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{ REPORT
115-290

DEPARTMENT OF DEFENSE APPROPRIATIONS BILL, 2019

JUNE 28, 2018.—Ordered to be printed

Mr. SHELBY, from the Committee on Appropriations,
submitted the following

REPORT

[To accompany S. 3159]

The Committee on Appropriations reports the bill (S. 3159) making appropriations for the Department of Defense for the fiscal year ending September 30, 2019, and for other purposes, reports favorably thereon and recommends that the bill do pass.

New obligational authority

Total of bill as reported to the Senate	\$667,980,036,000
Amount of 2018 appropriations	652,360,608,000
Amount of 2019 budget estimate	668,409,933,000
Bill as recommended to Senate compared to—	
2018 appropriations	+ 15,619,428,000
2019 budget estimate	– 429,897,000

CONTENTS

Background:		Page
Purpose of the Bill		5
Hearings		5
Summary of the Bill		5
Definition of Program, Project and Activity		6
Reprogramming Guidance		7
Funding Increases		7
Congressional Special Interest Items		8
Committee Initiatives		8
Army Cross Functional Teams		11
Indirect Fire Protection Capability		12
Joint Strike Fighter		12
Civilian Pay Increase		14
Title I:		
Military Personnel:		
Reprogramming Guidance for Military Personnel Accounts		16
Military Personnel Special Interest Items		16
Military Personnel Overview		17
Military Personnel, Army		18
Military Personnel, Navy		19
Military Personnel, Marine Corps		21
Military Personnel, Air Force		22
Reserve Personnel, Army		24
Reserve Personnel, Navy		25
Reserve Personnel, Marine Corps		26
Reserve Personnel, Air Force		27
National Guard Personnel, Army		27
National Guard Personnel, Air Force		28
Title II:		
Operation and Maintenance:		
Operation and Maintenance, Army		36
Operation and Maintenance, Navy		39
Operation and Maintenance, Marine Corps		43
Operation and Maintenance, Air Force		45
Operation and Maintenance, Defense-Wide		48
Operation and Maintenance, Army Reserve		51
Operation and Maintenance, Navy Reserve		53
Operation and Maintenance, Marine Corps Reserve		54
Operation and Maintenance, Air Force Reserve		54
Operation and Maintenance, Army National Guard		55
Operation and Maintenance, Air National Guard		57
U.S. Court of Appeals for the Armed Forces		59
Environmental Restoration, Army		59
Environmental Restoration, Navy		59
Environmental Restoration, Air Force		59
Environmental Restoration, Defense-Wide		59
Environmental Restoration, Formerly Used Defense Sites		59
Overseas Humanitarian, Disaster, and Civic Aid		60
Cooperative Threat Reduction Account		60
Department of Defense Acquisition Workforce Development Fund		60
Title III:		
Procurement:		
Aircraft Procurement, Army		64
Missile Procurement, Army		67
Procurement of Weapons and Tracked Combat Vehicles, Army		70

	Page
Title III—Continued	
Procurement—Continued	
Procurement of Ammunition, Army	74
Other Procurement, Army	77
Aircraft Procurement, Navy	89
Weapons Procurement, Navy	94
Procurement of Ammunition, Navy and Marine Corps	99
Shipbuilding and Conversion, Navy	102
Other Procurement, Navy	106
Procurement, Marine Corps	114
Aircraft Procurement, Air Force	118
Missile Procurement, Air Force	126
Space Procurement, Air Force	129
Procurement of Ammunition, Air Force	131
Other Procurement, Air Force	133
Procurement, Defense-Wide	138
National Guard and Reserve Equipment	143
Defense Production Act Purchases	144
Joint Urgent Operational Needs Fund	146
Title IV:	
Research, Development, Test and Evaluation:	
Research, Development, Test and Evaluation, Army	150
Research, Development, Test and Evaluation, Navy	162
Research, Development, Test and Evaluation, Air Force	179
Research, Development, Test and Evaluation, Defense-Wide	191
Operational Test and Evaluation, Defense	201
Title V:	
Revolving and Management Funds:	
Defense Working Capital Funds	203
Title VI:	
Other Department of Defense Programs:	
Defense Health Program	205
Chemical Agents and Munitions Destruction, Defense	214
Drug Interdiction and Counter-Drug Activities, Defense	217
Office of the Inspector General	217
Title VII:	
Related Agencies:	
Central Intelligence Agency Retirement and Disability System Fund	219
Intelligence Community Management Account	219
Title VIII: General Provisions	220
Title IX: Overseas Contingency Operations/Global War on Terrorism:	
Department of Defense—Military	226
Military Personnel:	
Military Personnel, Army	227
Military Personnel, Navy	228
Military Personnel, Marine Corps	229
Military Personnel, Air Force	230
Reserve Personnel, Army	231
Reserve Personnel, Navy	232
Reserve Personnel, Marine Corps	232
Reserve Personnel, Air Force	232
National Guard Personnel, Army	233
National Guard Personnel, Air Force	233
Operation and Maintenance:	
Operation and Maintenance, Army	234
Operation and Maintenance, Navy	235
Operation and Maintenance, Marine Corps	235
Operation and Maintenance, Air Force	236
Operation and Maintenance, Defense-Wide	237
Operation and Maintenance, Army Reserve	238
Operation and Maintenance, Navy Reserve	239
Operation and Maintenance, Marine Corps Reserve	239
Operation and Maintenance, Air Force Reserve	240
Operation and Maintenance, Army National Guard	240
Operation and Maintenance, Air National Guard	240
Afghanistan Security Forces Fund	241
Procurement:	
Aircraft Procurement, Army	243

	Page
Title IX—Continued	
Procurement—Continued	
Missile Procurement, Army	244
Procurement of Weapons and Tracked Combat Vehicles, Army	244
Procurement of Ammunition, Army	245
Other Procurement, Army	246
Aircraft Procurement, Navy	247
Weapons Procurement, Navy	248
Procurement of Ammunition, Navy and Marine Corps	248
Other Procurement, Navy	249
Procurement, Marine Corps	249
Aircraft Procurement, Air Force	250
Missile Procurement, Air Force	250
Procurement of Ammunition, Air Force	251
Other Procurement, Air Force	251
Procurement, Defense-Wide	252
Research, Development, Test and Evaluation:	
Research, Development, Test and Evaluation, Army	252
Research, Development, Test and Evaluation, Navy	253
Research, Development, Test and Evaluation, Air Force	253
Research, Development, Test and Evaluation, Defense-Wide	254
Revolving and Management Funds: Defense Working Capital Funds	255
Other Department of Defense Programs:	
Defense Health Program	255
Drug Interdiction and Counter-Drug Activities, Defense	256
Office of the Inspector General	256
General Provisions—This Title	257
Compliance With Paragraph 7, Rule XVI of the Standing Rules of the Senate	258
Compliance With Paragraph 7(c), Rule XXVI of the Standing Rules of the Senate	259
Compliance With Paragraph 12, Rule XXVI of the Standing Rules of the Senate	260
Budgetary Impact of Bill	261
Comparative Statement of New Budget Authority	262

BACKGROUND

PURPOSE OF THE BILL

This bill makes appropriations for the military functions of the Department of Defense for the period October 1, 2018, through September 30, 2019. Functional areas include the pay, allowances, and support of military personnel, operation and maintenance of the forces, procurement of equipment and systems, and research, development, test and evaluation. Appropriations for foreign military assistance, military construction, family housing, nuclear weapons programs, and civil defense are provided in other bills.

HEARINGS

The Appropriations Subcommittee on Defense began hearings on April 11, 2018, and concluded them on June 6, 2018, after nine separate sessions. The subcommittee heard testimony from representatives of the Department of Defense and the Intelligence Community.

SUMMARY OF THE BILL

The Committee recommendation of \$667,980,036,000 includes funding to develop, maintain, and equip the military forces of the United States and for other purposes.

The fiscal year 2019 budget request for activities funded in the Department of Defense appropriations bill totals \$668,409,933,000 in new budget authority, including \$68,078,580,000 in overseas contingency operations funding and \$514,000,000 in mandatory spending.

In fiscal year 2018, the Congress appropriated \$652,360,608,000 for activities funded in this bill. This amount includes \$582,274,519,000 in base appropriations and \$65,166,000,000 in overseas contingency operations appropriations provided in Public Law 115–141 and \$4,920,089,000 in emergency appropriations provided in Public Laws 115–96 and 115–123. The Committee recommends that funds requested for Coast Guard overseas contingency operations be appropriated directly to the Department of Homeland Security.

The Committee recommendation in this bill is \$15,619,428,000 above the amount provided in fiscal year 2018 and \$429,897,000 below the amount requested for fiscal year 2019.

COMMITTEE RECOMMENDATIONS

The following table displays the recommendations for each title:

[In thousands of dollars]

	Fiscal year 2018 enacted	Fiscal year 2019 estimate	Committee recommendation
Title I—Military Personnel	133,367,397	140,689,301	139,296,521
Title II—Operation and Maintenance	188,245,583	199,469,636	193,982,413
Title III Procurement	133,868,632	130,564,621	135,198,897
Title IV—Research, development, test and evaluation	88,308,133	91,056,950	95,131,819
Title V—Revolving and management funds	1,685,596	1,542,115	1,641,115
Title VI—Other Department of Defense Programs	36,646,600	35,839,806	36,331,606
Title VII—Related Agencies	1,051,600	1,053,124	1,043,624
Title VIII—General provisions (net)	– 899,022	115,800	– 2,559,935
Title IX—Overseas Contingency Operations	65,166,000	68,078,580	67,913,976
Title X—Missile Defense and Defeat Enhancements (Public Law 115–96)	4,485,844	.....	.....
Other appropriations (Public Law 115–123)	434,245	.....	.....
Net grand total	652,360,608	668,409,933	667,980,036
Total discretionary (incl. scorekeeping adjustments)	655,131,519	675,987,023	675,557,126

The Committee has displayed recommended adjustments in tables presented under each appropriation account.

These adjustments reflect the following Committee actions: elimination of funds requested for programs which are lower priority, duplicative, or not supported by firm requirements in out-year development or procurement appropriations; deletion of excess funds based on program delays or slow execution; addition of funds to reflect congressional priorities and to rectify shortfalls in the budget estimate; and implementation of recommendations in the National Defense Authorization Act for Fiscal Year 2019.

CLASSIFIED PROGRAM ADJUSTMENTS

The Committee recommends adjustments to certain classified programs, as explained in the classified annex to the Committee's report.

BUDGET JUSTIFICATION MATERIALS FOR SPECIAL ACCESS PROGRAMS

The Committee recommends adjustments to the budget justification materials provided in the Special Access Program Annual Report to Congress submitted in accordance with Title 10, United States Code, Section 119(a)(1), as explained in the classified annex to the Committee's report. It is expected that these adjustments will be incorporated in future budget submissions.

DEFINITION OF PROGRAM, PROJECT AND ACTIVITY

For the purposes of the Balanced Budget and Emergency Deficit Control Act of 1985 (Public Law 99–177), as amended by the Balanced Budget and Emergency Deficit Control Reaffirmation Act of 1987 (Public Law 100–119), and by the Budget Enforcement Act of 1990 (Public Law 101–508), the terms “program, project, and activity” for appropriations contained in this act shall be defined as the most specific level of budget items identified in the Department of Defense Appropriations Act, 2019, the related classified annexes and Committee reports, and P–1 and R–1 budget justification documents as subsequently modified by congressional action.

The following exception to the above definition shall apply: the military personnel and the operation and maintenance accounts, for which the term “program, project, and activity” is defined as the appropriations accounts contained in the Department of Defense Appropriations Act.

