. Navy in northern European waters. In southern Europe, the Mediterranean has re-emerged as an operating area of importance for the Navy. Some of these actions, particularly for mainland Europe, are assembled into an annually

³² See Paul McLeary, "Support Swells For New Indo-Pacom Funding; Will Money Follow," *Breaking Defense*, May 29, 2020; Aaron Mehta, "Inside US Indo-Pacific Command's \$20 Billion Wish List to Deter China—and Why Congress May Approve," *Defense News*, April 2, 2020; Paul McLeary, "EXCLUSIVE Indo-Pacom Chief's Bold \$20 Billion Plan For Pacific; What Will Hill Do?" *Breaking Defense*, April 2, 2020. The unclassified executive summary of the Section 1253 report was accessed on April 7, 2020, at https://int.nyt.com/data/documenthelper/6864-national-defense-strategy-summ/8851517f5e10106bc3b1/optimized/full.pdf.

³³ For press articles discussing the PDI/IPDI, see, for example, Bradley Bowman and Scott Adamson, "Lessons for the Pacific From The European Deterrence Initiative," *Breaking Defense*, August 28, 2020; Benjamin Rimland and Patrick Buchan, "Getting the Pacific Deterrence Initiative Right," *Diplomat*, May 2, 2020; Randy Schriver and Eric Sayers, "The Case for a Pacific Deterrence Initiative," Center for a New American Security, March 10, 2020; Bradley Bowman and John Hardie, "Aligning America's Ends and Means in the Indo-Pacific," *Defense News*, April 22, 2020; Frederico Bartels and Walter Lohman, "Congress Should Act to Boost Military Deterrence in the Indo-Pacific," Heritage Foundation, May 11, 2020; Abraham Mahshie, "Defense Department Will Need More Capable Allies in the Pacific to Ward off China," *Washington Examiner*, May 14, 2020; Vivienne Machi, "SASC Leaders Introduce New Pacific Deterrence Initiative to Bolster Counter-China Efforts," *Defense Daily*, May 28, 2020.

³⁴ See, for example, CRS In Focus IF11130, *United States European Command: Overview and Key Issues*, by Kathleen J. McInnis.

³⁵ See, for example, CRS In Focus IF11280, *U.S. Military Presence in Poland*, by Andrew Feickert, Kathleen J. McInnis, and Derek E. Mix.

funded package within the overall DOD budget originally called the European Reassurance Initiative and now called the European Deterrence Initiative (EDI).³⁶

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.³⁷

New Operational Concepts

The renewal of great power competition has led to a new 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.

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.³⁸

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.³⁹ 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

³⁶ For further discussion, see CRS In Focus IF10946, *The European Deterrence Initiative: A Budgetary Overview*, by Paul Belkin and Hibbah Kaileh.

³⁷ For additional discussion, see CRS Report R45652, *Assessing NATO's Value*, by Paul Belkin. See also CRS Insight IN10926, *NATO's 2018 Brussels Summit*, by Paul Belkin.

³⁸ 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.

³⁹ See, for example, Connie Lee, "ASC NEWS: U.S. Military Re-Emphasizing Large Warfighting Exercises (UPDATED)," *National Defense*, September 14, 2020.

Fighter (JSF)⁴⁰ and the next-generation long-range bomber,⁴¹ highly capable warships such as the Virginia-class attack submarine⁴² and DDG-51 class Aegis destroyer,⁴³ ballistic missile defense (BMD) capabilities,⁴⁴ longer-ranged land-attack and anti-ship weapons, new types of weapons such as lasers, railguns, and hypervelocity projectiles,⁴⁵ new ISR (intelligence, surveillance, and reconnaissance) capabilities, military space capabilities,⁴⁶ electronic warfare capabilities, military cyber capabilities, hypersonic weapons, and the military uses of robotics and autonomous unmanned vehicles, quantum technology, and artificial intelligence (AI).⁴⁷ Preparing for high-end conventional warfare could also involve making changes in U.S. military training and exercises⁴⁸ and reorienting the missions and training of U.S. special operations forces.⁴⁹

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.⁵⁰

⁴⁰ For more on the F-35 program, see CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program*, by Jeremiah Gertler.

