

BACKGROUNDER

No. 3205 | MARCH 29, 2017

Preventing a Defense Crisis: The 2018 National Defense Authorization Act *Must* Begin to Restore U.S. Military Strength

Edited by Thomas W. Spoehr and Rachel Zissimos

Abstract

Years of underfunding and overuse have created a U.S. military in crisis. The military services testified before Congress in February 2017, and the picture they painted was dire. The foremost responsibility of both Congress and the Commander in Chief is to ensure the nation's security. The 2018 National Defense Authorization Act (NDAA) provides an opportunity to begin to correct the mistakes of the past-which include the imposition of the Budget Control Act (BCA) on defense spending and the unwillingness of Congress to provide timely and predictable funding. Defense appropriations are operating under a continuing resolution due to Congress's failure to pass appropriations bills on time. President Trump has pledged to rebuild the military, and signed an executive order to do so. There are growing voices in Congress, particularly on the House and Senate Armed Services Committees, who recognize how dangerously large the gap between current capabilities and requirements has become. The Trump Administration has announced its proposed 2018 defense budget of \$603 billion, an amount \$54 billion higher than the limit allowed by the BCA. This will not be enough and Congress should push to substantially increase this amount. The 2018 NDAA should capitalize on these developments to provide a firm foundation for the rebuilding of the U.S. military, authorizing balanced growth among the areas of end strength, weapon systems, operations and maintenance funding, as well as directing appropriate reforms.

The Status of the U.S. Military

With clear threats in many corners of the globe challenging U.S. security and interests, one would assume the nation is investing more into its military. Yet for years the opposite has been the case. Whether

This paper, in its entirety, can be found at http://report.heritage.org/bg3205

The Heritage Foundation 214 Massachusetts Avenue, NE Washington, DC 20002 (202) 546-4400 | heritage.org

Nothing written here is to be construed as necessarily reflecting the views of The Heritage Foundation or as an attempt to aid or hinder the passage of any bill before Congress.

Key Points

- The U.S. military has been significantly degraded following 15 years of war, overlapped by five years of budget cuts.
- The new Administration should work with Congress to repeal the Budget Control Act, fully fund defense requirements, and rebuild the military.
- The 2018 NDAA should focus on restoring military power and readiness, strengthening alliances, eliminating wasteful programs and policies, and instituting structural reforms.

through the "peace dividend" of the 1990s, the efficiency initiatives under Defense Secretary Robert Gates, or the Budget Control Act of 2011 and its subsequent sequestration-level cuts, the military has been continuously handicapped in its ability to meet global responsibilities.

The effects of this strain are becoming clearer with each passing year. The Army is the smallest it has been since 1940,1 even as soldiers deploy at a high frequency. As the needs of those soldiers deployed to harm's way rightfully take priority, the readiness of the rest of the force has suffered. The Navy's fleet is some 70 ships smaller than is required to meet all its missions, which means fewer ships and sailors are taking on the same workload.² This in turn has yielded two damaging trends. First, sailors are at sea longer than they should be, meaning less time at home with families, less time for training and education, and more fatigue on the force. Second, as too few ships strive to maintain a high operational tempo, they are wearing down prematurely while also cutting out time for desperately needed maintenance work-a combination that has caused more frequent breakdowns and has prematurely aged the fleet.

The Marine Corps has suffered a combination of personnel cuts and a failure to modernize equipment, which means that it is maintaining a high operational tempo with insufficient training and with old, worn-out equipment. This has—tragically led to an increase in training accidents.³ The Air Force has seen its workforce erode in key places, with officials acknowledging in 2016 that the service was short 700 pilots and 4,000 maintainers.⁴ Both shortages have led to a force that is overtaxed and facing serious readiness shortfalls.

Across the board, the military is straining to keep up the same pace of operations with smaller, undertrained forces operating rapidly aging, worn-out equipment. With threats growing around the globe in both new and frighteningly familiar places, there is simply no justification for any delay in correcting this dangerous situation. Congress must take significant steps to work with the Trump Administration in its first year in office to reverse this course and begin rebuilding the military.

Rebuilding the Military: Overarching Principles

In many ways, the U.S. military is living off the remnants of the Reagan-era build-up. Nearly the entire force, the basis of which was acquired in the late 1980s and early 1990s, needs to be recapitalized following several failed modernization efforts over the past 20 years, high rates of sustained use since 9/11, and dramatic reductions in baseline defense spending since 2012 that have resulted in dramatically low readiness. Together, these factors have seriously compromised the ability of the force to remain ready for action and to be effective when it is called upon to act. The National Defense Authorization Act's (NDAA's) various initiatives and directives should be guided by a small set of overarching principles that will ensure that the U.S. military is able to succeed in any mission it is ordered to undertake.

The U.S. military must be:

- **Materially ready.** Regardless of its size, the military must be ready for action when called on to protect the country and its security interests anywhere in the world. It means that the military's equipment is ready for use, not unavailable due to lack of repair parts or too few people to maintain it.
- **Professionally competent.** Soldiers, sailors, airmen, and Marines may be materially equipped but, if they are not proficient in their skills, they

^{1.} Jim Tice, "Army Shrinks to Smallest Level Since Before World War II," *Army Times*, May 7, 2016, https://www.armytimes.com/story/military/ careers/army/2016/05/07/army-shrinks-smallest-level-since-before-world-war-ii/83875962/ (accessed March 8, 2017).

Dakota L. Wood, 2017 Index of U.S. Military Strength (Washington, DC: The Heritage Foundation, 2016), http://index.heritage.org/ military/2017/assessments/us-military-power/u-s-navy/, and U.S. Department of the Navy, Naval Sea Systems Command, Shipbuilding Support Office, "Ship Battle Forces," http://www.nvr.navy.mil/NVRSHIPS/FLEETSIZE.HTML (accessed March 8, 2017).

Amy Schafer, "Sequestration Taking Toll on Marine Aviators' Safety," The San Diego Union-Tribune, January 4, 2017, http://www. sandiegouniontribune.com/opinion/commentary/sd-utbg-marines-deaths-sequestration-20170104-story.html (accessed March 15, 2017).

^{4.} Oriana Pawlyk, "Carter: 'We Have to Be Concerned About' Pilot Shortage," Military.com, November 17, 2016, http://www.military.com/daily-news/2016/11/17/carter-we-have-to-be-concerned-about-pilot-shortage.html (accessed March 8, 2017), and Stephen W. Wilson, Vice Chief of Staff of the Air Force, "State of the Military," testimony before the Committee on Armed Services, U.S. House of Representatives, February 7, 2017, p. 8, http://docs.house.gov/meetings/AS/AS00/20170207/105530/HHRG-115-AS00-Wstate-WilsonS-20170207.pdf (accessed March 8, 2017).

Contributors

Thomas W. Spoehr is Director of the Center for National Defense, of the Kathryn and Shelly Cullom Davis Institute for National Security and Foreign Policy, at The Heritage Foundation.

Rachel Zissimos is Research Associate for National Defense in the Center for National Defense.

Dakota L. Wood is Senior Research Fellow for Defense Programs in the Center for National Defense.

Brian Slattery is Policy Analyst for National Security in the Center for National Defense.

John Venable is Senior Research Fellow for Defense Policy in the Center for National Defense.

Michaela Dodge is Senior Policy Analyst, in the Center for National Defense.

Daniel Kochis is Policy Analyst in European Affairs in the Margaret Thatcher Center for Freedom, of the Davis Institute.

Riley Walters is Research Associate in the Douglas and Sarah Allison Center for Foreign Policy, of the Davis Institute.

Charles Stimson is Manager of the National Security Law Program and Senior Legal Fellow for National Defense in the Davis Institute.

Ted R. Bromund, PhD, is Senior Research Fellow in Anglo-American Relations in the Thatcher Center. *Tori K. Whiting* is Research Associate in the Center for Free Markets and Regulatory Reform of the Institute for Economic Freedom.

David Inserra is Policy Analyst for Homeland Security and Cyber Policy in the Allison Center.

Bryan Riley is Jay Van Andel Senior Policy Analyst in Trade Policy in the Center for Free Markets and Regulatory Reform, of the Institute of Economic Freedom.

will still run the risk of failure in combat. Robust education and training in the art, science, and technical skills of war are essential to success in combat. Tasks that detract from such preparation necessarily reduce the probability for "first battle success."

- Sufficient in size. A force may be sufficiently equipped and trained, but if it is small relative to its obligations it will be unable to sustain operations over time, especially when attrition due to combat losses is a factor. The military must be able to overmatch its enemy(ies), replace losses so as to remain in the fight, and moderate the wearing effects of repeated or extended deployments.
- **Technologically relevant.** The tools of war evolve over time. While tanks, airplanes, and ships remain essential tools of war, technology evolves to make weapons more lethal, sensors more effective, and even key platforms faster,

more nimble, and better able to withstand the rigors of war. What was tactically relevant and effective in one era becomes irrelevant and less effective—or ineffective—in the next.

The U.S. military routinely operates far from home. It must operate in several regions at once to meet treaty obligations with allies, to assure friends and partners of U.S. commitments to protecting shared security interests, to guarantee the regional interests of the United States itself, and to deter bad behavior by competitors acting to undermine or overtly threaten the U.S. and its interests. The 2018 NDAA should account for these obligations assigned to the military and the enduring challenges and requirements of war, as it levies new tasks and provides resources. The NDAA should emphasize those things that enhance the military's ability to succeed in battle and avoid initiatives that detract from the primary function of the military: to provide for the country's and citizens' security.