At the time the President submits the budget request for fiscal year 2020, the Secretary of Defense is directed to transmit to the congressional defense committees budget justification documents to be known as the “M-1” and “O-1” which shall identify, at the budget activity, activity group, and sub-activity group level, the amounts requested by the President to be appropriated to the Department of Defense for military personnel and operation and maintenance in any budget request, or amended budget request, for fiscal year 2020.

REPROGRAMMING GUIDANCE

The Secretary of Defense is directed to continue to follow the reprogramming guidance for acquisition accounts as specified in the report accompanying the House version of the Department of Defense appropriations bill for fiscal year 2008 (House Report 110-279). The dollar threshold for reprogramming funds shall remain at \$20,000,000 for military personnel; \$20,000,000 for operation and maintenance; \$20,000,000 for procurement; and \$10,000,000 for research, development, test and evaluation.

Also, the Under Secretary of Defense (Comptroller) is directed to continue to provide the congressional defense committees annual DD Form 1416 reports for titles I and II and quarterly, spreadsheet-based DD Form 1416 reports for service and defense-wide accounts in titles III and IV of this act. Reports for titles III and IV shall comply with guidance specified in the explanatory statement accompanying the Department of Defense Appropriations Act for Fiscal Year 2006. The Department shall continue to follow the limitation that prior approval reprogrammings are set at either the specified dollar threshold or 20 percent of the procurement or research, development, test and evaluation line, whichever is less. These thresholds are cumulative from the base for reprogramming value as modified by any adjustments. Therefore, if the combined value of transfers into or out of a military personnel (M-1), an operation and maintenance (O-1), a procurement (P-1), or a research, development, test and evaluation (R-1) line exceeds the identified threshold, the Secretary of Defense must submit a prior approval reprogramming to the congressional defense committees. In addition, guidelines on the application of prior approval reprogramming procedures for congressional special interest items are established elsewhere in this report.

FUNDING INCREASES

The funding increases outlined in the tables for each appropriation account shall be provided only for the specific purposes indicated in the tables.

CONGRESSIONAL SPECIAL INTEREST ITEMS

Items for which additional funds have been recommended or items for which funding is specifically reduced as shown in the tables detailing Committee recommended adjustments or in paragraphs using the phrase “only for” or “only to” are congressional special interest items for the purpose of the Base for Reprogramming [DD Form 1414]. Each of these items must be carried on the DD Form 1414 at the stated amount, as specifically addressed in elsewhere in this report.

COMMITTEE INITIATIVES

The Committee has included funding above the fiscal year 2019 President’s budget request for several programmatic initiatives in support of the 2018 National Defense Strategy [NDS]. While the NDS recognizes the persistent nature of terrorist threats and the need to counter those threats, it also represents a significant shift toward long-term, strategic competition and operations in contested domains. Additionally, rapid technological advancement and the commercial availability of increasingly sophisticated capabilities presents challenges to the U.S. military advantage against state and non-state actors alike. In order to maintain overmatch against adversaries across the domain spectrum, the Committee recommends additional investment in the following areas: basic research, hypersonics, directed energy, artificial intelligence, microelectronics, missile defense, cybersecurity, and complimentary aspects including test and evaluation infrastructure.

The Committee expects that the Department will sustain and support continued investments in these areas in the fiscal year 2020 President’s budget request. Additionally, the Committee directs the Secretary of Defense to provide a spend plan for execution of the additional fiscal year 2019 resources provided for committee initiatives not later than 60 days following enactment of this act.

Finally, the Committee directs that funds for these initiatives are to be competitively awarded or provided to programs that have received competitive awards in the past.

MISSILE DEFENSE AGENCY

The fiscal year 2019 President’s budget request for the Missile Defense Agency [MDA] includes \$9,915,304,000 in the Operation and Maintenance, Defense-Wide; Procurement-Defense-Wide; Research, Development, Test and Evaluation, Defense-Wide and Military Construction appropriation accounts, a \$1,605,748,000 decrease from amounts appropriated for the MDA in fiscal year 2018 in the Department of Defense Missile Defeat and Defense Enhancements Appropriations Act, 2018 (Public Law 115–96) and in the Department of Defense Appropriations Act, 2018 (Public Law 115–141).

Addressing Future Threats.—Subsequent to submission of the fiscal year 2019 President’s budget request, the Director, MDA provided the congressional defense committees a list of unfunded requirements for MDA in fiscal year 2019. Noting that rapid technological progress has increased threat complexity, to include advanced capabilities being developed by rogue nations and emerging

threats such as hypersonic glide vehicles, the Committee recommends an increase of \$1,198,648,000 for MDA.

MDA's objective is to increase missile defense capability against advanced, complex threats by integrating multi-domain systems into its battle management control system while maximizing cost-effectiveness. Therefore, the Committee recommends increases to support programs that further that objective. Specifically, the Committee recommends \$100,500,000 above the budget request to initiate a Missile Defense Tracking System [MTS], which the Director, MDA identified to the Committee as MDA's top unfunded priority. The Committee understands that a MTS operational prototype would provide a responsive, flexible capability from space to detect and track both conventional ballistic missiles and emerging threats, such as hypersonic glide vehicles. The Committee further notes that funds appropriated for MTS in fiscal year 2018 are being utilized to support MTS concept designs, but MDA has not budgeted for a MTS acquisition program. Therefore, the Committee directs the Director, MDA, as the Ballistic Missile Defense Acquisition Executive, to provide the congressional defense committees a MTS acquisition strategy and MDA's associated cost estimate with the fiscal year 2020 President's budget request. The MTS acquisition strategy shall include the MTS requirement, contracting approach, test plan, and identification of programmatic and technical risk.

The MDA Comptroller/Chief Financial Officer is directed to certify full funding of the acquisition strategy in the fiscal year 2020 President's budget request, and the Director, Cost Assessment and Program Evaluation [CAPE], is directed to provide an Independent Cost Estimate [ICE] for MTS to the congressional defense committees with the fiscal year 2020 President's budget request. The Committee also recommends \$46,100,000 above the budget request to accelerate the development of critical interceptor technology in the areas of propulsion, materials and lethality to address hypersonic threats.

Additionally, the Committee notes that a boost phase kill ability could provide increased missile defense capability and that directed energy is a key technology required to ensure a boost phase kill ability. Therefore, the Committee recommends \$85,000,000 above the budget request to continue research and development of three separate laser scaling efforts with the goal of demonstrating a 500 kilowatt laser by 2021, and a best of breed of 1 megawatt laser capability by 2023. The Director, MDA, as the Ballistic Missile Defense Acquisition Executive, is directed to provide an acquisition strategy for a boost phase missile defense capability and the associated MDA cost estimate with the fiscal year 2020 President's budget request. The acquisition strategy shall include the requirement, contracting approach, test plan, and identification of programmatic and technical risk.

The MDA Comptroller/Chief Financial Officer is directed to certify full funding of the acquisition strategy in the fiscal year 2020 President's budget request, and the Director, CAPE is directed to provide an ICE for a boost phase missile defense capability to the congressional defense committees with the fiscal year 2020 President's budget. The Committee notes that consistent with MDA's Di-

rected Energy Roadmap, as submitted to the Committee with the fiscal year 2019 President's budget request, the Laser Scaling program is separate and distinct from MDA's Low Power Laser Demonstrator program [LPLD]. The Committee further notes that MDA has awarded three design contracts for LPLD and plans to downselect to one performer in late 2018 following a Preliminary Design Review. The Committee finds this approach to be technically risky. Therefore, consistent with the Department of Defense Appropriations Act, 2018, the Committee recommends an additional \$78,000,000, which is the amount identified by MDA as required for LPLD to retain three performers through Critical Design Review in late 2019, thereby reducing risk for a LPLD demonstration in fiscal year 2023.

The Committee recommends several additional increases for the Missile Defense Agency, including \$100,000,000 above the budget request to advance MDA's compliance with the Department of Defense Cybersecurity Discipline Implementation Plan to protect MDA systems in highly-contested cybersecurity threat environments; \$126,000,000 above the budget request to provide improved discrimination capabilities and high-fidelity digital modeling and simulation to counter emergent threats to the homeland, forward deployed forces and allies; \$93,500,000 to accelerate the integration of mobile sensors; and \$102,367,000 for MDA's test enterprise, including funds to replace obsolete airborne sensors.

Aegis Ashore Poland.—The Committee understands that completion of the Aegis Ashore site in Poland will slip by at least 1 year, delaying installation of the weapon system and transition of the capability to U.S. European Command. The Committee is concerned with this delay and recommends an additional \$20,000,000 to continue combat system and combat structure adaptation, integration, installation, and testing. The Committee directs the Director, MDA, to submit to the congressional defense committees, with the fiscal year 2020 President's budget request, an updated program baseline for Aegis Ashore Poland, to include revised cost estimates. The Director, CAPE, is directed to provide, with the fiscal year 2020 President's budget request, an Independent Cost Estimate for Aegis Ashore Poland.

MDA Acquisition Workforce and Contracts.—The Committee notes that MDA has utilized the Department of Defense Acquisition Workforce Development Fund [DAWDF] in support of hiring and developing entry level employees in critical career fields as part of its workforce pipeline strategy since 2009. The Director, MDA is directed to provide to the congressional defense committees, not later than with submission of the fiscal year 2020 President's budget request, a historical application of DAWDF funding by MDA, as well as identify additional requirements for MDA's acquisition workforce due to increased acquisition workload.

Additionally, the Committee is concerned with MDA's increasing reliance on Undefinitized Contract Actions [UCAs]. The Committee notes that UCAs are contract actions for which the contract terms, specifications, or price are not agreed upon before contractor performance commences, and that UCAs should be used only when a requirement needs to be met quickly and there is insufficient time to use normal contracting vehicles. However, the Committee notes

that the MDA continues to utilize UCAs for recurring annual contracts, and that MDA struggles to definitize UCAs within the definitization schedule set forth in the Defense Federal Acquisition Regulation Supplement [DFARS]. Therefore, the Committee directs the MDA Director of Contracts to provide the congressional defense committees, not later than with submission of the fiscal year 2020 President's budget request, a briefing on contract types used by MDA by program, to include historic application of UCAs and rationale for each UCA (such as the untimely receipt of proposals, acquisition workforce shortfalls, schedule pressures and emerging requirements), definitization schedules, final negotiated contract values compared to initial estimates, and contract strategies for acquisition programs going forward.

Finally, the Committee notes that information previously requested by the Committee regarding several acquisition programs has not yet been provided. Therefore, the Committee directs that not more than \$15,000,000 may be obligated for MDA Management Headquarters in fiscal year 2019 until the information requested is provided.

ARMY CROSS FUNCTIONAL TEAMS

In October 2017, the Army announced its intent to establish a new Army Futures Command, which is intended to synchronize efforts among the other Army Commands through Cross-Functional Teams [CFT] to advance the Army's six modernization priorities: long-range precision fires, air and missile defense, next generation combat vehicle, future vertical lift, network modernization, and soldier lethality. These eight CFTs will report directly to the Under Secretary and Vice Chief of Staff of the Army and work to compress the modernization and procurement timelines by involving the end user, defining requirements, integrating, prototyping, and validating a concept prior to low-rate initial production.

While the Committee is supportive of these prioritization efforts by the Army in accordance with the April 2018 Army Modernization Strategy, it is concerned with the timeliness and adequacy of the budget justification materials presented to the Committee. The Committee is still awaiting an above threshold reprogramming request from the Department to realign fiscal year 2018 funding and received a request from the Army to realign science and technology funding and support additional fiscal year 2019 funding for CFT priorities very late in the budget process.