⁴¹ CRS Report RL34406, *Air Force Next-Generation Bomber: Background and Issues for Congress*, by Jeremiah Gertler.

⁴² 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.

⁴³ For more on the DDG-51 program, see, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke.

⁴⁴ 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.

⁴⁵ See, for example, CRS Report R44175, Navy Lasers, Railgun, and Gun-Launched Guided Projectile: Background and Issues for Congress, by Ronald O'Rourke.

⁴⁶ See, for example, CRS In Focus IF10337, *Challenges to the United States in Space*, by Steven A. Hildreth and Clark Groves.

⁴⁷ See, for example, CRS Report R43848, *Cyber Operations in DOD Policy and Plans: Issues for Congress*, by Catherine A. Theohary.

 ⁴⁸ 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.

⁴⁹ See, for example, Chris Miller and Doug Livermore, "Special Forces Needs to Go Back to Basics to Win Against China and Russia," *Task and Purpose*, October 19, 2020; Peter Suciu, "U.S. Special Operations Forces Are Getting Ready for War with Russia or China," *National Interest*, October 8, 2020; Todd South, "Special Operations Forces Must Look and Fight Differently for Future Conflicts," *Defense News*, October 2, 2020; Shannon Culbertson and Alice Hunt Friend, "The Unbalanced Spear," *Lawfare*, September 20, 2020; Hal Brands, "Special Operations Forces and Great-Power Competition in the 21st Century," American Enterprise Institute, August 4, 2020; Kevin Bilms and Christopher P. Costa, "Look at Great Power Competition Through a Special Operations Lens," *Defense One*, June 18, 2020; Thomas Trask, Mark Clark, and Stuart Bradin, "The Role of Special Operations Forces in a 'Great Power Conflict," *Military Times*, May 4, 2020. 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.

⁵⁰ See, for example, Nathan Strout, "New Pentagon Budget Request Invests in 4 Advanced Technologies," C4ISRNet,

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 overoptimized 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.⁵¹

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, including Other Transaction Authority (OTA) and what is known as Section 804 Middle Tier authority.⁵²

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.⁵³ In previewing the new framework in October 2019, DOD described it as "the most transformational acquisition policy change we've seen in decades."⁵⁴

February 10, 2020. See also CRS In Focus IF11105, *Defense Primer: Emerging Technologies*, by Kelley M. Sayler; CRS Report R45178, *Artificial Intelligence and National Security*, by Kelley M. Sayler; CRS In Focus IF11150, *Defense Primer: U.S. Policy on Lethal Autonomous Weapon Systems*, by Kelley M. Sayler; and CRS Report R45811, *Hypersonic Weapons: Background and Issues for Congress*, by Kelley M. Sayler. 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.

⁵¹ 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.

⁵² 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.

⁵³ 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.

⁵⁴ 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,"

Some observers argue that DOD is not doing enough or moving quickly enough to generate and implement innovations in response to renewed great power competition.⁵⁵ 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.⁵⁶

DOD officials and other observers argue that to facilitate greater innovation and speed in weapon system development and deployment, U.S. defense acquisition policy and the oversight paradigm for assessing the success of acquisition programs will need to be adjusted to place a greater emphasis on innovation and speed as measures of merit in defense acquisition policy, alongside more traditional measures of merit such as minimizing cost growth, schedule delays, and problems in testing. As a consequence, they argue, defense acquisition policy and the oversight paradigm for assessing the success of acquisition programs should place more emphasis on time as a risk factor and feature more experimentation, risk-taking, and tolerance of failure during development, with a lack of failures in testing potentially being viewed in some cases not as an indication success, but of inadequate innovation or speed of development.⁵⁷

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, a term that 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, the term 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 to replace those expended in the earlier stages of a conflict;

-

Military.com, October 8, 2020.