Necessary Service-Specific Actions

Each military service has specific actions it must undertake to once again become the top-level defense and fighting force it once was:

The Army. The size of the Army has been cut to dangerously low levels. Congress took positive steps in the 2017 NDAA by reversing budget-driven end-strength cuts and authorizing 28,000 more soldiers than President Barack Obama had requested, adding back 16,000 active, 4,000 reserve, and 8,000 National Guard soldiers.⁵ This is an encouraging step, but the Army still remains too small for its global responsibilities. Congress should continue to re-grow the Army by restoring active troop levels to well above 500,000 soldiers, sufficient to field 50 brigade combat teams (BCTs), and modernizing its ground-combat vehicles and helicopters. To achieve this, Congress should:

 Increase Army end strength by 12,000 active, 2,000 Reserve, and 3,000 National Guard soldiers for fiscal year (FY) 2018. This would bring total Army end strengths to 488,000 active, 201,000 reserve, and 346,000 National Guard soldiers. This represents an achievable goal for Army re-growth. Army leaders recently testified that only three of 58 brigade combat teams are ready to fight.⁶ The primary reason given was personnel shortages, which have had a disproportionate impact on combat units.7 Exacerbating the personnel shortages is personnel non-availability, where, on average, 10 percent of soldiers are not able to deploy with their unit due to medical, judicial, administrative, or other issues. In order to determine appropriate operations and maintenance funding to support this growth, Congress should require that the Army and DOD produce a detailed

readiness recovery plan for Army BCTs with desired and expected readiness levels and dates.

- Fund Army modernization programs to take advantage of multiyear procurement savings. In particular, Congress should insist that Army helicopter modernization programs (AH-64E, UH-60M, and CH-47D) are funded at an adequate, economically viable rate, taking advantage of multiyear contracts to save money with 33 new AH-64E helicopters⁸ authorized for procurement in the 2018 NDAA.
- Mandate that the Department of Defense (DOD) produce a budget request and plan for the modernization of Cold War platforms, and the introduction of next-generation platforms. Army modernization programs have been sharply curtailed in recent years, both as a result of program cancellations and funding turbulence. There has been a 78 percent reduction in Army modernization budget authority since 2008.9 A recent study highlighted that of the 10 capabilities that constitute land warfighting capability, by 2030, Russia will have exceeded U.S. Army capabilities in six, have parity in three, and the U.S. will have dominance in one.¹⁰ There are *no replacement programs* underway for tanks or helicopters. Unless this trajectory changes, the platforms introduced in the 1980s in the Reagan-era build-up will still be in use in the 2050s and beyond. Meanwhile, China and Russia continue to replace their platforms, including the introduction of a new Russian tank, the T-14 Armata, reportedly the "most revolutionary tank design in the last half century."11 The U.S. Army

- 8. National Defense Authorization Act for Fiscal Year 2017, Public Law 114-840, p. 40.
- 9. Michelle Tan, "Budget Cuts Are Forcing the Army to Lose Its Competitive Edge," *Army Times*, April 5, 2016, https://www.armytimes.com/ story/military/capitol-hill/2016/04/05/budget-cuts-forcing-army-lose-its-competitive-edge/82672258/ (accessed March 8, 2017).
- 10. Dan Goure, "Near-Term U.S. Army Modernization: Buying What Is Available and Buying Time," Lexington Institute, January 11, 2017, http://lexingtoninstitute.org/near-term-u-s-army-modernization-buying-available-buying-time/ (accessed February 20, 2017).
- 11. Robert Mendick, Ben Farmer, and Roland Oliphant, "UK Military Intelligence Issues Warning over Russian Supertank Threat," *The Telegraph*, November 6, 2016, http://www.telegraph.co.uk/news/2016/11/05/uk-military-intelligence-issues-warning-over-russian-super-tank/ (accessed March 8, 2017).

Sydney J. Freedberg Jr., "2017 Defense Bill Heads to Vote: Adds \$3.2B, 16K Army Soldiers," Breaking Defense, November 29, 2016, http://breakingdefense.com/2016/11/2017-defense-bill-heads-to-vote-adds-3-2b-16k-army-soldiers/ (accessed March 8, 2017).

Hearing, Current Readiness of U.S. Forces, testimony before Armed Services Committee, U.S. Senate, February 8, 2017, http://www.armed-services.senate.gov/hearings/17-02-08-current-readiness-of-us-forces (accessed March 8, 2017).

Richard Sisk, "Most Army Brigades, Navy Planes Aren't Combat Ready: Leaders," Military.com, February 7, 2017, http://www.military.com/daily-news/2017/02/07/most-army-brigades-navy-planes-combat-ready-leaders.html (accessed March 8, 2017).

must retain a technological edge in critical combat capabilities.

Meanwhile, until these new platforms can be delivered, the Army will be required to live on incremental upgrades. The upgrades that should receive priority are active protection systems; jammingresistant position, navigation, and timing systems; and new and improved munitions for artillery and fire-support systems.

The Navy. The FY 2018 budget request should address two primary challenges for the Navy: rehabilitating the current forces, and taking initial steps to expand the fleet's capacity. The fleet currently stands at 275 ships,¹² far below either the Navy's previous force structure assessment (308) or the updated assessment issued in December 2016 (355).¹³ This has caused deployment challenges, as the Navy has had fewer ships with which to meet a constant high level of demand from combatant commanders. This in turn strains the fleet and sailors as they attempt to maintain this higher operational tempo, meaning that deployments have stretched, sailors are away from home for longer stretches than expected, and there is less time for ship depot maintenance.

To begin to solve these issues, the Navy needs to address short-term readiness challenges as well as implement a long-term strategy to rebuild its fleet. The 2018 NDAA can support both initiatives by:

Providing resources to immediate readiness challenges. The Navy detailed \$2 billion worth of readiness needs in its unfunded priorities list in FY 2016, including \$500 million for air operations, \$339 million for ship operations, and \$647 million for ship depot maintenance.¹⁴ While the recent FY 2017 supplemental funding amount addressed some of these shortfalls, the NDAA can prioritize and authorize additional operations and maintenance funding in those areas where chronic problems have occurred, such as at the depot maintenance level.

- Investing in long-term growth of the fleet. The Navy has a long way to go before reaching its 355-ship goal, but the 2018 NDAA can begin to take steps toward that end. For example, to reach the new goal of 66 attack submarines, the Navy will need to begin building three boats per year. This, in turn, would require an expansion of submarine building capacity from the industrial base. Congress can help ensure that such resources are provided so that industry can plan and make long-term investments to increase building capacity and reduce costs by taking advantage of economies of scale over longer periods of time.
- Shortening build cycles. Another way Congress can help to rebuild the fleet is by addressing the procurement cycles of certain ship classes. For example, the aircraft carrier fleet is currently authorized to be funded over six-year cycles. This is a relatively new, stretched procurement cycle to account for reduced annual funding and instability wrought by the Budget Control Act of 2011. Congress had previously authorized carriers to be procured over four-year cycles. Authorizing this shorter cycle could enable the fourth Ford-class carrier to enter the fleet earlier than currently projected. Similarly, Senate Armed Services Committee Chairman John McCain (R-AZ) has suggested that the DDG-51 Arleigh Burke-class destroyer program could accelerate delivery of new hulls. One of the shipyards that has built DDG-51s in recent years has stated that its facility is operating at 75 percent capacity.¹⁵ Congress should determine how it can help accelerate the delivery of destroyers through more robust funding cycles, as well as examine potential investments in shipyards and their workforces that could (similar to that of the Virginia-class submarine) accelerate capacity building in the Navy's large surface-combatant fleet.

^{12.} Navy Vessel Register, "Fleet Size," http://www.nvr.navy.mil/NVRSHIPS/FLEETSIZE.HTML (accessed March 8, 2017).

Christopher P. Cavas, "US Navy's New Fleet Goal: 355 Ships," *Defense News*, December 16, 2016, http://www.defensenews.com/articles/us-navys-new-fleet-goal-355-ships (accessed March 8, 2017).

Christopher P. Cavas, "Fix the Fleet! U.S. Navy Makes Maintenance Top Priority," *Defense News*, January 4, 2017, http://www.defensenews.com/articles/fix-the-fleet-us-navy-makes-maintenance-top-priority (accessed March 8, 2017).

^{15.} Ronald O'Rourke, "Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress," Congressional Research Service *Report* for Congress, February 2, 2017, https://fas.org/sgp/crs/weapons/RL32665.pdf (accessed March 8, 2017).

• **Opposing early retirement of vessels.** In past years, the Navy attempted to retire some of its *Ticonderoga*-class cruisers prematurely merely as a bill payer for other priorities, but Congress blocked these plans. It has also placed them in temporary layup status—effectively removing them from the fleet—to delay their retirement.¹⁶ Both options unnecessarily remove needed capacity in the large surface combatant fleet. Congress should ensure that each vessel is receiving adequate resources so that the Navy does not have to resort to such practices to preserve some of its ships.

Naval Aviation. The developmental delays associated with the F-35 have hurt all three services, but as the last recipient of the Joint Strike Fighter program, the repercussions have hit the Navy the hardest. The Vice Chief of Naval Operations recently testified that less than 50 percent of his aircraft fleet is air worthy,¹⁷ and only 38 percent of the Navy's F/A-18 fighter fleet is mission ready.¹⁸ Backlogs in depot-level maintenance and spare parts for legacy platforms were predictable after F-35 production delays became known, but with no funding to beef up parts-supply lines and depot-level repair capabilities, Naval aviation is now in very bad shape.¹⁹ To address this situation, Congress should:

Increase funding for aircraft parts, and double-depot capacity and throughput. Many,

including Members of Congress, have suggested purchasing more F-18Es as a short-term fix for the F-35C's developmental delays. However, the estimated fly-away cost of this jet is more than \$80 million for an underpowered fourth-generation aircraft.²⁰ Congress should provide funding to increase depot-level capacity and increase the supply of spare parts while the service waits for the delivery of the F-35C.