The fiscal year 2019 President's budget request includes \$2,119,871,000 for Army CFT priorities within the Missile Procurement; Procurement of Ammunition; Other Procurement; and Research, Development, Test and Evaluation accounts, with the Army requesting an additional \$416,953,000 above the budget request. The Committee understands that the fiscal year 2019 President's budget request was developed before CFT plans, requirements, and acquisition strategies could be finalized and that several programs under CFT purview continue to work to complete these decision points. Given this fluctuation, the Committee recommends modest reductions to the programs within the CFT budget request while also providing an additional \$127,737,000 for CFT science and technology efforts in anticipation of the Army's need to realign

funding to resource future CFT efforts. In addition, the Committee recommends \$75,400,000 above the budget request for the Army's future vertical lift program to accelerate Capability Set One Future Attack Reconnaissance Aircraft development.

The Committee looks forward to a continuing dialogue with the Army's acquisition and CFT leadership in order to provide appropriate, executable resources for Army modernization priorities.

INDIRECT FIRE PROTECTION CAPABILITY

The fiscal year 2019 President's budget request includes advance procurement totaling \$173,204,000 for AIM-9X interceptors, Multi-Mission Launcher [MML] components, and ancillary costs. This is in addition to \$50,056,000 of fiscal year 2018 advance procurement funding that remains unexecuted. The request also includes \$208,740,000 for continued research, development, test and evaluation of the current Indirect Fire Protection Capability [IFPC] program of record.

The Committee notes that following submission of the fiscal year 2019 President's budget request, the Army initiated reviews of the existing IFPC program of record and alternative courses of action [COA] prior to the upcoming milestone B decision. These include the pursuit and integration of an alternate interceptor to the currently proposed AIM-9X interceptor and modifications to the MML, as well as the analysis of at least two other distinct weapons systems.

The Committee further notes that section 111 of S. 2987, the National Defense Authorization Act for Fiscal Year 2019, directs the Army to deploy two batteries of an interim, fixed site cruise missile defense capability by September 30, 2020, in anticipation of deployment of the Army's IFPC.

The Committee supports the Army's pursuit of this defensive capability, however, the Committee is concerned that the current budget request does not support any change in acquisition strategy or procurement of readily available interim defense capabilities. Therefore, the Secretary of the Army is directed to provide a report to the congressional defense committees, not later than 30 days following enactment of this act, which details the results of the Army's internal review, revised acquisition strategy, and resulting resourcing requirements. The report shall also include: (1) analysis and recommendations on the COAs under review; (2) the supporting cost estimates for each of the COAs across the Future Years Defense Program [FYDP]; (3) a program schedule for the selected COA; (4) an analysis and recommendations for interim capabilities and a proposed acquisition schedule; (5) the proposed execution of current IFPC resources by appropriation, budget line, and project across the FYDP; and (6) a plan to resource any identified shortfalls for the selected program of record COA and interim capabilities that will be pursued.

JOINT STRIKE FIGHTER

F-35 Production.—The fiscal year 2019 President's budget request includes 77 F-35 Joint Strike Fighters [JSF], 13 fewer than were provided in the Department of Defense Appropriations Act,

2018 (Public Law 115–141). The Committee is encouraged that the budget request reflects planned procurement increases in the F–35C carrier variant for the Navy but is concerned that the Air Force continues to delay its stated goal to procure 60 F–35A variants in a single fiscal year. As a result, the Committee recommends an additional \$120,000,000 in advance procurement for the F–35A in order to assist the Air Force in achieving full rate production quantities in fiscal year 2020. The Committee also recommends \$796,000,000 for eight additional F–35C aircraft for the Navy and Marine Corps and \$412,000,000 for four additional F–35B aircraft for the Marine Corps. The Committee understands the Under Secretary of Defense (Acquisition and Sustainment) is leading a comprehensive review of reducing the lifecycle costs of the F–35 program, including the near term unit flyaway costs. Further, the Committee understands that the recent production contract awards, including Lot 9 and 10, have consistently included lower unit flyaway costs than the budgeted amounts. Therefore, the Committee recommends unit cost reductions in fiscal year 2018 and 2019 that are consistent with the savings negotiated in recent production contracts and the Under Secretary of Defense’s (Acquisition and Sustainment) targets for future production contracts.

The Department of Defense Appropriations Act, 2018 (Public Law 115–141) supported the Department’s request for \$660,989,000 in advance procurement for economic order quantities of material and equipment for 207 U.S. F–35 aircraft to be procured in fiscal years 2019 and 2020. According to Joint Program Office [JPO] estimates, these funds provided in fiscal year 2018 would save approximately \$1,200,000,000 across U.S. and partner buys in fiscal years 2018 through 2020, with about half of this savings amount going toward U.S. aircraft buys. A recent analysis by the Director of the Cost Assessment and Program Evaluation [CAPE] concluded that anticipated U.S. savings from this approach would only be \$300,000,000, about half of the prior estimates provided by the JPO. While these savings are still significant, as certified by the Under Secretary of Defense (Acquisition and Sustainment), the Committee is dismayed by the inaccuracy of the initial JPO estimates. Therefore, the F–35 Program Executive Officer is directed to provide a report to the congressional defense committees not later than 30 days after enactment of this act on an updated cost savings estimate on the economic order quantities procurement approach; an execution update on the \$660,989,000 for advance procurement provided in the Department of Defense Appropriations Act, 2018 (Public Law 115–141); an analysis of the CAPE estimate of lesser savings, and a plan for how the unrealized savings will be resourced in fiscal years 2019 and 2020.

F–35 Continuous Capability Development and Delivery.—The fiscal year 2019 President’s budget request includes \$983,549,000 in research, development, test and evaluation for Continuous Capability Development and Delivery [C2D2], previously referred to as Follow-on Modernization, an increase of \$395,328,000 or 67 percent, over amounts enacted in fiscal year 2018. The Committee notes that the F–35 C2D2 acquisition strategy is evolving and that its approval has slipped by one year. Further, the previously requested Independent Cost Estimate, system engineering plans, test

and evaluation master plan and acquisition program baselines for F-35 Follow-on Modernization elements have not yet been provided to Congress. Finally, the Committee notes that execution plans for fiscal year 2018 funding provided for F-35 Follow-on Modernization have changed. Therefore, the Committee recommends adjusting the fiscal year 2019 budget request for F-35 C2D2 to reflect actual fiscal year 2018 execution. In addition, the Under Secretary of Defense (Acquisition and Sustainment) and F-35 Program Executive Officer are directed to provide the F-35 C2D2 information previously requested in Senate Report 114-263, as soon as practicable.

ADVANCED BATTLE MANAGEMENT SYSTEM

The fiscal year 2019 President's budget request supports the Air Force's new approach to battle management, the Advanced Battle Management System [ABMS]. The Committee understands that the ABMS will be a decentralized network of platforms and sensors that will integrate battlefield surveillance information. The Committee is supportive of the Air Force's new approach given the changing threat environment and need for resilient and survivable networks against near peer competitors. However, the Committee is concerned with the near-term risks in cancelling the Joint Surveillance and Target Attack Radar System [JSTARS] recapitalization program and time required to operationalize these new capabilities. As a result, the Committee fully funds the budget request for ABMS and recommends an additional \$375,000,000 to address near-term risks, to include procurement funding for additional MQ-9 Reaper unmanned aerial vehicles and support of the battlefield airborne communications node mission; research, development, test and evaluation funding for radar and agile communications development; and operation and maintenance in the Air National Guard funding to continue to operate and sustain the legacy E-8 JSTARS fleet. Further, the Committee directs the Secretary of the Air Force to submit a report to the congressional defense committees not later than 90 days after enactment of this act on a revised ABMS plan and execution strategy, updated costs and schedules of each activity within the ABMS plan, and a gap and threat assessment of both the ground moving target indicator and battle management command and control mission areas.

CIVILIAN PAY INCREASE

Section 749 of the Senate version of the Financial Services and General Government Appropriations bill (S. 3107), as reported on June 21, 2018, included a pay increase for civilian Federal employees of 1.9 percent in calendar year 2019. The Committee supports this government-wide provision and is evaluating the impact to the Department of Defense. In order to inform this assessment, the Committee directs the Secretary of Defense to provide the estimated cost of a 1.9 percent pay increase for calendar year 2019 by appropriation account to the House and Senate Appropriations Committees not later than July 31, 2018.

**TITLE I
MILITARY PERSONNEL**

Funds appropriated under this title provide the resources required for basic pay, retired pay accrual, employers' contribution for Social Security taxes, basic allowance for subsistence, basic allowance for housing, special and incentive pays, permanent change of station travel, and other personnel costs for uniformed members of the Armed Forces.

The President's fiscal year 2019 budget requests a total of \$140,689,301,000 for military personnel appropriations. This request funds an Active component end strength of 1,338,100 and a Reserve component end strength of 817,700.

SUMMARY OF COMMITTEE ACTION

The Committee recommends military personnel appropriations totaling \$139,296,521,000 for fiscal year 2019. This is \$1,392,780,000 below the budget estimate.

Committee recommended military personnel appropriations for fiscal year 2019 are summarized below:

SUMMARY OF MILITARY PERSONNEL APPROPRIATIONS

[In thousands of dollars]

Account	2019 budget estimate	Committee recommendation	Change from budget estimate
Military Personnel:			
Military Personnel, Army	43,670,542	43,060,042	- 610,500
Military Personnel, Navy	30,426,211	30,305,481	- 120,730
Military Personnel, Marine Corps	13,890,968	13,799,038	- 91,930
Military Personnel, Air Force	30,526,011	30,173,691	- 352,320
Reserve Personnel:			
Reserve Personnel, Army	4,955,947	4,870,947	- 85,000
Reserve Personnel, Navy	2,067,521	2,059,521	- 8,000
Reserve Personnel, Marine Corps	788,090	787,090	- 1,000
Reserve Personnel, Air Force	1,894,286	1,871,286	- 23,000
National Guard Personnel:			
National Guard Personnel, Army	8,744,345	8,650,645	- 93,700
National Guard Personnel, Air Force	3,725,380	3,718,780	- 6,600
Total	140,689,301	139,296,521	- 1,392,780

Committee recommended end strengths for fiscal year 2019 are summarized below:

RECOMMENDED END STRENGTH

	2018 authorization	2019 budget estimate	Committee recommendation	Change from budget estimate
Active:				
Army	483,500	487,500	485,741	- 1,759

RECOMMENDED END STRENGTH—Continued

	2018 authorization	2019 budget estimate	Committee recommendation	Change from budget estimate
Navy	327,900	335,400	331,900	- 3,500
Marine Corps	186,000	186,100	186,100	.....
Air Force	325,100	329,100	325,720	- 3,380
Subtotal	1,322,500	1,338,100	1,329,461	- 8,639
Selected Reserve:				
Army Reserve	199,500	199,500	199,500	.....
Navy Reserve	59,000	59,100	59,000	- 100
Marine Corps Reserve	38,500	38,500	38,500	.....
Air Force Reserve	69,800	70,000	69,800	- 200
Army National Guard	343,500	343,500	343,500	.....
Air National Guard	106,600	107,100	106,600	- 500
Subtotal	816,900	817,700	816,900	- 800
Total	2,139,400	2,155,800	2,146,361	- 9,439

Committee recommended end strengths for full-time support of the Reserve and Guard for fiscal year 2019 are summarized below:

RECOMMENDED ACTIVE GUARD AND RESERVE END STRENGTH

	2018 authorization	2019 budget estimate	Committee recommendation	Change from budget estimate
Active Guard and Reserve:				
Army Reserve	16,261	16,386	16,261	- 125
Navy Reserve	10,101	10,110	10,101	- 9
Marine Corps Reserve	2,261	2,261	2,261	.....
Air Force Reserve	3,588	3,849	3,588	- 261
Army National Guard	30,155	30,595	30,155	- 440
Air National Guard	16,260	19,861	19,450	- 411
Total	78,626	83,062	81,816	- 1,246

REPROGRAMMING GUIDANCE FOR MILITARY PERSONNEL ACCOUNTS

The Committee directs the Secretary of Defense to submit the Base for Reprogramming (DD Form 1414) for each of the fiscal year 2019 appropriation accounts not later than 60 days after the enactment of this act. The Secretary of Defense is prohibited from executing any reprogramming or transfer of funds for any purpose other than originally appropriated until the aforementioned report is submitted to the House and Senate Appropriations Committees. The Committee directs the Secretary of Defense to use the normal prior approval reprogramming procedures to transfer funds in the services' military personnel accounts between budget activities in excess of \$20,000,000.

