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FY2018 National Defense Authorization Act

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Summary

The Trump Administration's initial FY2018 budget request, released on May 23, 2017, included a total of $677.1 billion for the national defense budget function (Budget Function 050), which encompasses all defense-related activities of the federal government. Of that amount, $659.8 billion was for appropriation accounts for which authorization is provided in the annual National Defense Authorization Act (NDAA). The remainder of the request was either for mandatory funds not requiring annual authorization or for discretionary funds outside the scope of the NDAA.

That initial Administration request included $595.3 billion in discretionary funding for the so-called *base budget*, that is, funds intended to pay for activities that the Department of Defense (DOD) and other national defense-related agencies would pursue even if U.S. forces were not engaged in contingency operations in Afghanistan, Iraq, Syria, and elsewhere. The remaining $64.6 billion of the request, formally designated as funding for Overseas Contingency Operations (OCO), would fund the incremental cost of those ongoing operations as well as any other DOD costs that Congress and the President agree to so designate.

On July 14, 2017, the House passed by a vote of 344-81 H.R. 2810, the version of the FY2018 NDAA that had been reported by the House Armed Services Committee. That bill would have authorized $613.8 billion for the base budget—$18.5 billion more than the Administration's initial request—and $74.6 billion designated as OCO funding, which is $10 billion more than the Administration's OCO request.

The Senate passed its version of H.R. 2810 on September 18, 2017, by a vote of 89-8, after first replacing the House-passed text of that bill with the text of S. 1519, the version of the FY2018 NDAA that had been reported by the Senate Armed Services Committee. This Senate-passed version of the bill would have authorized $631.9 billion for the base budget—exceeding the base budget request by nearly $37 billion—and $60.0 billion for OCO-designated funding.

In November 2017—after the House and Senate had passed their respective versions of the FY2018 NDAA but before conferees had completed negotiations to produce a compromise version of the bill—the Trump Administration amended its FY2018 DOD budget request, asking for an additional $5.9 billion. The additional funds included $4.0 billion for missile defense-related programs the Administration described as being in response to recent missile tests and other activities by North Korea. The budget amendment also included $674 million to repair two Navy destroyers damaged in collisions and $1.2 billion to support the President's decision to increase by approximately 3,500 the number of U.S. military personnel in and around Afghanistan. The $1.2 billion associated with the Afghanistan troop levels was designated as OCO while the remaining $4.7 billion of the increase was included in the base budget.

The final version of H.R. 2810 authorized $626.4 billion for base budget activities and $65.7 billion for OCO-designated funding. The House agreed to this final version of the bill on November 14, 2017, by a vote of 356-70. The Senate agreed to it on November 16, 2017, by voice vote. President Trump signed the bill into law (P.L. 115-91) on December 12, 2017.

Congressional action on FY2018 defense funding reflected a running debate about the size of the defense budget given the strategic environment and budgetary issues facing the United States. Annual limits (often referred to as *caps)* on discretionary spending for defense and for nondefense federal activities, set by the Budget Control Act of 2011 (P.L. 112-25), remain in place through FY2021. If the amount appropriated for either category were to exceed the relevant cap, it would trigger near-across-the-board reductions to a level allowed by the cap—a process called *sequestration*. Appropriations designated by Congress and the President as funding for OCO or for emergencies are exempt from these caps.

For the period during which Congress was considering the FY2018 NDAA, the BCA limit on discretionary defense spending was $549 billion. The caps apply to appropriations, not authorization legislation. However, if Congress had appropriated for national defense programs the amounts requested by the Administration or the amounts authorized by any of the versions of H.R. 2810 passed by House or Senate, those appropriations would have triggered sequestration.

Before Congress enacted any FY2018 appropriations bills, it raised the FY2018 and FY2019 discretionary spending caps on defense and nondefense spending as part of P.L. 115-123, which included the fifth continuing appropriations resolution for FY2018. The revised cap on base budget, discretionary defense appropriations for FY2018 is $629 billion, which would accommodate appropriations to the level authorized by the enacted version of H.R. 2810.

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Background

The annual National Defense Authorization Act (NDAA) provides authorization of appropriations for the Department of Defense (DOD), defense-related atomic energy programs of the Department of Energy, and defense-related activities of other federal agencies such as the Federal Bureau of Investigation. In addition to authorizing appropriations, the NDAA establishes defense policies and restrictions, and addresses organizational administrative matters related to DOD.[1] Unlike an appropriations bill, the NDAA does not provide budget authority for government activities.

FY2018 NDAA: Keeping the Numbers Straight

Although the House and Senate each passed an FY2018 NDAA designated H.R. 2810, there were hundreds of differences between the two versions. Initially, H.R. 2810 was reported by the House Armed Services Committee and then was debated and amended on the floor of the House before the House passed it on July 14, 2017. The version of the FY2018 NDAA reported by the Senate Armed Services Committee was designated S. 1519. When the Senate began consideration of the NDAA, it called up the House passed bill (H.R. 2810) amended it by striking the text and substituting a modified version of S. 1519—the Senate committee-reported bill.

In this report, the versions of H.R. 2810 passed by the House and Senate will be referred to as the House bill and Senate bill, respectively. The version of H.R. 2810 reported by the House Armed Services Committee (HASC) and S. 1519 as reported by the Senate Armed Services Committee (SASC) will be referred to as the HASC version and the SASC version, respectively.

Congressional action on the FY2018 NDAA reflected a running debate about the size of the defense budget given the strategic environment and budgetary issues facing the United States. Annual limits on discretionary spending set by the Budget Control Act of 2011 (P.L. 112-25) remain in place through FY2021 and fundamentally shape congressional actions related to all federal spending, including defense funding.[2]

Constrained by these limits, Congress and the executive branch face an increasingly complex and unpredictable international security environment, evidenced by a variety of threats to U.S. security interests including

- action around the globe by nonstate, violent extremist organizations—such as the Islamic State of Iraq and Syria (ISIS) and Al Qaeda;
- Russian-backed proxy warfare in Ukraine;
- North Korean provocation evidenced by an "unprecedented" number of missile test launches and its "use of malicious cyber tools" to threaten and destabilize the region;[3]

[1] For more information see CRS In Focus IF10515, *Defense Primer: The NDAA Process*, by Valerie Heitshusen and Lynn M. Williams, and CRS In Focus IF10516, *Defense Primer: Navigating the NDAA*, by Lynn M. Williams and Valerie Heitshusen.

[2] For more information see, CRS Report R44039, *The Budget Control Act and the Defense Budget: Frequently Asked Questions*, by Lynn M. Williams.

[3] General Joseph Dunford, Chairman of the Joint Chiefs of Staff, in testimony before the U.S. Congress, House Committee on Armed Services, *The Fiscal Year 2018 National Defense Authorization Budget Request from the Department of Defense*, 115th Cong., 1st sess., June 12, 2017.

- China's expansion of its nuclear enterprise, its investments in power projection and continued *island building* in the South China Sea; and
- Iran's continued efforts to support international terrorist organizations and establish regional dominance.[4]

Congress completed action on the FY2018 NDAA before the Trump Administration completed its initial updates of the National Defense Strategy and National Security Strategy. A Nuclear Posture Review also was in progress when the bill was enacted. Thus, to some degree, the Trump Administration's initial FY2018 budget request served as a placeholder while Congress awaited completion of these major strategic assessments.[5]

One exception to that rule is that the Administration's November 2017 amendment to its FY2018 budget request reflected its revision of U.S. strategy in Afghanistan: The additional $5.9 billion requested included $1.2 billion to support the President's decision to deploy in Afghanistan about 3,500 more U.S. personnel than the May 2017 budget request had assumed.[6] Although the additional funds were requested after the House and Senate each had passed their respective versions of the NDAA, conferees incorporated the requested amounts into the version of the bill that was enacted.

Organization of this Report

Congressional action on the FY2018 NDAA took place in the context of a complicated and atypical sequence of events driven by three factors: the ongoing budget debate; the unsettled state of the new Administration's policies when the FY2018 budget request was submitted to Congress; and bellicose statements and actions by the government of North Korea. This report will address aspects of the bill and its context in the following order:

- The broader budget debate that has shaped congressional debates on defense spending since 2011;
- The role in debate on the FY2018 NDAA of the binding budget *caps* on defense and nondefense spending that are rooted in that overall budget debate;
- The broad strokes of the Administration's initial FY2018 defense budget request and action by the House and Senate on the FY2018 NDAA based on that initial request;
- The Administration's November 2017 amendment to its initial FY2018 defense budget request;
- The conference report on the FY2018 NDAA which incorporated the November budget amendment and was enacted into law; and
- Selected policy and budgetary issues in the FY2018 NDAA.

Budgetary Context

The Budget Control Act of 2011 (BCA/P.L. 112-25), enacted August 2, 2011, contains several measures intended to reduce the budget deficit by $2.1 trillion over the period FY2012-FY2021.

[4] Ibid.

[5] Department of Defense, "News Briefing on the President's Fiscal Year 2018 Defense Budget," press release, May 23, 2017, https://www.defense.gov/News/Transcripts/Transcript-View/Article/1191830/department-of-defense-news-briefing-on-the-presidents-fiscal-year-2018-defense/.

[6] Department of Defense, "News Briefing on the President's Fiscal Year 2018 Defense Budget," press release, May 23, 2017, https://www.defense.gov/News/Transcripts/Transcript-View/Article/1191830/department-of-defense-news-briefing-on-the-presidents-fiscal-year-2018-defense/; Aaron Mehta, "The Nuclear Posture Review is underway. Here's what to look for." *Defense News*, April 17, 2017, https://www.defensenews.com/space/2017/04/17/the-nuclear-posture-review-is-underway-here-s-what-to-look-for/; and The White House, "Remarks by President Trump on the Strategy in Afghanistan and South Asia," press release, August 21, 2017, https://www.whitehouse.gov/the-press-office/2017/08/21/remarks-president-trump-strategy-afghanistan-and-south-asia.

Toward that goal, the legislation established annual limits that would reduce discretionary spending by approximately $1.0 trillion, compared with projected spending over that period.

The BCA established separate limits (commonly referred to as *caps*) on defense and nondefense discretionary budget authority that are enforced by a mechanism called *sequestration*.[7] Sequestration provides for the automatic cancellation of previously appropriated spending to reduce discretionary spending to the limits specified in the BCA. The defense limit applies to the national defense budget (function 050), but does not restrict amounts designated by the President and Congress as funding for *emergencies* or for *Overseas Contingency Operations* (OCO).[8]

The Budget Control Act

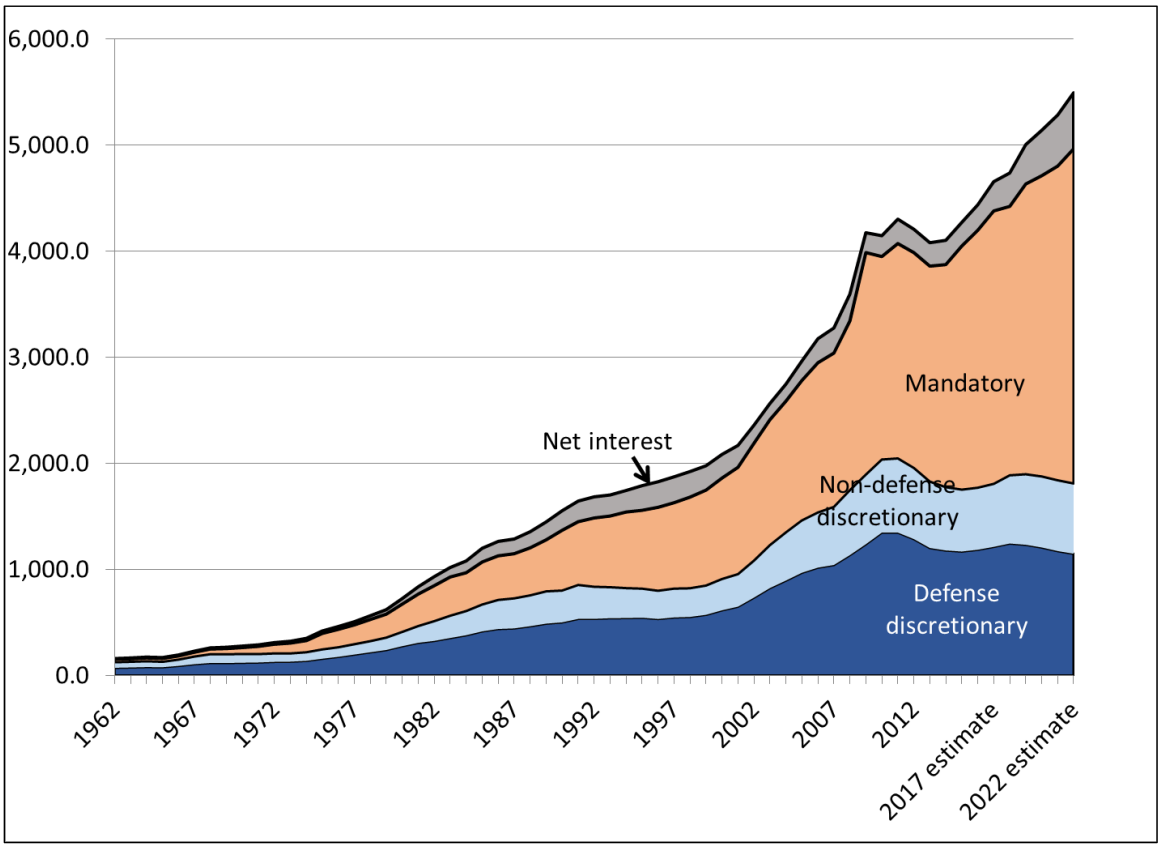
For additional information on the BCA, see CRS Report R44039, *The Budget Control Act and the Defense Budget: Frequently Asked Questions*, by Lynn M. Williams and CRS Report R42972, *Sequestration as a Budget Enforcement Process: Frequently Asked Questions*, by Megan S. Lynch.

