



CONGRESSIONAL BUDGET OFFICE COST ESTIMATE

May 18, 2018

H.R. 5515 **National Defense Authorization Act for Fiscal Year 2019**

As reported by the House Committee on Armed Services on May 15, 2018

SUMMARY

H.R. 5515 would authorize appropriations totaling an estimated \$709 billion for the military functions of the Department of Defense (DoD), for certain activities of the Department of Energy (DOE), and for other purposes. In addition, the bill would prescribe personnel strengths for each active-duty and selected-reserve component of the U.S. Armed Forces. CBO estimates that appropriation of the authorized and necessary amounts would result in outlays of \$685 billion over the 2019-2023 period.

The bill also contains provisions that would affect the costs of defense programs funded through discretionary appropriations in 2020 and future years. Those provisions mainly would affect force structure, compensation and benefits, and various procurement programs. CBO has analyzed the costs of a select number of those provisions and estimates that they would, on a net basis, increase the cost of those programs relative to current law by about \$48 billion over the 2020-2023 period. The net costs of those provisions in 2020 and beyond are not included in the total amount of outlays mentioned above because funding for those activities would be covered by specific authorizations in future years.

Several provisions of H.R. 5515 would have insignificant effects on direct spending and revenues over the 2019-2028 period. Because enacting the bill would affect direct spending and revenues, pay-as-you-go procedures apply.

CBO estimates that enacting H.R. 5515 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

H.R. 5515 contains intergovernmental and private-sector mandates as defined in the Unfunded Mandates Reform Act (UMRA). CBO estimates that the aggregate cost of the mandates would fall below the annual thresholds established in UMRA for intergovernmental and private-sector mandates (\$80 million and \$160 million respectively in 2018, adjusted annually for inflation).

ESTIMATED COST TO THE FEDERAL GOVERNMENT

The estimated budgetary effects of H.R. 5515 are shown in Table 1. Almost all of the \$709 billion authorized by the bill would be for activities within budget function 050 (national defense).

Some authorizations, however, fall within other budget functions, including \$565 million for the Maritime Administration in function 400 (transportation); \$113 million for a medical facility demonstration fund in function 700 (veterans benefits and services); \$64 million for the Armed Forces Retirement Home in function 600 (income security); and \$5 million for the Naval Petroleum Reserves in function 270 (energy).

BASIS OF ESTIMATE

For this estimate, CBO assumes that H.R. 5515 will be enacted near the start of fiscal year 2019 and that the authorized and estimated amounts will be appropriated each fiscal year.

Spending Subject to Appropriation

For 2019, H.R. 5515 would authorize an estimated \$709 billion, nearly all of which would be specifically authorized by the bill (see Table 2). Of that amount, \$639 billion would, if appropriated, count against that year's defense cap set in the Budget Control Act (BCA), as amended. Another \$69 billion specifically authorized for DoD—largely for costs related to overseas contingency operations—would not be subject to that cap. For nondefense programs, the bill would specifically authorize \$0.7 billion for several departments and agencies.

The total amount that would be specifically authorized for defense programs is an increase of \$15.6 billion (or 2 percent) compared to amounts appropriated for 2018. Authorizations for three of the four major categories of DoD spending would increase: operation and maintenance by \$7.6 billion (or 3 percent), military personnel by \$6.3 billion (4 percent), and research and development by \$3 billion (3 percent). Authorized funding for procurement would fall by \$1.9 billion (1 percent) compared to the current level of funding, while authorizations for all other categories combined would increase by \$0.6 billion (2 percent).

H.R. 5515 also contains provisions that would affect the cost of various discretionary programs in future years. Most of those provisions would affect end strength (the number of military personnel at the end of a fiscal year), military compensation and benefits, and authorities related to the acquisition of weapons systems. The estimated effects of some of

those provisions are shown in Table 3 and discussed below. The following sections discuss how those provisions would affect the need for discretionary appropriations in future years.

Force Structure. The bill would affect the force structure of the various military services by setting end-strength levels for 2019 and modifying the minimum end-strength levels authorized in permanent law.

Under title IV, the authorized end strengths in 2019 for active-duty personnel and personnel in the selected reserves would total 1,338,100 and 817,700, respectively. Of the selected reservists, 83,062 would serve on active duty in support of the reserves. In total, active-duty end strength would increase by 15,600 and selected-reserve end strength would increase by 800 when compared with levels authorized under current law for 2019. The specified end-strength levels for each component of the armed forces are detailed below with CBO's estimate of the effects of those changes on DoD's personnel and operation and maintenance costs.

Active-Duty End Strengths. Compared with end strengths authorized under current law for 2019, section 401 would authorize increases in active-duty personnel for all four services: 7,500 more for the Navy, 4,000 more for the Army, 4,000 more for the Air Force, and 100 more for the Marine Corps. CBO estimates that the net growth in active-duty personnel of 15,600 service members would cost \$10.6 billion over the 2019-2023 period, assuming appropriations are increased by that amount.