⁵⁵ See, for example, Christopher Zember and Peter Khooshabeh, "Defense Innovation Is Falling Short," *War on the Rocks*, September 25, 2020. See also Jamie Morin and Bill LaPlante, "What We Don't Know About Military Innovation," *Defense One*, October 20, 2020.

⁵⁶ Government Accountability Office, *Defense Acquisitions[:] Senior Leaders Should Emphasize Key Practices to Improve Weapon System Reliability*, GAO-20-151, January 2020, summary page.

⁵⁷ See, for example, Bryan Clark, "Pentagon And Congress Risk Bungling Drive To Modernize U.S. Military," *Forbes*, July 8, 2020; John Grady, "Officials: U.S. Must Move Faster in Testing and Fielding Hypersonics, 5G Networks," *USNI News*, June 30, 2020; Michèle A. Flournoy and Gabrielle Chefitz, "Breaking the Logjam: How the Pentagon Can Build Trust with Congress," *Defense News*, April 1, 2020; Ankit Panda, "Getting Critical Technologies Into Defense Applications," *National Interest*, February 1, 2020; Ankit Panda, "Critical Technologies and Great Power Competition," *Diplomat*, January 29, 2020; Michael Rubin, "The Simple Reason Why America Could Lose the Next Cold War to Russia or China," *National Interest*, January 14, 2020; George Franz and Scott Bachand, "China and Russia Beware: How the Pentagon Can Win the Tech Arms Race," *National Interest*, November 29, 2019; Scott Maucione, "Special Report: Failure Is an Option for DoD's Experimental Agency, But How Much?" *Federal News Week*, October 30, 2019; Sydney J. Freedberg Jr., "Stop Wasting Time So We Can Beat China: DoD R&D Boss, Griffin," *Breaking Defense*, August 9, 2018.

- 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. ⁵⁸ On April 24, 2019, the National Commission on Military, National, and Public Service, a commission created by the FY2017 National Defense Authorization Act (S. 2943/P.L. 114-328 of December 23, 2016), ⁵⁹ held two hearings on U.S. mobilization needs and how to meet them. ⁶⁰ DOD officials are now focusing more on actions to improve U.S. mobilization capabilities. ⁶¹

Supply Chain Security

The shift to renewed 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.⁶² More recent examples include the dependence of various U.S. military systems on rare earth elements from China, Chinese-made electronic

⁵⁸ See, for example, Robert "Jake" Bebber, "State of War, State of Mind: Reconsidering Mobilization in the Information Age," Journal of Political Risk, October 20, 2020; 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.

⁵⁹ See Sections 551 through 557 of S. 2943/P.L. 114-328.

⁶⁰ 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).

⁶¹ 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. Deteres

⁶² See CRS Report R44498, National Security Space Launch at a Crossroads, by Steven A. Hildreth.

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.⁶³

In response to concerns like those above, DOD officials have begun to focus more on actions to improve supply chain security. For additional readings on this issue, see **Appendix D**.

Capabilities for Countering Hybrid Warfare and Gray-Zone Tactics

Russia's seizure and 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.⁶⁴ For a list of articles discussing this issue, see **Appendix E**.⁶⁵

January 2020 DOD Report on FY2021 Defense-Wide Review

In early February 2020, DOD released a report, dated January 2020, on the results of the Defense-Wide Review (DWR), a review DOD conducted of certain defense-wide DOD organizations and activities, with the goal of identifying resources that could be redirected to higher-priority DOD programs, particularly those for countering Chinese and Russian military capabilities. The DWR, the report states, was

a major DoD initiative personally led by the Secretary of Defense, to improve alignment of time, money, and people to NDS priorities. In total, the Secretary of Defense, and/or the Deputy Secretary of Defense, hosted 21 review sessions examining \$99 billion of appropriated resources across roughly 50 Defense-Wide (DW) organizations and activities. Similar to the "Night Court" review process Secretary Esper led during his time as Secretary of the Army, the DWR was a comprehensive examination of DoD organizations outside of the military departments. However, unlike the Army Night Court, the DWR was not a full bottom-up review, as there was insufficient time for a more exhaustive examination to inform the FY 2021 President's Budget. As such, we will review these agencies more fully in 2020.