[7] For more information see CRS Report R42972, *Sequestration as a Budget Enforcement Process: Frequently Asked Questions*, by Megan S. Lynch.

[8] For more information on federal budget functions see CRS In Focus IF10618, *Defense Primer: The National Defense Budget Function (050)*, by Christopher T. Mann. For more information on funding for Overseas Contingency Operations see CRS Report R44519, *Overseas Contingency Operations Funding: Background and Status*, coordinated by Lynn M. Williams and Susan B. Epstein.

Figure 1. Federal Outlays by Budget Category

amounts in billions of dollars



Source: OMB Historical Table 8.1.

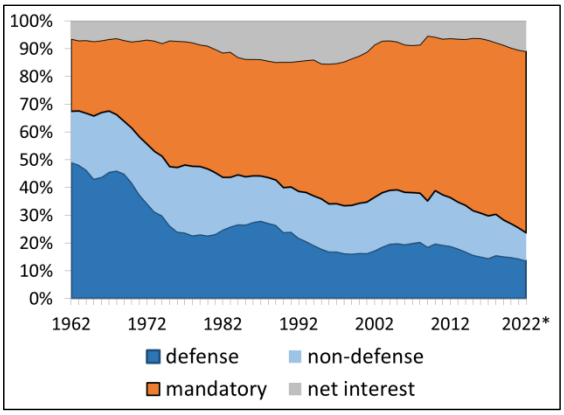
Over the nearly six decades from 1962 through 2022, OMB projects that defense outlays would increase from $52.6 billion to a projected $662.3 billion. Over the same period, net[9] mandatory spending is projected to increase at roughly 10 times that rate (from $27.9 billion to $3.16 trillion). (See **Figure 1**.)

According to OMB data, defense outlays, which accounted for 49.2% of federal spending in 1962, had dropped to 19.4% in 2011—the year the BCA was enacted—and are projected to drop to 13.7% by 2022. On the other hand, net mandatory outlays combined with net interest on the national debt, which accounted for 32.5% of outlays in 1962 and 62.6% in 2011, are projected to account for 76.2% of outlays in 2022. (See **Figure 2**.)

Similarly, the defense share of the GDP has declined relatively steadily since 1962, while the share of the GDP consumed by mandatory spending and net interest has risen. (See **Figure 3**.)

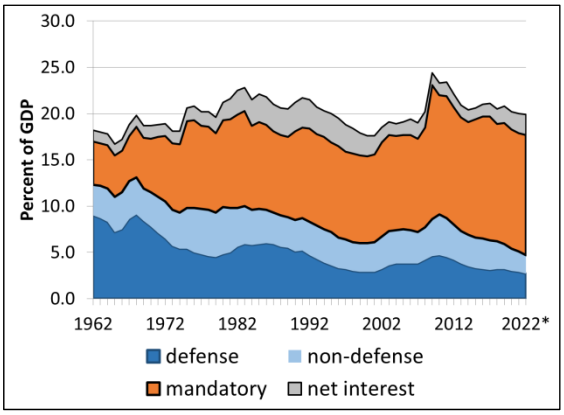
[9] OMB calculates net mandatory spending by deducting from gross mandatory spending the value of offsetting receipts, including those from the sale of federal assets. For all but three years from 2007 to 2022, those offsets have amounted to (or are projected to be) between $80 billion and $100 billion.

Figure 2. Percent of Federal Outlays



Source: OMB Historical Table 8.3.

Figure 3. Percent of GDP



Source: OMB Historical Table 8.4.

Trends in Federal Spending

For information on federal deficits and debt, see CRS Report R44383, *Deficits and Debt: Economic Effects and Other Issues*, by Grant A. Driessen. For additional information on mandatory spending, see CRS Report R44641, *Trends in Mandatory Spending: In Brief*, by D. Andrew Austin.

Budget Caps and the FY2018 NDAA

During the period in which Congress was deliberating on the FY2018 NDAA, the BCA limit (or *cap*) on FY2018 discretionary spending for national defense (budget function 050) was $549 billion. The Trump Administration proposed $603 billion for base budget national defense discretionary spending in FY2018—$54 billion more than the BCA cap. In the absence of the appropriate statutory changes to BCA, defense appropriations at the requested level would have triggered sequestration.[10]

The Trump Administration's FY2018 budget called on Congress to raise the defense discretionary caps for FY2018 and subsequent years to accommodate proposed defense budget increases in FY2018 and beyond.[11] This proposal was coupled with a recommendation to continue BCA-like limits on nondefense discretionary spending through FY2027—six years beyond the expiration of the Budget Control Act (see **Table 1**).

Table 1. Administration Proposed Discretionary Limits: FY2018-FY2027

(budget authority in billions)

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Current BCA Limits										
Defense	549	562	576	590	—	—	—	—	—	—
Nondefense	516	530	543	556	—	—	—	—	—	—

[10] For information about sequestration see CRS Report R42972, *Sequestration as a Budget Enforcement Process: Frequently Asked Questions*, by Megan S. Lynch.

[11] Office of Management and Budget, *A New Foundation for American Greatness – President's Budget FY 2018*,May 23, 2017, at https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/budget.pdf.

	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027
Proposed Limits										
Defense	603	616	629	642	655	669	683	697	712	727
Nondefense	462	453	444	435	426	417	409	401	393	385

Source: Office of Management and Budget, *A New Foundation for American Greatness—President's Budget FY 2018*, Table S-7.

Under the Administration's proposal, projected defense spending increases totaling $463 billion over the period FY2018-FY2027 would be more than offset by reductions in nondefense spending that would total $1.5 trillion over the same period. All told, the President's budget plan proposed a $1 trillion reduction in federal discretionary spending.[12]

The House and Senate disregarded the defense spending cap in passing their respective versions of the FY2018 NDAA and in agreeing to the conference report on a final version of the measure. All versions of the bill (H.R. 2810) authorized defense appropriations at levels which, if enacted, would have exceeded the cap then in force, thus triggering sequestration.

After the FY2018 NDAA was enacted, but before final action on any FY2018 appropriations, the caps on discretionary spending for defense and nondefense programs in FY2018 and FY2019 were increased as part of P.L. 115-123, which included the fifth continuing appropriations resolution for FY2018. The revised cap on base budget, discretionary defense appropriations for FY2018 is $629 billion, which would accommodate appropriations to the level authorized by the enacted version of the FY2018 NDAA.

FY2018 Defense Budget Request and NDAA

Shortly after taking office, President Trump directed Secretary of Defense James Mattis to conduct a "30-day Readiness Review" of "military training, equipment maintenance, munitions, modernization and infrastructure."[13] In the wake of that review, DOD moved out along three axes:

- Submitting a detailed amendment to the Obama Administration's FY2017 budget request—seeking an additional $30 billion to address what it described as "immediate and serious readiness challenges;"[14]
- Developing the FY2018 Budget Request to be "focus[ed] on balancing the program ... while continuing to rebuild readiness;" and

[12] The BCA places limits on discretionary spending in two categories: defense (budget function 050) and nondefense (all other discretionary spending). For more information see CRS Report R44039, *The Budget Control Act and the Defense Budget: Frequently Asked Questions*, by Lynn M. Williams.

[13] U.S. President (Trump), Memorandum to the Secretary of Defense and Director of the Office of Management and Budget, Subject: Rebuilding the U.S. Armed Forces, January 27, 2017, at https://www.whitehouse.gov/the-press-office/2017/01/27/presidential-memorandum-rebuilding-us-armed-forces.

[14] This readiness review, in part, led to the Trump Administration's March 2017 request for additional appropriations for DOD. In a letter to House Speaker Paul Ryan on March 16, 2017, President Trump said the $30 billion request for additional funds in FY2017 would address "critical budget shortfalls in personnel, training, equipment, munitions, modernization and infrastructure investment. It represents a critical first step in investing in a larger, more ready, and more capable military force." For more information see CRS Report R44806, *The Trump Administration's March 2017 Defense Budget Proposals: Frequently Asked Questions*, by Pat Towell and Lynn M. Williams.

- Beginning formulation of the FY2019-FY2023 Defense Program to be shaped by a new National Defense Strategy and provide "an approach to enchanc[e] the lethality of the joint force against high-end competitors and the effectiveness of our military against a broad spectrum of potential threats."[15]

In its presentation of the initial FY2018 budget request, DOD highlighted several priorities:

- Improving warfighting readiness;
- "Filling holes" in capacity and lethality while preparing for future growth;
- Reforming DOD business practices;
- Keeping faith with servicemembers and their families; and
- Supporting overseas contingency operations.[16]

The Trump Administration's initial FY2018 budget request, released on May 23, 2017, included a total of $677.1 billion for national defense-related activities of the federal government (budget function 050).[17] Of the national defense total, $667.6 billion was requested for discretionary spending to be provided, for the most part, by the annual appropriations bill drafted by the Appropriations Committees of the House and Senate. The balance—$9.6 billion—was requested for mandatory spending, that is, spending for entitlement programs and certain other payments. Mandatory spending is generally governed by statutory criteria and it is not provided by annual appropriation acts.[18]

As has been typical in recent years, about 95% of the national defense total, $646.9 billion, is for military activities of the DOD—designated as subfunction 051. The balance of the function 050 request comprises $21.8 billion for defense-related atomic energy activities of the Department of Energy (designated subfunction 053) and $8.4 billion for defense-related activities of other agencies (designated subfunction 054), of which about two-thirds is allocated to the Federal Bureau of Investigation. (See **Figure 4**.)

[15] Secretary of Defense James Mattis, "Implementation Guidance for Budget Directives in the National Security Presidential memorandum on Rebuilding the U.S. Armed Forces," January 31, 2017, at https://media.defense.gov/2017/Feb/01/2001693094/-1/-1/0/DDD-170201-373-002.

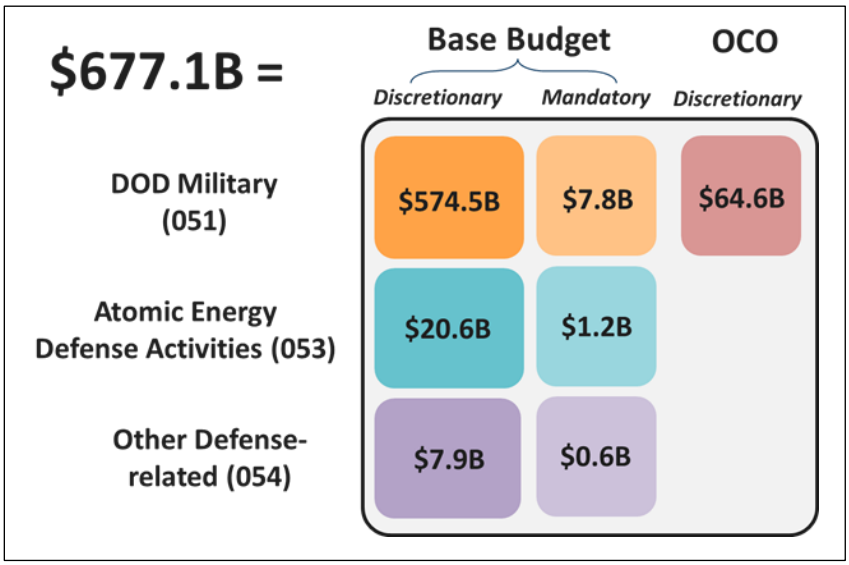
[16] Office of the Under Secretary of Defense (Comptroller), "Defense Budget Overview, United States Department of Defense Fiscal Year 2018 Budget Request," May 2017 at http://comptroller.defense.gov/Portals/45/Documents/defbudget/fy2018/fy2018_Budget_Request_Overview_Book.pdf.

[17] For more information on federal budget functions see CRS In Focus IF10618, *Defense Primer: The National Defense Budget Function (050)*, by Christopher T. Mann.

[18] Congressional Budget Office, https://www.cbo.gov/content/what-difference-between-mandatory-and-discretionary-spending.

Figure 4. Initial FY2018 National Defense Budget Request (Function 050)

(dollars in billions)



Source: OMB Analytical Perspectives (Table 25-1).

Notes: Totals may not reconcile due to rounding. OCO is Overseas Contingency Operations.

Of the initial, $677.1 billion request, $612.5 billion was for the *base budget,* that is, for funds intended to pay for those activities the DOD and other national defense-related agencies would pursue even if U.S. forces were not engaged in contingency operations in Afghanistan, Iraq, Syria, and elsewhere. The remainder of the FY2018 request—originally amounting to $64.6 billion—is designated as funding for Overseas Contingency Operations (OCO).