Selected-Reserve End Strengths. Sections 411 and 412 would authorize the end strengths for reserve components, including those who serve on active duty in support of the reserves. Under this bill, three of the six reserve components would experience increases in end strength: 500 more for the Air Guard, 200 more for the Air Force Reserve, and 100 more for the Navy Reserve. End strength for the Army Guard, Army Reserve, and Marine Corps Reserve would stay the same. As part of those changes, the number of full-time reservists who serve on active duty in support of the reserves would grow by 4,436 compared with current authorized end-strength levels for 2019. CBO estimates that, on net, implementing those provisions would increase costs for selected reservists by \$3.0 billion over the 2019-2023 period.

Reserve Technicians End Strengths. Section 413 sets the end-strength for dual-status military technicians, who are federal civilian personnel required to maintain membership in a selected-reserve component as a condition of their employment. Section 413 would reduce the number of dual status technicians by 166. CBO estimates a decrease in costs for civilian salaries and expenses from 166 fewer dual status positions of \$85 million over the 2019-2023 period. (Changing the number of dual status technicians would not change the

number of part-time reservists established in section 411, discussed above. Thus, the only budget effects would be the reduction in civilian compensation.)

Compensation and Benefits. H.R. 5515 contains several provisions that would affect compensation and benefits for uniformed personnel and civilian employees of DoD. The bill would specifically authorize regular appropriations of \$147.5 billion for the costs of military pay and allowances in 2019. For related costs resulting from overseas contingency operations (primarily in Afghanistan), the bill would authorize the appropriation of an additional \$4.7 billion for 2019.

Expiring Bonuses and Allowances. Section 611 would extend for another year DoD's authority to enter agreements to pay certain bonuses and allowances to military personnel. The authority to enter into such agreements is currently scheduled to expire on December 31, 2018. Some bonuses are paid in lump sum, while others are paid in annual or monthly installments over a period of obligated service. Based on DoD's budget submission for fiscal year 2019, CBO estimates that extending that authority for one year would cost \$8.0 billion over the 2019-2023 period.

Temporary Duty Per Diem Allowance. Section 605 would prohibit DoD from reducing per diem rates based on the duration of temporary duty assignments for service members and DoD civilian employees. The per diem allowance compensates travelers for the daily cost of lodging, meals and incidental expenses. This section would repeal the per diem policy that the Secretary of Defense implemented on November 1, 2014. Under that policy, the per diem allowance for travel lasting between 31 and 180 days is reduced to 75 percent of the full locality rate; for trips lasting more than 180 days, the allowance is reduced to 55 percent of the full rate. The section also would reverse similar per diem policies established by the Services, which are specific to travel for contingency operations. According to DoD, those two policies have reduced annual payments for per diem compensation by about \$60 million and \$20 million, respectively. On the basis of that information, CBO estimates that implementing section 605 would cost \$400 million over the 2019-2023 period.

TRICARE Advantage Demonstration. Section 701 would require DoD and the Department of Health and Human Services to carry out a demonstration program under which beneficiaries eligible for TRICARE-for-Life (TFL) would be enrolled in Medicare Advantage (MA) plans.¹ MA plans typically use managed care and preferred provider

1. TRICARE-for-Life is a benefit available to all military retirees and their dependents who are eligible for Medicare. Under TRICARE-for-Life, Medicare is the first payer for most health costs incurred by the beneficiary, and TRICARE acts as wrap-around coverage, paying almost all of the remaining costs. The only condition for receiving this benefit is that eligible beneficiaries must enroll in Medicare Part B.

organizations to reduce medical spending. The MA organizations chosen to participate in the program would be paid a capitation rate—a fixed pre-negotiated fee per enrollee. Beneficiaries who live in selected regions would automatically be enrolled in the program although they would be given the opportunity to opt out. The demonstration program would last for at least two years and could continue indefinitely.

The costs to DoD of administering the demonstration program would be paid from funds appropriated to the Defense Health Program. Based on the cost of previous demonstration programs, including the TRICARE Senior Prime demonstration, CBO estimates the cost to DoD of administering this program would be about \$10 million each year.² That includes the cost of contractor support, analytical studies, and outreach to affected beneficiaries. Costs would be less in the first year because of the time needed for rule-making and contract negotiations among the various parties. Based on the timeline of the previous TRICARE Senior Prime demonstration, CBO would expect the demonstration sites to be up and running by the start of 2021. CBO estimates that administrative costs would be lower beginning in 2023 because there is a significant possibility DoD would not continue the demonstration past the initial two-year period required by section 701. In total, CBO estimates this demonstration program would incur administrative costs of about \$40 million over the 2019-2023 period.

This demonstration program also would affect direct spending from the DoD Medicare-Eligible Retiree Health Care Fund and the Medicare Trust Funds, which provide the funding for the health expenses of TFL beneficiaries. The potential costs or savings of the demonstration are difficult to estimate, because many details of the program would be determined as part of the agreements between DoD and the Department of Health and Human Services and the MA bidding process. On one hand, TFL beneficiaries currently have little or no out-of-pocket costs after they pay their Medicare Part B premiums, and there is some evidence that they use more health services than other Medicare populations.³ Thus, an introduction of managed care or other means to encourage more efficient use of health services could result in savings. On the other hand, calculating an appropriate per capita premium for TFL beneficiaries would be difficult and could lead to the government paying more to the MA organizations than the current cost of benefits

2. TRICARE Senior Prime was a demonstration program created by the Balanced Budget Act of 1997 (Public Law 105-33) that allowed Medicare-eligible military retirees and their dependents to choose to forgo their regular Medicare benefit and participate in a health plan administered by DoD and centered around military treatment facilities. The demonstration was active from approximately 1998 until 2001, when it was replaced by the TRICARE-for-Life benefit.