• **Increase procurement of the EA-18G.** The standoff jamming mission of the EA-18G (Growler) electronic attack platform provides a critical capability to all three services. However, planned procurement numbers are insufficient for meeting the high level of demand for this capability. The Navy must expand F-18G capacity by 16 platforms over the Future Years Defense Program (FYDP).²¹

The Air Force. The Air Force is the only service that has continually downsized since 1991, and with 317,000 active duty personnel, its current manning levels are significantly below the level required to meet current and forecasted mission demands.²² Less than 50 percent of the Air Force is ready for full-spectrum combat operations, approaching readiness levels that have not been seen since the hollow force of the late 1970s.²³ The exodus of high-quality maintenance and operations personnel is nearing a death spiral, driven on

 Sam Lagrone, "Navy Pitches Cruiser Layup Plan, Again," USNI News, February 2, 2015, https://news.usni.org/2015/02/02/navy-pitches-cruiser-layup-plan (accessed March 8, 2017).

- Tom Spoehr, "Trump's Defense Proposal Would Boost a Languishing Military," The Daily Signal, February 28, 2017, http://dailysignal.com/2017/02/28/trumps-defense-proposal-would-boost-a-languishing-military/.
- 20. Loren Thompson, "Opinion: F-35 Is Not Too Pricey, Performance Is Better," *Aviation Week*, January 24, 2014, http://aviationweek.com/defense/opinion-f-35-not-too-pricey-performance-better (accessed March 8, 2017).
- John McCain, "Restoring American Power," 2017, http://www.mccain.senate.gov/public/_cache/files/25bff0ec-481e-466a-843f-68ba5619e6d8/restoring-american-power-7.pdf (accessed March 7, 2017). The McCain budget also calls for 16 additional Growlers and 58 F/A-18E/F Super Hornets.
- 22. General Larry O. Spencer (ret.), "Air Force Secretary Says She Needs More Airmen; America Should Listen," Air Force Times, August 21, 2016, https://www.airforcetimes.com/articles/air-force-secretary-says-she-needs-more-airmen-america-should-listen (accessed March 8, 2017).
- 23. Dakota L. Wood, 2016 Index of U.S. Military Strength, "U.S. Air Force," http://index.heritage.org/military/2016/assessments/us-military-power/ us-air-force/ (accessed March 8, 2017).

^{17.} Sam LaGrone, "VCNO Moran: Navy Is Less Ready Because 'We're Too Small," USNI News, February 8, 2017, https://news.usni.org/2017/02/08/vcno-moran-navy-is-less-ready-because-were-too-small (accessed March 7, 2017).

Admiral William F. Moran, Vice Chief of Naval Operations, "The State of the Military," testimony before the Armed Services Committee, U.S. House of Representatives, February 7, 2017, https://armedservices.house.gov/legislation/hearings/full-committee-hearing-state-military (accessed March 15, 2017).

a dysfunctional tempo that demands flawless execution when deployed, and a starvation budget that minimizes flying time and hands-on maintenance opportunities when they are at home station. To reverse this trend, the Air Force must increase its numbers by 33,000, institute retention programs, increase funding for flight hours and aircraft maintenance, and increase procurement rates throughout the FYDP. Congress should:

- Incrementally increase authorized Air Force end strength to 326,000 in FY 2018, to 337,000 airmen²⁴ over the next five years (McCain level), and to 350,000 by 2025.²⁵ In 2016, Congress authorized an end strength of 321,000 airmen, which will be filled as recruiting capacity and training pipelines expand to meet the need. Recovering from the impact that end-strength reductions have created will not happen overnight as maintenance personnel and pilots take significant time and money to recruit and train.
- Institute targeted incentives for retention. Congress should head off the 4,000-aircraft maintainer and 700-plus-pilot shortfalls by instituting effective and targeted incentive programs. Air Force pilot-training commitments should be cut back to a seven-year obligation following flight school to entice Air Force Academy, Air Force Reserve Officer Training Corps (ROTC) students, and Officer Training School (OTS) candidates to pursue a career in aviation. Pride and retention grow with quality, and flight-training capacity should expand to take on more students, and allow an increased level of screening that ensures that only the most competent, qualified pilots earn their wings.
- Replace bonus programs with robust incen-tive-pay programs for career fields that are particularly technical, demanding, or dangerous. Aviator Career Incentive Pay (ACIP, known as "flight pay") and Aviation Continuation Pay (ACP) currently total a maximum of \$35,080 a year for pilots,²⁶ but ACP is paid only to vulnerable aviators who have completed their service obligation, with dollar amounts that were established two decades ago.²⁷ In 2016, Secretary of the Air Force Deborah Lee James proposed nearly doubling ACP to \$48,000 a year, which when combined with flight pay, would total \$58,000. But, the ACP bonus program fails to value service members until they are dissatisfied enough to leave. The Air Force should immediately institute a graduated incentive-pay program for aircraft maintainers that runs for the duration of a maintenance career, and increase flight-incentive pay for each of the 10-year groupings by a factor of seven.
- Increase operations and maintenance funds to support greater aircraft availability. Once pilots are qualified in combat platforms, they need to fly much more than the current program for operations and maintenance allows. In recent testimony, the Vice Chiefs of Staff for the Navy and Marine Corps stated that approximately onethird of their fleets of fighter aircraft were mission ready.²⁸ While the Air Force has yet to give specifics, it suffers from the same readiness challenges. This shortage of flyable aircraft, combined with a 4,000-aircraft maintainer deficit and decreased funding for training, has resulted in fewer flight hours allotted for maintaining pilot proficiency. Recovering from this state will require additional maintenance personnel, which will take time to acquire and train, and be accompanied by a sig-

28. Jeff Schogol, "The Marine Corps' Aviation Fleet Is in Peril," *Marine Corps Times*, April 26, 2016, https://www.marinecorpstimes.com/story/ military/2016/04/26/fleet-peril-how-congressional-budget-cuts-are-crippling-the-marines-air-power/81974498/ (accessed March 8, 2017).

Hailey Haux, "SecAF, CSAF Testify on FY 2017 AF Posture," U.S. Air Force, February 10, 2016, http://www.af.mil/News/ArticleDisplay/ tabid/223/Article/654237/secaf-csaf-testify-on-fy-2017-af-posture.aspx (accessed March 8, 2017).

^{25.} Oriana Pawlyk, "Air Force Wants 350K Airmen by 2024," December 22, 2016, http://www.military.com/daily-news/2016/12/22/air-force-350k-airmen-2024.html (accessed March 8, 2017).

^{26.} Stephen Losey, "Air Force Wants to Nearly Double Fighter Pilot Retention Pay—to \$432,000," *Air Force Times*, August 9, 2016, https://www.airforcetimes.com/story/military/2016/08/09/432000-bonus-air-force-may-nearly-double-fighter-pilot-retentionpay/88464154/ (accessed March 16, 2017).

^{27.} Military.com, "Benefits: Aviation Career Incentive Pay for Officers," http://www.military.com/benefits/military-pay/special-pay/aviation-career-incentive-pay-for-officers.html (accessed March 16, 2017).

nificant increase in operation and maintenance (O&M) funding. The Air Force budget for O&M should increase by 4 percent in 2018, and a total of 20 percent over the next five years.

- Fund the expedited acquisition of the fifthgeneration fighter, while pursuing bomber; tactical mobility; intelligence, surveillance, and reconnaissance (ISR); and electronicattack aircraft acquisition and upgrades. The Air Force has a total of 1,040²⁹ of the 1,200³⁰ combat-coded fighters it needs to meet global requirements. To regrow required capacity, the Air Force should accelerate F-35A production by 73 aircraft over the FYDP. Expanding production capacity for the F-35A will take time, and while that tooling will be a focus of 2018, increased production will not begin until FY 2019. A Joint Surveillance and Target Attack Radar System replacement platform must also be developed over the FYDP.
- Maintain a high-low mix of fourth-generation and fifth-generation aircraft. The total buy plan for F-35As should be reduced to 1,260-1,040 of which will be combat coded in the active duty force, 60 will be combat-coded Guard and Reserve aircraft, and the remainder will fulfill active duty training and operational test and evaluation requirements. Even with accelerated production, the Air Force will not complete the purchase of 1,040 F-35As until the early 2030s, which means that dual-capable (DCA) F-16s and F-15Es, as well as air superiority F-15Cs will be required for the foreseeable future. The A-10C is a simple platform to fly and sustain, and with \$4 billion in avionics and structural³¹ upgrades since 2008, it can remain a viable low-threat environment combat platform well into the 2030s and

eliminate the need to acquire a low-cost close air support (CAS) replacement platform until well beyond the FYDP.

