

A Shift in the International Security Environment: Potential Implications for Defense—Issues for Congress

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Summary

World events since late 2013 have led some observers to conclude that the international security environment has undergone a shift from the familiar post-Cold War era of the last 20 to 25 years, also sometimes known as the unipolar moment (with the United States as the unipolar power), to a new and different strategic situation that features, among other things, renewed great power competition and challenges to elements of the U.S.-led international order that has operated since World War II.

A previous shift in the international security environment—from the Cold War to the post-Cold War era—prompted a broad reassessment by the Department of Defense (DOD) and Congress of defense funding levels, strategy, and missions that led to numerous changes in DOD plans and programs. A new shift in the international security environment could similarly have a number of implications for U.S. defense plans and programs. Of perhaps the greatest potential significance, such a shift could lead to a change in the current overall terms of debate over U.S. defense plans and programs.

Russia's seizure and annexation of Crimea, as well as subsequent Russian actions in eastern Ukraine and elsewhere in Eastern Europe, have already led to a renewed focus among policymakers on U.S. and NATO military capabilities in Europe, and on how to counter Russia's so-called hybrid warfare tactics. China's actions in the East and South China Seas have prompted a focus among policymakers on how to counter China's so-called salami-slicing tactics in those areas. A shift in the international security environment may also be generating implications for areas such as nuclear weapons and nuclear deterrence, maintaining technological superiority in conventional weapons, defense acquisition policy, submarines and antisubmarine warfare, and DOD reliance on Russian-made components.

Policy and oversight issues for Congress include the following:

- **Shift in strategic situations.** Has there been a shift in the international security environment, and if so, what features characterize the new environment?
- 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? If not, what grand strategy should the United States pursue?
- Reassessment of U.S. defense funding levels, strategy, and missions. Should there be a reassessment of U.S. defense funding levels, strategy, and missions?
- **Congressional role in reassessment.** If there is to be such a reassessment, how should it be done, and what role should Congress play?
- **Potential effect on plans and programs.** How might such a reassessment affect the current terms of debate on U.S. defense? What might be the potential implications for U.S. defense plans and programs?

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Introduction

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A previous shift in the international security environment—from the Cold War to the post-Cold War era—prompted a broad reassessment by the Department of Defense (DOD) and Congress of defense funding levels, strategy, and missions that led to numerous changes in DOD plans and programs. A new shift in the international security environment could similarly have a number of implications for U.S. defense plans and programs.

The issue for Congress is whether a shift in the international security environment has occurred, and if so, how to respond to that shift. This report briefly describes the shift in the international security environment that some observers believe has occurred, and identifies some defense-related issues for Congress that could arise from it. 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 a shift in the international security environment for other policy areas, such as foreign policy and diplomacy, trade and finance, energy, and foreign assistance. Future CRS reports may address the potential implications of a shift in the international security environment for these other policy areas or address the U.S. role in the international security environment from other analytical perspectives.

Background

Shift in International Security Environment

Overview

World events since late 2013—including Chinese actions in the East and South China Seas since November 2013² and Russia's seizure and annexation of Crimea in March 2014³—have led some observers to conclude that the international security environment has undergone a shift from the familiar post-Cold War era of the last 20 to 25 years, also known as the unipolar moment (with

¹ The term international order generally means the combination of laws, rules, norms, and supporting institutions that shapes and helps govern international politics and economics. The U.S.-led international order established at the end of World War II, also known as the liberal international order, can be characterized as one that features, among other things, a reliance on international law rather than force or coercion as the preferred means of settling international disputes, an emphasis on human rights, an open international trading system that attempts to evolve in the direction of free trade, and the treatment of the world's oceans, international airspace, outer space, and cyberspace as international commons.

² For discussions of these actions, see CRS Report R42784, *Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: 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.

³ For discussion Russia's seizure and annexation of Crimea, see CRS Report RL33460, *Ukraine: Current Issues and U.S. Policy*, by Steven Woehrel.

the United States as the unipolar power), to a new and different strategic situation that features, among other things, renewed great power competition and challenges to elements of the U.S.-led international order that has operated since World War II.⁴ A November 22, 2015, press report states:

The United States must come to grips with a new security environment as surging powers like Russia and China challenge American power, said Deputy Defense Secretary Robert Work.

"Great power competition has returned," he said Nov. 20 during a panel discussion at the Halifax International Security Forum.

"Russia is now a resurgent great power and I would argue that its long term prospects are unclear. China is a rising great power. Well, that requires us to start thinking more globally and more in terms of competition than we have in the past 25 years," Work said

During the 1990s and the early 2000s, the United States enjoyed a period of dominance that gave it an "enormous freedom of action," Work said. "I would argue that over that period of time ... our strategic muscles atrophied."

Work defined a great power as one that can engage with conventional forces and that has a nuclear deterrent that can survive a first strike.

Both Russia and China are challenging the order that has been prevalent since the end of World War II, he said. The United States will have to compete and cooperate with them.

"I believe what is happening in the United States is we're now trying to rebuild up our strategic muscles and to rethink in terms of global competitions and I believe the next 25 years will see a lot of give and take between the great powers," he said. 5

Some other observers see the emergence of a medieval- or feudal-like situation. See, for example, Brad Allenby, "The Return to Medievalism," *Slate*, March 18, 2015; Steven Metz, "Emerging Neo-Feudal World Leaving U.S., Global Security Behind," *World Politics Review*, May 29, 2015. See also Matt Thompson, "UN's Purpose Questioned in a 'Post-Nation' World," *Defense One*, July 1, 2015.

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⁴ See, for example, 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; 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; 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 Saferor Not?" Foreign Policy Research Institute, June 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.

⁵ Yasmin Tadjdeh, "Work: 'Great Power Competition' Has Returned," *National Defense*, November 22, 2015. See also Andrew Clevenger, "Work: Future Includes Competition Between US, Great Powers," *Defense News*, November 20, 2015. Ellipsis as in original. Similarly, in a December 14, 2015, speech, Deputy Secretary Work stated: (continued...)

Cold War Fra

The Cold War, which is generally viewed as lasting from the late 1940s until the late 1980s/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 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, which is generally viewed as having begun in the early 1990s, tended toward a unipolar situation, with the United States as the world's sole superpower. The Warsaw Pact had disbanded, the Soviet Union had dissolved into Russia and the former Soviet republics, and 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. Compared to the Cold War, the post-Cold War era generally featured reduced levels of overt political, ideological, and military competition among major states. Following 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.

(...continued)

I firmly believe that historians will look back upon the last 25 years – I actually snap that 25 years between May 12, 1989, when President Bush said containment would no longer be the lens through which the defense program was built. That was the end of the Cold War for all intents and purposes for defense planning, even though it took a couple of years for the Soviet Union to finally implode.

And I'd look in December 2013, that's when China started to do its land reclamation project in the South China Sea and in March 2014, Russia illegally annexed Crimea and started to send its troops and support separatists in east Ukraine.

So that 25-year period, I believe, is remarkable and is unlike any other period in the post-Westphalian era, because during that period, the United States reigned supreme as the only world's great power and the sole military superpower. It gave us enormous freedom of action.

But the circumstance is now changing. The unipolar world is starting to fade and we enter a more multipolar world, in which U.S. global leadership is likely to be increasingly challenged.

So among the most significant challenges in this 25 years, and one in my view that promises to be the most stressing one, is the reemergence of great power competition.

Now, for the purpose of this discussion and for the purposes of building a defense program which is focused on potential adversary capabilities, not necessarily intentions, I'll borrow John Mearsheimer's definition of a great power: A state having sufficient military assets to put up a serious fight in an all-out conventional war against the dominant power -- that would be the United States -- and possessing a nuclear deterrent that could survive a first strike against it.

And by that narrow definition, getting away from what are their economic peers or what is the attractiveness of their soft power and their stickiness, from a defense program perspective, if Russia and China are not yet great powers, they're well on their ways to being one.

(Deputy Secretary of Defense Speech, CNAS Defense Forum, As Delivered by Deputy Secretary of Defense Bob Work, JW Marriott, Washington, D.C., December 14, 2015, accessed December 21, 2015, at: http://www.defense.gov/News/Speeches/Speech-View/Article/634214/cnas-defense-forum.)

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The New Situation

Some Emerging Features

Observers who conclude that the international security environment has shifted to a new strategic situation generally view the new period not as a bipolar situation (like the Cold War) or a unipolar situation (like the post-Cold War era), but as a multipolar situation characterized by renewed competition among three major world powers—the United States, China, and Russia. Other emerging characteristics of the new international security situation as viewed by these observers include the following:

- renewed ideological competition, this time against 21st-century forms of authoritarianism in Russia, China, and other countries;⁶
- the promotion in 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;
- the use by Russia and China of new forms of aggressive or assertive military and paramilitary operations—called hybrid warfare or ambiguous warfare, among other terms, in the case of Russia's actions, and called salami-slicing tactics or gray-zone warfare, among other terms, in the case of China's actions—to gain greater degrees of control of areas on their peripheries;
- 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 continuation of the post-Cold War era's focus (at least from a U.S. perspective) on countering transnational terrorist organizations that have emerged as significant non-state 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) non-state actors, and become potential locations of intervention by
 stronger states, including major powers.

The June 2015 National Military Strategy released by the Department of Defense (DOD) states:

Since the last National Military Strategy was published in 2011, global disorder has significantly increased while some of our comparative military advantage has begun to

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⁶ See, for example, Gideon Rachman, "The West Has Lost Intellectual Self-Confidence," *Financial Times*, January 5, 2015; Garry Kasparov, "The Global War on Modernity," *Wall Street Journal*, January 20, 2015; Anna Borshchevskaya, "Moral Clarity Is Needed In Countering Anti-Western Propaganda," *Forbes*, March 14, 2015; Ellen Bork, "Democracy in Retreat," *World Affairs Journal*, May 11, 2015; Christopher Walker, "The New Containment: Undermining Democracy," *World Affairs Journal*, May/June 2015.

erode. We now face multiple, simultaneous security challenges from traditional state actors and transregional networks of sub-state groups—all taking advantage of rapid technological change. Future conflicts will come more rapidly, last longer, and take place on a much more technically challenging battlefield. They will have increasing implications to the U.S. homeland....

Complexity and rapid change characterize today's strategic environment, driven by globalization, the diffusion of technology, and demographic shifts....

Despite these changes, states remain the international system's dominant actors. They are preeminent in their capability to harness power, focus human endeavors, and provide security. Most states today — led by the United States, its allies, and partners — support the established institutions and processes dedicated to preventing conflict, respecting sovereignty, and furthering human rights. Some states, however, are attempting to revise key aspects of the international order and are acting in a manner that threatens our national security interests.

While Russia has contributed in select security areas, such as counternarcotics and counterterrorism, it also has repeatedly demonstrated that it does not respect the sovereignty of its neighbors and it is willing to use force to achieve its goals. Russia's military actions are undermining regional security directly and through proxy forces. These actions violate numerous agreements that Russia has signed in which it committed to act in accordance with international norms, including the UN Charter, Helsinki Accords, Russia-NATO Founding Act, Budapest Memorandum, and the Intermediate-Range Nuclear Forces Treaty.

Iran also poses strategic challenges to the international community. It is pursuing nuclear and missile delivery technologies despite repeated United Nations Security Council resolutions demanding that it cease such efforts. It is a state-sponsor of terrorism that has undermined stability in many nations, including Israel, Lebanon, Iraq, Syria, and Yemen. Iran's actions have destabilized the region and brought misery to countless people while denying the Iranian people the prospect of a prosperous future.

North Korea's pursuit of nuclear weapons and ballistic missile technologies also contradicts repeated demands by the international community to cease such efforts. These capabilities directly threaten its neighbors, especially the Republic of Korea and Japan. In time, they will threaten the U.S. homeland as well. North Korea also has conducted cyber attacks, including causing major damage to a U.S. corporation.

We support China's rise and encourage it to become a partner for greater international security. However, China's actions are adding tension to the Asia-Pacific region. For example, its claims to nearly the entire South China Sea are inconsistent with international law. The international community continues to call on China to settle such issues cooperatively and without coercion. China has responded with aggressive land reclamation efforts that will allow it to position military forces astride vital international sea lanes.

None of these nations are believed to be seeking direct military conflict with the United States or our allies. Nonetheless, they each pose serious security concerns which the international community is working to collectively address by way of common policies, shared messages, and coordinated action....

For the past decade, our military campaigns primarily have consisted of operations against violent extremist networks. But today, and into the foreseeable future, we must pay greater attention to challenges posed by state actors. They increasingly have the capability to contest regional freedom of movement and threaten our homeland. Of particular concern are the proliferation of ballistic missiles, precision strike technologies, unmanned systems, space and cyber capabilities, and weapons of mass destruction

(WMD) – technologies designed to counter U.S. military advantages and curtail access to the global commons....

Today, the probability of U.S. involvement in interstate war with a major power is assessed to be low but growing. Should one occur, however, the consequences would be immense. VEOs [violent extremist organizations], in contrast, pose an immediate threat to transregional security by coupling readily available technologies with extremist ideologies. Overlapping state and non-state violence, there exists an area of conflict where actors blend techniques, capabilities, and resources to achieve their objectives. Such "hybrid" conflicts may consist of military forces assuming a non-state identity, as Russia did in the Crimea, or involve a VEO fielding rudimentary combined arms capabilities, as ISIL has demonstrated in Iraq and Syria. Hybrid conflicts also may be comprised of state and non-state actors working together toward shared objectives, employing a wide range of weapons such as we have witnessed in eastern Ukraine. Hybrid conflicts serve to increase ambiguity, complicate decision-making, and slow the coordination of effective responses. Due to these advantages to the aggressor, it is likely that this form of conflict will persist well into the future.

In a November 7, 2015, speech at the Reagan Defense Forum, Secretary of Defense Ashton Carter stated:

After fourteen years of counterinsurgency and counter-terrorism—two skills we want to retain—we are in the middle of a strategic transition to respond to the security challenges that will define our future....

The innovative strategies and operational plans we need at this historical juncture maintain the same objectives: defend the United States and strengthen the principled international order that has served the United States, our many friends and allies—and yes—if you think about it, Russia, China, and many other countries, well for decades.

The principles that serve as that order's foundation—including peaceful resolution of disputes, freedom from coercion, respect for state sovereignty, freedom of navigation and overflight—are not abstractions, nor are they subject to the whims of any one country. They are not privileges to be granted or withdrawn. They make sense because they have worked for decades. They've helped keep the peace, lift more than a billion out of poverty, and give people a greater voice in their own affairs....

Despite that widespread appeal, some actors appear intent on eroding these principles and undercutting the international order that helps enforce them. Terror elements like ISIL, of course, stand entirely opposed to our values. But other challenges are more complicated, and given their size and capabilities, potentially more damaging.

Russia appears intent to play spoiler by flouting these principles and the international community. Meanwhile, China is a rising power, and growing more ambitious in its objectives and capabilities. Of course, neither Russia nor China can overturn that order, given its resilience and staying power. But both present different challenges for it.

The United States, and the men and women of the Defense Department, know that the good that a principled international order has done, and will do. But in the face of Russia's provocations and China's rise, we must embrace innovative approaches to protect the United States and strengthen that international order.⁸

⁷ 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.