3. For instance, see Department of Defense, *Evaluation of the TRICARE Program: Fiscal Year 2018 Report to Congress* (April 2018), p. 183, <https://health.mil/Military-Health-Topics/Access-Cost-Quality-and-Safety/Health-Care-Program-Evaluation/Annual-Evaluation-of-the-TRICARE-Program>.

under Medicare and TFL. Also, because TFL beneficiaries have little or no out-of-pocket costs, they would probably have to be offered incentives to remain in the demonstration plan which would likely offer more limited provider networks than TFL. After examining several possible scenarios and recent reports that compare the cost of MA and the Medicare fee-for-service benefit, CBO estimates that there is an equal probability that this demonstration program would increase or decrease mandatory spending relative to what the government currently pays for beneficiaries who use TFL.⁴ The effects of this program on mandatory spending could be significant; however, because we don't know the direction, CBO's estimate of the net effect on spending would on balance be zero, the middle of the range of possible outcomes.

Section 701 could also change the amount of the discretionary accrual payments made to the Medicare-Eligible Retiree Health Care Fund (MERHCF), which is the mandatory account that pays for the TFL benefit. While spending from the MERHCF is mandatory, the fund is credited with annual accrual payments that are part of DoD's budget and count against the caps on discretionary budget authority set by the BCA. Those accrual payments, made at the beginning of each fiscal year, represent DoD's future costs of providing health care for members currently serving in the military once they retire and are eligible for Medicare. Total federal spending for military retirees who are eligible for Medicare is currently split between the MERHCF and the Medicare Trust Funds. However, under section 701, it is not clear which source of funds would be used to pay the premiums to the MA plans selected for the demonstration. If the demonstration continues past the initial two-year requirement, the DoD Board of Actuaries could decide to change the calculation of the accrual payments to reflect any revised source of funding for the affected population. Any such revisions could change the accrual contributions by hundreds of millions of dollars per year.

Other Provisions. Several other provisions also would affect spending subject to appropriation, primarily by making changes to DoD procurement programs.

Multiyear Procurement Contracts. The bill would authorize DoD to enter into multiyear procurement contracts (MYP) for six weapons systems. Multiyear procurement is a special contracting method authorized in current law that permits the government to enter into contracts covering acquisitions for more than one year but not more than five years, even though the total funds required for all years are not appropriated at the time the contracts

4. For instance, see Scott Harrison, Carlos Zarabozo, and Andrew Johnson, "Medicare Advantage program: Status report" (presentation to the Medicare Payment Advisory Commission, Washington, D.C., December 8, 2017), http://www.medpac.gov/docs/default-source/default-document-library/ma_dec-2017-public.pdf?sfvrsn=0.

are awarded. Contracts that would cost more than \$500 million must be specifically authorized in law.

- Section 124 would authorize the Navy to enter into one or more multiyear contracts to build up to five amphibious vessels. The Navy had planned to start building the lead ship of the next generation LPD-17 amphibious ships in 2020. However, the Congress provided \$1.8 billion in the Consolidated Appropriations Act for Fiscal Year 2018 (Public Law 115-141) to start building that lead ship in 2018 (designated LPD-30). This bill would authorize the appropriation of \$150 million in 2019 for the purpose of building up to five ships over the next five years. Based on information provided by the Navy, CBO expects that, under this provision, the Navy would build the LPD-31 in 2020 and the LPD-32 and LPD-33 in 2022 and 2023, respectively. Those three ships would cost a total of \$6 billion over the 2019-2023 period, averaging about \$2 billion for each ship. Because the Navy did not request the MYP contract authority for 2019, it has not estimated savings that could arise from using that authority to purchase the amphibious ships.
- Section 145 would authorize the Air Force to enter a multiyear contract beginning in fiscal year 2019 to purchase several variants of the C-130J aircraft for the Air Force and the Marine Corps. The C-130J is a medium-sized transport aircraft that performs a broad variety of airlift and support missions. CBO estimates that under such a contract, the Air Force would buy 29 aircraft for its squadrons and 23 aircraft for the Marines over the 2019-2023 period at a cost of \$4.5 billion. The services estimate that a single multiyear contract would cost \$580 million less than five annual contracts.
- Section 127 would authorize the Navy to enter a multiyear contract to purchase F/A-18E/F aircraft beginning in fiscal year 2019. The F/A-18E/F can combat enemy aircraft and strike targets on the ground. On the basis of information from the Navy, CBO estimates that under such a contract the service would buy 72 of those aircraft over the 2019-2021 period at a cost of \$3.7 billion. The service estimates that a single multiyear contract would cost about \$380 million less than five annual contracts.
- Section 126 would authorize the Navy to enter a multiyear contract beginning in fiscal year 2019 to purchase E-2D aircraft. The E2-D provides surveillance radar coverage for naval vessels and aircraft and can operate from aircraft carriers. On the basis of information from the Navy, CBO estimates that under such a contract the service would buy 24 of those aircraft over the 2019-2023 period at a cost of \$3.5 billion. The service estimates that a single multiyear contract would cost about \$336 million less than five annual contracts.