U.S. Marine Corps. Like the other services, the Marine Corps is under immense budgetary pressure to balance the demands of current readiness, sustain repeated operational rotations with a smaller force, modernize or replace its aging equipment, and prepare for the future. It is well short of the size it needs to be to handle historically consistent operational tasks, much less the new requirements that have arisen, such as its contributions to the special operations community and the development and integration of cyber tools into its set of conventional combat capabilities. At present, the Corps lacks the minimum number of aircraft needed to train its pilots; its inventory of primary ground-combat vehicles, largely fielded in the 1970s and 1980s, is aged and rapidly obsolescing; and current funding has been insufficient to return broken equipment to the operating forces or to provide the training its forces need in order to attain and sustain competency in their warfighting skills. Consequently, the FY 2018 NDAA should enable the Corps' efforts to remain the country's "crisis response force of choice." Congress should:

- Fully fund key modernization programs, such as for the Amphibious Combat Vehicle intended to initially augment (and then replace) the Vietnam-era Amphibious Assault Vehicle, and the Corps' Aviation Modernization Plan for which the 2018 NDAA should include the funding needed to accelerate procurement of F-35 and CH-53K aircraft.
- Enhance funding specifically targeted toward the Corps' experimentation efforts

31. Lt. Colonel David R. Jacques USAF (ret.) and Dennis D. Strouble, "A-10 Thunderbolt II (Warthog) Systems Engineering Case Study" (technical report), Air Force Institute of Technology, 2010, p. 59, https://web.archive.org/web/20150910033808/http://www.dtic.mil/dtic/tr/fulltext/u2/a530838.pdf (accessed March 8, 2017), and U.S. Government Accountability Office, "Tactical Aircraft: DOD Needs a Joint and Integrated Investment," GAO-07-415, April 2, 2007, http://www.gao.gov/htext/d07415.html (accessed March 9, 2017).

^{29.} International Institute for Strategic Studies, *The Military Balance 2017: The Annual Assessment of Global Military Capabilities and Defense Economics*, February 14, 2017, pp. 53–55, http://www.iiss.org/en/publications/military%20balance/issues/the-military-balance-2017-b47b (accessed March 8, 2017).

William LaPlante, James M. Holmes, and Tod D. Wolters, "Fiscal Year 2016 Air Force, Force Structure and Modernization Programs," testimony before the Subcommittee on Airland Forces, Armed Services Committee, U.S. Senate, March 19, 2015, p. 8, http://www.armed-services.senate.gov/imo/media/doc/LaPlante_Holmes_Wolters_03-19-15.pdf (accessed March 8, 2017).

as seen in the deployment of 3rd Battalion, 5th Marines to Okinawa. The unit has served as the Corps' designated experimentation unit for the past year and will exercise various sub-unit configurations employing a range of new technologies that include unmanned ground and air systems, innovative digital communications tools, and energy-generating equipment.

- Begin to grow Marine Corps end strength from its current 182,000 active duty Marines to a revised minimum objective of 194,000. While the Corps has stated it can responsibly grow the service by an additional 3,000 Marines per year,³² thus taking four to five years to reach its new objective, the 2018 NDAA can set the conditions for stable funding for future years that supports this needed growth over time. A larger Corps will make it possible to reduce the current deployment burden, decrease high operational usage for any one piece of equipment or individual, thus extending the life of the item or person, and enable proper training, education, and preparation that ensures greater resilience of the force.
- Accelerate acquisition of new equipment that enables optimization of new capabilities and technologies, instead of simply applying new technologies to old primary platforms. While adding new components to old platforms extends the operational utility of legacy resources, new platforms are eventually needed to realize the full operational potential of advances in weapons, communications, sensors, and mobility.

Military Force Posture. During the height of the Cold War, there were nine fighter wings permanently stationed in Europe.³³ There were more than four heavy armor and mechanized army divisions. The drawdown that began in 1991 has decreased that presence to just five fighter squadrons and two

army brigades, and the decay in NATO ally military capability has decreased more sharply than has that of the U.S. Russia's illegal annexation of Crimea in March 2014, its military actions in Ukraine, and frequent "snap" military exercises mobilizing 30,000 to 80,000 troops near Baltic state borders since the onset of the Ukraine crisis³⁴ require a re-assessment of U.S. force disposition in Europe:

- The Air Force should develop a plan for Collocated Operating Bases in Europe. The Air Force should also authorize funds for stateside units to exercise deployments to each location within that plan every other year beginning in FY 2018.
- Congress should direct the forward station-ing of an armored brigade in Europe, and consider over time building this to a heavy division with all associated enablers. The Army is currently rotating a brigade from the United States to Europe. This is useful for re-gaining deployment skills, but more combat power is needed, and forward stationing is the best means to shorten deployment times and increase deterrence.³⁵ As a means to help NATO allies increase their military spending, the U.S. should strive for a healthy support agreement from Germany and other European allies for the cost of forward stationing this brigade, as is the case in South Korea and Japan.
- In order to increase readiness, the Secretary of Defense should direct the services to review all training requirements and remove or significantly shorten any training requirement that does not further mission readiness. Over the past two decades, the number and type of non-mission-related training requirements have grown to the point where they now impede mission readiness. The services

^{32.} Jeff Schogol, "Top Marine: Corps Assumes it Will Grow by 3,000 Marines," *Marine Corps Times*, January 12, 2017, https://www. marinecorpstimes.com/articles/commandant-expects-marine-corps-to-get-bigger (accessed March 8, 2017).

^{33.} Simon Duke, United States Military Forces and Installations in Europe (New York: Oxford University Press, 1989).

^{34.} Eoin Micheál McNamara, "Securing the Nordic-Baltic Region," NATO Review, 2016, http://www.nato.int/docu/Review/2016/Also-in-2016/ security-baltic-defense-nato/EN/index.htm (accessed March 9, 2017).

^{35.} John Vandiver, "Breedlove: No Substitute for Permanent U.S. Presence in Europe," *Stars and Stripes*, February 25, 2015, http://www. stripes.com/news/breedlove-no-substitute-for-permanent-us-military-presence-in-europe-1.331604?utm_source=feedburner&utm_ medium=feed&utm_campaign=Feed%3A+starsandstripes%2Fgeneral+(Stars+and+Stripes)#.WL8nak2Qy71 (accessed Mar 7, 2017).

should seek to cut non-mission-essential training by 50 percent in FY 2018.

• Congress should place particular attention on the munitions shortages. In times of budget downturn, military services typically reduce munition procurements in order to save production of platforms. This trend has become particularly troublesome in this downturn. Each of the services have accepted risk in munitions, particularly high-cost precision munitions and antitank missiles.

Systemic Changes

This Backgrounder argues for increased funding for additional military personnel, operations and maintenance, and weapon systems. These are needed to begin the rebuilding of the country's armed forces. But the Department of Defense can and must become more efficient in its organization, processes, and operations. As an enormous organization, employing more than three million personnel and with a budget of over \$400 billion (larger than Wal-Mart), even a 1 percent savings can equate to billions of dollars.³⁶ As a large federal bureaucracy, there are some intrinsic challenges in achieving reforms. These include tyranny of annual operations funding, which expires at the end of each fiscal year, cumbersome hiring and firing processes, overly layered organizations, the instinct to maintain separate individual silos of capability, and outdated information technology. Strong leadership combined with appropriate legislative relief can overcome many of these challenges. As Congress considers defense reform initiatives in the FY 2018 NDAA, it should:

 Authorize a "smart" base realignment and closure (BRAC) program. Military leaders have documented 22 percent excess infrastruc-

ture across DOD installations.37 Maintaining this excess costs billions of dollars per year. This is funding that could be directly applied to DOD priority needs, including training and procurement of weapon systems. Critics of BRAC point to the 2005 BRAC as overly costly without appropriate levels of savings.38 There is some justification for this criticism, but Congress can control the parameters of the next BRAC. Congress should authorize a smart BRAC (sBRAC), requiring, as many have suggested, that the purpose be specified to save money, that savings be realized in five years, and that proposals that depend on at least 20 years to achieve savings be closely scrutinized.³⁹ Congress should also insist that the DOD balance BRAC against a national mobilization capability review to ensure that no facilities are closed that could reasonably be needed in times of mobilization.

- **Reduce top-heavy headquarters.** The DOD, like other bureaucracies, has become overly layered, with as many as nine or more layers between the Secretary and the action officer at the bottom charged with carrying out the actual work. Many of the intermediate supervisors have as few as two subordinates, leading to micromanagement and unhappy employees. Some elements of the DOD have made progress in this area, but more can be done. Congress should require the Secretary of Defense to conduct his own review of the senior DOD headquarters to remove excessive layers.
- Allow public-private competition to drive efficiency in services. Congress, under pressure from federal employee unions since 2012, has prohibited competitions between public and private organizations to determine which could provide more cost-effective services for

 Jared Serbu, "Senior House Democrat Pushes New BRAC Legislation with Possible Support from Senate," Federal News Radio, January 27, 2017, http://federalnewsradio.com/defense/2017/01/senior-house-democrat-pushes-new-brac-legislation-possible-support-senate/ (accessed February 20, 2017).

U.S. Department of Defense, "DOD 101: Overview of the Department of Defense," https://www.defense.gov/About/DoD-101 (accessed February 20, 2017).

^{37.} U.S. Department of Defense, "Department of Defense Infrastructure Capacity," March 2016, http://defensecommunities.org/wp-content/ uploads/2015/01/2016-4-Interim-Capacity-Report-for-Printing.pdf (accessed March 9, 2017).

Sean Gorman, "Rob Wittman Says 2005 BRAC Round of Base Closings Hasn't Led to Savings," Politifact, May 15, 2015, http://www.politifact. com/virginia/statements/2015/may/15/rob-wittman/rob-wittman-says-2005-brac-round-base-closings-has/ (accessed February 21, 2017)

the U.S. government. DOD-specific competitions remain prohibited per section 325 of the FY 2010 NDAA.⁴⁰ Yet even critics will admit that "competition is the greatest single driver of performance and cost improvement."41 The RAND Corporation has estimated that opening support services for the military to private competition could result in savings of between 30 percent and 60 percent.42 This represents millions, possibly billions, of unrealized savings. Skeptics of these processes (referred to as "A-76 competitions," taken from the name of the governing Office of Management and Budget Circular⁴³), claim that the process cannot be made fair for both parties involved. This is a subterfuge to avoid taking on this potential opportunity. Congress should immediately act to allow A-76 competitions under a defined set of procedures.