⁸ Remarks on "Strategic and Operational Innovation at a Time of Transition and Turbulence" at Reagan Defense Forum, Secretary of Defense Ash Carter, November 7, 2015, accessed November 11, 2015, at http://www.defense.gov/News/News-Transcripts/Transcript-View/Article/628147/remarks-on-strategic-and-(continued...)

Some DOD officials have characterized security challenges now faced by the United States as a "4+1" situation, referring to a situation of two great powers (Russia and China), two major regional powers (Iran and North Korea), and transnational terrorism.⁹

Markers of the Shift to the New Situation

For observers who conclude that the international security environment has shifted to a new strategic situation, the sharpest single marker of the shift 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 East and South China Seas over the last several years, have been more gradual and cumulative.

Some observers trace the beginnings of the argued shift in strategic situations back to 2008. In that year, 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. China's assertive actions in the East and South China Seas can be viewed as having begun (or accelerated) soon thereafter. Other observers trace the roots of the end of the post-Cold War era further, to years prior to 2008.

Comparisons to Earlier Periods

Each strategic situation features a unique combination of major actors, dimensions of competition and cooperation among those actors, and military and other technologies available to them. A new strategic situation can have some similarities to previous ones, but it will also have differences, including, potentially, one or more features not present in any previous strategic situation. In the early years of a new strategic situation, some of its features may be unclear, in dispute, or not yet apparent. In attempting to understand a new strategic situation, comparisons to earlier 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 new strategic situation's characteristic features, particularly those that differentiate it from previous ones.

Some observers have stated that the world is entering a new Cold War (or Cold War II or 2.0). That term may have utility in referring specifically to U.S.-Russian relations, because the new strategic situation that some observers have identified features competition and tension with Russia. Considered more broadly, however, the Cold War was a bipolar situation, while the new

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⁹ See, for example, Megan Eckstein, "CNO: Navy Needs More Agile Procurement To Keep Pace With '4-Plus-1' Threat Set," *USNI News*, December 7, 2015.

¹⁰ See, for example, Howard W. French, "China's Dangerous Game," *The Atlantic*, October 13, 2014.

¹¹ See, for example, Walter Russell Mead, "Who's to Blame for a World in Flames?" *The American Interest*, October 6, 2014.

environment appears to be a multipolar 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, Russia today does not 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 emerging multipolar situation, have drawn comparisons to the multipolar situation that existed in the 19th century and the years prior to World War I. Still others, observing both multipolarity and 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 new strategic situation that some observers have identified may be similar in some respects to previous strategic 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 New Situation

Observers who conclude that the international security environment has shifted to a new strategic situation do not yet appear to have reached a consensus on what term to use to refer to the new situation. As noted above, some observers have used terms such as a new Cold War (or Cold War II or 2.0). Other terms that some observers have used include multipolar era, the age of everything (meaning an age in which the United States will face multiple security challenges of various types), 12 the disorderly world (or era), 13 and the "complexity crisis in U.S. strategy." 14

Renewed Emphasis on Grand Strategy and Geopolitics

The discussion of the shift in the international security environment that some observers have identified has led to a renewed emphasis in discussions of U.S. security and foreign policy on grand strategy and geopolitics. A November 2, 2015, press report, for example, stated:

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, U.S. Deputy Defense Secretary Robert Work said Monday at the Defense One Summit in Washington, D.C.

"The era of everything is the era of grand strategy," Work said, suggesting that the United States must carefully marshal and deploy its great yet limited resources.¹⁵

¹² See "Defense One Summit 2015—The Age of Everything," *Defense One*, November 3, 2015; Ashton B. Carter, "Maintaining the Edge in the Age of Everything," *Defense One*, November 2, 2015; Bradley Peniston, "Work: 'The Age of Everything Is the Era of Grand Strategy'," *Defense One*, November 2, 2015.

¹³ See, for example, Richard N. Haass, "The Era of Disorder," *Project Syndicate*, October 27, 2014; Rebecca K.C. Hersman, "Nuclear Deterrence in a Disordered World," Global Forecast 2016, Center for Strategic and International Studies, 2015.

¹⁴ See Anthony H. Cordesman, "America's Failed Approach to Chaos Theory," Center for Strategic and International Studies, April 15, 2015.

¹⁵ Bradley Peniston, "Work: 'The Age of Everything Is the Era of Grand Strategy'," *Defense One*, November 2, 2015. See also, for example, William C. Martel, "Why America Needs a Grand Strategy," *The 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* (continued...)

From a U.S. perspective, grand strategy can be understood as strategy considered at a global or interregional level, as opposed to strategies for specific countries, regions, or issues. Geopolitics refers to the influence on international relations and strategy of basic world geographic features such as the size and location of continents, oceans, and individual countries.

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 a regional hegemon in one part of Eurasia or another, on the grounds that such a hegemon could represent a concentration of power strong enough to threaten core U.S. interests by, for example, denying the United States access to some of the other hemisphere's resources and economic activity. Although U.S. policymakers have not often stated this key national strategic goal explicitly in public, U.S. military (and diplomatic) operations in recent decades—both wartime operations and day-to-day operations—can be viewed as having been carried out in no small part in support of this key goal.

The U.S. goal of preventing the emergence of a regional hegemon in one part of Eurasia or another is a major reason why the U.S. military is structured with force elements that enable it to cross broad expanses of ocean and air space and then conduct sustained, large-scale military operations upon arrival. 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.

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Congressional Participation in Reassessment of U.S. Defense During Previous Shift

A previous shift in the international security environment—from the Cold War to the post-Cold War era—prompted a broad reassessment 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),¹⁶ a reassessment of U.S. defense plans and programs whose very name conveyed the fundamental nature of the reassessment that had occurred.¹⁷ 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.¹⁸

Through both committee activities and the efforts of individual Members, Congress played a significant role in the reassessment of defense funding levels, strategy, and missions 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. ¹⁹

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;

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 (continued...)

¹⁶ See Department of Defense, *Report on the Bottom-Up Review*, Les Aspin, Secretary of Defense, October 1993, 109 pp.

¹⁷ Secretary of Defense Les Aspin's introduction to DOD's report on the 1993 BUR states:

¹⁸ 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 from the author of this report].

¹⁹ See, for example:

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,²⁰ 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.²¹

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.²² Aspin's effort included a series of policy papers in January and February 1992²³ 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,²⁴ the effort arguably proved consequential the following year, when Aspin became Secretary of Defense in the new Clinton

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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.

²⁰ 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.

²¹ Senator John McCain, Matching A Peace Dividend With National Security, A New Strategy For The 1990s, November 1991, 32 pp.

²² 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 from the authors of this report].

²³ These policy papers included the following:

²⁴ 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.

Administration. Aspin's 1992 effort helped inform his participation in DOD's 1993 BUR. The 1993 BUR in turn created a precedent for the Quadrennial Defense Review (QDR) process that remains in place today.

Potential or Emerging Implications for Defense

The shift in strategic situations that some observers have identified could have a number of implications for U.S. defense plans and programs, including those discussed briefly below.

Terms of Debate over U.S. Defense

Of perhaps the greatest potential significance, a shift from the post-Cold War era to a new strategic situation could lead to a change in the current overall terms of debate over U.S. defense plans and programs. The current terms of debate are shaped by things such as the limits on defense spending established under the Budget Control Act (BCA) of 2011 (S. 365/P.L. 112-25 of August 2, 2011) as amended, the defense strategic guidance document of January 2012, and the 2014 Quadrennial Defense Review. If the current terms of debate largely reflect the features of the post-Cold War era, they may not be responsive to features of the new strategic situation that some observers have identified. It

Some observers, citing recent world events, have raised the question of whether defense spending should be increased above levels set forth in the BCA, and consequently whether the BCA should be amended or repealed.²⁸ If policymakers judge that a shift in strategic situations of the kind discussed here is occurring, the nature of the U.S. response to that shift could lead to defense spending levels that are higher than, lower than, or about the same as those in the BCA.

U.S. and NATO Military Capabilities in Europe

Russia's seizure and annexation of Ukraine and Russia's subsequent actions in eastern Ukraine and elsewhere in Eastern Europe have led to a renewed focus among policymakers on U.S. and NATO military capabilities in Europe.²⁹ In July 2014, the Administration, as part of its FY2015

²⁵ Department of Defense, Sustaining U.S. Global Leadership: Priorities for 21st Century Defense, January 2012, 8 pp. For additional discussion, see CRS Report R42146, *Assessing the January 2012 Defense Strategic Guidance (DSG): In Brief*, by Catherine Dale and Pat Towell.

²⁶ Department of Defense, Quadrennial Defense Review 2014, 64 pp. For additional discussion, see CRS Report R43403, *The 2014 Quadrennial Defense Review (QDR) and Defense Strategy: Issues for Congress*, by Catherine Dale.

²⁷ See, for example, David Barno and Nora Bensahel, "Addressing Tomorrow's Challenges With Yesterday's Budget," *War on the Rocks*, February 10, 2015; John Grady, "Think Tank Panel Tells House U,.S. Military Faces More Challenges, Suggests Pentagon Spending Reforms," *USNI News*, February 11, 2015.

²⁸ See, for example, Thomas Donnelly and Gary Schmitt, "AWOL on the Defense Budget," *The Weekly Standard*, March 30, 2015; Dakota L. Wood, "An Epic Congressional Failure of Defense," *War on the Rocks*, May 13, 2015; Fred Hiatt, "Real World military Funding," *Washington Post*, May 17, 2015; Gary Schmitt and Thomas Donnelly, "Putting Defense First," *Weekly Standard*, October 5, 2015; Jim Talent, "Rebuilding America's Military," *The Hill*, October 7, 2015; Daniel Goure, "U.S. Rearmament Must Begin Now," *Lexington Institute*, October 7, 2015; Reihan Salam, "The United States Doesn't Spend Enough on Its Military," *Slate*, November 12, 2015.

²⁹ See, for example, Helene Cooper and James Kanter, "NATO, Tested by Russia in Syria, Raises Its Guard and Its Tone," *New York Times*, October 8, 2015; Julian E. Barnes, "NATO Chief Urges Allies to Start Modernizing Deterrence," *Real Time Brussels (Wall Street Journal)*, October 12, 2015; Aaron Mehta, "Carter: Russia Has Created 'New Reality' in Europe," *Defense News*, October 14, 2015; Marcus Weisgerber, "Russia Is Forcing the Pentagon to Rewrite Its European Playbook," *Defense One*, October 14, 2015; Esteban Villarrejo, "Trident Juncture: NATO Starts To Show Muscles to Russia," *Defense News*, October 19, 2015; Martin Banks, NATO Official: 'Arc of Instability' Surrounds Much of Europe," *Defense News*, October 22, 2015; Robin Emmott, "Upstaged NATO Searches for '360-(continued...)

funding request for the Overseas Contingency Operations (OCO) part of DOD's budget, requested \$1 billion for a European Reassurance Initiative, of which \$925 million would be for DOD to carry out several force deployments and operations in Europe. 30 At the September 4-5. 2014, NATO summit in Wales, NATO leaders announced a series of initiatives for 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.³¹ In December 2014, Russia issued a new military doctrine that, among other things, calls for a more assertive approach toward NATO.³² In June 2015, Russia stated that it would respond to the placement of additional U.S. military equipment in Eastern Europe by deploying additional forces along its own western border.³³

The increased attention that U.S. policymakers are paying to the security situation in Europe, combined with U.S. military operations in the Middle East against the Islamic State organization and similar groups, has intensified preexisting questions among some observers about whether the United States will be able to fully implement the military component of the U.S. strategic rebalancing to the Asia-Pacific region that was formally announced in the January 2012 defense strategic guidance document.

New Forms of Aggression and Assertiveness

Russia's seizure and annexation of Crimea, as well as subsequent Russian actions in eastern Ukraine and elsewhere in Eastern Europe, have already led to a renewed focus among policymakers on how to counter Russia's hybrid warfare or ambiguous warfare tactics. 34 China's

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Degree' Response to Russia," Reuters, October 22, 2015; Julian E. Barnes, "NATO Looks at Stationning More Troops Along Eastern Flank," Wall Street Journal, October 28, 2015; Phillip Swarts, "NATO Holds Largest Exercise in a Decade to Counter Russian Threat," Military Times, October 29, 2015; Aaron Mehta, "Gen. Breedlove: Intelligence Community Changing How it Handles Russia," Defense News, October 30, 2015; John Vandiver, "European Command Chief Seeks Stronger Navy Presence in Europe," Stars and Stripes, October 31, 2015; Michael Crowley, "U.S. Drawing a Line Against Putin in Europe," Politico, November 1, 2015; Agence France-Presse, "NATO Chief Says Alliance Must Counter Russia Military Buildup," Defense News, November 5, 2015; Gerard O'Dwyer, "NATO To Deepen Nordic Presence Through Sweden, Finland," Defense News, November 12, 2015; Robert H. Scales, "Our Precarious Defenses in Europe," *Wall Street Journal*, November 29, 2015; Aaron Mehta, "European Funding To Jump, Program Cuts Possible in FY17 Budget," *Defense News*, November 30, 2015; Sandra I. Erwin, "U.S. Army Europe to Request Aviation Reinforcements," National Defense, December 1, 2015; Jen Judson, "Hodges: US Army to Bolster Equipment Caches in Europe Within a Year," Defense News, December 9, 2015; Richard Sisk, "Polad's Suwalki Gap Replaces Germany's Fulda Gap as Top NATO Concern," Military.com, December 10, 2015; John Vandiver, "Breedlove Looks Back As He Charts NATO's New Path," Stars and Stripes, December 11, 2015; Loren Thompson, "War In Europe: Why The Army Is Worried," Forbes, December 11, 2015; Jens Stoltenberg, "NATO Chief Stoltenberg: 'Now Is the Time To Invest in Our Defense," Defense News, December 13, 2015.

³⁰ Prepared Statement of the Honorable Robert O. Work, Deputy Secretary of Defense, and Admiral James A. Winnefeld, Jr., USN, Vice Chairman of the Joint Chiefs of Staff, Before the House Armed Services Committee on the FY2015 Overseas Contingency Operations Budget Request for the Department of Defense, Wednesday, July 16, 2014, pp. 2, 4-5.

³¹ For additional discussion, see CRS Report R43698, NATO's Wales Summit: Outcomes and Key Challenges, by Paul

³² See, for example, Jaroslaw Adamowski, "Russia Overhauls Military Doctrine," *Defense News*, January 10, 2015.

³³ Karoun Demirjian, "Russia Says It Would Match Any U.S. Military Buildup in Eastern Europe," Washington Post,

³⁴ See, for example, 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 (continued...)

actions in the East and South China Seas have prompted a focus among policymakers on how to counter China's so-called salami-slicing tactics in those areas.³⁵

Nuclear Weapons and Nuclear Deterrence

Russia's reassertion of its status as a major world power has included, among other things, references by Russian officials to nuclear weapons and Russia's status as a major nuclear weapon power. This has led to an increased emphasis in discussions of U.S. defense and security on nuclear weapons and nuclear deterrence development that comes at a time when DOD is in the early stages of a multi-year plan to spend scores of billions of dollars to modernize U.S. strategic nuclear deterrent forces. DOD, for example, currently has plans to acquire a new class of ballistic missile submarines and a new long-range bomber.

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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.; 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 (pdated 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.