Originally, the OCO designation was assigned to funding associated with post-9/11 military operations in and around Iraq and Afghanistan. However, the range of DOD activities funded as OCO has broadened. The FY2018 OCO request includes $4.8 billion for the European Reassurance Initiative (ERI), a set of actions intended to beef up the U.S. military presence in Europe as a counter to menacing Russian military actions. The Administration's FY2018 request for ERI included $1.7 billion to increase the number of U.S. military personnel in Europe and $2.2 billion to increase prepositioned stocks of U.S. military equipment in the region. The request also included $150 million to "continue train, equip, and advise efforts to build Ukrainian capacity to conduct internal defense operations to defend its sovereignty and territorial integrity."[19]

One incentive for expanding the range of DOD spending designated as OCO is that, as such, it is exempt from the BCA funding cap.

House and Senate Action on FY2018 NDAA

Of the $667.6 billion in national defense discretionary funding initially requested by the President for FY2018, $659.8 billion fell within the jurisdiction of the House and Senate Armed Services Committees and was subject to authorization by the annual National Defense Authorization Act.[20]

[19] Ibid.

[20] For the most part, the NDAA does not authorize funds for National Defense subfunction 054 which includes defense-related activities by agencies other than DOD and the Energy Department.

On July 14, 2017, the House passed H.R. 2810, the National Defense Authorization Act for FY2018, by a vote of 344-81. On September 18, 2017, the Senate passed its version of that bill by a vote of 89-8 after having replaced the text of the House bill with an amended version of S. 1519, the version of the bill that had been reported by the Senate Armed Services Committee.

Before passing the NDAA, the Senate modified the committee-reported text, adopting by unanimous consent an amendment incorporating text from more than 100 amendments.[21] Subsequently, the Senate adopted an additional 49 amendments, *en bloc*, by unanimous consent. In the Senate's only roll call vote in relation to an amendment to the NDAA, it voted 61-36 to table (and thus reject) an amendment that would have repealed (six months after enactment of the bill) the joint resolutions on the Authorization of Military Force (AUMF) enacted in 2001 (P.L. 107-40) and in 2002 (P.L. 107-243).[22]

FY2018 DOD Budget Amendment (November 2017)

In November 2017—after the House and Senate had passed their respective versions of the FY2018 NDAA but before House and Senate conferees had completed work on a compromise version of the bill (H.R. 2810)—the Trump Administration amended its fiscal 2018 budget request, increasing its DOD funding request by a total of $5.87 billion. The requested increase included[23]

- $4.01 billion to expand and upgrade missile defense programs intended to counter threats from North Korea;
- $674 million to repair USS *John S. McCain* and USS *Fitzgerald,* destroyers equipped for antimissile defense that were damaged in separate collisions in the Western Pacific; and
- $1.18 billion to cover costs associated with the deployment in and around Afghanistan of 3,500 more U.S. troops than had been assumed in the FY2018 budget request.

Conferees on the FY2018 NDAA authorized the additional funds requested by the budget amendment.[24]

The President and Congress designated as emergency funds the $4.7 billion requested for missile defense and ship repair while designating as OCO the funds requested for an enlarged U.S. presence in Afghanistan. Thus, when Congress appropriated those amounts in the FY2018 omnibus appropriations bill, those amounts were exempt from the BCA defense cap.

[21] The text of this amendment, which is the modified version of the committee-reported bill on which the Senate eventually acted and which is designated SA1003, appears in the *Congressional Record*, daily edition, vol. 163, part 148 (September 13, 2017). p. 5273.

[22] For additional background and analysis of AUMF, see the following: CRS In Focus IF10539, *Defense Primer: Legal Authorities for the Use of Military Forces*, by Jennifer K. Elsea; CRS Report R43983, *2001 Authorization for Use of Military Force: Issues Concerning Its Continued Application*, by Matthew C. Weed; and CRS Report R43760, *A New Authorization for Use of Military Force Against the Islamic State: Issues and Current Proposals*, by Matthew C. Weed.

[23] See "Estimate #3—BY2018 Budget Amendments: Department of Defense to support urgent missile defeat and defense enhancements to counter the threat from North Korea, repair damage to U.S. Navy ships, and support the Administration's South Asia strategy. – 11/06/17" at https://www.whitehouse.gov/omb/budget_amendments.

[24] In the summary funding table of the conference report on the bill (H.Rept. 115-404), the additional amounts requested in the November budget amendment are added to the amounts requested by the Administration and approved by the House and Senate in their respective versions of the bill, both of which were passed before the budget amendment was submitted.

FY2018 NDAA Conference Report (H.R. 2810)

House and Senate conferees filed a conference report for H.R. 2810 on November 9, 2017. The House agreed to the conference report on November 14, 2017, by a vote of 356-70. The Senate agreed to it on November 16, 2017, by voice vote and the President signed the bill into law (P.L. 115-91) on December 12, 2017. (See **Table 2**.)

Table 2. FY2018 NDAA (H.R. 2810/S. 1519)

amounts in millions of dollars of discretionary budget authority

Title	Original FY2018 Request	Budget Amendment November 2017			Total Revised Request	Enacted (P.L. 115-91)
		Missile Defense re: North Korea	*Repair 2 damaged destroyers*	*Larger force in Afghanistan*		
Procurement	113,983.7	2,423.2			116,406.9	137,311.3
Research, Development, Test and Evaluation	82,716.6	1,346.7			84,063.3	86,348.7
Operation and Maintenance	188,570.3	42.5	673.5		189,286.3	192,290.0
Military Personnel	141,686.1				141,686.1	141,846.4
Revolving Funds and Other auth.	37,849.8				37,849.8	37,676.2
Military Const. and Fam. Housing	9,782.5	200.0			9,982.5	9,980.7
Subtotal: DOD Base Budget	**574.589.0**	**4,012.4**	**673.5**		**579,274.8**	**605,453.3**
Atomic Energy Defense Activities	20.477.3				20,477.3	20,597.8
Other Non-DOD Activities	210.0				210.0	300.0
Subtotal: Base Budget	**595,276.3**				**599,962.1**	**626,351.1**
OCO	64,573.0			1,184.1	65,757.1	65,748.3
Grand Total: Base + OCO	**659,849.3**	**4,012.4**	**673.5**	**1,184.1**	**665,719.2**	**692,099.4**

Sources: Original request is taken from H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017. Data on the November 6, 2017, budget amendment are taken from Office of Management and Budget, "Estimate #3, FY2018 Budget Amendments: Department of Defense to support urgent missile defeat and defense enhancements to counter the threat from North Korea, repair damage to U.S. Navy ships, and support the Administration's south Asia strategy," November 6, 2017, accessed at https://www.whitehouse.gov/sites/whitehouse.gov/files/omb/budget/fy2018/DOD_budgetamendment_package_nov2017.pdf. Total revised request is taken from H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Note: Conferees on the FY2018 NDAA did not consider a separate budget amendment, also submitted in November 2017, that requested $1.16 billion for repair of DOD facilities damaged by Hurricanes Harvey, Irma, and Maria.

Limited Information

The original, House-passed version of the FY2018 NDAA would have authorized a total of about $689.0 billion, exceeding the Administration's initial budget request by about $29.2 billion (4.4%). The original Senate-passed version of the bill would have exceeded the initial request by about $32.3 billion or 4.8%.

The conference report on H.R. 2810 does not present the authorization levels in the original House and Senate versions in comprehensive detail, and the number and complexity of floor amendments adopted by each chamber render it infeasible to extract that information from the data available.

Selected Budget and Policy Issues in H.R. 2810

Intermediate-Range Nuclear Forces Treaty[25]

The United States and Soviet Union signed the Intermediate-Range Nuclear Forces (INF) Treaty in 1987. In agreeing to the INF Treaty, the United States and Soviet Union agreed that they would ban all land-based ballistic and cruise missiles with ranges between 500 and 5,500 kilometers. The ban applies to missiles with nuclear or conventional warheads, but not to sea-based or air-launched missiles. Since 2014, the U.S. State Department has raised concerns about the Russian Federation violating the INF. In testimony before the House Armed Services Committee on March 8, 2017, General Paul Selva, the Vice Chairman of the Joint Chiefs of Staff, confirmed press reports that Russia had begun to deploy a new ground-launched cruise missile, in violation of the INF Treaty.

The House bill included a series of provisions (§§1241-1248) aimed at compliance enforcement regarding Russian violations of the INF Treaty and other related matters. The Senate bill (§1635) would have established a policy of the United States regarding actions necessary to bring the Russian Federation back into compliance with the INF Treaty. Both would have mandated that the Pentagon establish a program of record for the development of a U.S. land-based missile of INF range which, if carried out, would violate the treaty.

The final version of the bill retains the language that requires the Secretary of Defense to "establish a program of record to develop a conventional road-mobile ground-launched cruise missile system with a range of between 500 to 5,500 kilometers" and authorizes $58 million in funding for the development of active defenses to counter INF-range ground-launched missile systems; counterforce capabilities to prevent attacks from these missiles; and countervailing strike capabilities to enhance the capabilities of the United States.

The INF Treaty

For background and analysis on the INF Treaty see CRS Report R43832, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress*, by Amy F. Woolf.

Countering Russia[26]

Like the House and Senate versions of the bill, the final version of the NDAA includes several policy provisions aimed at countering Russian aggression and malign influence in Europe and expressing support for the European Deterrence Initiative (EDI). For example, in the enacted version of H.R. 2810

[25] This section was coordinated with Amy Woolf, Specialist in Nuclear Weapons Policy.

[26] This section was coordinated with Cory Welt, Analyst in European Affairs.

- Section 1273 requires a five-year plan of activities and resources for EDI that would be generally similar to the plan that would have been required by Section 1275 of the House version of the bill;
- Section 1205 extends existing authorities for the training of Eastern European national security forces in multilateral exercises, as would Sections 6209 and 6210 of the Senate version of the bill;
- Section 1279D authorizes the Secretary of Defense to provide joint security assistance to Estonia, Latvia, and Lithuania to improve their interoperability and build capacity to deter aggression, while Sections 1237 and 1238 of the House bill would have expressed support for those three countries and Georgia.
- Section 1234 extends current authorities to provide security assistance—including defensive lethal assistance and intelligence support—to Ukraine, as would the House bill (§1234) and the Senate bill (§6208);
- Section 1234 also expands authorities to provide medical treatment to wounded Ukrainian soldiers and additional forms of military assistance, as would the Senate bill (§6215);
- Sections 1231 and 1232 extend existing prohibitions on funding for military-to-military cooperation with Russia and on activities that would recognize Russian sovereignty over Crimea, echoing language in the House bill (§1231) and the Senate bill (§§1241 and 1242); and
- Section 3122 extends existing prohibitions against contracts with or assistance to Russia for atomic energy defense activities, as would Section 3117 of the House bill.

Additional Information on the Russian Federation

For more information on Russia, see CRS Report R44775, *Russia: Background and U.S. Policy*, by Cory Welt.

North Korean Threats[27]

Both the House and Senate bills both included sense of Congress provisions related to the importance of the U.S. alliance with the Republic of Korea and threats to U.S. interests and national security posed by North Korea (see §§1264, 1266, and 1270B of the House bill and §§1268 and 1269 of the Senate bill).

The House bill also would have required the President to provide a report to Congress on cooperation between the Government of Iran and the Democratic People's Republic of Korea on nuclear weapons programs, ballistic missile development, chemical and biological weapons development, and conventional weapons (§1288). The House bill also would have required an assessment and report related to the defense of Hawaii from a North Korea ballistic missile attack (§1685).

The enacted version of the bill includes sense of Congress provisions related to the importance of the U.S. alliances with the Republic of Korea and Japan, the need to strengthen deterrence capabilities in the face of North Korean aggression, and the need to encourage further defense cooperation among the allies (see §§1254 and 1255). It also requires that the President submit a strategy on North Korea, including addressing the DPRK's nuclear weapons programs, ballistic missile development, chemical and biological weapons development, and conventional weapons

[27] This section was coordinated with Mary Beth D. Nikitin, Specialist in Nonproliferation.

(§1256). Section 1257 of the conference report requires a briefing by the Secretary of Defense to the armed services committees on the "hazards or risks posed directly or indirectly by the nuclear ambitions of North Korea" including a plan to deter and defend against such threats. The NDAA conference report also adds a requirement that the annual report on the Military Power of Iran also include an assessment of military-to-military cooperation between Iran and North Korea (§1225). The conference report also requires an assessment and report related to the defense of Hawaii from a North Korea ballistic missile attack (§1680).

Additional Information on North Korea

For additional background and information on U.S. -North Korea relations and policy options, see CRS Insight IN10734, *North Korea's Long-Range Missile Test*, by Emma Chanlett-Avery, Dianne E. Rennack, and Steven A. Hildreth, CRS In Focus IF10246, *U.S.-North Korea Relations*, by Emma Chanlett-Avery, Jonathan R. Corrado, and Mark E. Manyin, CRS In Focus IF10467, *Possible U.S. Policy Approaches to North Korea*, by Emma Chanlett-Avery, Mark E. Manyin, and Jonathan R. Corrado, and CRS In Focus IF10472, *North Korea's Nuclear and Ballistic Missile Programs*, by Steven A. Hildreth and Mary Beth D. Nikitin.