Commonsense auditing of the Department of Defense. Public Law 111-84, section 1003 and Public Law 112-81, section 1003 direct the financial statements of the DOD to be "validated as ready for audit no later than September 30, 2017."44 Yet Pentagon officials have all but admitted that they will not make this deadline, and that to obtain "clean" audit findings may take years.45 The DOD's failure to meet this deadline will no doubt generate additional, and quite passionate, criticism. Issues of scale, history, and complexity make it incredibly difficult for the DOD to come through an audit with a clean opinion. The DOD is larger than any multinational corporation and globally distributed, with tens of thousands of product lines and business processes.

Efforts to make the DOD auditable are also resulting in the sorts of inefficiencies and wasteful outcomes those who push for a DOD-wide audit mean to prevent. The process of auditing the DOD consumes hundreds of millions of dollars in manpower and fees paid to U.S. accounting firms. In order to meet the requirement to accurately describe the value of its tangible assets, the military services spend an enormous amount of money to accurately determine the value of decades-old equipment, like M113 armored personnel carriers purchased in the 1970s, and buildings constructed hundreds of years ago. This precious time and effort could be better spent. And, when the DOD eventually comes through an audit with a clean opinion that still will not mean that defense money is spent wisely-it merely means that the DOD can account for it. Congress should direct the DOD to produce a commonsense set of recommendations to modify accepted accounting practices to reduce the illogical requirements of commonly accepted auditing standards, which are not value added as they apply to the DOD.

• Fight the "use it or lose it" mentality. Within the federal government, and in the DOD in particular, there is pervasive pressure to spend all appropriated funding "before you lose it." This pressure is driven by the fact that on October 1 of every fiscal year, any money appropriated for operations and maintenance left over from the preceding fiscal year vanishes. As such, defense entities push to expend their full budget before the end of the fiscal year, often driving poor spending decisions. One study has shown a nearly fivefold spike in federal procurements in the

45. Norman Leahy, "Defense Department Likely to Miss Audit Deadline," AMI Newswire, May 31, 2016, https://aminewswire.com/ stories/510760993-defense-department-likely-to-miss-audit-deadline (accessed February 22, 2017).

^{40.} National Defense Authorization Act for Fiscal Year 2010, Public Law 111-288.

^{41.} Stan Soloway, "It's Time to Bury A-76—It Worked Once, But its Day Is Past," Government Executive, January 4, 2017, http://www.govexec.com/excellence/promising-practices/2017/01/its-time-bury-76it-worked-once-its-day-past/134305/ (accessed February 21, 2017).

^{42.} Congressional Budget Office, "Replacing Military Personnel in Support Positions with Civilian Employees," December 2015, https://www.cbo.gov/sites/default/files/114th-congress-2015-2016/reports/51012-Military_Civilian_Report.pdf (accessed March 8, 2017).

^{43.} Office of Management and Budget, Circular No. A-76, August 4, 1983 (revised 1999), https://obamawhitehouse.archives.gov/sites/default/ files/omb/assets/omb/circulars/a076.pdf (accessed March 9, 2017).

^{44.} Cheryl Pellerin, "DOD Makes Audit Progress, But Challenges Remain," American Forces Press Service, May 15, 2014, http://archive.defense. gov/news/newsarticle.aspx?id=122263 (accessed February 22, 2017).

last week of the fiscal year, and that the quality of those procurement decisions is 2.2 times to 5.6 times worse than normal.46 In 2013, average DOD contract spending during the month of September was approximately double the fiscal year average through August.⁴⁷ Leaders try to combat the rush of end-of-year spending with mid-year reviews, but the trend continues. The Department of Justice has been granted special authority to roll over a small portion of its capital-equipment budget. Congress should authorize a pilot program allowing a sub-element of the DOD to roll over a portion of its operating budget (up to 5 percent) to see if it alleviates the drive to "use it or lose it," and produces more efficient spending practices.

Housing allowances-not entitlements. Congress endeavored to reform service members' Basic Allowance for Housing (BAH) in 2017, but, faced with some opposition, opted instead to require the Secretary of Defense to provide a report on a transition to a single salary pay system. Absent transition to a single-pay system, BAH reform is a legitimate issue that should continue to be pursued. Over time, the BAH has come to be perceived as an entitlement, an element of compensation, versus the purpose for which it was intended, to defray the costs of housing for service members living off base, which has become routine as the percentage of military personnel with families has increased over the years. Under the current system, two service members married and residing together receive a double portion of BAH, even though they occupy a single residence. Service members who find housing that costs less than the authorized rate for BAH are allowed to pocket the difference. Each of these examples reflects a subversion of the purpose of the allowance. Congress should restore BAH's place as an allowance, versus an entitlement, by requiring married military couples to

share a single BAH, and all service members to document their housing expenditures in order to receive BAH.

- Full pay raises. Because of demographic trends and low unemployment rates, the DOD will have an increasingly difficult time recruiting new personnel. A recent study found that only 13 percent of Americans between 17 and 24 qualify for military service without a waiver.⁴⁸ Rising rates of obesity and other disqualifying factors constitute a military manpower crisis. For that reason, Congress should authorize the full pay raise as determined by the Employment Cost Index (ECI) in order to assist in the recruiting mission among a shrinking candidate pool.
- Continue the transformation of military health care. In 2017, Congress took the bold step of centralizing the administration of all military treatment facilities under the Defense Health Agency (DHA) beginning on October 1, 2018. Currently, the DOD operates four separate systems of medical treatment facilities: (1) joint, (2) Army, (3) Navy, and (4) Air Force. This change will establish a single medical system and can reasonably be expected to result in savings and better management. The 2017 NDAA leaves the training and assignments of medical personnel under the respective services, which may prove to be a challenge. In the meantime, Congress should act in 2018 to ensure that the DHA remains responsive to the military service needs for medical readiness, and require that the DHA Director be both a serving military medical professional and a former Service Surgeon General.

Functional and Capability Priorities

In addition to preserving capacity and addressing some systemic challenges, Congress should work on a number of functional and capability priorities in the FY 2017 NDAA. These include:

- 46. Jeffrey B. Liebman and Neale Mahoney, "Do Expiring Budgets Lead to Wasteful Year-End Spending? Evidence from Federal Procurement," Harvard University, November 19, 2010, https://www.hks.harvard.edu/jeffreyliebman/LiebmanMahoneyExpiringBudgets.pdf (accessed February 22, 2017).
- 47. Jason J. Fichtner and Robert Greene, "Curbing the Surge in Year-End Federal Government Spending: Reforming 'Use It or Lose It' Rules," Mercatus Center, September 2014, https://www.mercatus.org/system/files/Fichtner-Year-End-Spending.pdf (accessed February 22, 2017).
- 48. Center for Naval Analysis, "Population Representation in the Military Services: FY2015 Summary Report," https://www.cna.org/pop-rep/2015/summary/summary.pdf (accessed February 22, 2017).

Experimentation. Experimentation sets the stage for future readiness. The military cannot predict the specifics of when and where the next conflict will occur, who will be involved, or how conflict will unfold, but it can explore the potential of emerging technologies and their relevance to military operations. Experimentation informs military investment strategy; it maximizes the opportunity available during times of peace to test, fail, learn, and retry when time, attention, and a portion of the force can be committed to such efforts.

Congress must be willing to view funding for experimentation as a critical investment in the nation's future despite the lack of any guarantee that a dollar investment will surely, and quickly, deliver the next competitive advantage. Oftentimes learning what does not work, or what is of little practical value in military operations, is as important as discovering the "next big thing" in warfare.

Innovation always accompanies war, spurred by an urgent need to overcome some "real world" problem. But periods of peace can and should be leveraged as opportunities to explore and to develop new capabilities, testing them for utility in war when the risks are low and delays in achieving success are not lethal to the war effort.

Experimentation is also an opportunity to discover what the enemy might be doing so as to develop effective counters that mitigate or neutralize a capability presumed by the enemy. The 2018 NDAA should engage and enable robust investment by the military services in their experimentation programs. The services know the importance of fielding new capabilities as quickly, effectively, and efficiently as possible, as well as the power of collaboration across the Joint Force. What they need beyond their own inherent authorities is the ability to do so provided by Congress through the NDAA.

The Law of War, ISIS, the AUMF, and Guantanamo Bay. Since 2014, the United States has carried out its military campaign against ISIS under the 2001 congressional Authorization for the Use of Military Force (AUMF). The Obama Administration's reliance on the 2001 AUMF for the war against ISIS had not been subject to federal court approval, nor should it be. However, if President Donald Trump orders the military to fill up Guantanamo with ISIS detainees who were allegedly "part of" or "associated with" al-Qaeda, those detainees will use their constitutional right to *habeas* review to challenge their detention on the grounds that the 2001 AUMF does not extend to ISIS—at least not in the detainee context.⁴⁹

In Hamdi v. Rumsfeld, the Supreme Court held that "the (2001) AUMF is explicit congressional authorization for the detention of individuals in the narrow category we describe," consisting of individuals "part of" or "associated with" the Taliban and al-Qaeda.50 While the courts have expanded the scope of characteristics which may be used to show association, their rulings have all depended on establishing a connection between the detainee and these specific, named groups.⁵¹ Under this jurisprudence, the government would have to explicitly connect an ISIS member it wanted to detain in Guantanamo to the narrow class of individuals defined by the AUMF case law. It is unclear that the President's authority under the AUMF to detain an enemy combatant in Guantanamo extends to an ISIS fighter.