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³⁵ See CRS Report R42784, *Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress*, by Ronald O'Rourke. See also Benjamin David Baker, "Hybrid Warfare With Chinese Characteristics," The Diplomat, September 23, 2015; Michael Raska, "China and the 'Three Warfares," *The Diplomat*, December 18, 2015.

³⁶ See, for example, Jeffrey Tayler, "Putin's Nuclear Option," *Foreign Policy*, September 4, 2014; Alexei Anishchuk, "Putin Warns U.S. Spay Over Ukraine Threatens Global Stability," Reuters, October 15, 2014; Adrian Croft, "UK Concerned Over 'Threatening' Russian Nuclear Strategy," *Reuters*, February 6, 2015; Paul Sonne, "As Tensions With West Rise, Russia Increasingly Rattles Nuclear Saber," *Wall Street Journal*, April 5, 2015; Zachary Keck, "Russia Threatens to Build More Nuclear Weapons," *The National Interest*, May 18, 2015; Zachary Keck, "Russia Threatens to Deploy Nuclear Weapons in Crimea," *The National Interest*, June 1, 2015; Keith B. Payne, "Putin Wields the Nuclear Threat—And Plays with Fire," National Review, June 30, 2015; "Russia Pledges Measures If U.S. Upgrades Nukes in Germany," *Radio Free Europe/Radio Liberty*, September 23, 2015; Harrison Menke, "Russia's Dangerous Strategy of Nuclear Coercion," *Real Clear Defense*, October 19, 2015.

³⁷ See, for example, Destiny Albritton, "Report: U.S. Must Modernize, Update Nuclear Strategy for New Century," Washington Free Beacon, June 23, 2015; Naftali Bendavid, "NATO to Weigh Nuclear Threats From Russia," Wall Street Journal, June 23, 2015; Steven Pifer, "Russia's Rising Military: Should the U.S. Send More Nuclear Weapons to Europe?" The National Interest, July 21, 2015; Michaela Dodge, Russian Intermediate-Range Nuclear Forces: What They Mean for the United States, Heritage Foundation, Backgrounder #3028, July 30, 2015; Kingston Reif, "A New Missile Gap?" Real Clear Defense, August 12, 2015; Kristina Wong, "Pentagon Chief: Russia Is A 'Very Significant Threat," The Hill, August 20, 2015; Matthew R. Costlow, "Number One Priority: Nuclear Deterrence," Real Clear Defense, August 25, 2015; Michael Auslin, "Reviving America's Nuclear Culture," City Journal, September 3, 2015; John Grady, "Panel: Moves from Putin Administration Ending 'Strategic Holiday' for U.S. NATO," USNI News, September 8, 2015; Bill Gertz, "U.S. Nuclear Missile Submarine Surfaces in Scotland," Washington Free Beacon, September 17, 2015; Mike Eckel, "Impasse Over U.S.-Russia Nuclear Treaty Hardens As Washington Threatens "Countermeasures," Radio Free Europe/Radio Liberty, September 27, 2015; Michael Auslin, "American's Russian Nuke Obsession," Real Clear Defense, October 14, 2015; Doy S. Zakheim, "Meeting Russia's New Nuclear Challenge," Washington Times, October 29, 2015; Rebecca K.C. Hersman, "Nuclear Deterrence in a Disordered World," Global Forecast 2016, Center for Strategic and International Studies, 2015; Aaron Mehta, "Formber SecDef Perry: US on 'Brink' of New Nuclear Arms Race," Defense News, December 3, 2015; David J. Trachtenberg, "Commentary: Align US Strategic Forces to New Russian Realities," Defense News, December 7, 2015.

³⁸ See, for example, William J. Broad and David E. Sanger, "U.S. Ramping Up Major Renewal in Nuclear Arms," *New* (continued...)

Maintaining Technological Superiority in Conventional Weapons

DOD officials have expressed concern that the technological and qualitative edge that U.S. military forces have had relative to the military forces of other countries is being narrowed by improving military capabilities in other countries, particularly China and (in some respects) Russia. To arrest and reverse the decline in the U.S. technological and qualitative edge, DOD in November 2014 announced a new Defense Innovation Initiative. In a related effort, DOD has also announced that it is seeking a new general U.S. approach—a so-called "third offset strategy"—for maintaining U.S. superiority over opposing military forces that are both numerically large and armed with precision-guided weapons. A November 24, 2014, press report stated:

After spending 13 years fighting non-state actors in Iraq, Afghanistan and Syria, the US Defense Department is shifting its institutional weight toward developing a new acquisition and technology development strategy that focuses more on major state competitors, the Pentagon's No. 2 told Defense News on Nov. 21[, 2014].

Deputy Defense Secretary Bob Work said that at the top of the agenda are powers like China and Russia, both of whom have "regional and global aspirations, so that's going to increasingly take a lot of our attention."

Next come regional states that want to become nuclear powers, such as Iran and North Korea, and finally are transnational terrorist groups and their myriad offshoots.

"Layered on top of all three are technological advancements that are happening at a very rapid pace," Work said, which has given rise to a global competition for the latest in stealth, precision strike, communications and surveillance capabilities over which the United States no longer holds a monopoly.

The new Defense Innovation Initiative that Defense Secretary Chuck Hagel recently announced is "really focused on state actors," Work said, "and looking at the capabilities

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York Times, September 21, 2014; 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.

³⁹ CRS Report R41129, Navy Ohio Replacement (SSBN[X]) Ballistic Missile Submarine Program: Background and Issues for Congress, by Ronald O'Rourke.

⁴⁰ CRS Report R43049, U.S. Air Force Bomber Sustainment and Modernization: Background and Issues for Congress, by Jeremiah Gertler.

⁴¹ See, for example, Cheryl Pellerin, "Hagel Announces New Defense Innovation, Reform Efforts," *DOD News*, November 15, 2014; Jake Richmond, "Work Explains Strategy Behind Innovation Initiative," *DOD News*, November 24, 2014; and memorandum dated November 15, 2015, from Secretary of Defense Chuck Hagel to the Deputy Secretary of Defense and other DOD recipients on The Defense Innovation Initiative, accessed online on July 21, 2015, at http://www.defense.gov/pubs/OSD013411-14.pdf.

⁴² See Deputy Secretary of Defense Speech, Reagan Defense Forum: The Third Offset Strategy, As Delivered by Deputy Secretary of Defense Bob Work, Reagan Presidential Library, Simi Valley, CA, November 7, 2015, accessed December 21, 2015, at: http://www.defense.gov/News/Speeches/Speech-View/Article/628246/reagan-defense-forum-the-third-offset-strategy, and Deputy Secretary of Defense Speech, CNAS Defense Forum, As Delivered by Deputy Secretary of Defense Bob Work, JW Marriott, Washington, DC, December 14, 2015, accessed December 21, 2015, at: http://www.defense.gov/News/Speeches/Speech-View/Article/634214/cnas-defense-forum. See also Jason Sherman, "DOD Unveils Technology Areas That Will Drive 'Third Offset' Investments, Experimentation," *InsideDefense.com Daily News*, December 9, 2014; Aaron Mehta, "Work Outlines Key Steps in Third Offset Tech Development," *Defense News*, December 14, 2015; Jon Harper, "2017 Budget Proposal to Include Billions for Next-Generation Weapons Research," *National Defense*, December 14, 2015; Tony Bertuca, "Work Pegs FY-17 'Third Offset' Investment at \$12B-\$15B," *InsideDefense.com Daily News*, December 14, 2017.

that could potentially hurt our nation the most and how [the Pentagon can] prepare to address those capabilities and deter their use."

A major part of this push is the new "offset" strategy, which is looking to identify new technologies that the United States can use in order to deter or defeat those threats.⁴³

Defense Acquisition Policy

Related to the above development, DOD officials and other observers have argued that staying ahead of improving military capabilities in countries such as China in coming years will require adjusting U.S. defense acquisition policy to place a greater emphasis on speed of development, experimentation, risk-taking, and tolerance of failure during development. For example, in a December 22, 2014, opinion column, Frank Kendall, the Under Secretary of Defense for Acquisition, Technology and Logistics, stated:

For some time I have been trying to make the point that the United States' military technological superiority is being challenged in ways we have not seen for decades. This is not a future problem, nor is it speculative. My concerns are based on the intelligence reports I have received on a daily basis for almost five years....

Some time ago, I asked the Defense Intelligence Agency to produce a poster size document showing the scope of China's modernization programs in key war-fighting areas. The result is a dense compendium of dozens of programs. More recently, I asked my staff to prepare a similar depiction of the United States' ongoing and projected modernization programs. The two documents are strikingly different.

The chart on China is dense with program descriptions and timelines. The chart on the US programs is characterized by a high amount of white space. China and Russia are fielding state-of-the-art weapons designed specifically to overmatch US capabilities....

In the face of increasing and sophisticated threats to our technological superiority, paying a reasonable price for the equipment we acquire and incentivizing industry to perform at its best is a means to an end, not the end itself. While we will continue those efforts, we have to turn our attention more toward meeting the very real challenges to our technological superiority.

[DOD's] BBP [Better Buying Power] 3.0 [defense acquisition improvement initiative] will focus on the ways we pursue innovation and acquire technology. All of our investments in research and development will be reviewed with the goal of improving the output of those investments. We will look for ways to reduce cycle time for product development. We will examine the barriers to greater use of commercial and international sources of technology.

The emphasis on the professionalism of the acquisition workforce that I introduced in BBP 2.0 [in 2012] will continue, but the focus now will be on encouraging innovation and technical excellence; not just within the defense government enterprise but across industry as well. We will conduct a long-range research and development planning effort to ensure we are investing in the highest payoff technologies. We will seek resources to increase the use of prototyping and experimentation. Our ability to accept and manage risk, which is essential to technological superiority and inherent in cutting edge programs, will be re-examined....

As a nation we must overcome these threats, or we will wake up one day to the realization that the United States is no longer the most capable military power on the planet.⁴⁴

⁴³ Paul McLeary, "DoD Shifts Acquisition, Tech Efforts Toward Major Powers," *Defense News*, November 14, 2014.

Submarines and Antisubmarine Warfare

The growing capabilities and operations of China's submarine fleet, ⁴⁵ combined with a stated intention by Russia to rebuild its navy (including its submarine force) and renewed Russian submarine operations (including suspected Russian submarine operations in Swedish and Finnish waters and near the United Kingdom), have led to a renewed focus in discussions of U.S. defense and security on the value of the U.S. attack submarine force for preserving U.S. command of the seas on a global basis, and on U.S. and allied antisubmarine warfare (ASW) capabilities. ⁴⁶ This could lead to an increased focus on the procurement of Virginia-class submarines ⁴⁷ and ASW platforms and equipment, including (to cite just two examples), P-8 Poseidon multi-mission aircraft and ASW equipment for Littoral Combat Ships (LCSs). ⁴⁸

Reliance on Components and Materials from Russia and China

Increased tensions with Russia have led to an interest in eliminating instances of being dependent on Russian-made military systems and components for U.S. military systems. A current case in point concerns the Russian-made RD-180 rocket engine, which is incorporated into U.S. space launch rockets, including rockets used by DOD to put military payloads into orbit. ⁴⁹ Concerns over Chinese cyber activities or potential Chinese actions to limit exports of certain materials (such as rare earth elements) might similarly lead to concerns over the use of certain Chinese-

^{(...}continued)

⁴⁴ Frank Kendall, "Kendall: Why Better Buying Power 3.0?," *Defense News*, December 22, 2014. See also, for example, Aaron Mehta, "Pentagon Begins Better Buying Power 3.0," *Defense News*, April 9, 2015; Megan Eckstein, "CNO: Navy Needs More Agile Procurement To Keep Pace With '4-Plus-1' Threat Set," *USNI News*, December 7, 2015; Sydney J. Freedberg, Jr., "CNO Richardson Urges Fast-Track For Cyber, EW & Drones," *Breaking Defense*, December 7, 2015; Valerie Insinna, "CNO Pushes to Expedite Acquisition Process," *Defense Daily*, December 8, 2015; Anthony L. Velocci, Jr., "Opinion: Risk And Failure Drive Innovation," *Aviation Week & Space Technology*, December 18, 2015. See also Testimony of Vice Admiral (retired) Michael J. Connor before the United States House of Representatives Armed Services Committee Sea Power and Projection Forces Committee Hearing Game Changers – Undersea Warfare, October 27, 2015.

⁴⁵ For a discussion of China's submarine fleet, see CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke.

⁴⁶ See, for example, Anthony Capaccio, "U.S. Navy Seeks Better Underseas Sub-Hunting to Counter Putin," *Bloomberg News*, August 18, 2015; Lucas Tomlinson, "Russian Spy Ship Spotted Near US Sub Base," *Fox News*, September 3, 2015; Bill Gertz, "U.S. Shadowing Russian Ship in Atlantic Near Nuclear Submarine Areas," *Washington Free Beacon*, September 3, 2015; David Axe, "U.S. Sub Takes On Russia in Santa's Backyard," *The Daily Beast*, September 3, 2015; Bill Gertz, "Russian Spy Ship Makes Port Call in Caribbean," *Washington Free Beacon*, September 22, 2015; David S. Cloud, "Aboard a U.S. Nuclear Sub, A Cat-and-Mouse Game with Phantom Foes," *Los Angeles Times*, September 25, 2015; David E. Sanger and Eric Schmitt, "Russian Ships Near Data Cables Are Too Close for U.S. Comfort," *New York Times*, October 25, 2015; Jim Stavridis, "A New Cold War Deep Under the Sea?" *Huffington Post*, October 28, 2015; Stephen Bryen, "The Real Story Behind the Undersea Cable Caper," *Technology and Security*, October 29, 2015; Thomas Gibbons-Neff, "With No Sub-Chasing Aircraft of Its Own, UK Calls on Allies to Help Find Russian Submarine," *Washington Post*, November 23, 2015; Sydney J. Freedberg, Jr., "UK Needs P-8s ASAP vs. Russian Subs: MOD Fallon," *Breaking Defense*, December 11, 2015.

⁴⁷ For a discussion of 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.

⁴⁸ For a discussion of the LCS program, see CRS Report RL33741, *Navy Littoral Combat Ship (LCS)/Frigate Program: Background and Issues for Congress*, by Ronald O'Rourke.

⁴⁹ For a discussion, see CRS Insight IN10069, *Russian Sanctions Reprisal Against the RD-180 Rocket Engine: Paths Ahead for U.S. National Security Space Launch*, by Steven A. Hildreth. See also Austin Wright, "Air Force Offers Plan to Move Off Russian Rocket Engines," Politico Pro, September 14, 2015.

made components (such as electronic components) or Chinese-origin materials (such as rare earth elements) for U.S. military systems.⁵⁰

Issues for Congress

Potential policy and oversight issues for Congress include the following:

- **Shift in strategic situation.** Has there been a shift in the international security environment, and if so, what features characterize the new environment?
- 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? If not, what grand strategy should the United States pursue?
- Reassessment of U.S. defense funding levels, strategy, and missions. Should there be a reassessment of U.S. defense funding levels, strategy, and missions?
- Congressional role in reassessment. If there is to be such a reassessment, how should it be done, and what role should Congress play? Should Congress conduct the reassessment itself, through committee activities? Should Congress establish the terms of reference for a reassessment to be conducted by the executive branch or by an independent, third-party entity (such as a blue ribbon panel)? Should some combination of these approaches be employed?
- **Potential effect on plans and programs.** How might such a reassessment affect the current terms of debate on U.S. defense? What might be the potential implications for U.S. defense plans and programs?
- U.S. and NATO military capabilities in Europe. Are the United States and its NATO allies taking appropriate steps regarding U.S. and NATO military capabilities and operations in Europe? What potential impacts would a strengthened U.S. military presence in Europe have on total U.S. military force structure requirements? What impact would it have on DOD's ability to implement the military component of the U.S. strategic rebalancing toward the Asia-Pacific region?
- New forms of aggression and assertiveness. Do the United States and its allies and partners have an adequate strategy for countering Russia's so-called hybrid warfare in eastern Ukraine and China's so-called salami-slicing tactics in the East and South China Seas?
- Nuclear weapons and nuclear deterrence. Are current DOD plans for modernizing U.S. strategic nuclear weapons, and for numbers and basing of non-strategic (i.e., theater-range) nuclear weapons, aligned with the needs of the new strategic situation?
- Maintaining technological superiority in conventional weapons. Are DOD's steps to maintaining U.S. technological superiority in conventional weapons appropriate and sufficient?