- Section 125 would authorize the Navy to enter into one or more multiyear contracts for the procurement of Standard Missile-6 interceptors starting in fiscal year 2019 at a rate of not more than 125 missiles a year. The bill would authorize \$490 million in 2019 to purchase 125 missiles and \$126 million for buying long-lead items associated with missiles purchased in later years. On the basis of information from the Navy, CBO estimates that the Navy would use the multiyear contract authority to purchase a total of 625 missiles over the 2019-2023 period. CBO estimates that those 625 missiles would require appropriations of about \$2.4 billion over the 2019-2023 period, or about \$4 million for each missile. The Navy estimates that purchasing those interceptors under multiple annual contracts would cost about \$300 million more than a multiyear procurement contract, an increase of about 12 percent.
- Section 1667 would authorize the Missile Defense Agency (MDA) to enter into one or more multiyear contracts for the procurement of Standard Missile-3 missiles starting in fiscal year 2019. In addition, the bill would authorize \$115 million in 2019 to purchase long-lead items associated with the missiles. On the basis of information from DoD, CBO estimates that the MDA would use the multiyear contract authority to purchase 204 additional missiles. CBO estimates that those 204 missiles would require appropriations of about \$2 billion over the 2019-2023 period, or about \$10 million for each missile. MDA estimates that purchasing those interceptors under multiple annual contracts would cost about \$200 million more than a multiyear procurement contract, an increase of about 10 percent.

Virginia-class Submarines. The Navy plans to buy two Virginia-class submarines each year over the 2019-2023 period, for a total of 10 submarines, using the multiyear procurement authority provided in the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115-91). That act authorized the purchase of up to 13 submarines over that period. Under a MYP contract, the Navy is permitted to accelerate the purchase of key components of the ships to be bought under the contract. Buying key components in this manner under the MYP contract is called an economic order quantity (EOQ) purchase. The Navy plans to initiate an EOQ contract in 2019 to buy key components for 10 submarines.

Section 130 would require the Navy to use that 2019 EOQ contract to purchase equipment for no fewer than 12 Virginia-class submarines, and would authorize \$1 billion in 2019 to buy equipment for the two additional submarines. In addition to the equipment for those submarines, CBO expects that the Navy would complete the purchase of those two additional submarines in 2022 and 2023. Buying the additional two submarines and the key components would increase the total cost for buying Virginia-class submarines by \$6.8 billion over the 2019-2023 period.

Incrementally Fund the CVN-81 Aircraft Carrier. Section 122 would allow the Navy to enter into a contract beginning in fiscal year 2019 to build the CVN-81 Ford-class aircraft carrier, the fourth ship in a new class of carriers that will replace the existing 10 Nimitz-class carriers. The bill would allow the Navy to use incremental funding for construction of the CVN-81. Currently, the Navy plans to buy the CVN-81 in 2023 and request advance procurement funding in 2021 and 2022 to buy materials such as the nuclear reactors and other critical items. CBO expects that the Navy would build the CVN-81 starting in 2023 using the advance procurement and incremental funding authority provided in this bill, and that funding for the ship would total about \$4.5 billion over the 2021-2023 period. The Navy estimates that the CVN-81 would, in total, cost about \$15 billion. The remaining cost of \$10.5 billion would occur after 2023.

Payments to Military Privatized Housing Initiative Lessors. Beginning one month after the date of enactment, section 604 would require DoD to make monthly payments to lessors of housing constructed under the Military Housing Privatization Initiative (MHPI). Under MHPI, the department leases land and conveys housing units to housing developers who renovate, construct and operate the property for lease by military families. The developers collect monthly rental payments from service members, which the military departments limit to no more than the amount of the occupants' housing allowance. The National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) authorized DoD to reduce housing allowances by up to 5 percent.

Payments from DoD to MHPI lessors would equal 5 percent of the average cost of specific types of housing in the areas around MHPI projects, and would vary based on the rank and dependency-status of the service members who would live in those MHPI units. The payments would make up for the loss of rental income resulting from the recent reduction in housing allowances. On the basis of information from DoD, CBO estimates that making those payments to MHPI lessors would cost \$2 billion over the 2019-2023 period.

Overhaul and Repair of Naval Vessels in Foreign Shipyards. Section 322 would require all vessels that are part of the U.S. naval fleet to be treated as though they are assigned to home ports in the United States or Guam for purposes of maintenance and repair. Vessels with a home port in the United States may not be overhauled, repaired, or maintained in shipyards outside the United States or Guam, other than in the case of voyage repairs. Military Sealift Command (MSC) vessels often have overseas home ports. Thus, they are usually exempt from the restrictions on maintenance and repair work in foreign shipyards. In addition, the Navy has a few ships stationed in Bahrain, the Western Pacific, Japan, Italy, and Spain that are also exempt from those restrictions.

The Navy reports that about 30 ships would be affected by this provision, and that each year about 13 of those ships would be required to transit to the west coast of the United States for shipyard repairs that are currently performed in Singapore. (Guam, while closer

than the west coast, does not have the dry dock capacity for those repairs.) On the basis of detailed information from the Navy regarding costs of overhauls, and the time and fuel required for those ships to transit to domestic shipyards, CBO estimates that round trip fuel costs would be about \$40 million a year and that higher repair costs in the United States would cost an additional \$40 million a year. On that basis, CBO estimates that implementing section 322 would cost \$400 million over the 2019-2023 period.