Before detaining ISIS members in Guantanamo, the executive branch should carefully study the issue and work with Congress to develop an ISIS-specific AUMF that provides a clear statutory basis for detention. If the Trump Administration rushes to bring ISIS fighters to Guantanamo without a stronger legal basis, not only could those detainees successfully challenge their own detention under the AUMF, but even the Obama Administration's entire legal justification for the authority to use all necessary and appropriate force in the fight against ISIS could be placed in jeopardy.

Nuclear and Missile-Defense Capabilities. The change in the Administration means that asymmetrical nuclear weapons reductions are less likely than under the Obama Administration, which continued to reduce accountable nuclear warheads under the New Strategic Arms Reduction Treaty

^{49.} Hamdi vs. Rumsfeld, 502 U.S. 507 (2004), https://www.law.cornell.edu/supct/html/03-6696.ZO.html (accessed March 9, 2017).

^{50.} Ibid.

^{51.} Salahi vs. Obama (2010); Al Bihani vs. Obama (2010); and Ali vs. Obama (2013).

despite Russian increases. The 2017 NDAA took steps in the right direction by providing funding for nuclear weapons modernization, and removing limitations in the National Missile Defense Policy, which constrained missile-defense systems to those designed for less sophisticated ballistic missile threats.⁵² The 2018 NDAA should continue to fund the development and modernization of U.S. nuclear and missile-defense capabilities to reflect current threats and requirements. The 2018 NDAA should:

- Provide for the modernization of U.S. nuclear weapons, their delivery platforms, and the nuclear complex that sustains nuclear weapons. The Obama Administration started to work on a recapitalization of the nuclear triad and on warhead life-extension programs. The United States does not have much of a time margin to delay nuclear modernization any further, as the components in the weapons themselves are timing out. The NDAA must ensure adequate funding for the nuclear mission—at least \$8.9 billion—as outlined in the NDAA FY 2010 Section 1251 report.⁵³ A modern, flexible, and capable nuclear weapons posture is vital to keeping the U.S. safe, allies assured, and enemies deterred.
- Consider permitting yield-producing nuclear weapons experiments. The United States currently has the oldest nuclear weapon arsenal in its history, the consequences of which are only vaguely understood. Small-scale yield-producing nuclear weapons experiments could help the United States improve its understanding of nuclear weapons science and the effects of aging on the performance of nuclear weapons.⁵⁴
- **Update U.S. missile-defense capabilities.** The United States should develop a layered comprehensive ballistic missile-defense system to address ballistic missile threats of varying ranges and scales. The Obama Administration reduced the Missile Defense Agency's budget. The 2018 NDAA should revitalize funding for missile

defense to ensure that the U.S. is protected from ballistic missile threats.

- Advance future missile-defense technologies, and space-based ballistic missile defenses. The United States should focus on developing ballistic missile-defense technologies that include space-based ballistic missile-defense interceptors and space-based sensors that would provide U.S. missile-defense systems with an enhanced operational picture. The United States should explore boost-phase ballistic missile defense since that is when ballistic missiles are at their most vulnerable: They are at their slowest and have not yet deployed any decoys.
- Accelerate the Multiple-Object Kill Vehicle (MOKV). The MOKV would make the existing Ground-Based Midcourse Defense interceptors more efficient, increasing their probability of intercept. The program is critical considering that the United States has lagged behind the longrange ballistic missile threat. The Obama Administration's policies increased the gap further.
- **Promote missile-defense cooperation with U.S. allies.** Allies can participate in the U.S. ballistic missile-defense program in various ways, including making their ships (where applicable) compatible with the U.S. Aegis weapons system, hosting U.S. missile-defense-capable ships and other missile-defense assets, and diplomatically supporting U.S. missile-defense efforts internationally.
- Deploy an X-band tracking radar to a European NATO member. The U.S. previously determined the Czech Republic to be the ideal host country for a radar that would track incoming ballistic missiles from Iran due to the geometry of ballistic-missile trajectories. The radar would improve the capability of U.S. homeland missile-defense systems, and it would serve as a visible reminder of U.S. commitment to European security.

^{52.} National Defense Authorization Act for Fiscal Year 2017, Subtitle E, http://docs.house.gov/billsthisweek/20161128/CRPT-114HRPT-S2943.pdf (accessed March 8, 2017).

^{53.} National Defense Authorization Act for Fiscal Year 2010, Public Law 111-84.

^{54.} Michaela Dodge, "U.S. Nuclear Weapons Policy: After Ukraine, Time to Reassess Strategic Posture," Heritage Foundation *Issue Brief* No. 4183, March 27, 2014, http://www.heritage.org/research/reports/2014/03/us-nuclear-weapons-policy-after-ukraine-time-to-reassess-strategic-posture.

- Continue improvements to the U.S. military's cyber capabilities. U.S. military cyber operations have been elevated to the level of a Combatant Command, alongside the six regional Combatant Commands, U.S. Special Operations, and the Strategic and Transportation Commands in 2016.55 Elevation of Cyber Command (CYBER-COM) demonstrates the importance that Congress places on U.S. military cyber operations, allotting it more influence, money, and personnel. Congress should continue to fund the development of DOD cyber capabilities, and increase cybersecurity cooperation with allies and trusted sources in the private sector in order to strengthen alliances and leverage the technology, expertise, and best practices of a wide variety of sources. To this end, Congress should use the NDAA to:
 - Develop the use of cybersecurity supply chain ratings and accreditation. Private-sector rating and accreditation systems identify information and communication technology providers that conform to industry cybersecurity standards.⁵⁶ By adopting its own standards, the DOD could acquire systems and technologies from accredited private-sector companies with greater confidence. The DOD should take full advantage of the robust private-sector marketplace for technology accumulation.
 - Ensure that Cyber Mission Force is adequately funded and supported. The DOD's Cyber Mission Force, which is designed "to defend DoD information networks, support combatant commander missions and defend the nation's critical infrastructure,"⁵⁷ is expected to reach full operational capability toward the end of

2018. In order to support the continued development of military offensive and defensive cyber capabilities, Congress should fully fund and support the development, training, and deployment of the 133 cyber teams.

- Leverage technical expertise outside the DOD. In April 2016, the DOD organized its first "Hack the Pentagon" campaign.⁵⁸ The participants, 1,410 U.S.-based hackers, were invited to test the cyber vulnerabilities of public-facing DOD networks in order to identify weaknesses in DOD systems.⁵⁹ In total, \$75,000 in rewards was paid out for 138 legitimate vulnerabilities found. Congress should allow the DOD, and other security-related government agencies, to explore more opportunities to take advantage of technical expertise outside the DOD.
- *Increase cybersecurity cooperation with allies.* Congress should increase training cooperation and exchange programs with allies and condemn aggressive state-sponsored cyber activities.

Ineffective Policies and Programs to Avoid or Cut

Part of rebuilding the military includes eliminating policies implemented by Congress or the Administration that do not contribute to warfighting readiness. Equally important, Congress must avoid the temptation to impose new policies that might hurt national security. With this in mind, Congress should:

 Eliminate the energy mandate. Title 10 of U.S. Code, section 2911 requires that 25 percent of DOD facility energy use be generated by renewable sources by 2025.⁶⁰ To enact this mandate,

55. National Defense Authorization Act for Fiscal Year 2017, Public Law 114-328.

^{56.} David Inserra and Steven Bucci, "Cyber Supply Chain Security: A Crucial Step Toward U.S. Security, Prosperity, and Freedom in Cyberspace," Heritage Foundation Backgrounder No. 2880, March 6, 2014, http://www.heritage.org/defense/report/cyber-supply-chain-security-crucialstep-toward-us-security-prosperity-and-freedom.

Jim Garamone, "Cyber Command Deputy Details Formation of Cyber Mission Force," U.S. Department of Defense, June 22, 2016, https://www.defense.gov/News/Article/Article/809904/cyber-command-deputy-details-formation-of-cyber-mission-force (accessed March 17, 2017).

^{58.} HackerOne, "Hack the Pentagon," https://www.hackerone.com/resources/hack-the-pentagon (accessed February 15, 2017).

^{59.} Joe Uchill, "Pentagon Hires Firms to Create New Bug Bounty Programs," *The Hill*, October 20, 2016, https://origin-nyi.thehill.com/business-a-lobbying/302107-pentagon-hires-firms-to-create-new-bug-bounty-programs (accessed March 9, 2017).

^{60. 10} U.S. Code § 2911—Energy Performance Goals and Master Plan for the Department of Defense, Legal Information Institute, https://www. law.cornell.edu/uscode/text/10/2911 (accessed March 9, 2017).

the DOD under the Obama Administration committed to developing three gigawatts of renewable energy generation capacity on Army, Navy, and Air Force installations.⁶¹ The green energy mandate, particularly as it pertains to installation energy, does not contribute to warfighting capabilities or consider the costs it imposes on the services to implement these goals.

- Enact cost-competitive requirements for bulk fuel purchases. Almost every major DOD weapons platform has been tested and certified to run on advanced biofuel blends. Now, the DOD should wait until such time as these fuels become cost-competitive with conventional fuels to procure them. Past DOD biofuel purchases, driven by President Obama's climate change agenda, have proven to be enormously expensive.⁶² Absent a demonstrable operational advantage with which to justify higher costs, Congress should enact cost-competitive requirements for bulk fuel purchases in terms of the fully burdened cost of fuel, and cost to the federal government as a whole.⁶³
- Reduce commissary subsidies and combine commissary and exchange systems. The DOD operates two parallel but similar organizations for providing service members and their families with access to goods and groceries. The commissaries provide groceries at cost plus 5 percent,

which requires an annual subsidy to be sustainable.⁶⁴ In FY 2017, Congress decreased the subsidy for commissaries from \$1.4 billion to \$1.2 billion.⁶⁵ At the same time, the military exchanges operate largely without subsidies by passing appropriate costs on to the consumers. Maintaining access to affordable groceries and goods is important for service members, particularly those stationed overseas or in remote locations in the United States. Congress has begun this process by authorizing private labeling and variable pricing of goods and products sold in commissaries,⁶⁶ and should continue to pursue this line of reform.