⁵⁰ For more on China and rare earth elements, see CRS Report R43864, *China's Mineral Industry and U.S. Access to Strategic and Critical Minerals: Issues for Congress*, by Marc Humphries, and CRS Report R41744, *Rare Earth Elements in National Defense: Background, Oversight Issues, and Options for Congress*, by Valerie Bailey Grasso.

- **Defense acquisition policy.** As one possible means of helping to maintain U.S. technological superiority in conventional weapons, should defense acquisition policy be adjusted to incorporate more risk taking and greater tolerance of failure during development?
- Submarines and antisubmarine warfare. Are current Navy plans for numbers and capabilities of attack submarines, and ASW capabilities, aligned with the needs of the new strategic situation?
- Reliance on Russian-made components. Aside from the Russian-made RD-180 rocket engine, what other Russian-made components, if any, are incorporated into DOD equipment? What are DOD's plans regarding reliance on Russian-made components for DOD equipment?

Legislative Activity in 2015

The Administration's proposed FY2016 defense budget was submitted to Congress on February 2, 2015.

FY2016 National Defense Authorization Act (H.R. 1735/S. 1376)

House (Committee Report)

Section 1088 of H.R. 1735 as reported by the House Armed Services Committee (H.Rept. 114-102 of May 5, 2015) states:

SEC. 1088. Department of Defense strategy for countering unconventional warfare.

- (a) Strategy required.—The Secretary of Defense, in consultation with the President and the Chairman of the Joint Chiefs of Staff, shall develop a strategy for the Department of Defense to counter unconventional warfare threats posed by adversarial state and non-state actors.
- (b) Elements.—The strategy required under subsection (a) shall include each of the following:
- (1) An articulation of the activities that constitute unconventional warfare being waged upon the United States and allies.
- (2) A clarification of the roles and responsibilities of the Department of Defense in providing indications and warning of, and protection against, acts of unconventional warfare.
- (3) The current status of authorities and command structures related to countering unconventional warfare.
- (4) An articulation of the goals and objectives of the Department of Defense with respect to countering unconventional warfare threats.
- (5) An articulation of related or required interagency capabilities and whole-of-Government activities required by the Department of Defense to support a counter-unconventional warfare strategy.
- (6) Recommendations for improving the counter-unconventional warfare capabilities, authorities, and command structures of the Department of Defense.
- (7) Recommendations for improving interagency coordination and support mechanisms with respect to countering unconventional warfare threats.

- (8) Recommendations for the establishment of joint doctrine to support counterunconventional warfare capabilities within the Department of Defense.
- (9) Any other matters the Secretary of Defense and the Chairman of the Joint Chiefs of Staff determine necessary.
- (c) Submittal to Congress.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees the strategy required by subsection (a). The strategy shall be submitted in unclassified form, but may include a classified annex.
- (d) Definition of unconventional warfare.—In this section, the term "unconventional warfare" means activities conducted to enable a resistance movement or insurgency to coerce, disrupt, or overthrow a government or occupying power by operating through or with an underground, auxiliary, or guerrilla force in a denied area.

Section 1531 of H.R. 1735 as reported by the committee states:

- SEC. 1531. Statement of policy regarding European Reassurance Initiative.
- (a) Findings.—Congress makes the following findings:
- (1) In February 2015, Lieutenant General James Clapper (retired), Director of National Intelligence, testified to the Committee on Armed Services of the Senate that "Russian dominance over the former Soviet space is Russia's highest foreign policy goal".
- (2) Russia, under the direction of President Vladimir Putin, has demonstrated its intent to expand its sphere of influence beyond its borders and limit Western influence in the region.
- (3) The Russian military is aggressively postured on the Ukrainian boarder and continues its buildup of military personnel and material. These aggressive and unwarranted actions serve to intimidate, with a show of force, the Ukrainian people as well as the other nations in the region including Georgia, the Baltic States, and the Balkan States.
- (4) In December 2014, Congress enacted the Ukraine Freedom Support Act of 2014 (Public Law 113–272), which gives the President the authority to expand assistance to Ukraine, increase economic sanctions on Russia, and provide equipment to counter offensive weapons.
- (5) In February 2015, the Atlantic Council, the Brookings Institute, and the Chicago Council on Global Affairs published a report entitled "Preserving Ukraine's Independence, Resisting Russian Aggression: What the United States and NATO Must Do" advocating for increased United States assistance to Ukraine with nonlethal and lethal defensive equipment.
- (6) Despite Russia signing the February 2015 Minsk Agreement, it has continued to violate the terms of the agreement, as noted by Assistant Secretary of State for European and Eurasian Affairs, Victoria Nuland, at the German Marshall Fund Brussels Forum in March 2015: "We've seen month on month, more lethal weaponry of a higher caliber...poured into Ukraine by the separatist Russian allies...the number one thing is for Russia to stop sending arms over the border so we can have real politics.".
- (7) The military of the Russian Federation continues to increase their show of force globally, including frequent international military flights, frequent snap exercises of thousands of Russian troops, increased global naval presence, and the threat of the use of nuclear weapons in defense of the annexation of Crimea in March 2014.
- (8) The Government of the Russian Federation continues to exert and increase undue influence on the free will of sovereign nations and people with intimidation tactics, covert operations, cyber warfare, and other unconventional methods.

- (9) In testimony to the Committee on Armed Services of the House of Representatives in February 2015, Commander of European Command, General Philip Breedlove, United States Air Force, stated that "Russia has employed 'hybrid warfare'...to illegally seize Crimea, foment separatist fever in several sovereign nations, and maintain frozen conflicts within its so-called 'sphere of influence' or 'near abroad'".
- (10) The use of unconventional methods of warfare by Russia presents challenges to the United States and its partners and allies in addressing the threat.
- (11) An enhanced United States military presence and readiness posture and the provision of security assistance in Europe are key elements to deterring further Russian aggression and reassuring United States allies and partners.
- (12) In the National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291), Congress authorized and appropriated \$1 billion for the European Reassurance Initiative, which supports Operation Atlantic Resolve of the United States Armed Forces.
- (13) The European Reassurance Initiative expands United States military presence in Europe, through—
- (A) bolstered and continual United States military presence;
- (B) bilateral and multilateral exercises with partners and allies;
- (C) improved infrastructure;
- (D) increased prepositioning of United States equipment throughout Europe; and
- (E) building partnership capacity for allies and partners.
- (14) The European Reassurance Initiative has served as a valuable tool in strengthening the partnerships with the North Atlantic Treaty Organization (NATO) as well as partnerships with non-member allies in the region.
- (15) As a result of the NATO 2014 Summit in Wales, NATO has initiated a Readiness Action Plan to increase partner nation funding and resourcing to combat Russian aggression. NATO's efforts with the Readiness Action Plan and United States investment in regional security through the European Reassurance Initiative will serve to continue and reinforce the strength and fortitude of the alliance against nefarious actors.
- (16) The President's Budget Request for fiscal year 2016 includes \$789.3 million to continue the European Reassurance Initiative focus on increased United States military troop rotations in support of Operation Atlantic Resolve, maintaining and further expanding increasing regional exercises, and building partnership capacity.
- (b) Statement of policy.—It is the policy of the United States to continue and expand its efforts in Europe to reassure United States allies and partners and deter further aggression and intimidation by the Russian Government, in order to enhance security and stability in the region. This policy shall include—
- (1) continued use of conventional methods, including increased United States military presence in Europe, exercises and training with allies and partners, increasing infrastructure, prepositioning of United States military equipment in Europe, and building partnership capacity;
- (2) increased emphasis on countering unconventional warfare methods in areas such as cyber warfare, economic warfare, information operations, and intelligence operations, including increased efforts in the development of strategy, operational concepts, capabilities, and technologies; and
- (3) increased security assistance to allies and partners in Europe, including the provision of both non-lethal equipment and lethal equipment of a defensive nature to Ukraine.

Section 1610 of H.R. 1735 as reported by the committee states:

SEC. 1610. Prohibition on reliance on China and Russia for space-based weather data.

- (a) Prohibition.—The Secretary of Defense shall ensure that the Department of Defense does not rely on, or in the future plan to rely on, space-based weather data provided by the Government of China, the Government of Russia, or an entity owned or controlled by the Government of China or the Government of Russia for national security purposes.
- (b) Certification.—Not later than 90 days after the date of the enactment of this Act, the Secretary shall submit to the congressional defense committees a certification that the Secretary is in compliance with the prohibition under subsection (a).

H.Rept. 114-102 states:

Russian Unconventional Warfare

Tactics employed by the Russian Federation in its aggression against Ukraine are not unique. However, Russia has combined them in new, effective, and troubling ways. It has fomented and taken advantage of ethnic disputes to train, build, and equip a separatist army in Ukraine under Russian direction. It has combined this line of effort with propaganda, diplomatic, and economic measures to try to reduce the effectiveness of Ukraine's response, as well as the response of the United States and Europe, and to preserve and extend its perceived sphere of influence.

The North Atlantic Treaty Organization (NATO) is the most successful military alliance in history, defending the security interests of its members against external threats for over 60 years. The committee supports the NATO alliance and believes that it can successfully continue to serve as a bedrock for U.S. and European security. However, the committee notes that the methods currently being used by Russia in Ukraine pose a challenge to the NATO system.

The core of the NATO alliance is provided by Article 5 of the Washington Treaty, which enshrines the principle of collective selfdefense: "The Parties agree that an armed attack against one or more of them in Europe or North America shall be considered an attack against them all . . ." In the wake of Russian actions in Ukraine, both the United States, in a series of bilateral actions referred to as the European Reassurance Initiative, and NATO collectively, in the Readiness Action Plan, have taken steps to ensure that all parties are postured to respond to any new aggression. The committee is concerned, however, that these steps may not sufficiently address the challenges posed by Russian tactics.

At its core, collective self-defense requires that the parties to the treaty agree that one of the members is under attack. This implies that such aggression can be correctly attributed to some actor outside the alliance. Russia's actions have been designed to be deniable and difficult to attribute directly to Russian government activity. Should similar tactics, or even more covert methods, be applied to NATO member states that border Russia, it may be difficult to attribute them to Russian activity and therefore difficult to trigger a collective NATO response. It is likely that some NATO members will have different views on the degree of Russian involvement. In addition, it is possible that Russia would perceive NATO may have difficulty in coming to an agreement about a collective response, which could undermine NATO's ability to deter Russia from engaging in attempts to intervene in sovereign issues of NATO members.

The committee believes that the Department of Defense, and NATO, should fully explore how the United States, NATO, and member states can, as necessary, establish deterrence mechanisms against activities such as those undertaken by the Russian government in Ukraine. The committee directs the Secretary of Defense, acting through the Office of Net Assessment or other such organization as the Secretary considers appropriate, to undertake a study exploring various strategies for deterring external efforts to interfere

with the internal workings of NATO member states by Russia, or any other actor utilizing tactics such as propaganda in media, economic warfare, cyber warfare, criminal acts, and intelligence operations, similar to those being used by Russia in Ukraine. The committee expects the Secretary to deliver a report to the congressional defense committees containing the findings of such study not later than March 31, 2016.

This study would complement a provision contained elsewhere in this Act requiring the Secretary of Defense to develop a strategy for the Department of Defense to counter unconventional warfare threats posed by adversarial state and non-state actors. (Pages 257-258)

H.Rept. 114-102 also states:

Funding and Support for the European Reassurance Initiative

The budget request included \$789.3 million for the European Reassurance Initiative (ERI). The committee supports the policy and activities contained in the ERI, which was originally proposed as part of the budget request for fiscal year 2015. However, the committee observes that these initiatives are largely focused on conventional reassurance and deterrence activities. The committee also recognizes that the Russian Federation has employed unconventional warfare methods in areas such as cyber warfare, economic warfare, information operations, and intelligence operations, and believes the Department of Defense should increase its focus on countering such methods.

The committee believes that ERI funds for fiscal year 2016 should be allocated for continued conventional reassurance and deterrence activities, as outlined in section 1535 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291), as well as countering unconventional threats. Therefore, elsewhere in this Act, the committee includes a provision that would: (1) lay out a statement of policy regarding ERI; (2) require a Department of Defense strategy to address unconventional warfare methods; and (3) authorize increased funding for U.S. intelligence and warning capabilities related to the European theater, technologies supporting U.S. information operations and strategic communications activities, the Javelin weapon system, and Stryker combat vehicle upgrades to meet U.S. Army Europe operational needs.

The committee further believes that, as part of the U.S. effort to increase security assistance to allies and partners in Europe, ERI funds should be allocated to provide both nonlethal equipment and lethal equipment of a defensive nature to Ukraine. Therefore, elsewhere in this Act, the committee includes a provision that would authorize appropriations to provide sustainment and assistance to the military and national security forces of Ukraine.

The committee believes that all of these U.S. efforts taken in combination are vital to address regional security and to deter and counter continued Russian aggression. The committee further believes that these efforts should be enduring and must be sustained as core activities of the Department of Defense in Europe. (Pages 281-282)

House (Floor Action)

On May 15, 2015, as part of its consideration of H.R. 1735, the House agreed by voice vote to H.Amdt. 229, an en bloc amendment that included, among other things, an amendment that was number 59 in H.Rept. 114-112 of May 13, 2015, on H.Res. 260, providing for the further consideration of H.R. 1735. Amendment number 59 in H.Rept. 114-102 states:

Page 227, after line 19, insert the following new section:

SEC. 569. REPORT ON CIVILIAN AND MILITARY EDUCATION TO RESPOND TO FUTURE THREATS.

- (a) IN GENERAL.—Not later than June 1, 2016, the Secretary of Defense shall submit to the congressional defense committees a report describing both civilian and military education requirements necessary to meet any threats anticipated in the future security environment as described in the quadrennial defense review. Such report shall include—
- (1) an assessment of the learning outcomes required of future members of the Armed Forces and senior military leaders to meet such threats;
- (2) an assessment of the shortfalls in current professional military education requirements in meeting such threats;
- (3) an assessment of successful professional military education programs that further the ability of the Department of Defense to meet such threats;
- (4) recommendations of subjects to be covered by civilian elementary and secondary schools in order to better prepare students for potential military service;
- (5) recommendations of subjects to be included in professional military education programs;
- (6) recommendations on whether partnerships between the Department of Defense and private institutions of higher education (as defined in section 101(a) of the Higher Education Act of 1965 (20 U.S.C. 1001(a))) would help meet such threats; and
- (7) an identification of opportunities for the United States to strengthen its leadership role in the future security environment and a description of how the recommendations made in this report contribute to capitalizing on such opportunities.
- (b) UPDATED REPORTS.—Not later than 10 months after date of the publication of each subsequent quadrennial defense review, the Secretary of Defense shall update the report described under subsection (a) and shall submit such report to the congressional defense committees.