MILITARY PERSONNEL SPECIAL INTEREST ITEMS

Items for which additional funds have been provided or have been specifically reduced as shown in the project level tables or in paragraphs using the phrase "only for" or "only to" in this report are congressional special interest items for the purpose of the Base for Reprogramming (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the stated amount as specifically addressed in the Committee report. Below Threshold

Reprogrammings may not be used to either restore or reduce funding from congressional special interest items as identified on the DD Form 1414.

MILITARY PERSONNEL OVERVIEW

Reserve Component Budget Reporting.—The Committee continues its requirement for the Department to provide a semi-annual detailed report to the congressional defense committees showing transfers between subactivities within the military personnel appropriation. Reports shall be submitted not later than 30 days following the end of the second quarter and 30 days following the end of the fiscal year.

Advanced Trauma Training Program for National Guard and Reserve.—The Committee recognizes the valuable support universities, hospitals, and other military partners provide by offering civilian-based emergency response trauma training and critical care training including public health, bio-environmental, and biomedical instruction to sustain medics' and medical providers' capabilities of the National Guard Enhanced Response Forces Packages [CERFP], National Guard Homeland Response Forces [NGHRF], the Army Reserve Consequence Management Response Forces [CCMRF] and other National Guard and Reserves medical conversion/readiness requirements. The Committee encourages the National Guard and Reserves to continue pursuing state-of-the-art trauma training with these civilian partners, thus maintaining unit medical readiness postures at optimum levels as military healthcare providers in CERFPs, NGHRFs, and CCMRFs maintain their individual skills to respond effectively to emergency incidents on the homeland. Furthermore, in order to minimize the civilian-military operational gaps in the event of a catastrophic incident, the Committee also encourages the development of enhanced medical and critical care preparedness medical training programs focusing on public health curriculums and the epidemiology of public health diseases, mass casualty triage, advanced disaster life support, advanced hazardous material life support, emergency dental, and psychological health by increasing civilian-based advanced trauma expertise gained through day-to-day experiences and medical research programs.

Army Stationing Procedures.—The Committee is concerned with the lack of transparency in Army stationing decisions. Therefore, the Committee directs the Secretary of the Army to submit a report to the congressional defense committees not later than 90 days after enactment of this act, on the procedures for Army stationing related to changes in force structure. The report shall discuss how the Department of the Army is incorporating factors related to the quality of life for soldiers and families pursuant to guidance distributed by the Service Secretaries on February 23, 2018.

Report on Guard and Reserve Benefits and Compensation.—The Committee recognizes that additional active duty service requirements are being asked of currently serving members of the National Guard and Reserve in order to enhance the readiness of the force. The Committee directs the Secretary of Defense to submit a report to the congressional defense committees not later than 90 days after the enactment of this act that includes proposals for compensation, allowances, and benefits for members of the reserve

components who perform additional periods of active duty service for non-contingency operations that exceed the standard duty obligations required of service in a reserve component. These proposals should provide for compensation, allowances, and benefits commensurate with the additional duties assigned.

MILITARY PERSONNEL, ARMY

Appropriations, 2018	\$41,628,855,000
Budget estimate, 2019	43,670,542,000
Committee recommendation	43,060,042,000

The Committee recommends an appropriation of \$43,060,042,000. This is \$610,500,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	MILITARY PERSONNEL, ARMY			
	ACTIVITY 1: PAY AND ALLOWANCES OF OFFICERS			
5	BASIC PAY	7,224,373	7,224,373	.....
10	RETIRED PAY ACCRUAL	2,192,145	2,192,145	.....
11	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	132,476	132,476	.....
25	BASIC ALLOWANCE FOR HOUSING	2,165,218	2,165,218	.....
30	BASIC ALLOWANCE FOR SUBSISTENCE	287,464	287,464	.....
35	INCENTIVE PAYS	66,719	66,719	.....
40	SPECIAL PAYS	440,782	440,782	.....
45	ALLOWANCES	191,420	191,420	.....
50	SEPARATION PAY	99,315	99,315	.....
55	SOCIAL SECURITY TAX	550,784	550,784	.....
	TOTAL, BUDGET ACTIVITY 1	13,350,696	13,350,696	.....
	ACTIVITY 2: PAY AND ALLOWANCES OF ENLISTED PERSONNEL			
60	BASIC PAY	13,825,095	13,825,095	.....
65	RETIRED PAY ACCRUAL	4,197,573	4,197,573	.....
66	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	243,633	243,633	.....
80	BASIC ALLOWANCE FOR HOUSING	4,782,445	4,782,445	.....
85	INCENTIVE PAYS	92,004	92,004	.....
90	SPECIAL PAYS	1,195,271	1,195,271	.....
95	ALLOWANCES	763,048	763,048	.....
100	SEPARATION PAY	390,174	390,174	.....
105	SOCIAL SECURITY TAX	1,057,618	1,057,618	.....
	TOTAL, BUDGET ACTIVITY 2	26,546,861	26,546,861	.....
	ACTIVITY 3: PAY AND ALLOWANCES OF CADETS			
110	ACADEMY CADETS	86,510	86,510	.....
	ACTIVITY 4: SUBSISTENCE OF ENLISTED PERSONNEL			
115	BASIC ALLOWANCE FOR SUBSISTENCE	1,264,097	1,264,097	.....
120	SUBSISTENCE-IN-KIND	636,029	636,029	.....
121	FAMILY SUBSISTENCE SUPPLEMENTAL ALLOWANCE	83	83	.....
	TOTAL, BUDGET ACTIVITY 4	1,900,209	1,900,209	.....
	ACTIVITY 5: PERMANENT CHANGE OF STATION			
125	ACCESSION TRAVEL	173,692	173,692	.....
130	TRAINING TRAVEL	158,716	158,716	.....
135	OPERATIONAL TRAVEL	375,936	375,936	.....
140	ROTATIONAL TRAVEL	778,697	778,697	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
145	SEPARATION TRAVEL	251,324	251,324	.....
150	TRAVEL OF ORGANIZED UNITS	4,939	4,939	.....
155	NON-TEMPORARY STORAGE	3,517	3,517	.....
160	TEMPORARY LODGING EXPENSE	37,723	37,723	.....
	TOTAL, BUDGET ACTIVITY 5	1,784,544	1,784,544	.....
	ACTIVITY 6: OTHER MILITARY PERSONNEL COSTS			
170	APPREHENSION OF MILITARY DESERTERS	263	263	.....
175	INTEREST ON UNIFORMED SERVICES SAVINGS	849	849	.....
180	DEATH GRATUITIES	41,400	41,400	.....
185	UNEMPLOYMENT BENEFITS	109,662	109,662	.....
195	EDUCATION BENEFITS	980	980	.....
200	ADOPTION EXPENSES	533	533	.....
210	TRANSPORTATION SUBSIDY	10,041	10,041	.....
215	PARTIAL DISLOCATION ALLOWANCE	59	59	.....
217	RESERVE OFFICERS TRAINING CORPS (ROTC)	102,501	106,501	+ 4,000
218	JUNIOR ROTC	28,228	28,728	+ 500
	TOTAL, BUDGET ACTIVITY 6	294,516	299,016	+ 4,500
	LESS REIMBURSABLES	- 292,794	- 292,794	.....
	UNDISTRIBUTED ADJUSTMENT .....	.....	- 615,000	- 615,000
	TOTAL, ACTIVE FORCES, ARMY	43,670,542	43,060,042	- 610,500
	TOTAL, MILITARY PERSONNEL, ARMY	43,670,542	43,060,042	- 610,500

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
217	Reserve Officers Training Corps (ROTC)	102,501	106,501	+ 4,000
	Program increase: ROTC helicopter training program .....	.....	.....	+ 4,000
218	Junior ROTC	28,228	28,728	+ 500
	Program increase .....	.....	.....	+ 500
UNDIST	Improving funds management: Revised budget estimate .....	.....	- 575,000	- 575,000
UNDIST	Improving funds management: Rate adjustments .....	.....	- 40,000	- 40,000

MILITARY PERSONNEL, NAVY

Appropriations, 2018 \$28,772,118,000
 Budget estimate, 2019 30,426,211,000
 Committee recommendation 30,305,481,000

The Committee recommends an appropriation of \$30,305,481,000. This is \$120,730,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	MILITARY PERSONNEL, NAVY			
	ACTIVITY 1: PAY AND ALLOWANCES OF OFFICERS			
5	BASIC PAY	4,382,346	4,382,346	.....
10	RETIRED PAY ACCRUAL	1,331,184	1,331,184	.....
11	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	83,235	83,235	.....
25	BASIC ALLOWANCE FOR HOUSING	1,531,259	1,531,259	.....
30	BASIC ALLOWANCE FOR SUBSISTENCE	172,777	172,777	.....
35	INCENTIVE PAYS	159,053	159,053	.....
40	SPECIAL PAYS	460,487	460,487	.....
45	ALLOWANCES	120,780	120,780	.....
50	SEPARATION PAY	41,489	41,489	.....
55	SOCIAL SECURITY TAX	334,535	334,535	.....
	TOTAL, BUDGET ACTIVITY 1	8,617,145	8,617,145	.....
	ACTIVITY 2: PAY AND ALLOWANCES OF ENLISTED PERSONNEL			
60	BASIC PAY	9,647,068	9,647,068	.....
65	RETIRED PAY ACCRUAL	2,933,110	2,933,110	.....
66	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	182,026	182,026	.....
80	BASIC ALLOWANCE FOR HOUSING	4,480,750	4,480,750	.....
85	INCENTIVE PAYS	103,984	103,984	.....
90	SPECIAL PAYS	938,584	938,584	.....
95	ALLOWANCES	636,255	636,255	.....
100	SEPARATION PAY	117,648	117,648	.....
105	SOCIAL SECURITY TAX	738,001	738,001	.....
	TOTAL, BUDGET ACTIVITY 2	19,777,426	19,777,426	.....
	ACTIVITY 3: PAY AND ALLOWANCES OF MIDSHIPMEN			
110	MIDSHIPMEN	83,875	83,875	.....
	ACTIVITY 4: SUBSISTENCE OF ENLISTED PERSONNEL			
115	BASIC ALLOWANCE FOR SUBSISTENCE	821,434	821,434	.....
120	SUBSISTENCE-IN-KIND	418,478	418,478	.....
121	FAMILY SUBSISTENCE SUPPLEMENTAL ALLOWANCE	5	5	.....
	TOTAL, BUDGET ACTIVITY 4	1,239,917	1,239,917	.....
	ACTIVITY 5: PERMANENT CHANGE OF STATION			
125	ACCESSION TRAVEL	98,373	98,373	.....
130	TRAINING TRAVEL	89,865	89,865	.....
135	OPERATIONAL TRAVEL	227,416	227,416	.....
140	ROTATIONAL TRAVEL	356,813	356,813	.....
145	SEPARATION TRAVEL	109,210	109,210	.....
150	TRAVEL OF ORGANIZED UNITS	30,763	30,763	.....
155	NON-TEMPORARY STORAGE	13,156	13,156	.....
160	TEMPORARY LODGING EXPENSE	15,753	15,753	.....
	TOTAL, BUDGET ACTIVITY 5	941,349	941,349	.....
	ACTIVITY 6: OTHER MILITARY PERSONNEL COSTS			
170	APPREHENSION OF MILITARY DESERTERS	35	35	.....
175	INTEREST ON UNIFORMED SERVICES SAVINGS	1,220	1,220	.....
180	DEATH GRATUITIES	21,300	21,300	.....
185	UNEMPLOYMENT BENEFITS	58,148	58,148	.....
195	EDUCATION BENEFITS	12,065	12,065	.....
200	ADOPTION EXPENSES	173	173	.....
210	TRANSPORTATION SUBSIDY	4,162	4,162	.....
215	PARTIAL DISLOCATION ALLOWANCE	34	34	.....
217	RESERVE OFFICERS TRAINING CORPS (ROTC)	21,032	21,032	.....
218	JUNIOR ROTC	14,961	15,231	+ 270
	TOTAL, BUDGET ACTIVITY 6	133,130	133,400	+ 270
	LESS REIMBURSABLES	- 366,631	- 366,631	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	UNDISTRIBUTED ADJUSTMENT .....	.....	- 121,000	- 121,000
	TOTAL, ACTIVE FORCES, NAVY	30,426,211	30,305,481	- 120,730
	TOTAL, MILITARY PERSONNEL, NAVY	30,426,211	30,305,481	- 120,730