- Exempt the DOD from Davis–Bacon. The Davis–Bacon Act requires that construction contractors pay prevailing wages when working on projects for the federal government.⁶⁷ However, the prevailing wage rates used by the government "bear no resemblance" to actual market wages.⁶⁸ In short, the Davis–Bacon Act increases the cost of federally funded construction by 9.9 percent. The increased cost of construction is significant for the DOD, which requested \$7.4 billion for construction projects in FY 2017.⁶⁹ Congress should exempt the DOD from Davis–Bacon requirements to ensure that military construction projects are as affordable as possible.
- News release, "Fact Sheet: Obama Administration Announces Additional Steps to Increase Energy Security," The White House, April 11, 2012, http://www.whitehouse.gov/the-press-office/2012/04/11/fact-sheet-obama-administration-announces-additional-steps-increase-ener (accessed March 9, 2017).
- 62. Rachel Zissimos and Katie Tubb, "The New Administration's Policy Should Reflect that Biofuels Cannot Meet Military Needs," Heritage Foundation *Issue Brief* No. 4643, January 4, 2017, http://www.heritage.org/defense/report/the-new-administrations-policy-should-reflect-biofuels-cannot-meet-military-needs.
- 63. Ibid. The costs associated with renewable energy are not constrained within the DOD budget, but distributed across a number of federal agencies in the form of grants and subsidies. The DOD energy strategy should reflect warfighters' needs and remove inappropriate initiatives, which impose unnecessary costs on an already strained budget. These changes will more accurately reflect costs to taxpayers and enable the military to manage its energy enterprise in the most efficient and effective manner possible.
- 64. U.S. Department of Defense, *Fiscal Year 2016 Budget Request Overview*, February 2015, p. 6-6, http://comptroller.defense.gov/Portals/45/ Documents/defbudget/fy2016/FY2016_Budget_Request_Overview_Book.pdf (accessed March 11, 2016).
- 65. National Defense Authorization Act for Fiscal Year 2017, Public Law 114-328.
- 66. Ibid.
- James Sherk, "Labor Department Can Create Jobs by Calculating Davis-Bacon Rates More Accurately," Heritage Foundation Backgrounder No. 3185, January 21, 2017, http://www.heritage.org/jobs-and-labor/report/labor-department-can-create-jobs-calculating-davis-bacon-rates-more.
- 68. Ibid.
- 69. U.S. Department of Defense, "Department of Defense Budget Fiscal Year 2017: Construction Programs (C-1)," February 2016, Summary, http:// comptroller.defense.gov/Portals/45/Documents/defbudget/fy2017/fy2017_c1.pdf (accessed March 8, 2017).

• **Cut non-defense research funding.** The Defense Department has the largest research and development budget of the federal government, equaling roughly \$72.7 billion a year.⁷⁰ While the vast majority of this amount goes toward developing advanced military systems or technologies that have battlefield applications, each year, the DOD spends significant sums on medical and green energy research projects that have no place in the defense budget. Congress is unfortunately a significant part of the problem.

The Congressionally Directed Medical Research Programs (CDMRP) is one of the oldest and largest examples of non-defense funding inside the DOD budget. CDMRP funding has continued to grow, gaining momentum, even while the total defense budget has declined. While some of this funding goes to DOD-relevant medical research, such as studying post-traumatic stress disorders or developing orthotics, a large percentage goes to research on muscular dystrophy, multiple sclerosis, breast cancer, genetic studies of food allergies, and other non-defense medical issues. This research will not directly contribute to the national defense mission, and should be cut from the defense budget.

- Eliminate non-defense "civil military programs." These include a DOD education program called STARBASE and the National Guard Youth Challenge Program. In FY 2017, this category is authorized at \$196 million.⁷¹ Congress should cut this funding and close down these programs.
- Phase out DOD funding for Junior Reserve Officer Training Corps (JROTC) programs. JROTC helps young enrollees to mature and grow into responsible adults, but there is no evidence that it yields higher enlistment rates among its participants. For FY 2017, the four services will receive \$304 million to fund JROTC programs (including \$50 million for the Navy, \$24 million for the Marines, \$171 million for the Army, and

\$59 million for the Air Force).⁷² The DOD funding for these programs should be phased out, possibly passing the responsibility for funding these programs to another federal agency or to the local level. By phasing out the programs with a 25 percent reduction in year one, this proposal would save \$85 million in FY 2019.

- Avoid growth in new reporting requirements. While Congress routinely criticizes the size of the workforce in the Pentagon, the annual NDAA typically calls for hundreds of new, detailed reports. Legislators should be mindful as they write the 2018 NDAA that a large portion of the workforce's size in the Pentagon is directly driven by the need to prepare and review required reports for Congress.
- Oppose treaties that harm national security. The Arms Trade Treaty (ATT) and the Anti-Personnel Mine Ban Convention (commonly known as the Ottawa Convention) could have significant harmful effects on national security. The Senate refused to provide its advice and consent to either of these treaties. Given this opposition, and the fact that neither treaty is in the U.S. national interest, the Administration should promptly "unsign" the ATT and reject the Ottawa Convention:
 - Arms Trade Treaty (ATT). The U.S. has not ratified the ATT, and a bipartisan majority of the Senate opposes its ratification on the grounds that it is vague, easily politicized, and could hinder the U.S. in fulfilling its commitments to provide arms to key allies. Many other leading arms-exporting and arms-importing countries also oppose the ATT, but despite its own assertion that any ATT that did not include all U.N. members would be "less than useless," the Obama Administration signed the ATT in 2013. Congress should reiterate its previous rejections of funding to implement the ATT, and should, in addition, prevent the ATT from

^{70.} National Defense Authorization Act for Fiscal Year 2017, Public Law 114–328.

^{71.} S. 2943—114th Congress (2015-2016), National Defense Authorization Act for Fiscal Year 2017, December 23, 2016, https://www.congress. gov/bill/114th-congress/senate-bill/2943/text (accessed March 9, 2017).

^{72.} Ibid.

being used as the basis for domestic prosecutions, ban U.S. financial contributions to the ATT's secretariat, and require that the ATT ratification process include House and Senate implementing legislation. Finally, it should condition the payment of fees to attend the ATT's annual conferences by requiring that such fees not exceed the amount reasonably required to pay the actual costs for attendance by the U.S. delegation.

• Anti-Personnel Mine Ban Convention. The U.S. has not ratified this convention-the treaty has never even been submitted to the Senate. U.S. anti-personnel landmines meet or exceed all relevant international standards, and the U.S. employs such landmines responsibly. Studies by NATO and other organizations confirm their military utility, and in 2014, the Chairman of the Joint Chiefs of Staff stated that anti-personnel landmines remain "an important tool in the arsenal of the armed forces of the United States."73 But in June 2014. the Obama Administration banned their use outside the Korean Peninsula. In the FY 2017 NDAA, Congress prohibited the destruction of U.S. anti-personnel landmine stockpiles before the DOD completes a comprehensive study on department policy on the use of landmines as required in the FY 2016 NDAA. This study should contain a 10-year inventory and cost projection for current stockpiles, a similar projection for replacement munitions, and an assessment of the effects of the projected inventory on operational plans, as well as the briefing on the current state of research and development into operational alternatives to anti-personnel landmines required by the FY 2017 NDAA.74 Finally, Congress should ban funding for the

destruction of existing stockpiles until it certifies that the replacement of anti-personnel landmines by alternative munitions will not endanger U.S. or allied forces or pose any operational challenges.

Eliminate protectionist and "Buy American" policies. "Buy American" is a great bumper sticker and political slogan, but it is bad economic and security policy. The concept is simple: The DOD should buy from American companies and suppliers. Economically, this does not make sense. Protectionist policies like Buy American-or tariffs that protect specific industrieshurt the U.S. economy more than they help.⁷⁵ Protectionist policies also mean that the DOD, and therefore American taxpayers, pay more for a given product or service than they should. The Buy American Act sets a price preference for domestic products by requiring the DOD to add 50 percent of the lowest offer's price to the offer if it is from a foreign company. After applying the additional 50 percent to the foreign offer, the DOD then determines which offer is the best value for the department. Often the price preference ensures that a domestic producer will win the bid.⁷⁶ This means that a project that could have cost the DOD \$20 million could cost American taxpayers as much as \$30 million before a foreign bid could be considered. The DOD is also subject to the Berry Amendment, which restricts the DOD from using funds to purchase food, clothing, tents, and certain other goods unless the items are "entirely grown, reprocessed, reused, or produced within the United States."77 In addition to the existing protectionist procurement laws, in the 2017 NDAA, Congress required that the DOD provide enlisted service members athletic footwear only manufactured in the U.S. instead of providing a cash

77. Ibid. (Emphasis added.)

^{73.} Steven Groves and Ted Bromund, "Obama Says No to Landmines," *National Review Online*, September 25, 2014, http://www.nationalreview.com/article/388807/ (accessed March 8, 2017).