The above section became **Section 570** of H.R. 1735 as passed by the House on May 15, 2015.

Also on May 15, 2015, as part of its consideration of H.R. 1735, the House agreed by voice vote to H.Amdt. 236, an en bloc amendment that included, among other things, an amendment that was number 115 in H.Rept. 114-112 of May 13, 2015, on H.Res. 260, providing for the further consideration of H.R. 1735. Amendment number 115 in H.Rept. 114-102 states:

At the end of subtitle G of title XII (page 622, after line 22), add the following:

- SEC. 12xx. REPORT ON IMPACT OF ANY SIGNIFICANT REDUCTION IN UNITED STATES TROOP LEVELS OR MATERIEL IN EUROPE ON NATO'S ABILITY TO CREDIBLY ADDRESS EXTERNAL THREATS TO ANY NATO MEMBER STATE.
- (a) SENSE OF CONGRESS.—It is the sense of Congress that—(1) in order to demonstrate United States commitment to North Atlantic Treaty Organization (NATO) allies, especially those NATO allies under pressure on the Eastern flank of the Alliance, and to enhance the United States deterrent presence and resolve to countering threats to NATO's collective security, United States Armed Forces stationed and deployed in Europe should be increased in number and combat power; and (2) the "current and foreseeable security environment", as referenced in paragraph 12 of Section IV on Political-Military Matters of the Founding Act on Mutual Relations, Cooperation and Security between NATO and the Russian Federation (NATO-Russia Founding Act), has changed significantly since the signing of such Act in 1997 and thus such Act should not be read, interpreted, or implemented so as to constrain or in any way limit additional permanent stationing of substantial combat forces anywhere on the territory of any NATO member State in furtherance of NATO's core mission of collective defense and other missions.

(b) REPORT.—

- (1) IN GENERAL.—In order to ensure that the United States contribution to NATO's core mission of collective defense remains robust and ready to meet any future challenges, the Secretary of Defense shall submit to the appropriate congressional committees a report on the impact of any significant reduction in United States troop levels or materiel in Europe on NATO's ability to credibly deter, resist, and, if necessary, repel external threats to any NATO member State.
- (2) DEADLINE.—The report required under paragraph (1) shall be submitted not later than 30 days prior to the date on which any significant reduction described in paragraph (1) is scheduled to take place.
- (3) FORM.—The report required under paragraph (1) shall be submitted in unclassified form, but may contain a classified annex if necessary to protect the national security interests of the United States.
- (4) DEFINITION.—In this subsection, the term "appropriate congressional committees" means—
- (A) the Committee on Armed Services and the Committee on Foreign Relations of the Senate; and
- (B) the Committee on Armed Services and the Committee on Foreign Affairs of the House of Representatives.

The above section became **Section 1274** of H.R. 1735 as passed by the House on May 15, 2015.

Senate

Section 212 of S. 1376 as reported by the Senate Armed Services Committee (S.Rept. 114-49 of May 19, 2015) states:

- SEC. 212. Department of Defense technology offset program to build and maintain the military technological superiority of the United States.
- (a) Program established.—
- (1) IN GENERAL.—The Secretary of Defense shall establish a technology offset program to build and maintain the military technological superiority of the United States by—
- (A) accelerating the fielding of offset technologies that would help counter technological advantages of potential adversaries of the United States, including directed energy, low-cost, high-speed munitions, autonomous systems, undersea warfare, cyber technology, and intelligence data analytics, developed using Department of Defense research funding and accelerating the commercialization of such technologies; and
- (B) developing and implementing new policies and acquisition and business practices.
- (2) GUIDELINES.—Not later than one year after the date of the enactment of this Act, the Secretary shall issue guidelines for the operation of the program, including—
- (A) criteria for an application for funding by a military department, defense agency, or a combatant command:
- (B) the purposes for which such a department, agency, or command may apply for funds and appropriate requirements for technology development or commercialization to be supported using program funds;
- (C) the priorities, if any, to be provided to field or commercialize offset technologies developed by certain types of Department research funding; and

- (D) criteria for evaluation of an application for funding or changes to policies or acquisition and business practices by a department, agency, or command for purposes of the program.
- (b) Development of directed energy strategy.—
- (1) IN GENERAL.—Not later than one year after the date of the enactment of this Act, the Secretary, in consultation with such officials and third-party experts as the Secretary considers appropriate, shall develop a directed energy strategy to ensure that the United States directed energy technologies are being developed and deployed at an accelerated pace.
- (2) COMPONENTS OF STRATEGY.—The strategy required by paragraph (1) shall include the following:
- (A) A technology roadmap for directed energy that can be used to manage and assess investments and policies of the Department in this high priority technology area.
- (B) Proposals for legislative and administrative action to improve the ability of the Department to develop and deploy technologies and capabilities consistent with the directed energy strategy.
- (C) An approach to program management that is designed to accelerate operational prototyping of directed energy technologies and develop cost-effective, real-world military applications for such technologies.
- (3) BIENNIAL REVISIONS.—Not less frequently than once every 2 years, the Secretary shall revise the strategy required by paragraph (1).
- (4) SUBMITTAL TO CONGRESS.—(A) Not later than 90 days after the date on which the Secretary completes the development of the strategy required by paragraph (1) and not later than 90 days after the date on which the Secretary completes a revision to such strategy under paragraph (3), the Secretary shall submit to the Committee on Armed Services of the Senate and the Committee on Armed Services of the House of Representatives a copy of such strategy.
- (B) The strategy submitted under subparagraph (A) shall be submitted in unclassified form, but may include a classified annex.
- (c) Applications for funding.—
- (1) IN GENERAL.—Under the program, the Secretary shall, not less frequently than annually, solicit from the heads of the military departments, the defense agencies, and the combatant commands applications for funding to be used to enter into contracts, cooperative agreements, or other transaction agreements entered into pursuant to section 845 of the National Defense Authorization Act for Fiscal Year 1994 (Public Law 103–160; 10 U.S.C. 2371 note) with appropriate entities for the fielding or commercialization of technologies.
- (2) TREATMENT PURSUANT TO CERTAIN CONGRESSIONAL RULES.—Nothing in this section shall be interpreted to require any official of the Department of Defense to provide funding under this section to any earmark as defined pursuant to House Rule XXI, clause 9, or any congressionally directed spending item as defined pursuant to Senate Rule XLIV, paragraph 5.
- (d) Funding.—
- (1) IN GENERAL.—Subject to the availability of appropriations for such purpose, of the amounts authorized to be appropriated for research, development, test, and evaluation, Defense-wide for fiscal year 2016, not more than \$400,000,000 may be used for any such fiscal year for the program established under subsection (a).

- (2) AMOUNT FOR DIRECTED ENERGY.—Of this amount, not more than \$200,000,000 may be used for activities in the field of directed energy.
- (e) Transfer authority.—
- (1) IN GENERAL.—The Secretary may transfer funds available for the program to the research, development, test, and evaluation accounts of a military department, defense agency, or a combatant command pursuant to an application, or any part of an application, that the Secretary determines would support the purposes of the program.
- (2) SUPPLEMENT NOT SUPPLANT.—The transfer authority provided in this subsection is in addition to any other transfer authority available to the Department of Defense.
- (f) Termination.—
- (1) IN GENERAL.—The authority to carry out a program under this section shall terminate on September 30, 2020.
- (2) TRANSFER AFTER TERMINATION.—Any amounts made available for the program that remain available for obligation on the date the program terminates may be transferred under subsection (e) during the 180-day period beginning on the date of the termination of the program.

Regarding Section 212, S.Rept. 114-49 states:

Department of Defense technology offset program to build and maintain the military technological superiority of the United States (sec. 212)

The committee notes with concern that the United States has not faced a more diverse and complex array of crises since the end of World War II, and that taken together, they constitute the greatest challenge in a generation to the integrity of the liberal world order, which has consistently been underwritten by U.S. military technological superiority. At the same time, the committee is alarmed by the apparent erosion in recent years of this technological advantage, which is in danger of disappearing altogether. To prevent such a scenario and to maintain the country's global military technological edge, the committee recommends a provision that would establish a new \$400.0 million initiative.

In doing so, the committee notes that the Defense Department is facing an emerging innovation gap. Commercial research and development in the United States now represents 80 percent of the national total, and the top four U.S. defense contractors combined spend only one-quarter of what the single biggest internet company does on research and development. Furthermore, global research and development is now more than twice that of the United States. The committee also notes that defense innovation is moving too slowly—in cycles that can last up to 18 years, whereas commercial innovation can be measured in cycles of 18 months or less.

The committee understands that accessing sources of innovation beyond the Defense Department is critical for national security, particularly in the areas of directed energy, low-cost high-speed munitions, cyber capabilities, autonomous systems, undersea warfare, and intelligence data analytics. However, there are currently too many barriers that limit cooperation with U.S. allies and global commercial firms, posing a threat to the country's future military technological dominance.

For the past several years, U.S. adversaries have been rapidly improving their own military capabilities to counter our unique advantages. Structural trends, such as the diffusion of certain advanced military technologies, pose new operational challenges to U.S. armed forces. As a result, the dominance of the United States military can no longer be taken for granted. Consequently, the Department of Defense must remain focused on

the myriad potential threats of the future and thus maintain technological superiority against potential adversaries.

The committee notes that since 1960, the department has invested more than \$6.0 billion in directed energy science and technology initiatives. The committee is concerned that, despite this significant investment, the department's directed energy initiatives are not resourced at levels necessary to transition them to fullscale acquisition programs. The committee is encouraged by the Navy's demonstration a 100–150 kilowatt prototype laser and by the Air Force's demonstration of high-powered electromagnetic weapons capabilities. However, the committee is concerned about the future of directed energy technologies as a whole. The committee notes that there is no inter-service entity dedicated to advancing promising directed energy platforms beyond the development point towards acquisition.

The committee is encouraged that the department established a department-wide Defense Innovation Initiative in November 2014 to pursue innovative ways to sustain and advance our military superiority and to improve business operations throughout the department. However, the committee is concerned by the possibility that this initiative is not being implemented in an appropriate and expeditious manner.

In response to these factors, the committee recommends a provision that would establish an initiative within the Department of Defense to maintain and enhance the military technological superiority of the United States. The provision would establish a program to accelerate the fielding of offset technologies, including, but not limited to, directed energy, low-cost high-speed munitions, autonomous systems, undersea warfare, cyber technology, and intelligence data analytics, developed by the department and to accelerate the commercialization of such technologies. As part of this program, the committee expects that the Secretary of Defense would also establish updated policies and new acquisition and management practices that would speed the delivery of offset technologies into operational use.

The provision would authorize \$400.0 million for fiscal year 2016 for the initiative, of which \$200.0 million would be authorized specifically for directed energy technology. Accordingly, the provision would mandate the Secretary to develop a directed energy strategy to ensure that appropriate technologies are developed and deployed at an accelerated pace, and update it every 2 years. The committee expects that this strategy would include a recommendation on rationalizing the roles and authorities of the Joint Technology Office for High Energy Lasers. The provision would further direct the Secretary to submit this strategy to the Senate Armed Services Committee and the House Armed Services Committee no later than 90 days after completing the strategy, and biennially thereafter.

To speed up the development of these vitally needed national security capabilities, the committee directs that the Secretary of Defense shall consider all appropriate flexible acquisition authorities granted in law and in this Act. These should include the management structure and streamlined procedures for rapid prototyping outlined in section 803 of this Act on the middle tier of acquisition for rapid prototyping and rapid fielding, and the procedures and authorities to be considered under section 805 of this Act on use of alternative acquisition paths to acquire critical national security capabilities to include other transactions, rapid acquisition, and commercial item authorities.

The committee expects that the Secretary of Defense would keep the Senate Committee on Armed Services and the House Committee on Armed Services regularly updated on progress of activities under this technology offsets initiative. (Pages 44-46)

Section 1253 of S. 1376 as reported by the committee states:

SEC. 1253. Increased presence of United States ground forces in Eastern Europe to deter aggression on the border of the North Atlantic Treaty Organization.

- (a) Sense of Congress.—It is the sense of Congress that—
- (1) the increased presence of United States and allied ground forces in Eastern Europe since April 2014 has provided a level of reassurance to North Atlantic Treaty Organization (NATO) members in the region and strengthened the capability of the Organization to respond to any potential Russian aggression against Organization members;
- (2) at the North Atlantic Treaty Organization Wales summit in September 2014 member countries agreed on a Readiness Action Plan which is intended to improve the ability of the Organization to respond quickly and effectively to security threats on the borders of the Organization, including in Eastern Europe, and the challenges posed by hybrid warfare;
- (3) the capability of the North Atlantic Treaty Organization to respond to threats on the eastern border of the Organization would be enhanced by a more sustained presence on the ground of Organization forces on the territories of Organization members in Eastern Europe; and
- (4) an increased presence of United States ground forces in Eastern Europe should be matched by an increased force presence of European allies.
- (b) Report.—
- (1) IN GENERAL.—Not later than 120 days after the date of the enactment of this Act, the Secretary of Defense shall, in consultation with the Secretary of State, submit to the congressional defense committees a report setting forth an assessment of options for expanding the presence of United States ground forces of the size of a Brigade Combat Team in Eastern Europe to respond, along with European allies and partners, to the security challenges posed by Russia and increase the combat capability of forces able to respond to unconventional or hybrid warfare tactics such as those used by the Russian Federation in Crimea and Eastern Ukraine.
- (2) ELEMENTS.—The report under this subsection shall include the following:
- (A) An evaluation of the optimal location or locations of the enhanced ground force presence described in paragraph (1) that considers such factors as—
- (i) proximity, suitability, and availability of maneuver and gunnery training areas;
- (ii) transportation capabilities;
- (iii) availability of facilities, including for potential equipment storage and prepositioning;
- (iv) ability to conduct multinational training and exercises;
- (v) a site or sites for prepositioning of equipment, a rotational presence or permanent presence of troops, or a combination of options; and
- (vi) costs.
- (B) A description of any initiatives by other members of the North Atlantic Treaty Organization, or other European allies and partners, for enhancing force presence on a permanent or rotational basis in Eastern Europe to match or exceed the potential increased presence of United States ground forces in the region.