Prohibitions on Transfer or Release of Detainees[28]

The final version of H.R. 2810—like the versions passed by the House and Senate—included provisions that extend until December 31, 2018, previously enacted provisions prohibiting or restricting the transfer or release of detainees at Guantanamo Bay, Cuba. In the final bill

- Section 1033 prohibits the use of any funds available to DOD to transfer or release Guantanamo Bay detainees to the United States, its territories, or possessions;
- Section 1034 prohibits the use of funds to construct or modify any facility in the United States to house detainees transferred from Guantanamo Bay;
- Section 1035 extends the current prohibition on the use of any funds to transfer or release detainees to Libya, Somalia, Syria, or Yemen; and
- Section 1036 prohibits the use of funds to close or relinquish U.S. control of the Guantanamo Bay base.

The Senate bill included a provision (§1035) that would have allowed the temporary transfer of a detainee to the United States for necessary medical treatment not available at Guantanamo Bay. That provision was not included in the final bill.

Selected DOD Cyber Matters[29]

Both the House and Senate versions of the NDAA included several provisions related to DOD-focused cybersecurity and cyberspace issues which were incorporated into the final version of the bill, with modifications.

House-Originated Provisions

In the version of H.R. 2810 originally passed by the House:

[28] This section was coordinated with Jennifer K. Elsea, Legislative Attorney.

[29] This section was coordinated with Catherine A. Theohary, Specialist in National Security Policy, Cyber and Information Operations.

- Section 1651 would have required the Secretary of Defense to "promptly submit in writing [to Congress] notice of any sensitive military cyber operation and notice of the results of the review of any cyber capability that is intended for use as a weapon." In the final version of the bill, Section 1631 modifies the House provision to require that the legal reviews of cyber capabilities intended for a weapon be submitted on a quarterly basis in aggregate form.
- Section 1654 would have required the Secretary of Defense to develop plans to increase regional cyber planning and enhance information operations to counter information operations and propaganda by China and North Korea. A slightly modified version of that requirement is included in Section 1641 of the final version of the NDAA.
- Section 1655 would have required a report on the progress of the review of the possible termination of the dual-hat arrangement of the commander of U.S. Cyber Command, who also serves as Director of the National Security Agency. This review had been mandated by the FY2017 NDAA (P.L. 114-328). The corresponding provision in the final version of the bill (§1648) requires that this report be informed using data from the Director of Cost Assessment and Program Evaluation, in consultation with the USCYBERCOM commander and Director of NSA.

Senate-Originated Provisions

In the version of the FY2018 NDAA originally passed by the Senate:

- Section 1621 would have established, as a policy of the United States, that the United States should "employ all instruments of national power, including the use of offensive cyber capabilities, to deter if possible, and respond when necessary, to any and all cyberattacks or other malicious cyber activities that target United States interests...." In the final version, this was replaced by Section 1633, which requires the President to develop a national policy for the United States relating to cyberspace, cybersecurity, and cyberwarfare.
- Section 1622 of the original Senate bill would have required the Secretary of Defense, in consultation with the Director of National Intelligence, the Attorney General, the Secretary of Homeland Security, and the Secretary of State, to complete a cyber posture review. In the final version of the bill, Section 1644 expanded the scope of the required study to include a review of the role of cyber operations in combatant commander operational planning; a review of the relevant laws, policies, and authorities; and a review of the various approaches to cyber deterrence.
- Section 1625 would have established a Strategic Cybersecurity Program to conduct continual "red-teaming" reviews of weapon systems, offensive cyber systems, and critical infrastructure of DOD. This provision was supplanted in the final bill by Section 1640, which calls on the Secretary of Defense, in consultation with the Director of the National Security Agency, to submit to the congressional defense committees a plan for carrying out the activities described in the Senate provision.
- Section 6211 of the Senate bill would have modified an existing requirement for an annual report on Russian military developments to include Russia's information warfare strategies and capabilities. In the final version of the bill

Section 6212 requires a separate annual report on Russian efforts to propagandize members of the U.S. Armed Forces.

- Section 1042 of the Senate bill would have established a task force to integrate DOD organizations responsible for information operations, military deception, public affairs, electronic warfare, and cyber operations. In the final bill, Section 1042 requires the Secretary of Defense to establish processes and procedures to integrate strategic information operations and cyberenabled information operations across the responsible organizations. It also requires that a senior DOD official implement and oversee such arrangements.
- Section 902 of the Senate bill would have delineated the responsibilities of DOD's Chief Information Warfare Officer. In the final version, Section 909 requires that this official be appointed by the President subject to Senate confirmation.

A provision of the original Senate-passed version retained in the final version as Section 1649B requires an update on the federal cyber scholarship-for-service program. This program awards graduate and undergraduate scholarships to students in cyber-security-related programs in return for which recipients agree to work in cybersecurity for a federal agency or other designated entity after graduation for a period equal to the length of the scholarship.

A provision in the original Senate-passed provision (§6608) that was not included in the final version of the bill would have required a Government Accountability Office (GAO) report on any critical telecommunications equipment manufactured by or incorporating information manufactured by a foreign supplier that is closely linked to a leading cyber threat actor.

Selected Government-Wide Information Technology Matters[30]

The Senate incorporated into its version of the NDAA the text of two previously introduced bills dealing with government-wide cybersecurity and information technology matters.

OPEN Government Act

Section 6012 of the Senate bill incorporated the "Open, Public, Electronic, and Necessary Government Data Act" or (OPEN Government Act), previously introduced as S. 760. It would require federal government agencies to catalog and publish their data in formats that are machine usable and to provide a license for open use of those data. This provision mirrored recommendations made in the Report of the Commission on Evidence-Based Policymaking, created by P.L. 114-140.[31]

The final version of the NDAA did not include this provision.

MGT Act

Sections 1091-1094 of the Senate version, comprising the "Modernizing Government Technology Act of 2017," or MGT Act, were incorporated into the final version of the NDAA as Sections 1076-1078. These sections authorize the creation of working capital funds in individual agencies, and a central fund managed by the General Services Administration (GSA) to improve or replace legacy government information technology. The savings realized through modernizing the

[30] This section was coordinated with Chris Jaikaran, Analyst in Cybersecurity Policy.

[31] The final report of the Commission on Evidence-Based Policy, published September 7, 2017, is available at https://www.cep.gov/cep-final-report.html.

technology are to be used to replenish the fund for future use. This legislation had been introduced as S. 990 and had been passed by the House on May 17, 2017, as H.R. 2227.

Software Security Issues

The final version of the NDAA included, in modified form, two other Senate-passed provisions dealing with software security threats:

- Section 1634 of the final bill prohibits the use by any federal agency of software products developed by Kaspersky Lab, a Russian firm selling antivirus software. The Department of Homeland Security has banned the use of Kaspersky products by federal agencies because of allegations that the company is associated with Russian espionage efforts. The provision also requires a report on procedures that are to be followed to remove suspect software from federal IT systems. A similar ban on Kaspersky products had been included in the Senate bill as Section 11603.
- Section 1646 of the final bill requires a DOD report to the appropriate congressional committees on the potential offensive and defensive applications of blockchain technology and on any efforts by foreign powers, extremist organizations, or criminals to utilize those technologies. The Senate version had included a similar provision as Section 1630.

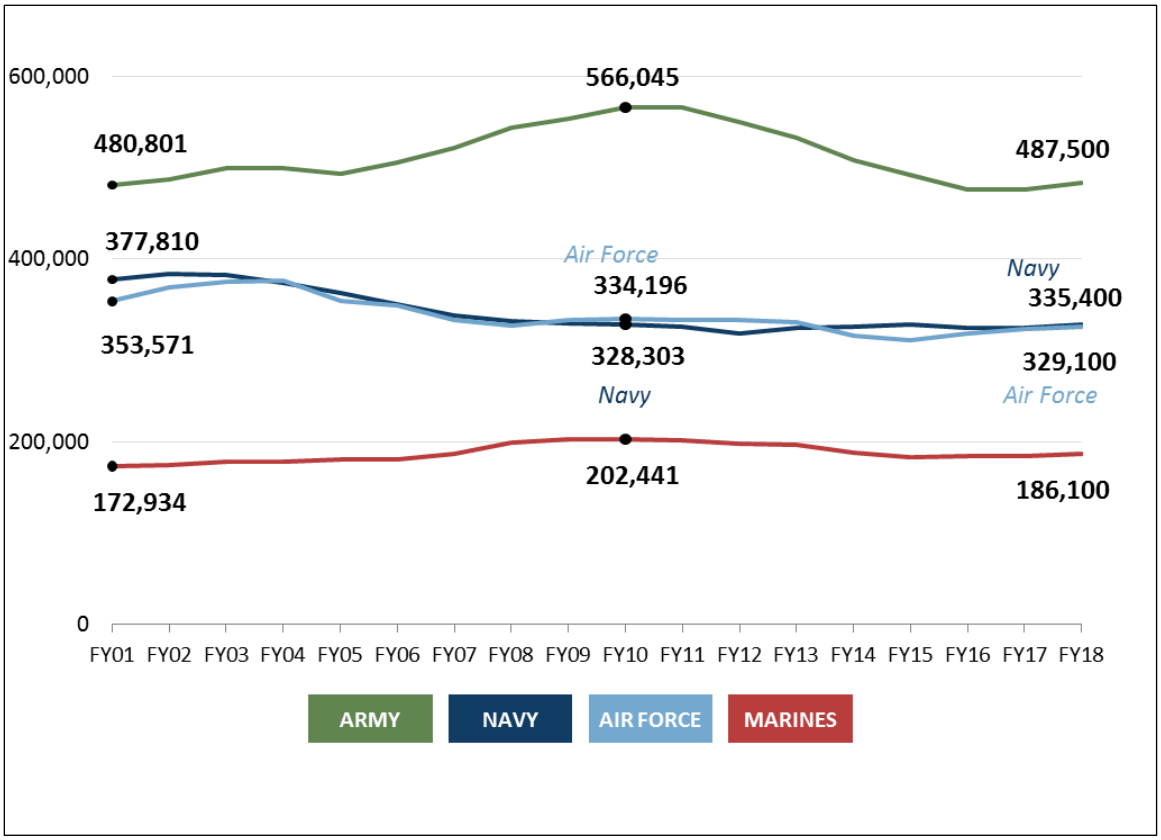
Military Personnel Matters[32]

Continuing the basic thrust of a congressional initiative in the FY2017 NDAA, the Administration's FY2018 budget request would sustain the currently authorized end-strength of the active-duty components of the Army and Marine Corps.[33] The two services' end-strengths increased gradually in the years after 2001, but those increases accelerated between 2006 and 2010 in response to the tempo of operations in Iraq and Afghanistan. The active duty end-strengths of the Army and Marine Corps peaked in 2010 and 2009, respectively, with the Army at slightly more than 566,000 and the Marine Corps at slightly less than 203,000. (See **Figure 5**.)

[32] This section was authored by Lawrence Kapp, Specialist in Military Manpower Policy and Kristy Kamarck, Analyst in Military Manpower.

[33] The term *end strength* refers to the authorized strength of a specified branch of the military at the end of a given fiscal year (i.e., on September 30). Authorized strength means "the largest number of members authorized to be in an armed force, a component, a branch, a grade, or any other category of the armed forces," (10 U.S.C. Section 115). The law also permits the service secretaries to exceed this maximum amount by up to 2%, and the Secretary of Defense to increase this maximum amount by up to 3%.

Figure 5. Active-duty End-Strength, 2001-2018



Source: Defense Manpower Data Center and FY2018 NDAA.

Notes: This table includes actual end-strengths for FY2001 through FY2017 and authorized end-strength for FY2018.

Beginning with the budget for 2012, the Obama Administration proposed—and Congress generally approved—a drawdown in the two services, with the Administration ultimately proposing an end-strength goal of 450,000 for the Army and 182,000 for the Marines.[34] In the FY2017 NDAA, Congress changed that trajectory, rejecting proposals by the Obama Administration to continue the Army and Marine Corps reductions. Instead, that bill increased the Army's authorized end-strength to 476,000—an increase of 16,000 over the budget request—and increased the Marine Corps end-strength to 185,000, an increase of 3,000 over the request.

The FY2018 budget request proposed maintaining those end-strengths for the Army and Marine Corps, while increasing the Navy to 327,900 (+4,000) and the Air Force to 325,100 (+4,100).

The FY2018 request would increase the active-duty end-strength of the Armed Forces to 1,314,000, an increase of 8,100 over the FY2017 end-strength cap. By one widely used rule-of-thumb, the annual pay and benefits for each additional active-duty servicemember cost about $100,000. On that assumption, the requested end-strength increase would cost about $810 million annually.

The enacted version of the FY2018 NDAA authorized a larger number of personnel than requested for the Army (active and reserve) and the Marine Corps. **Table 3** summarizes the end-

[34] Department of Defense, *FY2015 Budget Request Overview*, March 2014, p 2-4.

strength authorizations proposed by the Administration, the end-strengths authorized in the House and Senate NDAAs, and the end-strengths enacted into law by the FY2018 NDAA (P.L. 115-91).