^{74.} Brian Riley and Terry Miller, "2016 Index of Economic Freedom: Yet More Evidence of Free Trade's Benefits," Heritage Foundation *Backgrounder* No. 3086, December 21, 2015, http://www.heritage.org/international-economies/report/2016-index-economic-freedom-yet-more-evidence-free-trades-benefits.

^{75.} Bryan Riley, "Buy American. Sell American," The Daily Signal, September 23, 2011, http://dailysignal.com/2011/09/23/buy-american-sell-american/.

^{76.} Kate M. Manuel et al., "Domestic Content Restrictions: The Buy American Act and Complementary Provisions of Federal Law," Congressional Research Service, September 12, 2016, https://fas.org/sgp/crs/misc/R43354.pdf (accessed March 14, 2017).

allowance and giving them the freedom to buy the shoes of their choice, regardless of where they are made.⁷⁸ Congress should:

- Oppose attempts to expand Buy American laws to procurement for use outside the United States. Buy American provisions increase costs and cause delays in defense procurement. Military men and women serving overseas do not have time for bureaucratic delays, especially for basic supplies like food. The Buy American Act currently contains a provision exempting procurement for use outside the United States. A similar provision in the Berry Amendment exempts products procured for use "outside the United States in support of combat operations," as well as food and some other products for use "outside the United States in support of contingency operations."79 From a national security perspective, the DOD already has the authority and flexibility to avoid relying on potential adversaries for critical resources or capabilities. Free and open competition among friendly countries will produce the best products and best prices, and ensure that America's service members overseas get the supplies they need when they need them.
- Oppose efforts to impose Buy American laws on successful partnerships with allied countries. There is no national security reason to exclude companies in allied countries from competing for DOD contracts.⁸⁰

• Update legal requirements for U.S. defense procurement. Many U.S. defense procurement decisions are governed by congressionally mandated purchasing requirements for national content. In order to give full effect to existing law, these requirements should be revised to reflect the updated definition of the U.S. National Technological and Industrial Base (NTIB) contained in the FY 2017 NDAA, and the existing integration of the NTIB reflected in the national exemption contained in ITAR 126.5.⁸¹

The Defense Budget

In 2011, Congress passed the Budget Control Act and the President signed it into law. The law arbitrarily capped discretionary spending but did nothing to impact the largest driver of federal spending: entitlement programs. As such, the national debt has continued to grow, ballooning from 66 percent to 75 percent of gross domestic product since 2011.82 Despite a vastly more dangerous and challenging national security environment, the national defense budget has been cut by 24 percent over the past six years.⁸³ This decline has caused the military to shrink to dangerously low manning levels, readiness levels to plummet, and modernization programs to dry up. Congress and the Administration must immediately find a way to repeal the Budget Control Act and grow defense spending to match the national security needs and priorities of the United States. President Trump's budget director, Mick Mulvaney, announced on February 27, 2017, that the new Administration's defense budget for 2018 would be \$603 billion.⁸⁴ While representing an increase from

78. Dana Varinsky, "Here's What 5 of Your Favorite Products Would Cost If They Were Made in the US," *Business Insider*, http://www. businessinsider.com/how-much-products-would-cost-if-made-in-us-2016-11 (accessed March 9, 2017).

- 79. Manuel et al., "Domestic Content Restrictions: The Buy American Act and Complementary Provisions of Federal Law."
- Justin T. Johnson, "Buy America' Provisions Have No Place in the National Defense Authorization Act," Heritage Foundation Issue Brief No. 4421, June 15, 2015, http://www.heritage.org/research/reports/2015/06/buy-america-provisions-have-no-place-in-the-national-defenseauthorization-act.
- ITAR stands for International Traffic in Arms Regulations. 22 CFR 126.5, Canadian Exemptions, https://www.law.cornell.edu/cfr/text/22/126.5 (accessed March 8, 2017).
- 82. Senator John McCain, "Restoring American Power," white paper, January 16, 2017, http://www.mccain.senate.gov/public/index.cfm/2017/1/ restoring-american-power-sasc-chairman-john-mccain-releases-defense-budget-white-paper (accessed February 22, 2017).
- U.S. Department of Defense, "National Defense Budget Estimates," FY 2017 Budget, March 2016, Table 3.2, http://comptroller.defense. gov/Portals/45/Documents/defbudget/fy2017/FY17_Green_Book.pdf (accessed February 24, 2017), and U.S. Government Printing Office, Budget of the United States, FY17 Historical Tables, Table 5.1, https://www.gpo.gov/fdsys/pkg/BUDGET-2017-TAB/pdf/BUDGET-2017-TAB.pdf (accessed February 24, 2017).
- 84. Aaron Mehta and Joe Gould, "McCain, Thornberry Rip White House Budget Plan on Defense," *Defense News*, February 27, 2017, http://www. defensenews.com/articles/analysts-new-white-house-plan-to-boost-defense-with-domestic-cuts-wont-happen (accessed March 8, 2017).

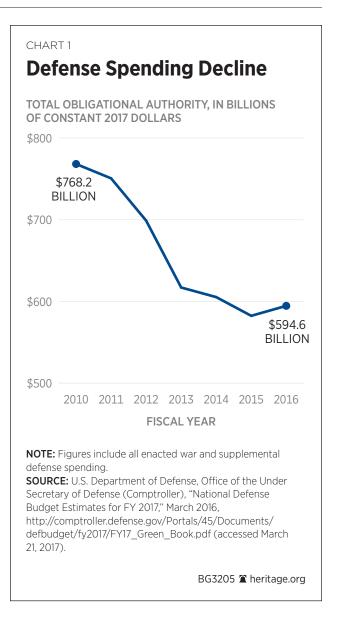
the Obama Administration's planned level of \$584 billion and possibly serving as the forcing function to finally repeal the Budget Control Act caps, this very modest increase is not enough to enable the rebuilding of the U.S. military.

The deterioration of the military began with the drastic cuts in defense spending during the Clinton Administration, after the Cold War. While the Soviet threat was no more, little attention was paid to standard aging of the U.S. military nor to the dramatic technological advances that occurred during the 1990s. The U.S. response to 9/11 was enabled by increases in spending, but the additional funding was immediately consumed by current operations; again, the baseline force was neglected and even reduced in size as a consequence of the cuts imposed by the Budget Control Act (BCA). Thus, the military has been in steady decline for a quarter-century, subject to reductions in spending for the past 25 years, continuously deployed for combat operations for the past 15 years, hammered by BCA-directed cuts for the past six years, and struggling to replace equipment regularly extended beyond planned lifespans, made obsolete by advances in technology, and hard to maintain and operate due to severe reductions in manpower. It will take more than a few years to rebuild it. The DOD's budget can and should ramp up by more than 3 percent from President Obama's planned FY 2018 defense budget. The Heritage Foundation believes that, combined with the implementation of the savings described previously in this Backgrounder, the Defense Department (budget function 050) should be funded at \$632 billion in FY 2018, in addition to the Overseas Contingency Operation (OCO) funds commensurate with years past.

Strengthening America's Alliances

The NDAA is a defense policy bill, but many of those policies have a direct impact on the U.S.'s relationship with other countries. As Congress writes the NDAA, it should focus on strengthening the NATO alliance, and reducing barriers to trade with the closest U.S. allies. Congress should:

 Ensure that NATO retains its lead role in European defense matters by pushing back against further European defense integration. NATO has been the cornerstone of transatlantic security for almost seven decades. Creation of duplicative European Union structures, such



as an EU operational headquarters or the aspirational EU army, weakens NATO. It also threatens to decouple the U.S. from European defense. EU defense integration undermines NATO by siphoning scarce resources from the Alliance.

The EU's Common Security and Defense Policy (CSDP) has not delivered increased military capability for the U.S. or for NATO. Instead, it competes *with* NATO for scarce European defense resources, while creating duplicative and competing military structures. In addition, the veto power of six non-NATO EU members (five of which are neutral), almost guarantees that any EU assets would not be available for NATO operations. The CSDP undermines NATO, the ultimate guarantor of transatlantic security—a dangerous proposition, especially in light of renewed Russian aggression.

U.S. allies in Europe should focus on fixing NATO, and living up to their Article III commitments under the North Atlantic Treaty to "maintain and develop their individual and collective capacity to resist armed attack."⁸⁵ For its part, the U.S. should discontinue reflexive support for European defense integration, in particular the creation of an EU Army. Instead, the U.S. should focus on advancing a NATO-first agenda, one that ensures American engagement and influence in European-related defense matters.

Support the seamless integration of the national technology and industrial base (NTIB). The FY 2017 NDAA required the Secretary of Defense to develop a plan to "reduce the barriers to the seamless integration" of the NTIB. The NDAA should support reforms that will make it easier for the U.S. to export defense technologies to its closest allies, Britain and Aus-

tralia. These reforms should include allowing all defense-related exports to be licensed to these close allies absent a U.S. decision to refuse within a specified and limited time period, and the system-level licensing of such exports, which would allow the automatic and immediate export of follow-on parts, components, servicing, or technical plans. Canada is already rightly treated separately under U.S. law, and the Defense Secretary's plan should reflect this fact and ensure that its exemption is updated to show the pending completion of export-control reform, and to remove any other impediments discovered in the course of preparing the plan.

Conclusion

The FY 2018 NDAA presents an opportunity for Congress to begin rebuilding the U.S. military. All of these recommendations combined would not immediately produce a strong U.S. military, but they would put the military back on the right track. Furthermore, future Congresses and Presidents will be able to build on these reforms, thereby continuing the restoration of the American military.

^{85.} North Atlantic Treaty Organization, "The North Atlantic Treaty," April 4, 1949, http://www.nato.int/cps/en/natolive/official_texts_17120.htm (accessed March 8, 2017).