Regarding Section 1253, S.Rept. 114-49 states:

Increased presence of United States ground forces in Eastern Europe to deter aggression on the border of the North Atlantic Treaty Organization (sec. 1253)

The committee recommends a provision that would require a report to the congressional defense committees, not later than 120 days after the date of the enactment of this Act, by

the Secretary of Defense, in consultation with the Secretary of State, assessing options for expanding the presence of U.S. ground forces of the size of a brigade combat team in Eastern Europe to respond, along with European allies and partners, to the security challenges posed by Russia and to increase the combat capability of allied forces to respond to unconventional or hybrid warfare tactics like those used by Russia in Crimea and eastern Ukraine. The committee believes that any increases in the presence of U.S. ground forces in Eastern Europe should be matched by similar increases in the commitment of ground forces by European allies and partners for these purposes. (Page 233)

Section 1254 of S. 1376 as reported by the committee states:

- SEC. 1254. Sense of Congress on European defense and North Atlantic Treaty Organization spending.
- (a) Findings.—Congress makes the following findings:
- (1) North Atlantic Treaty Organization (NATO) countries, at the 2014 North Atlantic Treaty Organization Summit in Wales, pledged to "reverse the trend of declining defense budgets, to make the most effective use of our funds and to further a more balanced sharing of costs and responsibilities".
- (2) Former Secretary of Defense Chuck Hagel stated on May 2, 2014, that "[t]oday, America's GDP is smaller than the combined GDPs of our 27 NATO allies. But America's defense spending is three times our Allies' combined defense spending. Over time, this lopsided burden threatens NATO's integrity, cohesion, and capability, and ultimately both European and transatlantic security".
- (3) Former North Atlantic Treaty Organization Secretary General Anders Fogh Rasmussen stated on July 3, 2014, that "[d]uring the last five years, Russia has increased defense spending by 50 percent, while NATO allies on average have decrease their defense spending by 20 percent. That is not sustainable, we need more investment in defense and security".
- (b) Sense of Congress.—It is the sense of Congress that—
- (1) it is in the national security and fiscal interests of the United States that prompt efforts should be undertaken by North Atlantic Treaty Organization allies to meet defense budget commitments made in Declaration 14 of the Wales Summit Declaration of September 2014;
- (2) the United States Government should continue efforts through the Department of Defense and other agencies to encourage North Atlantic Treaty Organization allies towards meeting the defense spending goals set out at the Wales Summit;
- (3) some North Atlantic Treaty Organization allies have already taken positive steps to reverse declines in defense spending and should continue to be supported in those efforts; and
- (4) thoughtful and coordinated defense investments by European allies in military capabilities would add deterrence value to the posture of the North Atlantic Treaty Organization against Russian aggression and terrorist organizations and more appropriately balance the share of Atlantic defense spending.

Section 1255 of S. 1376 as reported by the committee states:

- SEC. 1255. Additional matters in annual report on military and security developments involving the Russian Federation.
- (a) Additional matters.—Subsection (b) of section 1245 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291) is amended—

- (1) by redesignating paragraphs (4) through (15) as paragraphs (6) through (17), respectively; and
- (2) by inserting after paragraph (3) the following new paragraphs (4) and (5):
- "(4) An assessment of the force structure and capabilities of Russian military forces stationed in each of the Arctic, Kaliningrad, and Crimea, including a description of any changes to such force structure or capabilities during the one-year period ending on the date of such report and with a particular emphasis on the anti-access and area denial capabilities of such forces.
- "(5) An assessment of Russian military strategy and objectives for the Arctic region.".
- (b) Effective date.—The amendments made by subsection (a) shall take effect on the date of the enactment of this Act, and shall apply with respect to reports submitted under section 1245 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 after that date.

Regarding Section 1255, S.Rept. 114-49 states:

Additional matters in annual report on military and security developments involving the Russian Federation (sec. 1255)

The committee recommends a provision that would add a reporting requirement to section 1245 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291) requiring an assessment of the force structure and capabilities of Russian military forces stationed in the Arctic region, Kaliningrad, and Crimea, as well as an assessment of the Russian military strategy in the Arctic region.

The committee is concerned about increased Russian military activity in the Arctic region and notes that Russian activities and apparent ambitions could present challenges to international law, norms, and agreements relating to the Arctic region. (Page 233)

Section 1256 of S. 1376 as reported by the committee states:

- SEC. 1256. Report on alternative capabilities to procure and sustain nonstandard rotary wing aircraft historically procured through Rosoboronexport.
- (a) Report on assessment of alternative capabilities.—Not later than 180 days after the date of the enactment of this Act, the Under Secretary of Defense for Acquisition, Technology, and Logistics shall, in consultation with the Chairman of the Joint Chiefs of Staff, submit to the congressional defense committees a report setting forth an assessment, obtained by the Under Secretary for purposes of the report, of the feasibility and advisability of using alternative industrial base capabilities to procure and sustain, with parts and service, nonstandard rotary wing aircraft historically acquired through Rosoboronexport, or nonstandard rotary wing aircraft that are in whole or in part reliant upon Rosoboronexport for continued sustainment, in order to benefit United States national security interests.
- (b) Independent assessment.—The assessment obtained for purposes of subsection (a) shall be conducted by a federally funded research and development center (FFRDC), or another appropriate independent entity with expertise in the procurement and sustainment of complex weapon systems, selected by the Under Secretary for purposes of the assessment.
- (c) Elements.—The assessment obtained for purposes of subsection (a) shall include the following:
- (1) An identification and assessment of international industrial base capabilities, other than Rosoboronexport, to provide one or more of the following:

- (A) Means of procuring nonstandard rotary wing aircraft historically procured through Rosoboronexport.
- (B) Reliable and timely supply of required and appropriate parts, spares, and consumables of such aircraft.
- (C) Certifiable maintenance of such aircraft, including major periodic overhauls, damage repair, and modifications.
- (D) Access to required reference data on such aircraft, including technical manuals and service bulletins.
- (E) Credible certification of airworthiness of such aircraft through physical inspection, notwithstanding any current administrative requirements to the contrary.
- (2) An assessment (including an assessment of associated costs and risks) of alterations to administrative processes of the United States Government that may be required to procure any of the capabilities specified in paragraph (1), including waivers to Department of Defense or Department of State requirements applicable to foreign military sales or alterations to procedures for approval of airworthiness certificates.
- (3) An assessment of the potential economic impact to Rosoboronexport of procuring nonstandard rotary wing aircraft described in paragraph (1)(A) through entities other than Rosoboronexport.
- (4) An assessment of the risks and benefits of using the entities identified pursuant to paragraph (1)(A) to procure aircraft described in that paragraph.
- (5) Such other matters as the Under Secretary considers appropriate.
- (d) Use of previous studies.—The entity conducting the assessment for purposes of subsection (a) may use and incorporate information from previous studies on matters appropriate to the assessment.
- (e) Form of report.—The report under subsection (a) shall be submitted in unclassified form, but may include a classified annex.

Regarding Section 1256, S.Rept. 114-49 states:

Report on alternative capabilities to procure and sustain nonstandard rotary wing aircraft historically procured through Rosoboronexport (sec. 1256)

The committee recommends a provision that would require an independent assessment directed by the Under Secretary of Defense for Acquisition, Technology, and Logistics in consultation with the Chairman of the Joint Chiefs of Staff to report on the feasibility and advisability of using alternative industrial base capabilities to procure and sustain nonstandard rotary wing aircraft historically acquired through the Russian state corporation Rosoboronexport. The assessment would include an analysis of the economic impact as well as alterations that would be required for waivers of foreign military sales requirements and procedures for approval of airworthiness certificates.

The committee notes that the use of alternative industrial base capability to divest reliance on Rosoboronexport could benefit United States national security interests, deny financial support to the Russian Federation, and could potentially benefit U.S. and Ukrainian commercial interests. (pages 233-234)

Section 1603 of S. 1376 as reported by the committee states:

SEC. 1603. Exception to the prohibition on contracting with Russian suppliers of rocket engines for the evolved expendable launch vehicle program.

Section 1608 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3626; 10 U.S.C. 2271 note) is amended—

- (1) in subsection (a), by striking "subsections (b) and (c)" and inserting "subsections (b),
- (c), and (d)"; and
- (2) by adding at the end the following new subsection:
- "(d) Special rule for phase 1A competitive opportunities.—
- "(1) IN GENERAL.—For not more than 9 competitive opportunities described in paragraph (2), the Secretary of Defense may award a contract—
- "(A) requiring the use of a rocket engine designed or manufactured in the Russian Federation that is eligible for a waiver under subsection (b) or an exception under subsection (c); or
- "(B) if a rocket engine described in subparagraph (A) is not available, requiring the use of a rocket engine designed or manufactured in the Russian Federation that is not eligible for such a waiver or exception.
- "(2) COMPETITIVE OPPORTUNITIES DESCRIBED.—A competitive opportunity described in this paragraph is—
- "(A) an opportunity to compete for a contract for the procurement of property or services for space launch activities under the evolved expendable launch vehicle program; and
- "(B) one of the 9 Phase 1A competitive opportunities for fiscal years 2015 through 2017, as specified in the budget justification materials submitted to Congress in support of the budget of the President for fiscal year 2016 (as submitted to Congress under section 1105(a) of title 31, United States Code)."

Regarding Section 1603, S.Rept. 114-49 states:

Exception to the prohibition on contracting with Russian suppliers of rocket engines for the Evolved Expendable Launch Vehicle program (sec. 1603)

The committee recommends a provision that would amend section 1608 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3626; 10 U.S.C. 2271 note) by adding a special rule for Phase 1A competitive opportunities. For not more than nine competitive Phase 1A launches, the special rule would allow the Secretary of Defense to award a contract requiring the use of a rocket engine designed or manufactured in the Russian Federation that is eligible for the existing waiver or exception requirements as specified in the existing statute. If a circumstance arises during the Phase 1A period where a launch provider is awarded a competitive contract and requires a rocket engine unable to meet the waiver or exception requirements, the provision would allow for the Secretary to waive the waiver or exception. In order to qualify for the new special rule, all engines that meet the waiver or exception of the existing statute must first be used.

The committee notes that for the Phase 1A competitive period, this could result in as few as zero Russian rocket engines or up to nine, depending upon the outcome of the competitions. The committee believes that the continued use of Russian rocket engines represents a threat to our national security and that their use should be minimized to the greatest extent practicable.

National Security Presidential Directive 40 states that Assured Access to Space is "a requirement for critical national security, homeland security, and civil missions and is defined as a sufficiently robust, responsive, and resilient capability to allow continued space operations, consistent with risk management and affordability. The Secretary of Defense and the Administrator of the National Aeronautics and Space Administration, as

appropriate, are responsible for assuring access to space." The committee notes that under section 1608, the National Aeronautics and Space Administration (NASA) is not prohibited from procuring launches that utilize rocket engines manufactured or designed in the Russian Federation. The committee also notes that NASA has contracts for numerous launches that rely on Russian rocket engines for the foreseeable future. While the committee does not condone the use of Russian rocket engines for NASA purposes, the committee recognizes that assured access to space can still be met if a national emergency required the use of a NASA procured launch for Department of Defense purposes. (Pages 258-259)

S.Rept. 114-49 also states:

Committee overview

For seven decades, the U.S. military has been the most reliable guarantor of the foundations of international order that American statesmen of both parties helped to establish in the aftermath of World War II. The relative security and prosperity that our nation has enjoyed, and made possible for so many others across the world, has been painstakingly maintained through the deterrence of adversaries, the cooperation with allies and partners, the global leadership of the United States, and the credibility and capability of our Armed Forces.

The committee is concerned that growing threats abroad and continued limitations on defense spending at home are increasingly harming the ability of the United States, and its military, to play an effective leadership role in the world. Indeed, military readiness and capabilities have deteriorated to the point where senior military leaders have warned that we are putting at risk the lives of the men and women who serve in our Armed Forces. There is a growing consensus that we must reverse this damage so that we can respond adequately to a host of disturbing challenges to the international order that adversely impact our national security.

These challenges include:

- In Ukraine, Russia has sought to redraw an international border and annex the territory of another sovereign country through the use of military force. It continues aggressively to destabilize Ukraine, with troubling implications for security in Europe.
- A terrorist army with tens of thousands of fighters, many holding Western passports, has taken over a vast swath of territory and declared an Islamic State in the heart of the Middle East. Nearly 3,000 U.S. troops have returned to Iraq to combat this threat, with U.S. aircraft flying hundreds of strike missions a month over Iraq and Syria.
- Amid negotiations over its nuclear program, Iran continues to pursue its ambitions to challenge regional order in the Middle East by increasing its development of ballistic missiles, support for terrorism, training and arming of pro-Iranian militant groups, and other malign activities in places such as Iraq, Syria, Lebanon, Gaza, Bahrain, and Yemen.
- Yemen has collapsed, as a Shia insurgency with ties to the Iranian regime has toppled the U.S.-backed government in Sanaa, Al-Qaeda continues to use parts of the country to plan attacks against the West, the U.S. Embassy has been evacuated, and a U.S.-backed coalition of Arab nations has intervened militarily to reverse the gains of the Houthi insurgency and to restore the previous government to power.
- Libya has become a failed state, beset by civil war and a growing presence of transnational terrorist groups, such as al-Qaeda and ISIL, similar to Afghanistan in 2001.
- North Korea, while continuing to develop its nuclear arsenal and ever-more capable ballistic missiles, committed the most destructive cyberattack ever on U.S. territory.
- China is increasingly taking coercive actions to assert expansive territorial claims that unilaterally change the status quo in the South and East China Seas and raise tensions

with U.S. allies and partners, all while continuing to expand and modernize its military in ways that challenge U.S. access and freedom of movement in the Western Pacific. (Pages 2-3)

S.Rept. 114-49 also states:

Congressional Defense Review to Prepare for Future Strategic Challenges

For the past 14 years, the United States has been engaged in a long war against terrorist and violent extremist groups. The committee believes that this conflict will persist, at one level or another, across multiple theaters of operation, for some time to come, and that winning this war must be a top priority of the U.S. military and the Department of Defense (DOD).

At the same time, the committee is deeply concerned by the growth of more traditional security threats posed by powerful states, such as China and Russia, and rogue regimes such as Iran and North Korea. States such as these are modernizing their military capabilities, developing advanced technologies that could undermine U.S. military advantages—from precision-guided munitions and advanced sensors, to undersea-warfare and unmanned systems, to offensive cyber and space capabilities—and pursuing strategies that seek to deter the United States from achieving its national security interests and meeting its commitments to allies and partners.

Secretary of Defense Ashton Carter captured this new military challenge well when he said "for decades, U.S. global power projection has relied on the ships, planes, bases, aircraft carriers, satellite networks, and other advanced capabilities that comprise our military's unrivaled technological edge. But today that superiority is being challenged in unprecedented ways." In short, for the first time in three decades, the United States faces a potential turning point where our nation's long-standing military advantages threaten to be eroded by new shifts in the balance of military power.

Accordingly, over the coming 18 months, the committee plans to conduct a comprehensive review of the roles, capabilities/size of the U.S. Armed Forces and DOD in meeting, and succeeding against, these new security challenges, especially those posed by the growing anti-access/area denial capabilities of U.S. adversaries. This review will utilize open hearings, classified briefings, the Government Accountability Office, the Congressional Research Service, Federally Funded Research and Development Centers, and consultation with former senior defense and military leaders and other national security experts. Building on the series of strategy-focused hearings that the committee has already conducted, the committee will deepen its oversight of military strategy while also delving deeper into intelligence and threat assessments, contingency planning, force structure and posture, joint concept development, domestic and overseas basing and infrastructure, theater and strategic

lift requirements, munition quality and quantity, and institutional and personnel reforms. The committee will also review civilian personnel policy, DOD infrastructure, and acquisition policies and practices to bring them more into line with the needs of the future.