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
218	Junior ROTC	14,961	15,231	+ 270
	Program increase .....	.....	.....	+ 270
UNDIST	Improving funds management: Rate adjustments .....	.....	- 26,000	- 26,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	- 95,000	- 95,000

MILITARY PERSONNEL, MARINE CORPS

Appropriations, 2018	\$13,231,114,000
Budget estimate, 2019	13,890,968,000
Committee recommendation	13,799,038,000

The Committee recommends an appropriation of \$13,799,038,000. This is \$91,930,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	MILITARY PERSONNEL, MARINE CORPS			
	ACTIVITY 1: PAY AND ALLOWANCES OF OFFICERS			
5	BASIC PAY	1,641,181	1,641,181	.....
10	RETIRED PAY ACCRUAL	498,204	498,204	.....
11	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	31,369	31,369	.....
25	BASIC ALLOWANCE FOR HOUSING	546,247	546,247	.....
30	BASIC ALLOWANCE FOR SUBSISTENCE	67,428	67,428	.....
35	INCENTIVE PAYS	46,034	46,034	.....
40	SPECIAL PAYS	3,891	3,891	.....
45	ALLOWANCES	46,208	46,208	.....
50	SEPARATION PAY	17,019	17,019	.....
55	SOCIAL SECURITY TAX	125,091	125,091	.....
	TOTAL, BUDGET ACTIVITY 1	3,022,672	3,022,672	.....
	ACTIVITY 2: PAY AND ALLOWANCES OF ENLISTED PERSONNEL			
60	BASIC PAY	5,196,233	5,196,233	.....
65	RETIRED PAY ACCRUAL	1,574,705	1,574,705	.....
66	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	97,777	97,777	.....
80	BASIC ALLOWANCE FOR HOUSING	1,658,129	1,658,129	.....
85	INCENTIVE PAYS	9,137	9,137	.....
90	SPECIAL PAYS	198,171	198,171	.....
95	ALLOWANCES	304,996	304,996	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
100	SEPARATION PAY	97,425	97,425	.....
105	SOCIAL SECURITY TAX	396,969	396,969	.....
	TOTAL, BUDGET ACTIVITY 2	9,533,542	9,533,542	.....
	ACTIVITY 4: SUBSISTENCE OF ENLISTED PERSONNEL			
115	BASIC ALLOWANCE FOR SUBSISTENCE	444,111	444,111	.....
120	SUBSISTENCE-IN-KIND	410,720	410,720	.....
121	FAMILY SUBSISTENCE SUPPLEMENTAL ALLOWANCE	10	10	.....
	TOTAL, BUDGET ACTIVITY 4	854,841	854,841	.....
	ACTIVITY 5: PERMANENT CHANGE OF STATION			
125	ACCESSION TRAVEL	48,992	48,992	.....
130	TRAINING TRAVEL	16,506	16,506	.....
135	OPERATIONAL TRAVEL	166,904	166,904	.....
140	ROTATIONAL TRAVEL	110,869	110,869	.....
145	SEPARATION TRAVEL	87,538	87,538	.....
150	TRAVEL OF ORGANIZED UNITS	890	890	.....
155	NON-TEMPORARY STORAGE	8,730	8,730	.....
160	TEMPORARY LODGING EXPENSE	5,743	5,743	.....
165	OTHER	2,140	2,140	.....
	TOTAL, BUDGET ACTIVITY 5	448,312	448,312	.....
	ACTIVITY 6: OTHER MILITARY PERSONNEL COSTS			
170	APPREHENSION OF MILITARY DESERTERS	236	236	.....
175	INTEREST ON UNIFORMED SERVICES SAVINGS	19	19	.....
180	DEATH GRATUITIES	13,100	13,100	.....
185	UNEMPLOYMENT BENEFITS	37,114	37,114	.....
195	EDUCATION BENEFITS	4,661	4,661	.....
200	ADOPTION EXPENSES	86	86	.....
210	TRANSPORTATION SUBSIDY	1,448	1,448	.....
215	PARTIAL DISLOCATION ALLOWANCE	103	103	.....
218	JUNIOR ROTC	3,790	3,860	+ 70
	TOTAL, BUDGET ACTIVITY 6	60,557	60,627	+ 70
	LESS REIMBURSABLES	-28,956	-28,956	.....
	UNDISTRIBUTED ADJUSTMENT .....	.....	-92,000	-92,000
	TOTAL, ACTIVE FORCES, MARINE CORPS	13,890,968	13,799,038	-91,930
	TOTAL, MILITARY PERSONNEL, MARINE CORPS	13,890,968	13,799,038	-91,930

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
218	Junior ROTC	3,790	3,860	+ 70
	Program increase .....	.....	.....	+ 70
UNDIST	Improving funds management: Rate adjustments .....	.....	-17,000	-17,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	-75,000	-75,000

MILITARY PERSONNEL, AIR FORCE

Appropriations, 2018	\$28,790,440,000
Budget estimate, 2019	30,526,011,000
Committee recommendation	30,173,691,000

The Committee recommends an appropriation of \$30,173,691,000. This is \$352,320,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	MILITARY PERSONNEL, AIR FORCE			
	ACTIVITY 1: PAY AND ALLOWANCES OF OFFICERS			
5	BASIC PAY	5,208,253	5,208,253	.....
10	RETIRED PAY ACCRUAL	1,571,933	1,571,933	.....
11	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	97,630	97,630	.....
25	BASIC ALLOWANCE FOR HOUSING	1,573,578	1,573,578	.....
30	BASIC ALLOWANCE FOR SUBSISTENCE	202,971	202,971	.....
35	INCENTIVE PAYS	284,437	284,437	.....
40	SPECIAL PAYS	368,153	368,153	.....
45	ALLOWANCES	120,547	120,547	.....
50	SEPARATION PAY	46,101	46,101	.....
55	SOCIAL SECURITY TAX	397,802	397,802	.....
	TOTAL, BUDGET ACTIVITY 1	9,871,405	9,871,405	.....
	ACTIVITY 2: PAY AND ALLOWANCES OF ENLISTED PERSONNEL			
60	BASIC PAY	9,601,883	9,601,883	.....
65	RETIRED PAY ACCRUAL	2,909,736	2,909,736	.....
66	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	179,662	179,662	.....
80	BASIC ALLOWANCE FOR HOUSING	3,882,466	3,882,466	.....
85	INCENTIVE PAYS	71,294	71,294	.....
90	SPECIAL PAYS	492,365	492,365	.....
95	ALLOWANCES	559,102	559,102	.....
100	SEPARATION PAY	121,017	121,017	.....
105	SOCIAL SECURITY TAX	734,544	734,544	.....
	TOTAL, BUDGET ACTIVITY 2	18,552,069	18,552,069	.....
	ACTIVITY 3: PAY AND ALLOWANCES OF CADETS			
110	ACADEMY CADETS	79,454	79,454	.....
	ACTIVITY 4: SUBSISTENCE OF ENLISTED PERSONNEL			
115	BASIC ALLOWANCE FOR SUBSISTENCE	1,040,809	1,040,809	.....
120	SUBSISTENCE-IN-KIND	146,609	146,609	.....
121	FAMILY SUBSISTENCE SUPPLEMENTAL ALLOWANCE	6	6	.....
	TOTAL, BUDGET ACTIVITY 4	1,187,424	1,187,424	.....
	ACTIVITY 5: PERMANENT CHANGE OF STATION			
125	ACCESSION TRAVEL	102,161	102,161	.....
130	TRAINING TRAVEL	70,306	70,306	.....
135	OPERATIONAL TRAVEL	279,456	279,456	.....
140	ROTATIONAL TRAVEL	516,029	516,029	.....
145	SEPARATION TRAVEL	162,934	162,934	.....
150	TRAVEL OF ORGANIZED UNITS	9,752	9,752	.....
155	NON-TEMPORARY STORAGE	28,300	28,300	.....
160	TEMPORARY LODGING EXPENSE	34,442	34,442	.....
	TOTAL, BUDGET ACTIVITY 5	1,203,380	1,203,380	.....
	ACTIVITY 6: OTHER MILITARY PERSONNEL COSTS			
170	APPREHENSION OF MILITARY DESERTERS	18	18	.....
175	INTEREST ON UNIFORMED SERVICES SAVINGS	2,282	2,282	.....
180	DEATH GRATUITIES	15,000	15,000	.....
185	UNEMPLOYMENT BENEFITS	23,490	23,490	.....
195	EDUCATION BENEFITS	55	55	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
200	ADOPTION EXPENSES	462	462	.....
210	TRANSPORTATION SUBSIDY	3,061	3,061	.....
215	PARTIAL DISLOCATION ALLOWANCE	482	482	.....
217	RESERVE OFFICERS TRAINING CORPS (ROTC)	47,328	47,328	.....
218	JUNIOR ROTC	18,825	19,205	+ 380
	TOTAL, BUDGET ACTIVITY 6	111,003	111,383	+ 380
	LESS REIMBURSABLES	- 478,724	- 478,724	.....
	UNDISTRIBUTED ADJUSTMENT .....	.....	- 376,000	- 376,000
	TRANSFER FROM O&M. AF .....	.....	23,300	+ 23,300
	TOTAL, ACTIVE FORCES, AIR FORCE	30,526,011	30,173,691	- 352,320
	TOTAL, MILITARY PERSONNEL, AIR FORCE	30,526,011	30,173,691	- 352,320

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
218	Junior ROTC	18,825	19,205	+ 380
	Program increase .....	.....	.....	+ 380
UNDIST	Improving funds management: Rate adjustments .....	.....	- 26,000	- 26,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	- 350,000	- 350,000
UNDIST	Transfer: From Air Force—identified asset in Operation and Maintenance, Air Force SAG 11C to be used for fiscal year 2019 costs associated with the transition to the Operational Camouflage Pattern (OCP) uniform at the request of the Air Force .....	.....	23,300	+ 23,300