Table 3. FY2018 Military End-Strength

	Budget Request	House-passed	Senate-passed	Final bill
Army	476,000	486,000	481,000	483,500
Navy	327,900	327,900	327,900	327,900
Marine Corps	185,000	185,000	186,000	186,000
Air Force	325,100	325,100	325,100	325,100
Total, Active Forces	**1,314,000**	**1,324,000**	**1,320,000**	**1,322,500**
Army National Guard	343,000	347,000	343,500	343,500
Army Reserve	199,000	202,000	199,500	199,500
Navy Reserve	59,000	59,000	59,000	59,000
Marine Corps Reserve	38,500	38,500	38,500	38,500
Air National Guard	106,600	106,600	106,600	106,600
Air Force Reserve	69,800	69,800	69,800	69,800
Total, DOD Selected Reserves	**815,900**	**822,900**	**816,900**	**816,900**
Coast Guard Reserve	7,000	7,000	7,000	7,000

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

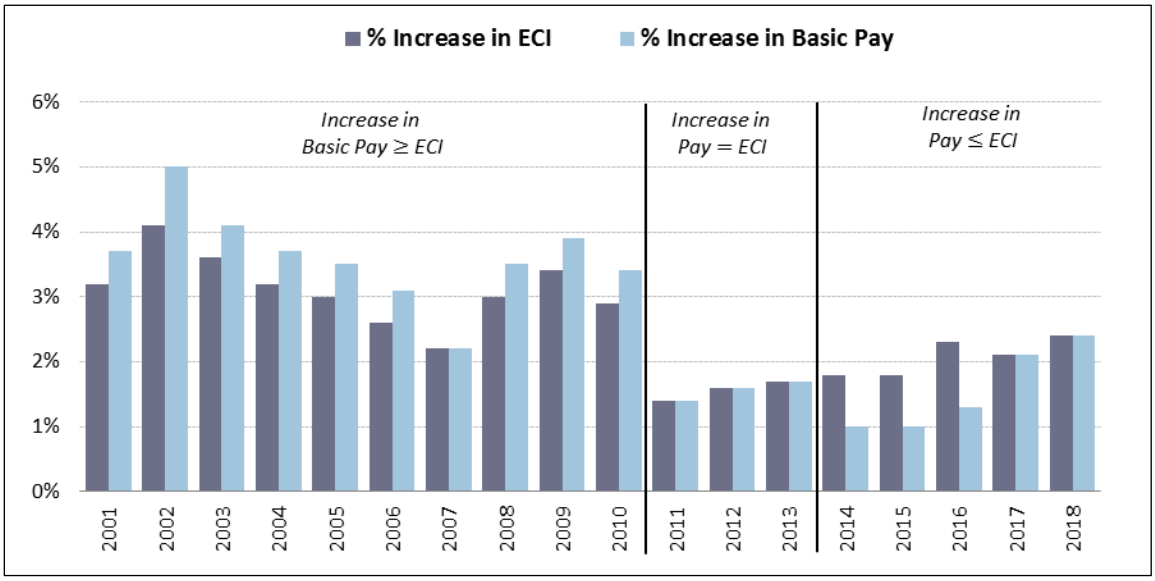
Military Pay Raise

Title 37 of United States Code provides a permanent formula for an automatic annual increase in basic pay that is indexed to the annual increase in the Employment Cost Index (ECI) for "wages and salaries" of private industry workers.[35] The FY2018 budget request proposed a 2.1% increase in basic pay for military personnel instead of the 2.4% increase that would occur automatically.

In most years from 2001 through 2010, increases in basic pay were above ECI. From 2011 through 2014, raises were equal to ECI as per the statutory formula. From 2014 through 2016, the rate of military pay raises slowed as the President invoked his authority to set an alternative pay adjustment below the ECI, and Congress did not act to overturn those decisions. In 2017 the President proposed a pay raise that was lower than the ECI, but Congress included a provision in the FY2017 NDAA that set the pay raise at the ECI rate. The FY2018 budget proposed increasing basic pay by 2.1% rather than the statutory formula of 2.4%, but in the FY2018 NDAA Congress required that the 2.4% statutory formula go into effect (see **Figure 6**).

[35] The automatic adjustment is equal to the increase in the ECI from the 3rd quarter of the third preceding year to the 3rd quarter of the second preceding year. For more information, see CRS In Focus IF10260, *Defense Primer: Military Pay Raise*, by Lawrence Kapp.

Figure 6. Increases in Basic Pay, 2001-2018



Sources: Bureau of Labor Statistics, Employment Cost Index; National Defense Authorization Acts for FY2001-FY2018.

Note: This table only includes increases in basic pay applicable to all servicemembers; it does not include increases in basic pay for specified paygrades that were included in a series of "pay table reform" measures in 2000-2004, and 2007.

Military Sexual Assault and Sexual Harassment

Over the past decade, the issues of sexual assault and sexual harassment in the military have generated a good deal of congressional and media attention. In 2005, DOD issued its first department-wide sexual assault policies and procedures.[36] Between 2012 and 2017, DOD took a number of steps to implement its own strategic initiatives as well as dozens of congressionally mandated actions related to sexual assault prevention and response, victim services, reporting and accountability, and military justice.[37]

House and Senate versions of the NDAA as well as the final version included a number of provisions aimed at expanding or clarifying existing requirements in these areas. One new departure in this area was Section 533 of the final bill (corresponding to Section 523 in the House bill and Section 532 in the Senate bill) amending the Uniform Code of Military Justice (UCMJ) to criminalize wrongful broadcast or distribution of intimate visual images.

[36] DOD Directive 6495.01 and DOD Instruction 6495.02.

[37] For more information on congressional activity prior to 2013 see CRS Report R43168, *Military Sexual Assault: Chronology of Activity in Congress and Related Resources*, by Barbara Salazar Torreon.

FY2018 NDAA Provisions Related to Military Sexual Assault and Sexual Harassment

For additional background and a complete list of proposed FY2018 NDAA provisions related to military sexual assault and sexual harassment see CRS Report R44923, *FY2018 National Defense Authorization Act: Selected Military Personnel Issues*, by Kristy N. Kamarck, Lawrence Kapp, and Barbara Salazar Torreon.

Strategic Nuclear Forces[38]

The Trump Administration initiated a new review of the U.S. nuclear force posture in 2017 but also pledged to continue most, if not all, previously planned nuclear modernization programs. Hence, the FY2018 budget request sustained the previous Administration's plan to modernize each leg of the *triad* of long-range, nuclear-armed weapons over the course of the next decade.[39]

See **Table 4** for information on the FY2018 budget request and authorization actions for selected strategic offense and long-range strike systems.

B-21 Long-Range Strike Bomber[40]

The budget includes $2.00 billion to continue development of the B-21 long-range bomber, which the Air Force describes as one of its top three acquisition priorities. Acquisition of the plane is slated to begin in 2023. The new bomber—like the B-2s and B-52s currently in U.S. service—could carry conventional as well as nuclear weapons. For the latter role, the budget includes $451.3 million to continue development of the Long Range Standoff Weapon (LRSO), a cruise missile that would replace the 1980s-vintage Air-Launched Cruise Missile (ALCM) currently carried by U.S. bombers. The House bill, the Senate amendment, and the final version of the bill all support the President's budget request for the B-21 bomber and the LRSO.

Columbia-Class Ballistic Missile Submarine[41]

The Columbia-class program, previously known as the Ohio replacement program (ORP) or SSBN(X) program, is a program to design and build a new class of 12 ballistic missile submarines (SSBNs) to replace the Navy's current force of 14 Ohio-class SSBNs. The Navy has identified the Columbia-class program as its top priority program. The Navy wants to procure the first Columbia-class boat in FY2021. The Navy's proposed FY2018 budget requested $842.9 million in advance procurement (AP) funding and $1.04 billion in research and development funding for the program. The budget also includes $1.3 billion to continue refurbishing the Trident II (or D-5) missiles that arm the submarines. The House bill, the Senate amendment, and the final version of the bill all support the President's budget request for the Columbia-class program and refurbishment of the Trident II missiles.

[38] This section coordinated with Amy Woolf, Specialist in Nuclear Weapons Policy and Steve Hildreth, Specialist in U.S. and Foreign National Security Programs.

[39] For background and further analysis see CRS Report RL33640, *U.S. Strategic Nuclear Forces: Background, Developments, and Issues*, by Amy F. Woolf.

[40] For background and additional information see CRS Report R44463, *Air Force B-21 Raider Long-Range Strike Bomber*, by Jeremiah Gertler.

[41] For background and additional information see CRS Report R41129, *Navy Columbia (SSBN-826) Class Ballistic Missile Submarine Program: Background and Issues for Congress*, by Ronald O'Rourke.

Land-based Ballistic Missiles[42]

Also requested is $216 million to continue developing a new, land-based intercontinental ballistic missile (ICBM), known as the Ground-Based Strategic Deterrent (GBSD), that in 2029 would begin replacing the Minuteman III missiles currently in service. The House bill, the Senate amendment, and the final version of the bill all support the President's budget request of $216 million for the new ground-based strategic deterrent.

Table 4. Selected Strategic Offense and Long-range Strike Systems

amounts in millions of dollars

		Request	House-passed H.R. 2810	Senate-passed	Final bill
Upgrades to Existing Bombers[a]	Proc	$362	$336	$328	$328
	R&D	$562	$366	$562	$562
B-21 Bomber[b]	Proc	–	–	–	-
	R&D	$2,004	$2,004	$2,004	$2,004
Long-Range Stand-Off Weapon	Proc	–	–	–	-
	R&D	$451	$451	$451	$451
Columbia-class Ballistic Missile Submarine[c]	Proc	$843	$843	$843	$843
	R&D	$1,042	$1,042	$1,042	$1,042
D-5 Trident II Missile Mods	Proc	$1,144	$1,144	$1,144	$1,144
	R&D	$135	$135	$135	$135
Ground-based Strategic Deterrent	Proc	–	–	–	-
	R&D	$216	$216	$216	$216
Conventional Prompt Global Strike[d]	Proc	–	–	–	-
	R&D	$202	$202	$202	$202
Intermediate-Range Ground-Launched Cruise Missile[e]	Proc	–	–	–	-
	R&D	–	–	$65	$58

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Notes:

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

b. CRS Report R44463, *Air Force B-21 Raider Long-Range Strike Bomber*, by Jeremiah Gertler.

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

d. CRS Report R41464, *Conventional Prompt Global Strike and Long-Range Ballistic Missiles: Background and Issues*, by Amy F. Woolf.

[42] For background and more information see CRS Report RL33640, *U.S. Strategic Nuclear Forces: Background, Developments, and Issues*, by Amy F. Woolf and CRS Report R43832, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress*, by Amy F. Woolf.

e. CRS Report R43832, *Russian Compliance with the Intermediate Range Nuclear Forces (INF) Treaty: Background and Issues for Congress*, by Amy F. Woolf.

Ballistic Missile Defense Programs[43]

The United States has been developing and deploying ballistic missile defenses (BMD) to defend against enemy missiles since the late 1940s. In 1983, President Reagan announced an enhanced effort for BMD. Since the start of the Reagan initiative in 1985, BMD has been a key national security interest in Congress, which has appropriated more than $200 billion for a broad range of research and development programs and deployment of BMD systems. The United States has deployed a global array of networked ground-, sea-, and space-based sensors for target detection and tracking, an extensive number of ground- and sea-based hit-to-kill (direct impact) and blast fragmentation warhead interceptors, and a global network of command, control, and battle management capabilities to link those sensors with those interceptors.

U.S. Missile Defense Programs

For background and additional analysis see CRS In Focus IF10541, *Defense Primer: Ballistic Missile Defense*, by Steven A. Hildreth, CRS Insight IN10655, *Current Ballistic Missile Defense (BMD) Issues*, by Steven A. Hildreth, CRS Insight IN10734, *North Korea's Long-Range Missile Test*, by Emma Chanlett-Avery, Dianne E. Rennack, and Steven A. Hildreth, and CRS Report RL33745, *Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress*, by Ronald O'Rourke.

The Trump Administration's initial FY2018 budget request included a total of $9.2 billion for defense against ballistic missiles, of which $7.9 billion would be allocated to the Missile Defense Agency (MDA). More than three-quarters of that total is for research and development. The budget amendment sent to Congress in November added a total of $4.0 billion to the missile defense request, three-quarters of which was for MDA. The supplemental request also added $905.0 million to the Army's request for Patriot and PAC-3 antimissile interceptors.

See **Table 5** for information on the FY2018 budget request and authorization actions for selected ballistic missile defense systems.

U.S. Homeland Missile Defense

In the Administration's May budget submission, a total of $905 million was requested for the Ground-Based Mid-course Defense System (GMD) which, at the time the FY2018 budget was submitted, was projected to include 44 interceptor missiles deployed in Alaska and California by the end of 2017. These interceptors, the last of which was deployed in November 2017, are intended to destroy intercontinental ballistic missiles (ICBMs) with ranges in excess of 5,500 kilometers launched toward U.S. territory from countries such as North Korea and Iran. The original FY2018 budget request also included $823 million to develop improvements to the GMD system, including an upgraded interceptor missile and improved radar to be deployed in the mid-2020s.

Both the House and Senate bills would have authorized additional funding to expand the GMD effort and accelerate planned improvements. However, before conferees completed work on the final version of the NDAA, the Administration's November budget amendment boosted the total amounts requested to $1.5 billion for the current GMD system and $904 million for planned improvements. The final version of the NDAA authorized both increased amounts, in toto. The

[43] This section coordinated with Steven A. Hildreth, Specialist in U.S. and Foreign National Security Programs.

increased funding for the current homeland defense system includes $200 million to construct a third interceptor launch site at Fort Greely, Alaska, and $268 million for 20 interceptors to be deployed there.