-

⁶³ 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.

⁶⁴ See CRS Report R42784, *U.S.-China Strategic Competition in South and East China Seas: Background and Issues for Congress*, by Ronald O'Rourke.

⁶⁵ See also CRS In Focus IF10771, Defense Primer: Information Operations, by Catherine A. Theohary.

These reforms required tough decisions. The impacted programs were not wasteful nor mismanaged, they were simply not NDS priorities, some with outdated missions or practices. The question was not "Is this a good program?", but rather "Is a dollar spent on this program or organization more important to our military capability than spending that same dollar on an NDS priority?"...

The FY 2021-2025 DWR successfully generated over \$5 billion in FY 2021 savings (5.7% of the Defense-Wide overall budget) for re-investment in lethality and readiness, and identified more than \$2 billion in activities and functions to transfer to the military departments. While budget line-item details from DWR savings will be included in the FY 2021 President's Budget, this report aggregates DW organizations and activities into five functional categories: Family & Benefits; Warfighting & Support; RDT&E; Policy & Oversight; and Working Capital Funds (WCF).... Per the Senate Report accompanying the DoD Appropriations Bill for 2020 and following the FY 2021 budget release, the Department will provide spend plans for all program truncations or eliminations resulting from the DWR....

The DWR identified significant savings in each of the functional categories. The largest savings occurred within the "Warfighting & Support" category due primarily to reductions of legacy missions that do not advance the NDS. The Review also identified savings within the Working Capital Funds (WCF) as well as through transfers of DW activities and functions to the military departments and other agencies, for increased effective and efficient management....

The purpose of generating these DWR savings was to reinvest in NDS priorities. Every dollar spent on overhead, redundant efforts, and lower priority programs is a dollar not spent on lethality and readiness. Without the DWR savings, the full extent of these investments would not have been possible or would have had to been made by realigning resources from existing warfighting capability in the military departments. Key investments made possible by the DWR include:

- NUCLEAR MODERNIZATION: Maintaining a strong nuclear deterrent is the highest modernization priority in the NDS. All three legs of the nuclear triad (land, air, and sea) are being modernized simultaneously and DWR savings enabled increased investment in this modernization effort.
- SPACE: The FY 2020 NDAA [National Defense Authorization Act] created the sixth Armed Service, the U.S. Space Force (USSF), to transform our ability to fight and win future conflicts. The DWR enabled DoD to fund the establishment of the USSF from within available resources. In addition, the DWR enabled substantial new investments in space capabilities, including resilience of the use of space and enhancements in our ability to control space.
- MISSILE DEFENSE: The 2019 Missile Defense Review reiterated U.S. commitment to robust defenses against rogue regime missile threats. DWR savings enable increased missile defense capacity and capability, and allows MDA to pursue a multi-layered approach to homeland missile defense. This approach includes development and deployment of a Next Generation Interceptor (NGI) for Ground-Based Interceptors (GBI) and development and demonstration of lower altitude interceptors that can provide additional defense against threat missiles.
- HYPERSONIC WEAPONS: The FY 2020 budget established a significant program of investment in hypersonic weapons. The DWR enabled a major increase in this investment to accelerate development and fielding of hypersonic weapons over the Future Years Defense Program (FYDP).
- ARTIFICIAL INTELLIGENCE (AI): AI is a key technology for the future and the United States has been trailing our adversaries in investment. The DWR significantly accelerated investment in AI to increase the scope and capability of AI applications fielded across the

full range of DoD missions. This investment will support and speed development of applications for maneuver, intelligent business automation and logistics, warfighter health analysis, and intelligence data processing.