RESERVE PERSONNEL, ARMY

Appropriations, 2018	\$4,715,608,000
Budget estimate, 2019	4,955,947,000
Committee recommendation	4,870,947,000

The Committee recommends an appropriation of \$4,870,947,000. This is \$85,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	RESERVE PERSONNEL, ARMY			
	ACTIVITY 1: RESERVE COMPONENT TRAINING AND SUPPORT			
10	PAY GROUP A TRAINING (15 DAYS & DRILLS 24/48)	1,624,216	1,624,216	.....
20	PAY GROUP B TRAINING (BACKFILL FOR ACTIVE DUTY)	42,354	42,354	.....
30	PAY GROUP F TRAINING (RECRUITS)	227,561	227,561	.....
40	PAY GROUP P TRAINING (PIPELINE RECRUITS)	9,658	9,658	.....
60	MOBILIZATION TRAINING	1,121	1,121	.....
70	SCHOOL TRAINING	252,317	252,317	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
80	SPECIAL TRAINING	309,074	309,074	.....
90	ADMINISTRATION AND SUPPORT	2,309,323	2,309,323	.....
94	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	35,494	35,494	.....
100	EDUCATION BENEFITS	24,274	24,274	.....
120	HEALTH PROFESSION SCHOLARSHIP	64,225	64,225	.....
130	OTHER PROGRAMS (ADMIN & SUPPORT)	56,330	56,330	.....
	TOTAL, BUDGET ACTIVITY 1	4,955,947	4,955,947	.....
	UNDISTRIBUTED ADJUSTMENT .....	.....	-85,000	-85,000
	TOTAL RESERVE PERSONNEL, ARMY	4,955,947	4,870,947	-85,000

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
UNDIST	Improving funds management: Rate adjustments .....	.....	-3,000	-3,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	-82,000	-82,000

RESERVE PERSONNEL, NAVY

Appropriations, 2018	\$1,988,362,000
Budget estimate, 2019	2,067,521,000
Committee recommendation	2,059,521,000

The Committee recommends an appropriation of \$2,059,521,000. This is \$8,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	RESERVE PERSONNEL, NAVY			
	ACTIVITY 1: RESERVE COMPONENT TRAINING AND SUPPORT			
10	PAY GROUP A TRAINING (15 DAYS & DRILLS 24/48)	698,480	698,480	.....
20	PAY GROUP B TRAINING (BACKFILL FOR ACTIVE DUTY)	8,364	8,364	.....
30	PAY GROUP F TRAINING (RECRUITS)	62,628	62,628	.....
60	MOBILIZATION TRAINING	11,535	11,535	.....
70	SCHOOL TRAINING	55,012	55,012	.....
80	SPECIAL TRAINING	109,433	109,433	.....
90	ADMINISTRATION AND SUPPORT	1,052,934	1,052,934	.....
94	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	14,011	14,011	.....
100	EDUCATION BENEFITS	78	78	.....
120	HEALTH PROFESSION SCHOLARSHIP	55,046	55,046	.....
	TOTAL, BUDGET ACTIVITY 1	2,067,521	2,067,521	.....
	UNDISTRIBUTED ADJUSTMENT .....	.....	-8,000	-8,000
	TOTAL, RESERVE PERSONNEL, NAVY	2,067,521	2,059,521	-8,000

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
UNDIST	Improving funds management: Rate adjustments .....	.....	- 1,000	- 1,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	- 7,000	- 7,000

RESERVE PERSONNEL, MARINE CORPS

Appropriations, 2018	\$764,903,000
Budget estimate, 2019	788,090,000
Committee recommendation	787,090,000

The Committee recommends an appropriation of \$787,090,000. This is \$1,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	RESERVE PERSONNEL, MARINE CORPS			
	ACTIVITY 1: RESERVE COMPONENT TRAINING AND SUPPORT			
10	PAY GROUP A TRAINING (15 DAYS & DRILLS 24/48)	284,427	284,427	.....
20	PAY GROUP B TRAINING (BACKFILL FOR ACTIVE DUTY)	44,091	44,091	.....
30	PAY GROUP F TRAINING (RECRUITS)	124,573	124,573	.....
60	MOBILIZATION TRAINING	1,347	1,347	.....
70	SCHOOL TRAINING	26,089	26,089	.....
80	SPECIAL TRAINING	42,780	42,780	.....
90	ADMINISTRATION AND SUPPORT	244,504	244,504	.....
94	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	4,776	4,776	.....
95	PLATOON LEADER CLASS	9,364	9,364	.....
100	EDUCATION BENEFITS	6,139	6,139	.....
	TOTAL, BUDGET ACTIVITY 1	788,090	788,090	.....
	UNDISTRIBUTED ADJUSTMENT .....	.....	- 1,000	- 1,000
	TOTAL, RESERVE PERSONNEL, MARINE CORPS	788,090	787,090	- 1,000

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
UNDIST	Improving funds management: Rate adjustments .....	.....	- 1,000	- 1,000

RESERVE PERSONNEL, AIR FORCE

Appropriations, 2018	\$1,802,554,000
Budget estimate, 2019	1,894,286,000
Committee recommendation	1,871,286,000

The Committee recommends an appropriation of \$1,871,286,000. This is \$23,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
RESERVE PERSONNEL, AIR FORCE				
ACTIVITY 1: RESERVE COMPONENT TRAINING AND SUPPORT				
10	PAY GROUP A TRAINING (15 DAYS & DRILLS 24/48)	700,565	700,565	.....
20	PAY GROUP B TRAINING (BACKFILL FOR ACTIVE DUTY)	100,488	100,488	.....
30	PAY GROUP F TRAINING (RECRUITS)	53,181	53,181	.....
40	PAY GROUP P TRAINING (PIPELINE RECRUITS)	3,101	3,101	.....
60	MOBILIZATION TRAINING	725	725	.....
70	SCHOOL TRAINING	152,919	152,919	.....
80	SPECIAL TRAINING	279,605	279,605	.....
90	ADMINISTRATION AND SUPPORT	518,918	518,918	.....
94	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	9,755	9,755	.....
100	EDUCATION BENEFITS	14,553	14,553	.....
120	HEALTH PROFESSION SCHOLARSHIP	57,363	57,363	.....
130	OTHER PROGRAMS (ADMIN & SUPPORT)	3,113	3,113	.....
	TOTAL, BUDGET ACTIVITY 1	1,894,286	1,894,286	.....
	UNDISTRIBUTED ADJUSTMENT .....	.....	-23,000	-23,000
	TOTAL, RESERVE PERSONNEL, AIR FORCE	1,894,286	1,871,286	-23,000

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
UNDIST	Improving funds management: Rate adjustments .....	.....	-1,000	-1,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	-22,000	-22,000

NATIONAL GUARD PERSONNEL, ARMY

Appropriations, 2018	\$8,264,626,000
Budget estimate, 2019	8,744,345,000
Committee recommendation	8,650,645,000

The Committee recommends an appropriation of \$8,650,645,000. This is \$93,700,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	NATIONAL GUARD PERSONNEL, ARMY			
	ACTIVITY 1: RESERVE COMPONENT TRAINING AND SUPPORT			
10	PAY GROUP A TRAINING (15 DAYS & DRILLS 24/48)	2,805,051	2,805,051	.....
30	PAY GROUP F TRAINING (RECRUITS)	575,310	575,310	.....
40	PAY GROUP P TRAINING (PIPELINE RECRUITS)	43,618	43,618	.....
70	SCHOOL TRAINING	554,644	554,644	.....
80	SPECIAL TRAINING	695,097	698,697	+ 3,600
90	ADMINISTRATION AND SUPPORT	3,925,593	3,925,593	.....
94	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	55,530	55,530	.....
100	EDUCATION BENEFITS	89,502	89,502	.....
	TOTAL, BUDGET ACTIVITY 1	8,744,345	8,747,945	+ 3,600
	UNDISTRIBUTED ADJUSTMENT .....	.....	- 99,500	- 99,500
	TRAUMA TRAINING .....	.....	1,200	+ 1,200
	WILDFIRE TRAINING .....	.....	1,000	+ 1,000
	TOTAL, NATIONAL GUARD PERSONNEL, ARMY	8,744,345	8,650,645	- 93,700

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
080	Special Training	695,097	698,697	+ 3,600
	Program increase: State Partnership Program .....	.....	.....	+ 3,600
UNDIST	Improving funds management: Rate adjustments .....	.....	- 7,000	- 7,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	- 92,500	- 92,500
UNDIST	Program increase: Advanced trauma training program .....	.....	1,200	+ 1,200
UNDIST	Program increase: National Guard wildfire training .....	.....	1,000	+ 1,000

National Guard Cyber Protection Teams.—The Army National Guard currently has 11 Cyber Protection Teams [CPT] with a plan to reach Full Operational Capability by fiscal year 2022. The Committee recognizes the National Guard's unique authority to provide cyberspace operations support to State and local agencies for domestic operations, supports additional CPTs and encourages the Army to investigate the viability of a CPT in each State's Guard.

NATIONAL GUARD PERSONNEL, AIR FORCE

Appropriations, 2018	\$3,408,817,000
Budget estimate, 2019	3,725,380,000
Committee recommendation	3,718,780,000

The Committee recommends an appropriation of \$3,718,780,000. This is \$6,600,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	NATIONAL GUARD PERSONNEL, AIR FORCE			
	ACTIVITY 1: RESERVE COMPONENT TRAINING AND SUPPORT			
10	PAY GROUP A TRAINING (15 DAYS & DRILLS 24/48)	989,368	989,368	.....
30	PAY GROUP F TRAINING (RECRUITS)	85,771	85,771	.....
40	PAY GROUP P TRAINING (PIPELINE RECRUITS)	8,113	8,113	.....
70	SCHOOL TRAINING	334,293	334,293	.....
80	SPECIAL TRAINING	167,411	171,011	+ 3,600
90	ADMINISTRATION AND SUPPORT	2,099,045	2,099,045	.....
94	THRIFT SAVINGS PLAN MATCHING CONTRIBUTIONS	25,177	25,177	.....
100	EDUCATION BENEFITS	16,202	16,202	.....
	TOTAL, BUDGET ACTIVITY 1	3,725,380	3,728,980	+ 3,600
	UNDISTRIBUTED ADJUSTMENT .....	.....	- 12,000	- 12,000
	TRAUMA TRAINING .....	.....	1,800	+ 1,800
	TOTAL, NATIONAL GUARD PERSONNEL, AIR FORCE	3,725,380	3,718,780	- 6,600

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
080	Special Training	167,411	171,011	+ 3,600
	Program increase: State Partnership Program .....	.....	.....	+ 3,600
UNDIST	Improving funds management: Rate adjustments .....	.....	- 2,000	- 2,000
UNDIST	Improving funds management: Revised budget estimate .....	.....	- 10,000	- 10,000
UNDIST	Program increase: Advanced trauma training program .....	.....	1,800	+ 1,800

TITLE II
OPERATION AND MAINTENANCE

Funds appropriated under this title provide the resources required to prepare for and conduct combat operations and other peace time missions. These funds are used to purchase fuel and spare parts for training operations, pay supporting civilian personnel, and purchase supplies, equipment, and service contracts for the repair of weapons and facilities.

The President's fiscal year 2019 budget requests a total of \$199,469,636,000 for operation and maintenance appropriations.

SUMMARY OF COMMITTEE ACTION

The Committee recommends operation and maintenance appropriations totaling \$193,982,413,000 for fiscal year 2019. This is \$5,487,223,000 below the budget estimate.