The House bill (§1699F) and the Senate bill (§1653) each would have required DOD to develop a plan to significantly increase the number of deployed GMD interceptors. The final version of the bill (§1686) authorizes the Secretary of Defense to deploy 20 additional interceptors in Alaska and also authorizes MDA to develop detailed options for increasing to 104 the total number of interceptors deployed. This is one of the more substantial changes to the U.S. BMD System since 2002, when President George W. Bush withdrew the United States from the 1972 ABM Treaty and then began to deploy the GMD system in Alaska and California.

Regional Missile Defense

The Administration's initial budget included a total of $700.5 million for procurement and additional development work associated with the Terminal High-Altitude Air Defense (THAAD) system, which is intended to intercept short-, medium- and intermediate-range ballistic missiles. THAAD is a transportable system designed to defend troops abroad and population centers. In testing, THAAD has generally performed well by most measures, but THAAD has not operated in combat.

Both the House and Senate versions of the NDAA would have authorized an additional $318.4 million in procurement funding for THAAD. However, the November budget amendment boosted the total THAAD request to $1.3 billion. That amount is authorized by the final version of H.R. 2810.

The Army's Patriot system is the most mature BMD system. It was used in combat in the 1991 and 2003 wars against Iraq with mixed results and is fielded around the world by the United States and other countries that have purchased the system. Patriot is a mobile system designed to defend relatively small areas such as military bases and air fields. Patriot works with THAAD to provide an integrated and overlapping defense against incoming missiles in their final phase of flight.

The original FY2018 budget request included $625.9 million for the Patriot system. The House and Senate versions of the bill would have authorized substantially higher procurement amounts for Patriot—an additional $634 million in the House bill and an additional $650 million in the Senate bill. The November budget amendment closely tracked those proposed increases, requesting a total of $1.1 billion for Patriot procurement, the amount authorized by the final version of H.R. 2810.

The House bill included a provision (§1681) that would have required that acquisition and budgeting for missile defense programs be transferred from the Missile Defense Agency to the military service departments in time for presentation of the FY2020 DOD budget request. The corresponding provision of the enacted bill (§1676) deferred the transition deadline to the date of presentation of the FY2021 budget request.

Table 5. Selected Missile Defense Programs

amounts in millions of dollars

		Initial Budget Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Amended Budget Request		Final Bill H.R. 2810	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.	#	Amt.
Ground-based Missile Defense [U.S. Homeland Defense] (incl. test and construction of additional launch site)	Proc	–	–	–	–	–	–	20	$268	20	$268
	R&D	–	$905	–	$1,278	–	$927	–	$1,035	–	$1,035
	Construction	–	–	–	–	–	–	–	$200	–	$200
Improved Ground-based Missile Defense (interceptors and radar)	Proc	–	–	–	–	–	–	–	–	–	–
	R&D	–	$823	–	$903	–	$903	–	$994	–	$994
Aegis BMD/Aegis Ashore (incl. test)	Proc	34	$684	45	$742	34	$684	50	$876	50	$876
	R&D	–	$1,027	–	$1,120	–	$1,120	–	$1,039	–	$1,039
THAAD	Proc	34	$452	58	$771	58	$771	84	$961	84	$961
	R&D	–	$249	–	$249	–	$249	–	$311	–	$311
Patriot	Proc	93	$459	240	$1,093	240	$1,109	240	$1,106	240	$1,106
	R&D	–	$169	–	$169	–	$259	–	$259	–	$259
Israeli Cooperative Missile Defense Programs	Proc	–	$0	–	$0	–	$240	–	$240	–	$240
	R&D	–	$105	–	$613	–	$374	–	$374	–	$374
Iron Dome	Proc	–	$42	–	$92	–	$92	–	$42	–	$92
	R&D	–	–	–	–	–	–	–	–	–	–

Sources: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Ballistic Missile Defense

For more information on ballistic missile defense programs, see CRS In Focus IF10541, *Defense Primer: Ballistic Missile Defense*, by Steven A. Hildreth.

Space and Space-Based Programs and Activities[44]

The President's budget request included $6.9 billion to fund National Security Space activities. This includes a total of $1.9 billion to continue acquiring satellite launchers under the Evolved Expendable Launch Vehicle (EELV) program and developing a replacement for the Russian-made rocket engine used since the early 2000s in most national security space launches.[45] The enacted

[44] This section authored by Steven A. Hildreth, Specialist in U.S. and Foreign National Security Programs.

[45] For background on the EELV program – including information regarding concerns over U.S. reliance on the Russian-built RD-180 engine – see CRS Report R44498, *National Security Space Launch at a Crossroads*, by Steven A. Hildreth.

version of the bill—like the versions earlier passed by the House and Senate—generally supported the President's budget request for space programs. (See **Table 6**.)

The Senate version of the NDAA included a provision (§1604) that would have prohibited the obligation of funding to maintain infrastructure, base and range support, sustainment commodities, and other activities associated with the Delta IV launch vehicle until the Secretary of the Air Force certified that the Air Force plans to launch a satellite on a Delta IV launch vehicle within three years. In its report on the bill, the Senate Armed Services Committee contended that, "[since] the Air Force no longer requires the Delta IV, the Air Force should not be responsible for the significant costs associated with maintaining the capability for the NRO [National Reconnaissance Office]."[46] The NRO is the DOD agency that acquires and operates U.S. reconnaissance satellites. A slightly modified version of this provision is retained in the enacted version of the bill (§1611).

Table 6. Selected Military Space Systems

amounts in millions of dollars

		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill H.R. 2810	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
Enhanced Expendable Launch Vehicle (EELV)[a]	Proc	3	$1,564	3	$1,564	3	$1,537	3	$1,564
	R&D	–	$298	–	$298	–	$298	–	$298
Space-Based Infra-red System, High (SBIRS High)	Proc	–	$1,113	–	$1,190	–	$1,187	–	$1,187
	R&D	–	$383	–	$383	–	$396	–	$383
Advanced EHF Satellite	Proc	–	$57	–	$57	–	$57	–	$57
	R&D	–	$146	–	$146	–	$146	–	$146
Global Positioning System III	Proc	–	$86	–	$86	–	$86	–	$86
	R&D	–	$1.008	–	$1,018	–	$1,147	–	$1,018

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Note:

a. For background on the EELV program—including information regarding concerns over U.S. reliance on the Russian-built RD-180 engine—see CRS Report R44498, *National Security Space Launch at a Crossroads*, by Steven A. Hildreth.

The House version of the bill would have created a Space Corps, independent of the Army, Navy, and Air Force, to "posture and properly focus" the military services to protect U.S. interests in space and provide combat-ready space forces (§1601). The Senate bill, on the other hand, would have prohibited the creation of any such corps independent of the existing service departments (§6605). Neither provision was included in the enacted version of the NDAA.

[46] S.Rept. 115-125, p. 295.

Section 1601 of the Senate bill would have required that the Commander of Air Force Space Command serve a term of at least six years. Section 1601 of the final version of the bill retains the six-year requirement. It also expands the authority of this officer over the organization, training, equipping, and operation of Air Force space activities and abolishes various other DOD offices that previously had some role in these activities.

Overview of Ground Vehicle Programs[47]

As the House and Senate versions of the FY2018 NDAA would have done, the final version of the bill accelerates the Administration's programs to modernize the Army's existing suite of armored combat vehicles: M-1 Abrams tanks, M-2 Bradley troop carriers, and Stryker light armored cars. All three types of vehicles, which are slated to remain in service beyond FY2028, are being given various upgrades including self-protection systems intended to neutralize antiarmor missiles.

Similarly, the enacted version of the bill—as the House and Senate versions would have done—accelerates the planned procurement of long-range artillery rockets and of the Joint Light Tactical Vehicle (JLTV) slated for use by all services as a replacement for the 1980s-vintage High Mobility Multi-purpose Wheeled Vehicle (HMMWV).

The House and Senate versions, as well as the final version, authorized the amounts requested to continue a program to remount the Army's Paladin self-propelled artillery piece on a new tracked chassis, based on the Bradley. They also authorized continued acquisition of two new types of combat vehicles: the Army's Armored Multi-Purpose Vehicle (AMPV), the Marine Corps' Amphibious Combat Vehicle (ACV).

Army Modernization Issues

For additional background and analysis of Army modernization issues, see CRS Report R44366, *National Commission on the Future of the Army (NCFA): Background and Issues for Congress*, by Andrew Feickert.

See **Table 7** for information on the FY2018 budget request and authorization actions for selected ground vehicle programs.

Armored Multi-Purpose Vehicle (AMPV)

The Armored Multi-Purpose Vehicle (AMPV) is the Army's proposed replacement for the Vietnam-era M-113 personnel carriers, which are still in service in a variety of support capacities in armored brigade combat teams (ABCTs). While M-113s no longer serve as infantry fighting vehicles, five variants of the M-113 serve as command and control vehicles, general purpose vehicles, mortar carriers, and medical treatment and evacuation vehicles. The new vehicle would incorporate those capabilities on a Bradley chassis.

For FY2018, the Army requested a total of $647.4 million (base budget and OCO funds combined) to continue developing the AMPV and to procure the first 107 vehicles. The request was approved by the House and Senate bills and by the enacted version.

Amphibious Combat Vehicle (ACV)

The Marine Corps requested $340.5 million to continue developing and begin procurement of the Amphibious Combat Vehicle (ACV) to replace its 1970s-vintage amphibious assault vehicles.

[47] The section authored by Andrew Feickert.

The service plans to field 204 wheeled vehicles (designated ACV 1.1) and then begin fielding a tracked vehicle designated ACV 1.2. As requested by the Administration, the enacted bill authorizes $340.5 million to continue development of the new vehicles and to acquire the first 26 ACV 1.1s. The House and Senate bills would have done likewise.

Table 7. Selected Ground Combat Systems and Tactical Vehicles

amounts in millions of dollars

		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
M-1 Abrams Tank (mod and upgrade)	Proc	56	$1,105	85	$1,651	56	$1,887	85	$1,651
	R&D	–	$109	–	$109	–	$109	–	$109
M-2 Bradley Fighting Vehicle	Proc	60	$675	93	$786	93	$786	93	$786
	R&D	–	$131	–	$131	–	$131	–	$131
M-109A6 Paladin self-propelled artillery	Proc	71	$772	71	$772	71	$772	71	$772
	R&D	–	$47	–	$47	–	$47	–	$47
Guided MLRS and HIMARS rocket artillery	Proc	–	$1,125	–	$1,697	–	$1,700	–	$1,698
	R&D	–	$214	–	$271	–	$257	–	$277
Stryker Combat Vehicle (new and mods)	Proc	–	$98	–	$623	–	$793	–	$623
	R&D	–	$81	–	$81	–	$81	–	$81
Armored Multi-Purpose Vehicle[a]	Proc	107	$448	107	$448	107	$448	107	$448
	R&D	–	$200	–	$200	–	$200	–	$200
Amphibious Combat Vehicle[b]	Proc	26	$162	26	$162	26	$162	26	$162
	R&D	–	$179	–	$179	–	$179	–	$44
Joint Light Tactical Vehicle (JLTV)[c]	Proc	2,637	$1,099	2,637	$1,109	2,637	$1,038	2,637	$1,038
	R&D	–	$44	–	$44	–	$44	–	$44

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Notes:

a. CRS Report R43240, *The Army's Armored Multi-Purpose Vehicle (AMPV): Background and Issues for Congress*, by Andrew Feickert.

b. CRS Report R42723, *Marine Corps Amphibious Combat Vehicle (ACV): Background and Issues for Congress*, by Andrew Feickert.

c. CRS Report RS22942, *Joint Light Tactical Vehicle (JLTV): Background and Issues for Congress*, by Andrew Feickert.

Overview of Shipbuilding Programs[48]

In December 2017, the Navy adopted a new force goal of 355 ships—a total similar to the 350-ship fleet President Trump had called for during the 2016 election campaign. The 355-ship plan

[48] This section was authored by Ronald O'Rourke, Specialist in Naval Affairs.

replaced a force goal of 308 ships that the Navy had adopted in March 2015. The House bill and the Senate amendment both included a provision (designated Section 1016, in each case) to declare it to be U.S. policy to have available, as soon as practicable, a force of 355 ships. The FY2018 NDAA as enacted (H.R. 2810/P.L. 115-91 of December 12, 2017) includes this provision as Section 1025.

The Navy's proposed FY2018 budget, as amended on June 29, 2017, requested the procurement of nine new ships, including one Gerald R. Ford (CVN-78) class aircraft carrier, two Virginia-class attack submarines, two DDG-51 class destroyers, two Littoral Combat Ships (LCSs), one TAO-205 class oiler, and one towing, salvage, and rescue ship. The request was amended on June 29 to include the second LCS—the budget as originally submitted requested only one LCS.

Achieving and maintaining the Navy's 355-ship fleet would require an expanded shipbuilding effort, and an associated increase in funding for Navy shipbuilding. The House bill and Senate amendment would have authorized various changes (mostly additions) to the shipbuilding request. In total, the House bill would authorize a $4.9 billion increase to the requested amount for shipbuilding. The Senate bill would authorize a $5.0 billion increase. The FY2018 NDAA as enacted authorizes a $5.8 billion increase, including funding for not only the nine ships requested for FY2018, but also one additional DDG-51 class destroyer, one additional LCS, one additional LPD-17 or LX(R) class additional amphibious ship, one additional expeditionary sea base (ESB) ship, one additional cable ship, and five additional ship-to-shore connector (SSC) landing craft.