- 5TH GENERATION (5G) COMMUNICATIONS TECHNOLOGIES: The DWR enabled DoD to resource key investments in secure and resilient 5G technologies and networks and speed their adoption by providing at-scale test facilities for rapid and extensive experimentation and application prototyping. These investments will allow our forces to leverage the dynamic spectrum without impediment across the battlefield as well as establish the foundation for Next Generation technologies through collaboration with industry, academia, and international spectrum access and communications standards organizations.
- RESPONSE FORCE READINESS: The new Immediate Response Force (IRF) and Contingency Response Force (CRF) enable the U.S. to rapidly confront incidents and threats to its interests across the globe with mission-ready units from all of the services. DWR savings resource substantial investments to IRF and CRF readiness allowing DoD to fully exercise these capabilities and further advance Dynamic Force Employment....
- ... to fully implement some of these reforms, we require Congressional support and action, and, in certain cases, tough decisions. Below are some of the key themes of the Legislative Proposals related to DWR reforms for Congress to consider for the FY 2021 NDAA. The FY 2021 President's Budget, scheduled to be released 10 February 2020, will provide more details. We look forward to working with Congress and our oversight committees to achieve these reforms.

Key themes include:

- Removing constraints to allow agencies to operate more like private sector businesses, responsibly investing taxpayer resources and achieving funding stability;
- Eliminating legacy applications or modernizing technology applications;
- Transferring select functions and programs to the military departments;
- Eliminating outdated Congressional reporting requirements, ineffective boards/commissions, and earmarked programs; and
- Providing flexibility to capture lost buying power and updating appropriations structures to meet rapid development, sustainment, and development cycles....

The FY 2021 DWR is just the beginning. On 6 January 2020, the Secretary of Defense directed an aggressive and wide-ranging reform agenda for 2020 that includes strengthening DoD oversight of the DW organizations and replicating resource reviews elsewhere in the Department. The Combatant Commands (CCMDs) and military departments are performing line-by-line reviews of their budgets in preparation for the FY 2022 President's Budget....

The Secretary of Defense also directed a full review of the remaining CCMDs to inform the FY 2022 President's Budget....

Lastly, the Secretary of Defense directed the Secretaries of the military departments and the Service Chiefs to establish and execute aggressive reform plans—including detailed budget reviews—to free up resources in support of NDS priorities by using the same detailed methodology implemented during the DWR. Military department and Service leaders are dedicating necessary time and attention to prioritizing resources within their

prescribed fiscal guidance, making tough choices, and relentlessly seeking more cost-effective ways of doing business for the FY 2022 President's Budget.⁶⁶

Issues for Congress

Potential policy and oversight issues for Congress include the following:

- December 2017 NSS and January 2018 NDS. Do the December 2017 NSS and the January 2018 NDS correctly describe or diagnose the renewal of great power competition? As strategy documents, do they lay out an appropriate U.S. national security strategy and national defense strategy for responding to renewed great power competition?
- **Defense funding levels.** In response to renewed 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?⁶⁷ If not, what grand strategy should the United States pursue? What is the Trump Administration's position on this issue?⁶⁸
- **DOD organization.** Is DOD optimally organized for renewed great power competition? What further changes, if any, should be made to better to better align DOD's activities with those needed to counter Chinese and Russian military capabilities?
- Nuclear weapons and nuclear deterrence. Are current DOD plans for modernizing U.S. strategic nuclear weapons, and for numbers and basing of nonstrategic (i.e., theater-range) nuclear weapons, aligned with the needs renewed great power competition?
- Global allocation of U.S. military force deployments. Should the global allocation of U.S. military force deployments be altered, and if so, how? What

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.

⁶⁶ Department of Defense, *FY2021 Defense Wide Review*, Report to Congress, January 2020, pp. 2-6. See also Tony Bertuca, "Angst Grows on Capitol Hill over DOD's \$5.7 Billion 'Savings' Review," *Inside Defense*, June 17, 2020.