Committee recommended operation and maintenance appropriations for fiscal year 2019 are summarized below:

SUMMARY OF OPERATION AND MAINTENANCE APPROPRIATIONS

[In thousands of dollars]

Account	2019 budget estimate	Committee recommendation	Change from budget estimate
Operation and Maintenance:			
Operation and Maintenance, Army	42,009,317	40,634,715	- 1,374,602
Operation and Maintenance, Navy	49,003,633	47,296,183	- 1,707,450
Operation and Maintenance, Marine Corps	6,832,510	6,372,000	- 460,510
Operation and Maintenance, Air Force	42,060,568	40,775,374	- 1,285,194
Operation and Maintenance, Defense-Wide	36,352,625	35,662,783	- 689,842
Operation and Maintenance, Army Reserve	2,916,909	2,854,909	- 62,000
Operation and Maintenance, Navy Reserve	1,027,006	1,018,006	- 9,000
Operation and Maintenance, Marine Corps Reserve	271,570	271,570	.....
Operation and Maintenance, Air Force Reserve	3,260,234	3,247,534	- 12,700
Operation and Maintenance, Army National Guard	7,399,295	7,261,295	- 138,000
Operation and Maintenance, Air National Guard	6,427,622	6,433,697	+ 6,075
United States Court of Appeals for the Armed Forces	14,662	14,662	.....
Environmental Restoration, Army	203,449	228,449	+ 25,000
Environmental Restoration, Navy	329,253	329,253	.....
Environmental Restoration, Air Force	296,808	365,808	+ 69,000
Environmental Restoration, Defense-Wide	8,926	8,926	.....
Environmental Restoration, Formerly Used Defense Sites	212,346	212,346	.....
Overseas Humanitarian, Disaster, and Civic Aid	107,663	107,663	.....
Cooperative Threat Reduction Account	335,240	335,240	.....
Department of Defense Acquisition Workforce Development Fund ..	400,000	552,000	+ 152,000
Total	199,469,636	193,982,413	- 5,487,223

REPROGRAMMING GUIDANCE FOR OPERATION AND MAINTENANCE
ACCOUNTS

The Committee directs the Secretary of Defense to submit the Base for Reprogramming (DD Form 1414) for each of the fiscal year 2019 appropriation accounts not later than 60 days after the enactment of this act. The Secretary of Defense is prohibited from executing any reprogramming or transfer of funds for any purpose other than originally appropriated until the aforementioned report is submitted to the House and Senate Appropriations Committees.

The Committee directs the Secretary of Defense to use the normal prior approval reprogramming procedures to transfer funds in the services' operation and maintenance accounts between O-1 budget activities, or between subactivity groups in the case of Operation and Maintenance, Defense-Wide, in excess of \$20,000,000.

The Committee maintains the reprogramming rules established in the Department of Defense Appropriations Act, 2018 (Public Law 115-141) for transferring funding out of readiness subactivity groups, which are defined as follows:

Army:

- Maneuver units
- Modular support brigades
- Land forces operations support
- Aviation assets
- Force readiness operations support
- Land forces depot maintenance
- Base operations support
- Facilities sustainment, restoration and modernization
- Specialized skill training

Navy:

- Mission and other flight operations
- Fleet air training
- Aircraft depot maintenance
- Mission and other ship operations
- Ship depot maintenance
- Facilities sustainment, restoration and modernization

Marine Corps:

- Operational forces
- Field logistics
- Depot maintenance
- Facilities sustainment, restoration and modernization

Air Force:

- Primary combat forces
- Combat enhancement forces
- Depot purchase equipment maintenance
- Facilities sustainment, restoration and modernization
- Contractor logistics support and system support
- Flying hour program

Air Force Reserve:

- Primary combat forces

Air National Guard:

- Aircraft operations

During fiscal year 2019, the Committee directs the Service Secretaries to submit written notification to the congressional defense

committees not later than 30 days prior to implementing transfers in excess of \$20,000,000 out of any readiness sub-activity if the funds will be transferred into another readiness sub-activity. However, if funding is transferred out of any readiness sub-activity into a non-readiness sub-activity, the Secretary of Defense is directed to use normal prior approval reprogramming procedures.

The Committee further directs the Service Secretaries to include an enclosure with each written notification that includes increases and decreases by sub-activity group, a detailed justification explaining why the sources of funding are available and why the increases are necessary, and an explanation of the impact on resources included in the fiscal year 2020 budget request for each increase and decrease. All transfers may be implemented 30 days after congressional notification unless an objection is received from one of the congressional defense committees.

Additionally, the Committee directs the Secretary of Defense to use normal prior approval reprogramming procedures when implementing transfers in excess of \$20,000,000 into the following budget sub-activities:

Operation and Maintenance, Army:

Recruiting and advertising

Operation and Maintenance, Army National Guard:

Other personnel support/recruiting and advertising

OPERATION AND MAINTENANCE BUDGET EXECUTION DATA

The Committee directs the Secretary of Defense to continue to provide the congressional defense committees with quarterly budget execution data. Such data should be provided not later than 45 days after the close of each quarter of the fiscal year, and should be provided for each O-1 budget activity, activity group, and sub-activity group for each of the active, defense-wide, reserve, and National Guard components. For each O-1 budget activity, activity group, and sub-activity group, these reports should include the budget request and actual obligation amount, the distribution of unallocated congressional adjustments to the budget request, all adjustments made by the Department in establishing the Base for Reprogramming (DD Form 1414) report, all adjustments resulting from below threshold reprogrammings, and all adjustments resulting from prior approval reprogramming requests.

OPERATION AND MAINTENANCE SPECIAL INTEREST ITEMS

Items for which additional funds have been provided or have been specifically reduced as shown in the project level tables or in paragraphs using the phrase "only for" or "only to" in the Committee report are congressional special interest items for the purpose of the Base for Reprogramming (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the stated amount as specifically addressed in the Committee report. Below Threshold Reprogrammings may not be used to either restore or reduce funding from congressional special interest items as identified on the DD Form 1414.

OPERATION AND MAINTENANCE OVERVIEW

Civilian Workforce.—The Committee expects the Department of Defense to maintain a stable, effective, right-sized civilian cadre. The Committee further expects the hiring process to be responsive and efficient in order to build the workforce needed to achieve its mission and strategic goals. The Committee recognizes the critical role that the civilian workforce plays every day in ensuring the mission success of the Armed Forces.

Contract Services Spending.—The Committee is concerned that the Department of Defense does not have adequate policies, procedures, and controls in place to enforce limitations on the annual amounts expended on contracted services. There is further concern that not all contracted services are being subjected to spending limitations because of the exclusion of contracted services involving Economy Act transfers between and within Department of Defense components. Additionally, because of the disparity between the levels of contracted services captured in the Inventory of Contracts for Services, required under section 2330a of title 10, United States Code, and what the Department budgets for contracted services, it appears as though the Department does not deliberately plan for most contracted services. The Committee urges the Under Secretary of Defense (Comptroller) to review the efforts of the financial management and acquisition communities to implement effective control mechanisms for contracted services spending.

Tobacco Use in the Military.—Tobacco use is the leading cause of preventable death in the United States, with more than 480,000 deaths attributable to cigarette smoking each year. The Department of Defense has affirmed the goal of a tobacco-free military, and has implemented a range of programs including public education campaigns, the banning of all tobacco use during basic training, and the prohibition of tobacco use by instructors in the presence of students. The Committee supports the Secretary of Defense's Policy Memorandum 16-001 from April 8, 2016, directing the military services "to ensure a comprehensive tobacco policy that assists with preventing initiation of tobacco use, helping those who want to quit using tobacco succeed, and decreasing exposure to second-hand smoke for all our people." As a result, the Committee retains a provision from the Department of Defense Appropriations Act, 2018 (Public Law 115-141) directing the elimination of the price subsidy provided to tobacco products at military exchanges.

Voluntary Military Education Programs—Enforcing Memorandum of Understanding.—The Committee supports the Department of Defense's commitment to enforcing the terms of the current Memorandum of Understanding [MOU] with all educational institutions providing educational programs through the Department of Defense tuition assistance program. The Committee is also supportive of the Department's efforts to increase participating institutions' understanding of their contractual obligations as MOU signatories and the procedures for enforcement as outlined in Department of Defense Instruction [DODI] 1322.25. The Committee urges the Department to maintain vigorous defense of these responsibilities in order to protect the integrity and quality of voluntary military education programs.

Demonstration Project for Contractors Employing Persons with Disabilities.—The Committee encourages the Secretary of Defense to pursue a demonstration project for contractors employing persons with disabilities. The demonstration project is modeled after the Small Business Administration's Set Aside program, but uniquely includes an incentive for Federal contracting entities to hire people with disabilities who currently receive Social Security benefits. Such a demonstration project provides opportunities for severely disabled individuals to become gainfully employed taxpayers.

Transfer of Veterans Memorial Objects to Foreign Governments.—The Committee directs that the use of any funds appropriated in this act to carry out authorities under section 2864 of the National Defense Authorization Act for Fiscal Year 2018 be subject to normal reprogramming procedures.

Reporting Requirement on Suppliers from Bangladesh.—The annual report directed by the Department of Defense Appropriations Act, 2015 regarding factories in Bangladesh that produce items sold in the commissary and exchange systems is no longer required after fiscal year 2018.

Drinking Water Contamination.—The Committee remains concerned about the health implications of contaminated drinking water due to perfluorinated chemicals [PFCs]. The Committee worked with the military services to assess unfunded executable requirements in fiscal year 2019 due to issues associated PFCs and provided additional funding accordingly. The Committee intends to aggressively follow up with the services on procedures for timely remediation and community notification.

Additionally, the Committee encourages the Secretary of Defense to evaluate the efficacy and cost-effectiveness of available remediation technologies for the removal of PFCs and other chemical contaminants from ground water and drinking water, to include granulated activated carbon systems which have already been installed at current and former Department of Defense installations.

Boards for Correction of Military Records.—The Air Force Review Board Agency, Army Review Boards Agency, and the Board of Naval Corrections play a decisive role ensuring that military personnel enjoy fair, just, and equitable decisions as it pertains to their service records and benefits. However, the Committee is concerned that the Boards have failed to modernize personnel, processes, and infrastructure at the pace required for demonstrated increases in the volume and complexity of its caseloads. As a result, the Boards are significantly under-resourced. The Committee also notes that none of the Boards have current, validated needs assessments for personnel, information technology, and operations, which are critical to the budget process. The Committee has not yet received the report directed by the Department of Defense Appropriations Act, 2018, and awaits receipt of the service Secretaries' plans to address these resourcing issues.

Excess Department of Defense Property.—The Department of Defense's 1033 program, which transfers surplus equipment to Federal, State, local, tribal and territorial law enforcement agencies, can provide substantial support for law enforcement activities. The Committee notes that current law requires consultation between

the Secretary of Defense and the Attorney General, the Director of National Drug Control Policy, and the Secretary of Homeland Security, as appropriate. The Committee urges the Secretary of Defense to maintain an ongoing working group of agency representatives from the Departments of Justice and Homeland Security, the Office of National Drug Control Policy, the General Services Administration, as well as public stakeholders, to provide effective consultation regarding the 1033 program, to discuss issues, concerns and opportunities regarding the 1033 program, and to ensure coordination with programs that provide similar equipment to law enforcement. The Committee directs the Director of the Defense Logistics Agency to improve public transparency and ensure that all program data is proactively published through the Law Enforcement Support Office [LESO] website. This should include historic data on both items requested and all transferred items. The Committee further directs the Director of the Defense Logistics Agency to notify Congress and the public, through the LESO website, before changes are made regarding the list of items allowed for transfer, including changes to those items considered controlled items.