In addition, enacting this provision would reduce the operational status of the MSC ships. The Navy has indicated that the increased transit time for each ship would amount to 26 days each way and that there are not sufficient ships in their inventory to make up for the lost operational days. While buying and operating several additional ships could close that gap, the bill does not specifically authorize such purchases; thus, CBO ascribes no additional cost for lost operational time.

Indo-Pacific Maritime Security Initiative. Under the Southeast Asia Maritime Security Initiative, which is scheduled to expire September 30, 2020, DoD provides assistance to certain regional partners and allied countries in Southeast Asia with the goal of enhancing their ability to respond to shared transnational threats. Assistance authorized under the program includes the provision of equipment, supplies and defense services, training, and small-scale construction. The Congress appropriated \$65 million in 2018 and DoD has requested almost \$100 million for that purpose in 2019. Section 1254 would extend that program through September 30, 2023, and rename it as the Indo-Pacific Maritime Security Initiative. The section also would specifically add India to the list of countries eligible to receive assistance from DoD to cover certain training expenses for increasing awareness of activities and potential threats in the region, and it would allow DoD to add other countries to that list. On the basis of information from DoD, CBO estimates that extending and expanding this authority would cost about \$300 million over the 2021-2023 period.

United States Space Command. Section 1601 would establish the United States Space Command as a unified subordinate command under the U.S. Strategic Command (USSTRATCOM). In 2017, DoD created the Joint Force Space Component (JFSC) located at Vandenberg Air Force Base in California to carry out joint space warfighting operations. The component is scheduled to move to Schriever Air Force Base in Colorado this year, where it will be co-located with the 50th Space Wing and a research center dedicated to space activities.

DoD reports that JFSC, with a staff of about 150 people, has been operating as a unified subordinate command under the combatant command of USSTRATCOM and, as such, is already part of USSTRATCOM's command structure. On the basis of that information from DoD, CBO expects that, under section 1601, JFSC would be renamed as the U.S. Space Command, but would otherwise operate as under current law. Thus, CBO estimates that implementing this provision would have no significant budgetary effect.

Eliminating Certain DoD Organizations. Section 913 would require DoD to eliminate the following subordinate organizations by January 1, 2021:

- Defense Information Systems Agency,
- Defense Technology Security Administration,
- Defense Human Resources Activity,
- Defense Technical Information Center,
- Office of Economic Adjustment,
- Test Resource Management Center, and
- Washington Headquarters Service.

Essential functions and assets of those organizations would be transferred to other components of the department. CBO expects that military personnel assigned to those agencies would be transferred to other positions in DoD.

The affected organizations employ about 7,000 civilian personnel and roughly an equivalent number of contract workers. Spending subject to appropriation could decline if eliminating those organizations reduces the number of civilian employees and contractors at DoD. Those potential savings would be offset in the near term if the department incurs costs for physically relocating agency assets and personnel and for providing separation pay to some employees whose positions would be eliminated. However, CBO has no basis for estimating how many positions could be eliminated and how many would be transferred to other defense agencies and offices.

Direct Spending and Revenues

Several provisions in H.R. 5515 would have insignificant effects on direct spending or revenues, generally because very few people would be affected or because the proposal would allow the spending of new receipts so that the net effect would be small.

- Section 146 would eliminate a 30-day waiting period on the obligation of funds for the ECH-130 Compass Call program which would slightly accelerate outlays of amounts appropriated for 2018.
- Sections 523, 1076, 1213, 1221, and 1222 would extend or add to DoD's authority to accept and spend contributions from nonfederal entities for various purposes. Because the department might not spend all the contributions it receives, those sections could reduce direct spending.
- Sections 532 and 534 would establish domestic violence as a specified offense under the military justice system and modify the Military Rules of Evidence,

respectively. Additional penalties collected as a result of those provisions would be classified as revenues.

- Section 551 would permanently authorize an expiring pilot program that allows service members to take a one-time career intermission (or sabbatical) from active service. During a sabbatical, a service member serves in the inactive reserve, and does not count against the authorized end strength for active-duty personnel. Unlike most members of the inactive reserve, a member on a sabbatical retains eligibility for disability retirement. Consequently, section 531 could result in a small number of additional service members receiving disability retirement if they suffer a qualifying disability during a sabbatical.
- Section 621 would allow certain spouses to retain eligibility to shop at commissary stores, thus increasing the patron base for those stores and likely the number of credit and debit card transactions processed. Those processing costs are borne by the Department of the Treasury on behalf of commissary stores and are paid from a permanent, indefinite appropriation.
- Section 701 would require DoD and the Department of Health and Human Services to carry out a demonstration program under which beneficiaries eligible for TRICARE-for-Life would be enrolled in Medicare Advantage plans. CBO estimates that there is an equal probability that this demonstration program would either increase or decrease mandatory spending. Therefore, CBO estimates the net effect would be zero, which is the middle of the range of possible outcomes. (For additional information, see the discussion of the *TRICARE* Advantage Demonstration in the Spending Subject to Appropriation section of this estimate.)
- Section 874 would modify provisions of law that control the possession and transfer of certain firearms, and thus could increase or decrease the amount of criminal fines the federal government might collect under those laws. Criminal fines are recorded as revenues, deposited in the Crime Victims Fund, and later spent.
- Section 1043 would delay by nine months (from January 2020 to October 2020) the time when H-2B nonimmigrant (or temporary) workers hired in Guam or the Northern Marianas begin to count against the nationwide cap on H-2B workers. Under section 1043, beginning in October 2020, H-2B workers who previously worked in those territories also would not count against the nationwide cap the first time they returned to those territories in H-2B. Thus, the provision would result in more aliens receiving H-2B status and working in one of the 50 states or Washington, D.C., where they can receive emergency Medicaid benefits and health-insurance subsidies under the Affordable Care Act, if they otherwise qualify.