⁶⁷ One observer states that this question was reviewed in 1992, at the beginning of the post-Cold War era:

⁶⁸ For additional discussion of this issue, see CRS Report R44891, *U.S. Role in the World: Background and Issues for Congress*, by Ronald O'Rourke and Michael Moodie.

- are the potential benefits and risks of shifting U.S. military force deployments out of some areas and into others? Should the Trump Administration's proposals for changing the global allocation 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 renewed 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 constraints on defense funding, how should trade-offs be made in balancing capabilities for high-end conventional warfare against other DOD priorities?
- Maintaining U.S. superiority in conventional weapon technologies. Are DOD's steps for maintaining U.S. superiority in conventional weapon technologies appropriate and sufficient? What impact will funding these technologies have on funding available for nearer-term DOD priorities, such as redressing deficiencies in force readiness?
- Innovation and speed in weapon system development and deployment. To what degree should defense acquisition policy and the paradigm for assessing the success of acquisition programs be adjusted to place greater emphasis on innovation and speed of development and deployment, and on experimentation, risk taking, and greater tolerance of failure during development? Are DOD's steps for doing this appropriate and sufficient? What new legislative authorities, if any, might be required (or what existing provisions, if any, might need to be amended or repealed) to achieve greater innovation and speed in weapon development and deployment? What implications might placing a greater emphasis on speed of acquisition have on familiar congressional paradigms for conducting oversight and judging the success of defense acquisition programs?
- **Mobilization capabilities.** What actions is DOD taking regarding mobilization capabilities for an extended-length conflict against an adversary such as China or

- Russia, and are these actions appropriate? How much funding is being devoted to mobilization capabilities, and how are mobilization capabilities projected to change as a result of these actions in coming years?
- Supple chain security. To what degree are Chinese or Russian components, subcomponents, materials, or software incorporated into DOD equipment? How good of an understanding does DOD have of this issue? What implications might this issue have for the reliability, maintainability, and reparability of U.S. military systems, particularly in time of war? What actions is DOD taking or planning to take to address supply chain security, particularly with regard to Chinese or Russian components, subcomponents, materials, and software? What impact might this issue have on U.S.-content requirements (aka Buy America requirements) for U.S. military systems?
- **Hybrid warfare and gray-zone tactics.** Do the United States and its allies and partners have adequate strategies for countering Russia's so-called hybrid warfare in eastern Ukraine, Russia's information operations, and China's so-called salami-slicing tactics in the South and East China Seas?

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

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

Previous International Security Environments

Cold War Era

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

Post-Cold War Era

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

The post-Cold War era is generally viewed as having tended toward a unipolar situation, with the United States as the world's sole superpower. Neither Russia, China, nor any other country was viewed as posing a significant challenge to either the United States' status as the world's sole superpower or the U.S.-led international order. Following the terrorist attacks of September 11, 2001 (aka 9/11), the post-Cold War era was additionally characterized by a strong focus (at least from a U.S. perspective) on countering transnational terrorist organizations that had emerged as significant non-state 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 Seas⁶⁹ and Russia's seizure and annexation of Crimea⁷⁰—the international environment had shifted to a fundamentally different

⁶⁹ 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.

⁷⁰ 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 renewed 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 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....

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.⁷¹

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

⁷¹ Office of the President, *National Security Strategy of the United States of America*, December 2017, pp. 2-3, 25, 26-27.

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.⁷²

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 for 2019 states, by the organization's own analysis, that countries experiencing net declines in freedom have outnumbered countries experiencing net increases in freedom for 13 years in a row, starting in 2006.⁷³
- 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.⁷⁴
- 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. Also in that year, the financial crisis and resulting deep recessions in the United States and Europe, combined with China's ability to weather that crisis and its successful staging of the 2008 Summer Olympics, are seen by observers as having contributed to a perception in China of the United States as a declining power, and to a Chinese sense of self-confidence or triumphalism. Seas can be viewed as having begun (or accelerated) soon thereafter.

⁷² 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.

⁷³ Freedom in the World 2019, Freedom House, undated but released February 2019, p. 5.