Navy Shipbuilding Plans and Budgets

For additional background and analysis of projected Navy force structure and shipbuilding budgets, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke, and Congressional Budget Office, Costs of Building a 355-Ship Navy, April 2017.

See **Table 8** for summary information on the FY2018 budget request and authorization actions for selected combatant ships. See **Table 9** for summary information on the FY2018 budget request and authorization actions for selected support and amphibious assault ships.

Nuclear-Powered Aircraft Carrier Programs

A total of $4.5 billion was requested to continue acquisition of Gerald R. Ford-class nuclear-powered aircraft carriers, including $2.6 billion to continue work on the second ship of the class, designated CVN-79 (slated for delivery in 2024 at an estimated total cost of $11.4 billion) and $1.9 billion for the third ship of the class, designated CVN-80 (slated for delivery in 2027 at an estimated total cost of $13.0 billion).[49] The Senate bill would have approved the request while the House bill would approve a total of $3.74 billion on grounds that the remainder of the funds requested would not be needed during FY2018. The Senate amendment also included a provision (§125) limiting to $12.0 billion the cost of any aircraft carrier procured after the procurement of CVN-79. The FY2018 NDAA as enacted authorizes the requested amount.

The House bill and Senate amendment diverged regarding a request for $1.7 billion to continue refueling and modernizing the carrier *George Washington* and to continue procurement of equipment that would be used in modernizing and refueling the carrier *John C. Stennis*, an operation slated to begin in 2021. The Senate amendment would have authorized the amount requested for the refueling operations while the House bill would make a net reduction of $423.3

[49] For background and additional information see CRS Report RS20643, *Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress*, by Ronald O'Rourke.

million, largely on grounds that the funds would not be needed in FY2018. The FY2018 NDAA as enacted authorizes about $1.6 billion—a reduction of $35.2 million from the requested amount.

Table 8. Selected Shipbuilding and Modernization Programs: Combatant Ships

amounts in millions of dollars

Program		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
Ford-*class* Aircraft Carrier[a]	Proc	1	$4,442	1	$3,742	1	$4,142	1	$4,442
	R&D	–	$138	–	$158	–	$138	–	$138
Mid-life Refueling Overhaul for Nuclear-powered Carriers	Proc	–	$1,681	–	$1,258	–	$1,681	–	$1,646
	R&D	–	–	–	–	–	–	–	–
Virginia-*class* attack submarine[b]	Proc	2	$5,226	2	$6,169	2	$6,399	2	$5,924
	R&D	–	$193	–	$193	–	$193	–	$193
DDG-51-class Aegis destroyer[c]	Proc	2	$3,589	3	$5,531	3	$5,448	3	$5,623
	R&D	–	$32	–	$32	–	$32	–	$32
Mods to Existing Aegis Cruisers and Destroyers	Proc	–	$909*/	–	$1,009	–	$910	–	$957
	R&D	–	–	–	–	–	–	–	–
Littoral Combat Ship[d]	Proc	2[e]	$1,136	3	$1,669	2	$1,196	2	$1,196
	R&D	–	$185	–	$185	–	$178	–	$184
Littoral Combat Ship Modules	Proc	–	$144	–	$178	–	$172	–	$178
	R&D	–	$117	–	$117	–	$117	–	$117

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Notes:

a. For more information see CRS Report RS20643, *Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress*, by Ronald O'Rourke.

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

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

d. The Trump Administration's original DOD budget request for FY2018 included $636 million for one Littoral Combat Ship. On June 29, 2017, the Administration amended its DOD request, moving $500 million from other parts of the budget request to the Navy's shipbuilding account to fund two LCSs. For more information see CRS Report RL33741, *Navy Littoral Combat Ship (LCS) Program: Background and Issues for Congress*, by Ronald O'Rourke.

e. The original budget request for a single LCS ship was amended to a request for two ships.

Table 9. Selected Shipbuilding Programs: Support and Amphibious Assault Ships

amounts in millions of dollars

Program		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
T-AO 125-*class* Oiler	Proc	1	$541	1	$541	1	$541	1	$541
	R&D	–	$2	–	$2	–	$2	–	$2
LHA-*class* Amphibious Assault Ship (Helicopter Carrier)	Proc	–	$1,711	–	$1,211	–	$1,711	–	$1,711
	R&D	–	–	–	–	–	–	–	–
LPD-17-*class* or LX(R)-*class* Amphibious Ship	Proc	–	–	1	$1,886	1	$1,000	1	$1,500
	R&D	–	$11	–	$11	–	$11	–	$11
Expeditionary Sea Base (ESB) Ship	Proc	–	–	1	$636	1	$661	1	$635
	R&D	–	–	–	–	–	–	–	–
Ship-to-Shore Connector (air-cushion landing craft)	Proc	3	$213	8	$525	8	$510	8	$525
	R&D	–	$22	–	$22	–	$22	–	$22

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Note: For more information, see CRS Report R43543, *Navy LPD-17 Flight II (LX[R]) Amphibious Ship Program: Background and Issues for Congress*, by Ronald O'Rourke.

Selected Aviation Programs[50]

The budget request includes $40.3 billion for acquisition of manned and unmanned aircraft. Of that amount, $528 million is designated as OCO funding to replace 22 unmanned aerial vehicles (UAVs) and two Apache helicopters that were destroyed or damaged beyond repair in missions related to operations in Afghanistan and the Middle East.

See **Table 10** for summary information on the FY2018 budget request and authorization actions for selected fighter and attack aircraft. See **Table 11** for summary information on the FY2018 budget request and authorization actions for selected tanker, transport, and cargo aircraft. See **Table 12** for summary information on the FY2018 budget request and authorization actions for selected patrol and surveillance aircraft (including UAVs). See **Table 13** for summary information on the FY2018 budget request and authorization actions for selected helicopters and tilt-rotor aircraft.

Air Force Aircraft Investment Plans

For more information on the Air Force's plan for development and procurement of aviation systems, see CRS Report R44305, *The Air Force Aviation Investment Challenge*, by Jeremiah Gertler.

[50] The section was authored by Jeremiah (J.J.) Gertler, Specialist in Military Aviation.

Fighter and Attack Aircraft

The budget request includes $9.0 billion for the procurement of 70 F-35 Joint Strike Fighters, including 46 Air Force F-35As, 20 F-35Bs for the Marine Corps equipped for short takeoff and vertical landing (STOVL), and 4 Navy F-35Cs, equipped for carrier operations. The request also includes $135 million to modify F-35s already in service and $542 million for F-35 spare parts. The request also includes nearly $1.2 billion to continue development of the three versions of the aircraft and of the F135 engine that powers it.[51] Both chambers proposed additions to the President's budget request for the F-35 program: the House bill would have added 17 aircraft and the Senate bill would have added 24. The final version provides 90 F-35s, an increase of 20 from the request.

In addition to heavily investing in the JSF program, the Air Force continues investments in modification of in-service fighter aircraft—often referred to as legacy aircraft—with 23% of its aircraft procurement budget ($3.5 billion) allocated to the effort. Modifications include continued modernization of legacy fighters such as F-22As, F-15s, and F-16s. As enacted, H.R. 2810 fully funds this request. The Air Force budget request would have maintained the A-10 fleet at its FY2017 inventory levels (143 active, 85 National Guard, 55 reserve). The House and Senate versions of the NDAA both fully supported the President's budget request for these aircraft, as does the enacted version. The final bill, like the House and Senate versions, authorizes $103 million for replacement wings for A-10 aircraft (not requested by the Administration, but included on the Air Force's Unfunded Priority List or UPL).[52]

To compensate for the slower-than-planned fielding of the JSF, the budget request included funds to mitigate a shortfall in the Navy's fleet of strike fighters by buying new F/A-18s and upgrading planes of that type already in service. The Administration requested $1.3 billion for procurement of 14 F/A-18s and an additional $1.3 billion for modifications and upgrades to the existing fleet. The FY2018 budget did not report plans to buy additional F/A-18s in future budget years. However, the Navy's UPL included an additional 10 F/A-18s as the service's top priority should additional funding be available. Both the House and Senate bills generally supported the President's budget request for the F/A-18 program and took note of the UPL, recommending procurement of additional aircraft. The House bill would have authorized procurement of 8 additional F/A-18s (22 total) and the Senate amendment would have authorized an additional 10. The enacted NDAA provides 24 F-18s, matching the Navy's UPL.

In addition, SASC expressed concern that "continued reliance on the A-10, B-1, B-52, F-16, and F-15E fleets to conduct armed reconnaissance and close air support (CAS) missions in Afghanistan, Iraq, Syria, and other regions significantly reduces airframe lifespans due to utilization rates that are much higher than planned and programmed."[53] The committee recommended an additional $1.2 billion be provided to the Air Force for the acquisition of a fleet of light attack/observation aircraft (OA-X). The final version of the bill provides $400 million for this purpose.

[51] For background and additional information see CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program*, by Jeremiah Gertler.

[52] For additional background and information see CRS Report R44305, *The Air Force Aviation Investment Challenge*, by Jeremiah Gertler.

[53] S.Rept. 115-125, p. 20.

Table 10. Selected Fighter and Attack Aircraft Programs

amounts in millions of dollars

Program		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
F/A-18	Proc	14	$1,253	22	$1,844	24	$1,992	24	$1,992
	R&D	–	–	–	–	–	–	–	–
F/A-18 mods	Proc	–	$1,044	–	$1,092	–	$1,125	–	$992
	R&D	–	$225	–	$214	–	$225	–	$216
F-35 *(all variants)* and mods[a]	Proc	70	$9,117	87	$10,759	94	$12,203	90	$11,533
	R&D	–	$1,178	–	$1,178	–	$1,509	–	$1,508
F-22 mods	Proc	–	$282	–	$282	–	$282	–	$282
	R&D	–	$625	–	$625	–	$625	–	$625
F-15 mods	Proc	–	$417	–	$417	–	$417	–	$417
	R&D	–	$530	–	$530	–	$530	–	$530
F-16 mods	Proc	–	$204	–	$204	–	$204	–	$204
	R&D	–	$247	–	$272	–	$272	–	$272
A-10 mods	Proc	–	$6	–	$109	–	$109	–	$109
	R&D	–	$18	–	$18	–	$18	–	$17
OA-X (attack/observation aircraft)	Proc	–	–	–	–	–	$1,200	–	$400
	R&D	–	–	–	–	–	–	–	–

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

a. CRS Report RL30563, *F-35 Joint Strike Fighter (JSF) Program*, by Jeremiah Gertler.

Tanker, Cargo, and Transport Aircraft

In FY2018, the KC-46A aerial refueling tanker program continues into the fourth year of low-rate initial production (LRIP), with the Administration requesting $3.1 billion for the procurement of 15 additional aircraft and support of continued development and testing. The House and Senate versions of the bill each would have added two aircraft to the President's budget request for the KC-46A (authorizing a total of 17). However, the House bill would have authorized none of the $94 million requested for RDT&E funding on grounds that the program has not spent funds appropriated in prior budgets. See **Table 11**. As passed, the NDAA provides $400 million for two additional KC-46s as well as the $94 million in RDT&E.

The President's budget request included $1.0 billion in procurement funding for nine C-130 aircraft of various types. Both the House and Senate committees recommended substantial increases in procurement quantities—the House bill would authorize an additional $842 million (adding 11 aircraft) and the Senate amendment would authorize an additional $1.6 billion (adding 20 aircraft). The final version authorizes a total of $2.0 billion for 23 C-130s.

Both chambers also supported the President's budget request for research, development, test and evaluation funding for an Air Force One replacement (formally known as the Presidential Aircraft Recapitalization program) and the VH-92 presidential helicopter. However, the House bill included a provision (§211) that would impose cost controls and require quarterly briefings to the HASC on efforts to control costs related to the program. The final version funded the requested amounts.

Table 11. Selected Tanker, Cargo, and Transport Aircraft Programs

amounts in millions of dollars

		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
KC-46 tanker	Proc	15	$2,546	17	$2,946	17	$2,946	17	$2,946
	R&D	–	$94	–	$0	–	$94	–	$94
Air Force One replacement	Proc	–	–	–	–	–	–	–	–
	R&D	–	$434	–	$434	–	$434	–	$434
VH-92 Presidential Helicopter	Proc	–	–	–	–	–	–	–	–
	R&D	–	$452	–	$452	–	$452	–	$452
C-130 (all variants)[a] (new aircraft only)	Proc	9	$1,034	20	$1,876	29	$2,655	20	$1,978
	R&D	–	$76	–	$76	–	$58	–	$76

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Notes:

a. For more information see CRS Report R43618, *C-130 Hercules: Background, Sustainment, Modernization, Issues for Congress*, by Jeremiah Gertler and Timrek Heisler.

Patrol and Surveillance Aircraft

The President's budget also requested investment in several patrol and surveillance aircraft (see **Table 12**). Both chambers generally supported the request but also recommended additional funding for procurement of P-8 Poseidon aircraft for the Navy and an additional $39.4 million for RQ-4 Global Hawk modifications.

The House bill would have further increased funding for the RQ-4 program by $18.3 million to support continued modifications of existing RQ-4 aircraft. The House bill also included a provision (§1034) that would repeal Section 133 of the FY2012 NDAA (P.L. 112-81), which limited the Secretary of the Air Force in taking actions to retire U-2 aircraft. The final version of H.R. 2810 included $1.8 billion for P-8s, authorizing three more than requested. Global Hawk modifications are funded at $101.8 million, $39.4 million above the request. Section 136 of the conference report places modified limits on retirement of U-2s.