Ultimately, the committee intends to review each of the major defense acquisition programs and its related industrial base to determine whether they are sufficient and appropriate to meet developing national security challenges. This review will take nothing for granted and will evaluate each program, both qualitatively and quantitatively, in the broader context of the roles, missions, requirements, and other capabilities of the armed services, as well as emerging technologies that could significantly alter previous assumptions underpinning the current programs of record. The committee's future budgetary decisions will be based on the outcome of this strategic review.

The committee acknowledges that for this review to be successful it will require a sustained commitment of many years and potentially multiple chairmen. The muchheralded "offset strategy" of the 1970s required a tremendous amount of intellectual capital and research and development dollars invested over the course of a decade before capabilities like stealth, precision-guided-munitions, and advanced sensors could be effectively deployed. Nevertheless, it is possible to embark upon a new period of sustained military innovation today if DOD, the military services, and industry can be aligned towards this goal. The committee intends to use all of the resources at its disposal to this end. (Page 214-215)

S.Rept. 114-49 also states:

Countering Russian propaganda

The committee has watched with increasing concern the proliferation and expansion of Russian propaganda not only in Eastern Europe, but also throughout Central and Western Europe to levels not seen since the end of the Cold War. Russian-speaking populations in Eastern Europe in former Soviet Union nations, including North Atlantic Treaty Organization (NATO) allies, are especially vulnerable to propaganda that could be used to create more favorable conditions for future Russian aggression. Moreover, the sophistication and pervasiveness of outlets such as the Russia Today (RT) television network that broadcast in multiple languages in Western European democracies is cause for concern.

The committee notes that Russian propaganda has promoted a false narrative on the nature, scope, and cause of the conflict in Crimea and eastern Ukraine and has unfortunately achieved some success with targeted audiences in obscuring attribution for Russian-driven aggression and disregard for sovereignty, territorial integrity, and international law.

The committee recognizes that propaganda is a critical element of Russia's 'hybrid warfare' concept. The speed and reach of Russian propaganda and the ambiguity it creates pose a challenge to NATO collective defense and the political consensus upon which it relies.

Therefore, the committee encourages the Secretary of Defense to consult with the Secretary of State with the objective of developing a strategy, including supporting resources, to counter Russian propaganda in Europe. (page 238)

S.Rept. 114-49 also states:

Report on capability of the North Atlantic Treaty Organization to respond to unconventional or hybrid warfare tactics such as used by the Russian Federation in Crimea and Eastern Ukraine

The committee is concerned about the capability of the North Atlantic Treaty Organization (NATO) to respond to unconventional or hybrid warfare tactics such as those used by the Russian Federation in Crimea and eastern Ukraine due to the ambiguous nature of those tactics and the resultant challenges of attribution. As such, the committee directs the Secretary of Defense to submit a report not later than September 1, 2016 to the congressional defense committees on recommendations for improving the alliance's response options, decision-making processes and implementation timelines for addressing the use of unconventional or hybrid warfare tactics such as those used by the Russian Federation. The report should include:

- (1) An identification of the unconventional or hybrid tactics the Russian Federation may employ against NATO nations;
- (2) A consolidation of tactics identified pursuant to paragraph (1) into a set of possible scenarios to be used to analyze potential response options by NATO;

- (3) An assessment of the response options NATO could potentially pursue for each of the scenarios identified pursuant to paragraph (2);
- (4) Recommendations to improve response options, decisionmaking processes, and implementation timelines for the scenarios identified pursuant to paragraph (2);
- (5) An assessment of implementation by NATO of commitments made at the Wales Summit regarding the Readiness Action Plan;
- (6) Recommendations, if any, for exercises or mechanisms to improve the ability of NATO to consult and reach consensus in scenarios relating to the employment of unconventional or hybrid tactics; and
- (7) Such other matters as the Secretary considers appropriate. (page 240)

Conference (Version Vetoed)

The conference report (H.Rept. 114-270 of September 29, 2015) on H.R. 1735 was agreed to by the House and Senate on October 1 and 7, 2015, respectively, and vetoed by the President on October 22, 2015.

Section 1097 of H.R. 1735 states:

- SEC. 1097. Department of Defense strategy for countering unconventional warfare.
- (a) Strategy required.—The Secretary of Defense shall, in consultation with the Chairman of the Joint Chiefs of Staff and the heads of other appropriate departments and agencies of the United States Government, develop a strategy for the Department of Defense to counter unconventional warfare threats posed by adversarial state and non-state actors.
- (b) Elements.—The strategy required under subsection (a) shall include each of the following:
- (1) An articulation of the activities that constitute unconventional warfare threats to the United States and allies.
- (2) A clarification of the roles and responsibilities of the Department of Defense in providing indications and warning of, and protection against, acts of unconventional warfare.
- (3) An analysis of the adequacy of current authorities and command structures necessary for countering unconventional warfare.
- (4) An articulation of the goals and objectives of the Department of Defense with respect to countering unconventional warfare threats.
- (5) An articulation of related or required interagency capabilities and whole-of-Government activities required by the Department of Defense to support a counter-unconventional warfare strategy.
- (6) Recommendations for improving the counter-unconventional warfare capabilities, authorities, and command structures of the Department of Defense.
- (7) Recommendations for improving interagency coordination and support mechanisms with respect to countering unconventional warfare threats.
- (8) Recommendations for the establishment of joint doctrine to support counterunconventional warfare capabilities within the Department of Defense.
- (9) Any other matters the Secretary of Defense considers appropriate.
- (c) Submittal to Congress.—Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall submit to the congressional defense committees the

strategy required by subsection (a). The strategy shall be submitted in unclassified form, but may include a classified annex.

(d) Unconventional warfare defined.—In this section, the term "unconventional warfare" means activities conducted to enable a resistance movement or insurgency to coerce, disrupt, or overthrow a government or occupying power by operating through or with an underground, auxiliary, or guerrilla force in a denied area.

Section 1242 of H.R. 1735 states:

- SEC. 1242. Notifications of deployment of nuclear weapons by Russian Federation to territory of Ukrainian Republic or Russian territory of Kaliningrad.
- (a) Notifications.—
- (1) UPON DEPLOYMENT.—Not later than seven days after the Secretary of Defense determines that there is reasonable grounds to believe that the Russian Federation has deployed covered weapons systems onto the territory of the Ukranian Republic, or has deployed covered weapons systems onto the Russian territory of Kaliningrad, the Secretary shall submit to the appropriate congressional committees a notification of such determination.
- (2) FORM.—A notification required under paragraph (1) shall be submitted in unclassified form, but may contain a classified annex if necessary.
- (b) Department of Defense planning.—The Chairman of the Joint Chiefs of Staff shall include in military planning options for responding to the military threat posed by the Russian Federation deploying covered weapons systems onto the territory of the Ukranian Republic, or deploying covered weapons system onto the Russian territory of Kaliningrad, including opportunities for allied cooperation in developing such responses based on consultation with such allies.
- (c) Definitions.—In this section:
- (1) APPROPRIATE CONGRESSIONAL COMMITTEES.—The term "appropriate congressional committees" means—
- (A) the congressional defense committees; and
- (B) the Committee on Foreign Relations of the Senate and the Committee on Foreign Affairs of the House of Representatives.
- (2) COVERED WEAPONS SYSTEMS.—The term "covered weapons systems" means weapons systems that can perform both conventional and nuclear missions, nuclear weapon delivery systems, and nuclear warheads.
- (d) Sunset.—The provisions of this section shall not be in effect on and after the date that is 5 years after the date of the enactment of this Act.

Section 1246 of H.R. 1735 states:

SEC. 1246. Limitation on military cooperation between the United States and the Russian Federation.

(a) Limitation.—None of the funds authorized to be appropriated for fiscal year 2016 for the Department of Defense may be used for any bilateral military-to-military cooperation between the Governments of the United States and the Russian Federation until the Secretary of Defense, in coordination with the Secretary of State, certifies to the appropriate congressional committees that—

- (1) the Russian Federation has ceased its occupation of Ukrainian territory and its aggressive activities that threaten the sovereignty and territorial integrity of Ukraine and members of the North Atlantic Treaty Organization; and
- (2) the Russian Federation is abiding by the terms of and taking steps in support of the Minsk Protocols regarding a ceasefire in eastern Ukraine.
- (b) Nonapplicability.—The limitation in subsection (a) shall not apply to—
- (1) any activities necessary to ensure the compliance of the United States with its obligations or the exercise of rights of the United States under any bilateral or multilateral arms control or nonproliferation agreement or any other treaty obligation of the United States; and
- (2) any activities required to provide logistical or other support to the conduct of United States or North Atlantic Treaty Organization military operations in Afghanistan or the withdrawal from Afghanistan.
- (c) Waiver.—The Secretary of Defense may waive the limitation in subsection (a) if the Secretary of Defense, in coordination with the Secretary of State—
- (1) determines that the waiver is in the national security interest of the United States; and
- (2) submits to the appropriate congressional committees—
- (A) a notification that the waiver is in the national security interest of the United States and a description of the national security interest covered by the waiver; and
- (B) a report explaining why the Secretary of Defense cannot make the certification under subsection (a).
- (d) Exception for certain military bases.—The certification requirement specified in paragraph (1) of subsection (a) shall not apply to military bases of the Russian Federation in Ukraine's Crimean peninsula operating in accordance with its 1997 agreement on the Status and Conditions of the Black Sea Fleet Stationing on the Territory of Ukraine.
- (e) Appropriate congressional committees defined.—In this section, the term "appropriate congressional committees" means—
- (1) the Committee on Armed Services and the Committee on Foreign Relations of the Senate; and
- (2) the Committee on Armed Services and the Committee on Foreign Affairs of the House of Representatives.

Section 1248 of H.R. 1735 states:

- SEC. 1248. Additional matters in annual report on military and security developments involving the Russian Federation.
- (a) Additional matters.—Subsection (b) of section 1245 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3566) is amended—
- (1) by redesignating paragraphs (4) through (15) as paragraphs (7) through (18), respectively; and
- (2) by inserting after paragraph (3) the following new paragraphs (4), (5), and (6):
- "(4) An assessment of the force structure and capabilities of Russian military forces stationed in each of the Arctic, Kaliningrad, and Crimea, including a description of any changes to such force structure or capabilities during the one-year period ending on the

date of such report and with a particular emphasis on the anti-access and area denial capabilities of such forces.

- "(5) An assessment of Russian military strategy and objectives for the Arctic region.
- "(6) A description of the status of testing, production, deployment, and sale or transfer to other states or non-state actors of the Club-K cruise missile system by the Russian Federation"
- (b) Effective date.—The amendments made by subsection (a) shall take effect on the date of the enactment of this Act, and shall apply with respect to reports submitted under section 1245 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 after that date.

Section 1249 of H.R. 1735 states:

- SEC. 1249. Report on alternative capabilities to procure and sustain nonstandard rotary wing aircraft historically procured through Rosoboronexport.
- (a) Report on assessment of alternative capabilities.—Not later than one year after the date of the enactment of this Act, the Under Secretary of Defense for Acquisition, Technology, and Logistics shall, in consultation with the Chairman of the Joint Chiefs of Staff, submit to the congressional defense committees a report setting forth an assessment, obtained by the Under Secretary for purposes of the report, of the feasibility and advisability of using alternative industrial base capabilities to procure and sustain, with parts and service, nonstandard rotary wing aircraft historically acquired through Rosoboronexport, or nonstandard rotary wing aircraft that are in whole or in part reliant upon Rosoboronexport for continued sustainment, in order to benefit United States national security interests.
- (b) Independent assessment.—The assessment obtained for purposes of subsection (a) shall be conducted by a federally funded research and development center (FFRDC), or another appropriate independent entity with expertise in the procurement and sustainment of complex weapon systems, selected by the Under Secretary for purposes of the assessment.
- (c) Elements.—The assessment obtained for purposes of subsection (a) shall include the following:
- (1) An identification and assessment of international industrial base capabilities, other than Rosoboronexport, to provide one or more of the following:
- (A) Means of procuring nonstandard rotary wing aircraft historically procured through Rosoboronexport.
- (B) Reliable and timely supply of required and appropriate parts, spares, and consumables of such aircraft.
- (C) Certifiable maintenance of such aircraft, including major periodic overhauls, damage repair, and modifications.
- (D) Access to required reference data on such aircraft, including technical manuals and service bulletins.
- (E) Credible certification of airworthiness of such aircraft through physical inspection, notwithstanding any current administrative requirements to the contrary.
- (2) An assessment (including an assessment of associated costs and risks) of alterations to administrative processes of the United States Government that may be required to procure any of the capabilities specified in paragraph (1), including waivers to Department of Defense or Department of State requirements applicable to foreign military sales or alterations to procedures for approval of airworthiness certificates.

- (3) An assessment of the potential economic impact to Rosoboronexport of procuring nonstandard rotary wing aircraft described in paragraph (1)(A) through entities other than Rosoboronexport.
- (4) An assessment of the risks and benefits of using the entities identified pursuant to paragraph (1)(A) to procure aircraft described in that paragraph.
- (5) Such other matters as the Under Secretary considers appropriate.
- (d) Use of previous studies.—The entity conducting the assessment for purposes of subsection (a) may use and incorporate information from previous studies on matters appropriate to the assessment.
- (e) Form of report.—The report under subsection (a) shall be submitted in unclassified form, but may include a classified annex.

Section 1281 of H.R. 1735 states:

- SEC. 1281. Increased presence of United States ground forces in Eastern Europe to deter aggression on the border of the North Atlantic Treaty Organization.
- (a) Report.—Not later than 120 days after the date of the enactment of this Act, the Secretary of Defense shall, in consultation with the Secretary of State, submit to the appropriate committees of Congress a report setting forth an assessment of options for expanding the presence of United States ground forces of the size of a Brigade Combat Team in Eastern Europe to respond, along with European allies and partners, to the security challenges posed by Russia and increase the combat capability of forces able to respond to unconventional or hybrid warfare tactics such as those used by the Russian Federation in Crimea and Eastern Ukraine.
- (b) Elements.—The report under this section shall include the following:
- (1) An evaluation of the optimal location or locations of the enhanced ground force presence described in subsection (a) that considers such factors as—
- (A) proximity, suitability, and availability of maneuver and gunnery training areas;
- (B) transportation capabilities;
- (C) availability of facilities, including for potential equipment storage and prepositioning;
- (D) ability to conduct multinational training and exercises;
- (E) a site or sites for prepositioning of equipment, a rotational presence or permanent presence of troops, or a combination of options; and
- (F) costs.
- (2) A description of any initiatives by other members of the North Atlantic Treaty Organization, or other European allies and partners, for enhancing force presence on a permanent or rotational basis in Eastern Europe to match or exceed the potential increased presence of United States ground forces in the region.
- (c) Additional element on reduction in troop levels or materiel.—In addition to the matters specified in subsection (b), the report under this section shall also include an assessment of any impacts on United States national security interests in Europe of any proposed Brigade-sized or other significant reduction in United States troop levels or materiel in Europe.
- (d) Appropriate committees of Congress defined.—In this section, the term "appropriate committees of Congress" means—
- (1) the Committee on Armed Services, the Committee on Foreign Relations, and the Committee on Appropriations of the Senate; and

(2) the Committee on Armed Services, the Committee on Foreign Affairs, and the Committee on Appropriations of the House of Representatives.