⁷⁴ For an English-language transcript of the speech, see "Putin's Prepared Remarks at 43rd Munich Conference on Security Policy," Washington Post, accessed April 26, 2018, at http://www.washingtonpost.com/wp-dyn/content/article/2007/02/12/AR2007021200555.html.

⁷⁵ 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.

⁷⁶ See, for example, Howard W. French, "China's Dangerous Game," *Atlantic*, October 13, 2014.

Other observers trace the roots of the shift to renewed great power competition further, to years prior to 2006-2008.⁷⁷

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 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 have given it various names, but names using some variation of great power competition or renewed great power competition appear to have become to 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), particularly in reference to the U.S.-

⁷⁷ 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.

China relationship. Other terms that have been used include competitive world order, multipolar era, tripolar era, and disorderly world (or era).

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),⁷⁸ a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred.⁷⁹ 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.⁸⁰ For additional discussion of Congress's response to the shift from the Cold War to the post-Cold War era, see **Appendix F**.

-

⁷⁸ See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

⁷⁹ 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.)

⁸⁰ 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 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," *The Strategist*, November 7, 2017. (Interview with Thomas Mahnken)

Citations from January 2018

"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," The 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.

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" Bebber 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 "Constrainment:" 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

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 Nicastro, "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.

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.

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, Rare Earth Magnets, and Tungsten*, 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

Paul McLeary, "Worried About Chinese Backdoors, Lord Pushes For New Tech Strategy," *Breaking Defense*, September 29, 2020.

Jerry McGinn, "Reshoring Does Not Mean 'Buy America' Only," *Defense News*, September 15, 2020.

Rob Rosenberg, "Great Power Competition and Global Supply Chains," *The Hill*, August 19, 2020.

Jacob Helberg, "In the New Cold War, Deindustrialization Means Disarmament," *Foreign Policy*, August 12, 2020.

"The Challenge of Reshoring the Defense Department Supply Chain," Govini, August 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.

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.

Eli Nachmany, "Securing the Critical Minerals Supply Chain," Lawfare, October 21, 2020.

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

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 Hyrbid 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 Ouarter 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 Defends 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, 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

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 Tankel and Tommy Ross, "Retooling U.S. Security Sector Assistance," *War on the Rocks*, October 28, 2020.

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), 81 a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reexamination that had occurred. §2 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.⁸³

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.⁸⁴

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.)

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;

⁸¹ See Department of Defense, Report on the Bottom-Up Review, Les Aspin, Secretary of Defense, October 1993, 109 pp.

⁸² Secretary of Defense Les Aspin's introduction to DOD's report on the 1993 BUR states

⁸³ 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).

⁸⁴ See, for example, the following:

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, 85 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. 86

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. Aspin's effort included a series of policy papers in January and February 1992 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, 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.

- National Security in the 1990s: Defining a New Basis for U.S. Military Forces, Rep. Les Aspin, Chairman,
 House Armed Services Committee, Before the Atlantic Council of the United States, January 6, 1992, 23 pp.;
- An Approach to Sizing American Conventional Forces For the Post-Soviet Era, Rep. Les Aspin, Chairman, House Armed Services Committee, January 24, 2991, 20 pp.;
- Tomorrow's Defense From Today's Industrial Base: Finding the Right Resource Strategy For A New Era, by Rep. Les Aspin, Chairman, House Armed Services Committee, Before the American Defense Preparedness Association, February 12, 1992, 20 pp.; and
- An Approach to Sizing American Conventional Forces For the Post-Soviet Era, Four Illustrative Options, Rep. Les Aspin, Chairman, House Armed Services Committee, February 25, 1992, 27 pp.

.

⁸⁵ 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.

⁸⁶ Senator John McCain, Matching A Peace Dividend With National Security, A New Strategy For The 1990s, November 1991, 32 pp.

⁸⁷ 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).

⁸⁸ These policy papers included the following:

⁸⁹ 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.