- Section 1079 would give states more time to spend federal grants for the construction and operation of public target ranges. That extension would change the timing of outlays from currently available appropriations.
- Section 1106 would reauthorize, through December 31, 2020, telework programs for federal workers that expired on December 9, 2017. Payments under those programs by agencies that are not funded through annual appropriations could affect direct spending.
- Section 1236 would increase the number of people who would be subject to civil or criminal penalties for violating sanctions. Penalties are recorded as revenues, and a portion of those penalties can be spent without further appropriation.
- Section 1252 would require the President to develop a whole-of-government strategy to address activities of the People’s Republic of China. Developing that strategy would increase the administrative expenses for agencies not funded through annual appropriations.
- Section 2823 would authorize the Department of the Navy to sell a 40-acre parcel of the property that formerly served as a department-run dairy farm for the U.S. Naval Academy. The sales receipts would be available for expenditure without further appropriation; thus the effects on direct spending would net to zero.
- Section 3132 would require the Department of Energy to impose civil penalties on contractors and suppliers for violations of federal law related to nuclear safety and radiation protection.
- Section 3523 would allow the Commandant of the Coast Guard to levy a civil penalty for actions related to certain terminated contracts.

PAY-AS-YOU-GO CONSIDERATIONS

The Statutory Pay-As-You-Go Act of 2010 establishes budget-reporting and enforcement procedures for legislation affecting direct spending or revenues. CBO estimates that the net effects of H.R. 5515 on direct spending and revenues would be insignificant.

INCREASE IN LONG-TERM DIRECT SPENDING AND DEFICITS

CBO estimates that enacting H.R. 5515 would not increase net direct spending or on-budget deficits in any of the four consecutive 10-year periods beginning in 2029.

MANDATES

H.R. 5515 contains intergovernmental and private-sector mandates as defined in UMRA. CBO estimates that the aggregate cost of the mandates on public and private entities would fall below the annual thresholds established in UMRA for intergovernmental and private-sector mandates (\$80 million and \$160 million respectively in 2018, adjusted annually for inflation).

Mandate that Applies to Public and Private Entities

Section 401 would increase the costs of complying with existing intergovernmental and private-sector mandates by increasing the number of service members on active-duty by about 16,000 relative to currently authorized levels. Those additional service members would be eligible for existing protections under the Service Members Civil Relief Act (SCRA). Protections under SCRA require public and private entities to grant active-duty personnel various allowances for business and tax transactions and court procedures.

For example, SCRA allows service members to maintain a single state of residence for paying state and local personal income taxes and to request deferrals for certain state and local fees. CBO estimates that the additional cost of those mandates on state and local governments would be small.

SCRA also requires creditors to charge no more than 6 percent interest rate on service members' loan obligations when the acquisition of such obligations predates active-duty service, and it allows courts to temporarily stay certain civil proceedings, such as evictions, foreclosures, and repossessions. The Act also precludes the use of a service member's personal assets to satisfy the member's trade or business liability while he or she is in military service.

Under the bill, the number of active-duty service members covered by SCRA would increase by about 1 percent, CBO estimates. Service members' utilization of the various provisions of the SCRA depends on a number of uncertain factors, including how often and how long they are deployed. However, the increase in the number of active-duty service members covered by SCRA would be small, so CBO estimates that the incremental cost of

compliance for public or private entities also would be small relative to the annual thresholds in UMRA.

Mandates that Apply to Private Entities Only

Section 1083 would impose a mandate on private entities by requiring the Federal Communications Commission to issue new regulations that would limit the ability of community associations to restrict homeowners from installing outdoor amateur radio antenna on their property. Homeowner association rules, mobile home park agreements, condo association bylaws, and deed covenants could be affected by the bill's prohibition. The bill also would impose a private-sector mandate on amateur radio licensees by requiring them to obtain prior approval from their community association before installing an outdoor antenna. The cost of the mandates would be any costs associated with revising private land-use policies if necessary to comply with the bill, and the cost of notifying community associations of the intent to install an outdoor antenna. Based on an analysis of information about the existing practices of community associations, such costs would probably be small. Therefore, CBO estimates that the aggregate cost of the mandates would fall well below the annual threshold established in UMRA for private-sector mandates (\$160 million in 2018, adjusted annually for inflation).