Section 1606 of H.R. 1735 states:

- SEC. 1606. Rocket propulsion system development program.
- (a) Streamlined acquisition.—Section 1604 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3623; 10 U.S.C. 2273 note) is amended—
- (1) by redesignating subsection (c) as subsection (d); and
- (2) by inserting after subsection (b) the following new subsection:
- "(c) Streamlined acquisition.—In developing the rocket propulsion system required under subsection (a), the Secretary shall—
- "(1) use a streamlined acquisition approach, including tailored documentation and review processes, that enables the effective, efficient, and expedient transition from the use of non-allied space launch engines to a domestic alternative for national security space launches; and
- "(2) prior to establishing such acquisition approach, establish well-defined requirements with a clear acquisition strategy.".
- (b) Availability of funds.—
- (1) IN GENERAL.—In accordance with paragraph (2), of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2016 for the rocket propulsion system required by section 1604 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015, the Secretary of Defense may obligate or expend such funds only for the development of such system, and the necessary interfaces to, or integration of, the launch vehicle, to replace non-allied space launch engines by 2019 as required by such section.
- (2) RULE OF CONSTRUCTION.—The funds specified in paragraph (1)—
- (A) may be used for the integration of the rocket propulsion system covered by such paragraph with an existing or new launch vehicle; and
- (B) may not be used to develop or procure a new launch vehicle or related infrastructure.
- (c) Briefing.—Not later than 90 days after the date of the enactment of this Act, the Secretary of Defense shall provide to the congressional defense committee a briefing on—
- (1) the streamlined acquisition approach, requirements, and acquisition strategy required under subsection (c) of section 1604 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015, as added by subsection (a); and
- (2) the plan for the development and fielding of a full-up rocket propulsion system pursuant to such section 1604.

Section 1607 of H.R. 1735 states:

SEC. 1607. Exception to the prohibition on contracting with Russian suppliers of rocket engines for the evolved expendable launch vehicle program.

Paragraph (1) of section 1608(c) of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3626; 10 U.S.C. 2271 note) is amended to read as follows:

- "(1) IN GENERAL.—The prohibition in subsection (a) shall not apply to any of the following:
- "(A) The placement of orders or the exercise of options under the contract numbered FA8811–13–C–0003 and awarded on December 18, 2013.
- "(B) Subject to paragraph (2), contracts awarded for the procurement of property or services for space launch activities that include the use of not more than a total of five rocket engines designed or manufactured in the Russian Federation that prior to February 1, 2014, were either fully paid for by the contractor or covered by a legally binding commitment of the contractor to fully pay for such rocket engines.
- "(C) Contracts not covered under subparagraph (A) or (B) that are awarded for the procurement of property or services for space launch activities that include the use of not more than a total of four additional rocket engines designed or manufactured in the Russian Federation."

Regarding Section 1607, H.Rept. 114-270 states:

Exception to the prohibition on contracting with Russian suppliers of rocket engines for the evolved expendable launch vehicle program (sec. 1607)

The House bill contained a provision (sec. 1604) that would amend section 1608 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3626; 10 U.S.C. 2271 note).

The Senate amendment also contained a provision (sec. 1603) that would amend section 1608 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291; 128 Stat. 3626; 10 U.S.C. 2271 note).

The House recedes with an amendment that would amend section 1608 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) by modifying the exception to the prohibition. The amendment would except contracts awarded for the procurement of property or services for space launch activities that includes the use of not more than a total of five rocket engines designed or manufactured in the Russian Federation that prior to February 1, 2014, were either fully paid for by the contractor or covered by a legally binding commitment of the contractor to fully pay for such rocket engines. The amendment would also add an additional exception which would allow contracts, not covered under the other exceptions, that are awarded for the procurement of property or services for space launch activities that include the use of not more than a total of four additional rocket engines designed or manufactured in the Russian Federation. Therefore, the agreement allows for a total of nine Russian rocket engines, aside from the waiver authority and the existing contract number FA8811-13-C-0003 awarded on December 18, 2013. Of those nine engines, not more than four additional rocket engines can be procured from the Russian Federation as five of the nine allowed under the (c)(1)(B) exception would have already been fully paid for as of February 1, 2014.

The existing exception on the placement of orders or the exercise of options under the contract number FA8811–13–C–0003 and awarded on December 18, 2013 and the existing waiver remain unchanged and unaffected.

The conferees believe that the continued reliance on Russian rocket engines represents a significant risk to our national security and that their use should be minimized to the greatest extent practicable while maintaining assured access to space and competition.

Consistent with the limitations established by this provision, the conferees direct the Secretary of Defense, in coordination with the Director of National Intelligence, to evaluate options for an executable backup plan for assured access to space that maintains competition as feasible. The conferees expect the report to consider options in the event

of a national emergency including using a Delta launch vehicle, relying on the National Aeronautics and Space Administration's launch capability, acquiring or leveraging space launch services provided by international partners consistent with the National Space Transportation Policy, or any other options that the Secretary deems feasible. The report shall include identification of requirements, feasibility, costs, infrastructure, security, timelines, required authorities and risks and benefits associated with each option considered. The Secretary shall submit the results in the form of a briefing to the appropriate congressional committees no later than April 15, 2016. (Pages 810-811)

Section 1608 of H.R. 1735 states:

- SEC. 1608. Acquisition strategy for evolved expendable launch vehicle program.
- (a) Treatment of certain arrangement.—
- (1) DISCONTINUATION.—The Secretary of the Air Force shall discontinue the evolved expendable launch vehicle launch capability arrangement, as structured as of the date of the enactment of this Act, for—
- (A) existing contracts using rocket engines designed or manufactured in the Russian Federation by not later than December 31, 2019; and
- (B) existing contracts using domestic rocket engines by not later than December 31, 2020.
- (2) WAIVER.—The Secretary may waive paragraph (1) if the Secretary—
- (A) determines that such waiver is necessary for the national security interests of the United States;
- (B) notifies the congressional defense committees of such waiver; and
- (C) a period of 90 days has elapsed following the date of such notification.
- (b) Consistent standards.—In accordance with section 2306a of title 10, United States Code, the Secretary shall—
- (1) apply consistent and appropriate standards to certified evolved expendable launch vehicle providers with respect to certified cost and pricing data; and
- (2) conduct the appropriate audits.
- (c) Acquisition strategy.—In accordance with subsections (a) and (b) and section 2273 of title 10, United States Code, the Secretary shall develop and carry out a 10-year phased acquisition strategy, including near and long term, for the evolved expendable launch vehicle program.
- (d) Elements.—The acquisition strategy under subsection (c) for the evolved expendable launch vehicle program shall—
- (1) provide the necessary—
- (A) stability in budgeting and acquisition of capabilities;
- (B) flexibility to the Federal Government; and
- (C) procedures for fair competition; and
- (2) specifically take into account, as appropriate per competition, the effect of—
- (A) contracts or agreements for launch services or launch capability entered into by the Department of Defense and the National Aeronautics and Space Administration with certified evolved expendable launch vehicle providers;

- (B) the requirements of the Department of Defense, including with respect to launch capabilities and pricing data, that are met by such providers;
- (C) the cost of integrating a satellite onto a launch vehicle; and
- (D) any other matters the Secretary considers appropriate.
- (e) Competition.—In awarding any contract for launch services in a national security space mission pursuant to a competitive acquisition, the evaluation shall account for the value of the evolved expendable launch vehicle launch capability arrangement per contract line item numbers in the bid price of the offeror as appropriate per launch.
- (f) Report.—Not later than 180 days after the date of the enactment of this Act, the Secretary shall submit to the congressional defense committees, the Permanent Select Committee on Intelligence of the House of Representatives, and the Select Committee on Intelligence of the Senate a report on the acquisition strategy developed under subsection (c).

Section 1614 of H.R. 1735 states:

- SEC. 1614. Prohibition on reliance on China and Russia for space-based weather data.
- (a) Prohibition.—The Secretary of Defense shall ensure that the Department of Defense does not rely on, or in the future plan to rely on, space-based weather data provided by the Government of the People's Republic of China, the Government of the Russian Federation, or an entity owned or controlled by either such government for national security purposes.
- (b) Certification.—Not later than 90 days after the date of the enactment of this Act, the Secretary shall submit to the congressional defense committees a certification that the Secretary is in compliance with the prohibition under subsection (a).

Section 1656 of H.R. 1735 states:

- SEC. 1656. Annual briefing on the costs of forward-deploying nuclear weapons in Europe.
- (a) In general.—Not later than 30 days after the date on which the President submits to Congress the budget for each of fiscal years 2017 through 2021 under section 1105 of title 31, United States Code, the Secretary of Defense shall provide to the congressional defense committees a briefing on the costs of forward-deploying nuclear weapons in Europe (not including costs relating to the life extension program for the B61 nuclear bomb).
- (b) Elements.—Each briefing required under paragraph (1) shall include the following:
- (1) The contributions of the United States, including with respect to sustainment (operations and maintenance) and manpower, to support forward-deployed nuclear weapons in Europe, but not costs that are attributed to non-nuclear missions, during the fiscal year following the date of the briefing and the period covered by the future-years defense program submitted to Congress under section 221 of title 10, United States Code, for that fiscal year.
- (2) Contributions made by the North Atlantic Treaty Organization (NATO) or member states of NATO relating to the extended deterrence mission.
- (3) Recent or planned contributions of the United States for security enhancements (site-by-site) relating to support for such forward-deployed nuclear weapons and any other contributions, including burden-share costs by the United States, for other security enhancements and upgrades relating to such forward-deployed nuclear weapons, including infrastructure upgrades at weapons storage sites in Europe.

FY2016 DOD Appropriations Act (H.R. 2685/S. 1558/H.R. 2029)

House

Section 8105 of H.R. 2685 as reported by the House Appropriations Committee (H.Rept. 114-139 of June 5, 2015) states:

Sec. 8105. (a) None of the funds appropriated or otherwise made available by this or any other Act may be used by the Secretary of Defense, or any other official or officer of the Department of Defense, to enter into a contract, memorandum of understanding, or cooperative agreement with, or make a grant to, or provide a loan or loan guarantee to Rosoboronexport or any subsidiary of Rosoboronexport.

- (b) The Secretary of Defense may waive the limitation in subsection (a) if the Secretary, in consultation with the Secretary of State and the Director of National Intelligence, determines that it is in the vital national security interest of the United States to do so, and certifies in writing to the congressional defense committees that, to the best of the Secretary's knowledge:
- (1) Rosoboronexport has ceased the transfer of lethal military equipment to, and the maintenance of existing lethal military equipment for, the Government of the Syrian Arab Republic;
- (2) the armed forces of the Russian Federation have withdrawn from Crimea, other than armed forces present on military bases subject to agreements in force between the Government of the Russian Federation and the Government of Ukraine; and
- (3) agents of the Russian Federation have ceased taking active measures to destabilize the control of the Government of Ukraine over eastern Ukraine.
- (c) The Inspector General of the Department of Defense shall conduct a review of any action involving Rosoboronexport with respect to a waiver issued by the Secretary of Defense pursuant to subsection (b), and not later than 90 days after the date on which such a waiver is issued by the Secretary of Defense, the Inspector General shall submit to the congressional defense committees a report containing the results of the review conducted with respect to such waiver.

H.Rept. 114-139 states:

EUROPEAN REASSURANCE INITIATIVE

The Committee supports efforts started in fiscal year 2015 to reassure NATO allies and partners of the continued commitment of the United States to their security and territorial integrity. The Committee recommends \$789,300,000 for the European Reassurance Initiative (ERI) to support increased capability, presence, readiness, and responsiveness to deter further destabilization in central and eastern Europe. Efforts include an increased U.S. military presence in Europe, additional bilateral and multilateral exercises and training opportunities with allies and partners, improved infrastructure to allow for greater responsiveness, enhanced prepositioning of equipment in Europe, and intensified efforts to build partner capacity for new NATO members and other partners.

This funding is provided as requested in the fiscal year 2016 budget request in the military personnel and operation and maintenance accounts at the budget activity and sub-activity group level of detail. The Committee again directs the Secretary of Defense to request any required fiscal year 2017 funding within the existing military personnel and operation and maintenance accounts as part of the fiscal year 2017 budget request. (Pages 317-318)

Senate

Section 8105 of S. 1558 as reported by the Senate Appropriations Committee (S.Rept. 114-63 of June 11, 2015) states:

Sec. 8105. (a) None of the funds appropriated or otherwise made available by this or any other Act may be used by the Secretary of Defense, or any other official or officer of the Department of Defense, to enter into a contract, memorandum of understanding, or cooperative agreement with, or make a grant to, or provide a loan or loan guarantee to Rosoboronexport or any subsidiary of Rosoboronexport.

- (b) The Secretary of Defense may waive the limitation in subsection (a) if the Secretary, in consultation with the Secretary of State and the Director of National Intelligence, determines that it is in the vital national security interest of the United States to do so, and certifies in writing to the congressional defense committees that, to the best of the Secretary's knowledge:
- (1) Rosoboronexport has ceased the transfer of lethal military equipment to, and the maintenance of existing lethal military equipment for, the Government of the Syrian Arab Republic;
- (2) The armed forces of the Russian Federation have withdrawn from Crimea, other than armed forces present on military bases subject to agreements in force between the Government of the Russian Federation and the Government of Ukraine; and
- (3) Agents of the Russian Federation have ceased taking active measures to destabilize the control of the Government of Ukraine over eastern Ukraine.
- (c) The Inspector General of the Department of Defense shall conduct a review of any action involving Rosoboronexport with respect to a waiver issued by the Secretary of Defense pursuant to subsection (b), and not later than 90 days after the date on which such a waiver is issued by the Secretary of Defense, the Inspector General shall submit to the congressional defense committees a report containing the results of the review conducted with respect to such waiver.

Conference

The FY2016 DOD appropriations act is Division C of H.R. 2029, the Consolidated Appropriations Act, 2016.

Section 8109 of Division C of H.R. 2029 states:

SEC. 8109. (a) None of the funds appropriated or otherwise made available by this or any other Act may be used by the Secretary of Defense, or any other official or officer of the Department of Defense, to enter into a contract, memorandum of understanding, or cooperative agreement with, or make a grant to, or provide a loan or loan guarantee to Rosoboronexport or any subsidiary of Rosoboronexport.

- (b) The Secretary of Defense may waive the limitation in subsection (a) if the Secretary, in consultation with the Secretary of State and the Director of National Intelligence, determines that it is in the vital national security interest of the United States to do so, and certifies in writing to the congressional defense committees that, to the best of the Secretary's knowledge:
- (1) Rosoboronexport has ceased the transfer of lethal military equipment to, and the maintenance of existing lethal military equipment for, the Government of the Syrian Arab Republic;

- (2) The armed forces of the Russian Federation have withdrawn from Crimea, other than armed forces present on military bases subject to agreements in force between the Government of the Russian Federation and the Government of Ukraine; and
- (3) Agents of the Russian Federation have ceased taking active measures to destabilize the control of the Government of Ukraine over eastern Ukraine.
- (c) The Inspector General of the Department of Defense shall conduct a review of any action involving Rosoboronexport with respect to a waiver issued by the Secretary of Defense pursuant to subsection (b), and not later than 90 days after the date on which such a waiver is issued by the Secretary of Defense, the Inspector General shall submit to the congressional defense committees a report containing the results of the review conducted with respect to such waiver.

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