Table 12. Selected Patrol and Surveillance Aircraft Programs

amounts in millions of dollars

		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
P-8 Poseidon	Proc	7	$1,386	10	$1,892	13	$2,397	10	$1,892
	R&D	–	$194	–	$194	–	$194	–	$194
E-2D Advanced Hawkeye	Proc	5	$836	7	$1,028	5	$836	5	$836
	R&D	–	$293	–	$293	–	$293	–	$293
AWACS mods	Proc	–	$165	–	$165	–	$165	–	$165
	R&D	–	$152	–	$152	–	$152	–	$152
JSTARS replacement	Proc	–	–	–	–	–	–	–	–
	R&D	–	$417	–	$417	–	$417	–	$417
RQ-4 Global Hawk and mods (all variants)[a]	Proc	3	$663	3	$716	3	$703	3	716
	R&D	–	$573	–	$573	–	$573	–	$573
MQ-9 Reaper	Proc	16	$751	16	$756	16	$751	16	$751
	R&D	–	$239	–	$239	–	$252	–	$239

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Notes: For more information see CRS Report R44108, *U.S. Command and Control and Intelligence, Surveillance, and Reconnaissance Aircraft*, by Jeremiah Gertler and Jeffrey Nelson.

a. RQ-4 line includes data for the Air Force Global Hawk, the Navy Triton, and NATO's AGS.

Helicopters and Tilt-Rotor Aircraft

Both chambers generally supported the request and recommended additional funding for the procurement of various types of helicopters and tilt-rotor aircraft—AH-64 Apaches, CH-47 Chinooks, and V-22 Ospreys—and for upgrades to Apaches, Chinooks, H-1 "Hueys," and AH-1 Cobras (see **Table 13**). The House bill would have authorized additional funding for AH-64 modifications and UH-60 Blackhawk procurement (8 additional aircraft). The Senate bill would have authorized an additional $279.2 million to procure 2 additional CH-53Ks over the Marine Corps request.

The final version of H.R. 2810 authorized procurement of 14 CH-47s (8 more than requested); 75 AH-64s (10 more than requested); 92 UH-60s (8 more than requested); 29 UH/AH-1s (7 more than requested); 12 V-22s (6 more than requested); and met the requested amount of CH-53s.

Table 13. Selected Helicopter and Tilt-Rotor Aircraft Programs

amounts in millions of dollars

	Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
	#	Amt.	#	Amt.	#	Amt.	#	Amt.
Proc	65	$1,382	73	$1,694	76	$1,695	75	$1,695

		Request		House-passed H.R. 2810		Senate-passed H.R. 2810		Final Bill	
		#	Amt.	#	Amt.	#	Amt.	#	Amt.
AH-64 Apache (incl. new and remanufactured acft.)	R&D	–	$60	–	$60	–	$60	–	$60
AH-64 mods	Proc	–	$238	–	$383	–	$238	–	$383
	R&D	–	–	–	–	–	–	–	–
UH-60 Blackhawk	Proc	84	$1,101	92	$1,404	84	$1,101	92	$1,226
	R&D	–	$34	–	$44	–	$34	–	$44
CH-47 Chinook	Proc	6	$220	14	$575	10	$467	14	$575
	R&D	–	$195	–	$195	–	$195	–	$195
CH-53K	Proc	4	$715	4	$715	6	$995	4	$715
	R&D	–	$341	–	$341	–	$341	–	$341
UH-1/AH-1	Proc	22	$721	27	$872	29	$941	29	$941
	R&D	–	$61	–	$61	–	$61	–	$61
V-22 Osprey and mods	Proc	6	$1,036	10	$1,388	12	$1,599	12	$1,558
	R&D	–	$194	–	$209	–	$208	–	$223
Search and Rescue helicopter	Proc	–	–	–	–	–	–	–	–
	R&D	–	$355	–	$355	–	$355	–	$355

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Acquisition Reform[54]

Since the 114th Congress, the House and Senate Armed Services Committees have worked to reform the Department of Defense's acquisition processes. This focus continues in the enacted version of the FY2018 NDAA. The final version of the bill addresses several major areas, including the following.

Procurement of Commercial Items

Many provisions in the House and Senate versions of the NDAA would have expanded the range of products that may be considered commercial items and, as such, would be exempt from certain federal procurement regulations, thus making their purchase simpler and faster. The final version of the bill included modified versions of several such provisions:

- The House bill included a provision (§801) that would require the General Services Administration to "establish a program to procure commercial products through online marketplaces for purposes of expediting procurement and ensuring reasonable pricing of commercial products." The Senate bill contained no such provision. The House provision is included in the final bill (§846) with a

[54] This section was authored by Moshe Schwartz.

number of modifications, including requiring a phased implementation of the program, limiting acquisition on such marketplaces to the simplified acquisition threshold, and requiring GAO to assess both the implementation plan and the first three years of the program's performance.

- The Senate bill included several provisions intended to expand the range of products DOD could acquire under the less restrictive commercial procedures. In the Senate bill, Section 852 would allow an item to meet the definition of being commercially available if it had been sold to multiple foreign governments. No such provision was contained in the House bill. A modified version of the Senate provision was included in the final bill (§847).
- Section 853 of the Senate bill would direct that a contract for a commercial item "shall serve as a prior commercial item determination" when making any future purchase of the item unless there is a written determination to the contrary. No such provision was in the House bill. The provision was included in the final bill, with some modification (§848).
- Section 854 of the Senate bill would require that the acquisition of commercial items and nondevelopmental items take priority over any small business set-asides that would result in a noncommercial acquisition. No such provision was in the House bill. This provision was not included in the final bill.

Contracts for Services

The House and Senate versions of the NDAA both included provisions intended to improve the visibility and oversight of contracts for services, which account for the majority of DOD spending on contracts. GAO has found that both DOD and Congress track the funding spent on products better than they do the funding spent on services.[55] Many of these service contracting oversight provisions were incorporated into the final version of the bill, with some modifications:

- Section 814 of the House bill and Section 829 of the Senate bill include similar provisions aimed at improving the collection and analysis of data used in planning for and awarding service contracts. A similar provision, based on the House language, is included in the final bill as Section 851.
- Section 819 of the Senate bill would have created temporary authority for DOD to enter into multiyear services contracts for up to 15 years instead of the current limit of 5 years. A similar provision was included in the final version of the bill as Section 854.

Some service contracting provisions approved by one or the other chamber were dropped in conference. Such was the fate of House Section 870 that would have limited the amount spent on services contracts in FY2018 to the amount spent in FY2010. Also dropped was Senate Section 820 that would have required the Secretary of Defense to identify categories of industry in which there are a significant number of commercial services providers that could meet DOD requirements.

[55] U.S. Government Accountability Office, *DOD Service Acwquisition::Improved Use of Available Data Needed to Better Manage and Forecast Service Contract Requirements*, GAO-16-119, February 2016, https://www.gao.gov/assets/680/675276.pdf.

Major Defense Acquisition Programs (MDAPs)

Following on previous efforts to reform acquisition process management, both House and Senate versions again proposed changing parts of the process. The Senate bill contained a provision to exclude defense business systems and major automated information systems from the definition of an MDAP (§835). The House bill had no such provision and the House receded, including the provision in the final bill (§831).

Section 811 of the House bill sought to insert new requirements to consider "reliability and maintainability" when DOD designs weapon systems, and Section 852 of the House bill would codify use of operating and support costs in evaluating major programs at every stage of acquisition. Both provisions were included in the final version of the NDAA, with some modification (§§834 and 836 respectively).

Bid Protests to GAO

Section 821 of the Senate bill would require that in a bid protest where GAO issues an opinion denying every point of a protest, the protestor would pay the protest costs if the protester had revenues in excess of $100.0 million during the previous year. The House bill had no such provision. The final version of the bill establishes a three-year pilot program requiring certain companies filing a GAO bid protest to pay DOD processing costs for the protest when GAO issues an opinion that denies all elements of the protest. By terms of Section 827, the pilot program is to begin two years after the date of the bill's enactment.

Military Construction[56]

For military construction (MILCON) and family housing in FY2018, the Administration requested $9.8 billion in the base budget and $600 million in OCO funds, for a total of $10.4 billion (see **Table 14**). This compares with the FY2017 total of $8.1 billion, including $7.7 billion in the base budget and $420 million in OCO.

DOD's proposed increase in military construction funds continued an upward trend that began in FY2015. The department indicated it would use the additional amounts in FY2018 to address priorities that include the establishment of new missions at various locations (such as the arrival of F-35s at various bases); support to combatant commands (e.g., improvements to existing air bases); medical facility recapitalization (at Fort Bliss, Fort Leonard Wood, Walter Reed, and Rhine Ordnance Barracks); and quality of life improvements (e.g., the replacement of schools for servicemembers' dependents).

The FY2018 funding requests for seven projects exceeded $100 million each. For four of the seven, the full amounts requested were approved in the House and Senate versions of the bill and in the final enacted version:

- $314 million for a National Security Agency operations facility for more than 3,000 personnel at Fort George G. Meade, Maryland;
- $251 million for a hospital at Fort Bliss, Texas;
- $124 million for a hospital at Bethesda, Maryland; and
- $107 million for a hospital at Rhine Ordnance Barracks in western Germany.

[56] This section authored by Christopher Mann.

According to the conference report on the final version of the NDAA, House and Senate conferees approved the other three large projects in principle, but authorized in H.R. 2810 only that portion of the requested amounts that could be spent during FY2018. Thus, the final bill authorized

- $175 million (of $381 million requested) for a new headquarters complex in St. Louis, MO, for the National Geospatial-Intelligence Agency;
- $100 million (of $254 million requested) for a maintenance complex for Air Force One at Andrews Air Force Base, in Maryland; and
- $100 million (of $250 million requested) for a hospital at Fort Leonard Wood, Missouri.

Base Realignment and Closure

As it had done for several years, the Administration included in its DOD budget request for FY2018 authorization to conduct another Base Realignment and Closure (BRAC) round—this one in 2021. The House and Senate versions of the NDAA included identical provisions (§2702, in each case) that would have prohibited an additional BRAC round. The same language was incorporated into the final bill as Section 2702.[57]

Overseas Contingency Operations

The Administration requested $638 million in OCO funds for military construction, an increase of $218 million over FY2017 enacted amounts. Most of this increase was for European Reassurance Initiative (ERI) construction projects. Funding for ERI projects represents roughly half of the Administration's entire OCO request. Of the $306.9 million requested for ERI-related military construction, more than two-thirds is for Air Force facilities, with the largest amounts targeted for projects in Luxembourg, Hungary, and Slovakia. Both the House and Senate versions of H.R. 2810 approved the ERI construction requests in toto, as did the final version of the bill.

The Administration requested an additional $331 million in non-ERI OCO appropriations for a relatively small number of capital-intensive projects. These included the construction of a new airfield in Jordan ($143 million), an enlisted barracks at Guantanamo Bay ($115 million), and security upgrades at Incirlik Air Base in Turkey ($22 million). All of these projects were authorized by the final version of H.R. 2810, as they had been by the House and Senate versions.

Family Housing

Funding for the construction and operation of DOD-owned military family housing has generally remained level since FY2014, following a period of steep decline with the privatization of most of the DOD's government-owned housing within the United States.[58] DOD's FY2018 budget request included $1.4 billion for family housing, an increase of $130 million over the FY2017 enacted amounts.

The House bill would have cut $46 million from the housing request citing anticipated savings. The Senate bill would have cut $72 million to deny funding for housing construction on Guam and on Kwajalein Atoll. The final version of the NDAA fully funded the request.

[57] Section 2702 in both the House bill and Senate amendment.

[58] At enduring installations overseas, family housing funds still support more than 36,000 units.

Table 14. Authorization for Military Construction and Family Housing Activities

amounts in millions of dollars

	Request	House-passed H.R. 2810	Senate-passed H.R. 2810	Final Bill
Military Construction				
Army	$1,205	$1,354	$1,365	$1,407
Navy and Marine Corps	$1,682	$1,740	$2,109	$1,786
Air Force	$1,964	$1,922	$2,327	$1,995
Defense-wide	$3,315	$2,764	$2,613	$2,942
NATO	$154	$153	$154	$154
Subtotal: Military Construction	**$8,319**	**$7,933**	**$8,569**	**$8,283**
Family Housing				
Construction	$351	$325	$280	$351
Operation	$1,052	$1,052	$1,052	$1,052
Housing Improvement Funds	$3	$3	$3	$3
Subtotal: Family Housing	**$1,407**	**$1,381**	**$1,335**	**$1,407**
BRAC	$256	$233	$198	$291
Total: Base Budget	**$9,982**	**$9,547**	**$10,102**	**$9,981**
OCO	$638	$637	$331	$749

Source: H.Rept. 115-200, Report of the House Armed Services Committee on H.R. 2810, the FY2018 NDAA, July 6, 2017; S.Rept. 115-125, Report of the Senate Armed Services Committee on S. 1519, the FY2018 NDAA, July 10, 2017; H.Rept. 115-404, conference report on H.R. 2810, the FY2018 NDAA.

Notes: Totals may not reconcile due to rounding

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