Mandates that Apply to Public Entities Only

Section 1073 would impose an intergovernmental mandate as defined in UMRA. Under the federal Gun Control Act, a person may only purchase a firearm in the state in which he or she is considered a resident. Exceptions are made for members of the military, who are considered residents of states in which they are deployed on active duty. The bill would extend this exception to military spouses, allowing them to purchase firearms in the state where the military member resides or is permanently stationed for duty, or in a neighboring state if the military member commutes across state borders to his or her duty installation. To the extent that any state firearms law or regulation conflicts with this change, it would be preempted. Although it would limit the application of state laws, CBO estimates that it would impose no duty on states that would result in additional spending or a loss of revenues.

ESTIMATE PREPARED BY:

Federal Costs:

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Military and Civilian Personnel—Dawn Regan
Military Construction—David Newman
Military Health Care—Matthew Schmit
Military Retirement and Immigration—David Rafferty
Operation and Maintenance—William Ma
Procurement—Raymond Hall and David Newman
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TABLE 1. BUDGETARY EFFECTS OF H.R. 5515, THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2019^a

	By Fiscal Year, in Millions of Dollars					2019-2023
	2019	2020	2021	2022	2023	
INCREASES IN SPENDING SUBJECT TO APPROPRIATION						
Authorization Levels for Appropriations Subject to the BCA Caps						
Defense						
Specified Authorizations for the Departments of Defense and Energy						
Authorization Level ^b	638,783	0	0	0	0	638,783
Estimated Outlays	366,827	148,380	59,112	30,328	13,306	617,953
Nondefense						
Specified Authorizations for Various Departments and Agencies ^{b,c}						
Authorization Level	748	0	0	0	0	748
Estimated Outlays	310	172	136	122	0	739
Estimated Authorizations for Various Departments and Agencies ^d						
Estimated Authorization Level	10	28	1	1	1	42
Estimated Outlays	6	19	14	1	1	42
Subtotal						
Estimated Authorization Level	639,540	28	1	1	1	639,572
Estimated Outlays	367,143	148,571	59,262	30,451	13,307	618,734
Specified Authorizations for Defense Appropriations not Subject to the BCA Caps						
Authorization Level ^{b,e}	69,000	0	0	0	0	69,000
Estimated Outlays	37,770	17,858	7,090	2,850	1,131	66,699
Total						
Estimated Authorization Level	708,540	28	1	1	1	708,572
Estimated Outlays	404,913	166,429	66,352	33,301	14,438	685,433

Except as discussed in footnote d below, the authorization levels in this table reflect amounts that would be specifically authorized by the bill (as reflected in Table 2). Some provisions in the bill also would affect the costs of defense programs in 2020 and future years; estimates for a select number of those provisions are shown in Table 3, but are not included above because specified authorizations in future NDAA's would reflect funding for those activities.

Numbers may not add to totals because of rounding; BCA = Budget Control Act; NDAA = National Defense Authorization Act.

- a. In addition to increasing spending subject to appropriation, the bill would have insignificant effects on direct spending and revenues over the 2019-2023 and 2019-2028 periods.
- b. Amounts that would be specifically authorized by the bill.
- c. Authorizations for the Maritime Administration (\$565 million), the Department of Veterans Affairs (\$113 million), the Armed Forces Retirement Home (\$64 million) and the Naval Petroleum Reserves (\$5 million).
- d. Various provisions of the bill would increase estimated authorizations for the Small Business Administration and several other federal agencies.
- e. Primarily for military operations and related activities in Afghanistan, Iraq, and Syria.

TABLE 2. SPECIFIED AUTHORIZATIONS OF APPROPRIATIONS IN H.R. 5515

	By Fiscal Year, in Millions of Dollars					2019- 2023
	2019	2020	2021	2022	2023	
Specified Authorization Levels for Appropriations Subject to the BCA Caps						
Defense						
Military Personnel						
Authorization Level	147,525	0	0	0	0	147,525
Estimated Outlays	137,117	8,423	195	41	0	145,776
Operation and Maintenance						
Authorization Level	229,834	0	0	0	0	229,834
Estimated Outlays	145,873	57,582	13,382	4,899	1,829	223,565
Procurement						
Authorization Level	134,561	0	0	0	0	134,561
Estimated Outlays	25,164	40,537	31,902	18,377	8,290	124,270
Research and Development						
Authorization Level	91,971	0	0	0	0	91,971
Estimated Outlays	41,583	32,980	9,218	4,905	2,196	90,882
Military Construction and Family Housing						
Authorization Level	10,404	0	0	0	0	10,404
Estimated Outlays	860	2,161	2,938	2,039	994	8,992
Revolving Funds						
Authorization Level	2,359	0	0	0	0	2,359
Estimated Outlays	1,516	505	220	89	9	2,339
General Transfer Authority						
Authorization Level	0	0	0	0	0	0
Estimated Outlays	125	-50	-38	-25	-12	0
Subtotal, Department of Defense						
Authorization Level	616,654	0	0	0	0	616,654
Estimated Outlays	352,238	142,138	57,817	30,325	13,306	595,824
Atomic Energy Defense Activities						
Authorization Level ^a	22,129	0	0	0	0	22,129
Estimated Outlays	14,589	6,242	1,295	3	0	22,129
Subtotal, Defense						
Authorization Level	638,783	0	0	0	0	638,783
Estimated Outlays	366,827	148,380	59,112	30,328	13,306	617,953
Nondefense						
Maritime Administration and Other Departments and Agencies						
Authorization Level ^b	748	0	0	0	0	748
Estimated Outlays	310	172	136	122	0	739
Subtotal (subject to caps)						
Authorization Level	639,530	0	0	0	0	639,530
Estimated Outlays	367,137	148,552	59,248	30,450	13,306	618,692

(Continued)

TABLE 2. CONTINUED

	By Fiscal Year, in Millions of Dollars					2019- 2023
	2019	2020	2021	2022	2023	
Specified Authorization Levels for Defense Appropriations not Subject to the BCA Caps ^c						
Military Personnel						
Authorization Level	4,661	0	0	0	0	4,661
Estimated Outlays	4,297	307	3	1	0	4,608
Operation and Maintenance						
Authorization Level	51,677	0	0	0	0	51,677
Estimated Outlays	29,983	13,907	4,229	1,423	534	50,076
Procurement						
Authorization Level	10,458	0	0	0	0	10,458
Estimated Outlays	2,807	3,036	2,499	1,156	474	9,972
Research and Development						
Authorization Level	1,268	0	0	0	0	1,268
Estimated Outlays	559	488	124	56	24	1,251
Military Construction						
Authorization Level	921	0	0	0	0	921
Estimated Outlays	0	162	268	237	110	777
Working Capital Funds						
Authorization Level	15	0	0	0	0	15
Estimated Outlays	11	3	1	0	0	15
Special Transfer Authority						
Authorization Level	0	0	0	0	0	0
Estimated Outlays	113	-45	-34	-23	-11	0
Subtotal (not subject to caps)						
Authorization Level	69,000	0	0	0	0	69,000
Estimated Outlays	37,770	17,858	7,090	2,850	1,131	66,699
Total Specified Authorizations						
Authorization Level	708,530	0	0	0	0	708,530
Estimated Outlays	404,907	166,410	66,338	33,300	14,437	685,391

This table reflects the authorizations of appropriations explicitly stated in the bill in specified amounts. Various provisions of the bill also would authorize activities and provide authorities that would affect costs in 2020 and in future years. Because the bill would not specifically authorize appropriations to cover those costs, they are not reflected in this table. Rather, Table 3 contains the estimated costs of some of those provisions.

Numbers may not add up to totals because of rounding; BCA = Budget Control Act.

- a. Primarily for atomic energy defense activities of the Department of Energy.
- b. Authorizations for the Maritime Administration (\$565 million), the Department of Veterans Affairs (\$113 million), the Armed Forces Retirement Home (\$64 million), and the Naval Petroleum Reserves (\$5 million). The authorized amount for the Maritime Administration does not include the \$300 million specified in the bill for payments to shipping companies under the Maritime Security Program or the \$35 million for assistance to small shipyards because those amounts are already authorized under current law for 2019.
- c. Under H.R. 5515, funding provided for 2019 pursuant to the authorizations in title XV would not be subject to the BCA cap on defense appropriations for that year. Most authorizations in title XV would be for costs related to Overseas Contingency Operations—primarily military operations and related activities in Afghanistan, Iraq, and Syria.

TABLE 3. ESTIMATED COSTS FOR SELECTED PROVISIONS IN H.R. 5515

	By Fiscal Year, in Millions of Dollars					2019- 2023
	2019	2020	2021	2022	2023	
FORCE STRUCTURE						
Active-Duty End Strengths	1,128	2,253	2,335	2,430	2,500	10,646
Selected-Reserve End Strengths	313	644	664	685	709	3,015
Reserve Technicians End Strengths	-9	-18	-19	-19	-20	-85
COMPENSATION AND BENEFITS						
Expiring Bonuses and Allowances	2,867	2,026	1,404	1,342	364	8,003
Temporary Duty Per Diem Allowance	80	80	80	80	80	400
TRICARE Advantage Demonstration	5	10	10	10	5	40
OTHER PROVISIONS						
Multiyear Procurement Contracts						
LPD-17 Class Amphibious Ships	150	1,800	0	2,000	2,100	6,050
C-130J Cargo Aircraft	1,027	1,152	762	786	764	4,491
F/A-18E/F Aircraft	1,241	1,261	1,232	0	0	3,734
E-2D Aircraft	722	648	586	712	817	3,485
Standard Missile-6 Missiles	616	500	470	450	410	2,446
Standard Missile-3 Missiles	480	430	370	330	380	1,990
Virginia-class Submarines	1,003	740	620	2,200	2,200	6,763
Incrementally Fund the CVN-81 Aircraft Carrier	0	0	1,000	1,570	1,920	4,490
Payments to Military Privatized Housing Initiative						
Lessors	370	390	400	420	430	2,010
Overhaul and Repair of Naval Vessels in Foreign						
Shipyards	80	80	80	80	80	400
Indo-Pacific Maritime Security Initiative	0	0	100	100	100	300

Amounts shown in this table for 2019 are included in the amounts that would be specifically authorized to be appropriated by the bill (as reflected in Table 2 and summarized in Table 1). Amounts shown in this table for 2020-2023 would not be specifically authorized by the bill (and therefore are not reflected in Tables 1 and 2); rather, those amounts would be covered by specified authorizations in future National Defense Authorization Acts.

Numbers may not add to totals because of rounding.