Long-term Temporary Duty Allowance.—The Committee recognizes the importance of per diem allowances for travelers on long-term temporary duty assignments. The Committee affirms its support for Section 632 of S. 2987, the National Defense Authorization Act for Fiscal Year 2019, which prohibits the Department of Defense from reducing per diem rates based on the duration of a temporary duty assignment or civilian travel.

Operation and Maintenance Budget Justification.—The Committee commends the Department for the improvements in the Operation and Maintenance [O&M] budget materials made over the past several years. To further inform the congressional review, the Committee directs the following actions:

- The Air Force justification lacks sufficient performance criteria in a number of budget line items due to the recent consolidation of flying hour costs into a separate, single budget line item. The Air Force is directed to develop more meaningful performance metrics and criteria for the following budget line items to be included in the budget justification for fiscal year 2020: 11A Primary Combat Forces, 11C Combat Enhancement Forces, 11D Air Operations Training, 12A Global C3I and Early Warning, 12C Other Combat Operations Support Programs, 21A Airlift Operations, 32B Flight Training, and 42G Other Servicewide Activities.
- The Air Force, Air Force Reserve, and Air National Guard are directed to include average salary data in the Personnel Summary section of the OP-5 exhibits.

Arctic Broadband Infrastructure.—The Committee is concerned that broadband infrastructure in the Arctic, particularly in northern Alaska and the Aleutian Islands, is not capable of supporting current military operations. Therefore, the Committee directs the Secretary of Defense to conduct an evaluation of broadband infrastructure in the United States Arctic and provide a report to the congressional defense committees not later than 180 days after enactment of this act. The report shall list an inventory of all existing broadband and communications infrastructure in the Aleutian Is-

land chain and Alaska's northwest and northern slope communities, as well as present limitations and needs for the future.

OPERATION AND MAINTENANCE, ARMY

Appropriations, 2018 \$38,816,957,000
 Budget estimate, 2019 42,009,317,000
 Committee recommendation 40,634,715,000

The Committee recommends an appropriation of \$40,634,715,000. This is \$1,374,602,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, ARMY			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	LAND FORCES			
10	MANEUVER UNITS	2,076,360	1,761,360	- 315,000
20	MODULAR SUPPORT BRIGADES	107,946	107,946	.....
30	ECHELONS ABOVE BRIGADES	732,485	732,485	.....
40	THEATER LEVEL ASSETS	1,169,508	1,079,508	- 90,000
50	LAND FORCES OPERATIONS SUPPORT	1,180,460	1,180,460	.....
60	AVIATION ASSETS	1,467,500	1,417,500	- 50,000
	LAND FORCES READINESS			
70	FORCE READINESS OPERATIONS SUPPORT	4,285,211	3,895,211	- 390,000
80	LAND FORCES SYSTEMS READINESS	482,201	482,201	.....
90	LAND FORCES DEPOT MAINTENANCE	1,536,851	1,236,851	- 300,000
	LAND FORCES READINESS SUPPORT			
100	BASE OPERATIONS SUPPORT	8,274,299	8,242,299	- 32,000
110	FACILITIES SUSTAINMENT, RESTORATION, & MODERNIZATION	3,516,859	3,523,609	+ 6,750
120	MANAGEMENT AND OPERATIONAL HEADQUARTERS	438,733	438,733	.....
	COMBATANT COMMAND SUPPORT			
180	US AFRICA COMMAND	231,518	231,518	.....
190	US EUROPEAN COMMAND	150,268	141,268	- 9,000
200	US SOUTHERN COMMAND	195,964	213,964	+ 18,000
210	US FORCES KOREA	59,625	59,625	.....
	TOTAL, BUDGET ACTIVITY 1	25,905,788	24,744,538	- 1,161,250
	BUDGET ACTIVITY 2: MOBILIZATION			
	MOBILITY OPERATIONS			
220	STRATEGIC MOBILITY	370,941	354,941	- 16,000
230	ARMY PREPOSITIONED STOCKS	573,560	562,560	- 11,000
240	INDUSTRIAL PREPAREDNESS	7,678	7,678	.....
	TOTAL, BUDGET ACTIVITY 2	952,179	925,179	- 27,000
	BUDGET ACTIVITY 3: TRAINING AND RECRUITING			
	ACCESSION TRAINING			
250	OFFICER ACQUISITION	135,832	135,832	.....
260	RECRUIT TRAINING	54,819	54,819	.....
270	ONE STATION UNIT TRAINING	69,599	69,599	.....
280	SENIOR RESERVE OFFICERS TRAINING CORPS	518,998	518,998	.....
	BASIC SKILL AND ADVANCED TRAINING			
290	SPECIALIZED SKILL TRAINING	1,020,073	1,007,073	- 13,000
300	FLIGHT TRAINING	1,082,190	1,082,190	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
310	PROFESSIONAL DEVELOPMENT EDUCATION	220,399	220,399	.....
320	TRAINING SUPPORT	611,482	611,482	.....
	RECRUITING AND OTHER TRAINING AND EDUCATION			
330	RECRUITING AND ADVERTISING	698,962	648,962	- 50,000
340	EXAMINING	162,049	162,049	.....
350	OFF-DUTY AND VOLUNTARY EDUCATION	215,622	215,622	.....
360	CIVILIAN EDUCATION AND TRAINING	176,914	176,914	.....
370	JUNIOR RESERVE OFFICERS TRAINING CORPS	174,430	180,570	+ 6,140
	TOTAL, BUDGET ACTIVITY 3	5,141,369	5,084,509	- 56,860
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	LOGISTICS OPERATIONS			
390	SERVICEWIDE TRANSPORTATION	588,047	588,047	.....
400	CENTRAL SUPPLY ACTIVITIES	931,462	921,462	- 10,000
410	LOGISTICS SUPPORT ACTIVITIES	696,114	696,114	.....
420	AMMUNITION MANAGEMENT	461,637	461,637	.....
	SERVICEWIDE SUPPORT			
430	ADMINISTRATION	447,564	447,564	.....
440	SERVICEWIDE COMMUNICATIONS	2,069,127	2,069,127	.....
450	MANPOWER MANAGEMENT	261,021	261,021	.....
460	OTHER PERSONNEL SUPPORT	379,541	349,541	- 30,000
470	OTHER SERVICE SUPPORT	1,699,767	1,687,767	- 12,000
480	ARMY CLAIMS ACTIVITIES	192,686	192,686	.....
490	REAL ESTATE MANAGEMENT	240,917	240,917	.....
500	BASE OPERATIONS SUPPORT	291,569	291,569	.....
	SUPPORT OF OTHER NATIONS			
510	SUPPORT OF NATO OPERATIONS	442,656	442,656	.....
520	MISC. SUPPORT OF OTHER NATIONS	48,251	48,251	.....
	OTHER PROGRAMS			
	OTHER PROGRAMS	1,259,622	1,281,130	+ 21,508
	TOTAL, BUDGET ACTIVITY 4	10,009,981	9,979,489	- 30,492
	OVERESTIMATION OF CIVILIAN FTE TARGETS .....	.....	- 100,000	- 100,000
	PL115-68 IMPLEMENTATION .....	.....	1,000	+ 1,000
	TOTAL, OPERATION AND MAINTENANCE, ARMY	42,009,317	40,634,715	- 1,374,602

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
111	Maneuver Units	2,076,360	1,761,360	- 315,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 15,000
	Transfer: From Title II to Title IX for OCO Operations .....	.....	.....	- 300,000
114	Theater Level Assets	1,169,508	1,079,508	- 90,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 90,000
116	Aviation Assets	1,467,500	1,417,500	- 50,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 50,000
121	Force Readiness Operations Support	4,285,211	3,895,211	- 390,000
	Program increase: Advanced combat helmets .....	.....	.....	+ 10,000
	Transfer: From Title II to Title IX for OCO Operations .....	.....	.....	- 400,000
123	Land Forces Depot Maintenance	1,536,851	1,236,851	- 300,000
	Transfer: From Title II to Title IX for OCO Operations .....	.....	.....	- 300,000
131	Base Operations Support	8,274,299	8,242,299	- 32,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Improving funds management: Remove one-time fiscal year 2018 increase			- 50,000
	Program increase: PFOS/PFOA treatment, sampling, site investigations			+ 17,000
	Program increase: Prevention of child abuse and training on safe childcare practices			+ 1,000
132	Facilities Sustainment, Restoration & Modernization	3,516,859	3,523,609	+ 6,750
	Program increase: Advanced manufacturing			+ 4,250
	Program increase: Energy resilience			+ 2,500
142	US European Command	150,268	141,268	- 9,000
	Improving funds management: Remove one-time fiscal year 2018 increase			- 9,000
143	US Southern Command	195,964	213,964	+ 18,000
	Program increase: Multi-mission support vessel			+ 18,000
211	Strategic Mobility	370,941	354,941	- 16,000
	Maintain program affordability: Unjustified growth			- 16,000
212	Army Prepositioned Stocks	573,560	562,560	- 11,000
	Maintain program affordability: Unjustified growth			- 11,000
321	Specialized Skill Training	1,020,073	1,007,073	- 13,000
	Improving funds management: Program decrease unaccounted for			- 13,000
331	Recruiting and Advertising	698,962	648,962	- 50,000
	Maintain program affordability: Unjustified growth			- 50,000
335	Junior Reserve Officer Training Corps	174,430	180,570	+ 6,140
	Program increase			+ 6,140
411	Security Programs	1,259,622	1,281,130	+ 21,508
	Program increase: SOUTHCOM ISR requirements			+ 23,328
	Classified program adjustment			- 1,820
422	Central Supply Activities	931,462	921,462	- 10,000
	Maintain program affordability: Unjustified growth			- 10,000
434	Other Personnel Support	379,541	349,541	- 30,000
	Maintain program affordability: Unjustified growth			- 30,000
435	Other Service Support	1,699,767	1,687,767	- 12,000
	Improving funds management: Program decrease unaccounted for			- 12,000
UNDIST	Maintain program affordability: Overestimation of Civilian FTE		- 100,000	- 100,000
UNDIST	Program increase: Public Law115-68 implementation at Combatant Commands		1,000	+ 1,000

Army Sustainment, Restoration and Modernization and Facility Reduction Funding.—The Committee supports the robust funding level requested in fiscal year 2019 for facility sustainment, restoration and modernization. The Secretary of the Army is encouraged to use a portion of these funds on Army testing facilities and for the demolition of contaminated military facilities that are no longer in use.

Army Mountain Warfare Capabilities.—The Committee recognizes the contemporary national security relevance of military mountaineering training and supports bolstering existing frameworks to train personnel in this field. The Committee directs the Secretary of the Army to review the Army's current mountaineering capabilities, any gaps in personnel and resources for continuing and potential missions, and any limitations that may exist to increasing training capacity should it be required. The Secretary of the Army shall provide a report detailing the results of the review to the House and Senate Appropriations Committees not later than 90 days after the enactment of this act.

Mobile Small Arms Repair Team.—The Committee encourages the Secretary of the Army to conduct a pilot program to assess the feasibility and advisability of providing a mobile small arms repair team to be located near a United States Army Depot.

Logistics Automation Systems Sustainment.—The Committee encourages the Secretary of the Army to leverage Condition Based Maintenance technologies and concepts to maintain logistic and equipment publications. This includes utilizing industry available software that can be integrated for specific purposes in the capture of holistic data analytics provided by embedded sensors to update equipment and repair manuals in real time.

OPERATION AND MAINTENANCE, NAVY

Appropriations, 2018	\$45,384,353,000
Budget estimate, 2019	49,003,633,000
Committee recommendation	47,296,183,000

The Committee recommends an appropriation of \$47,296,183,000. This is \$1,707,450,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, NAVY			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	AIR OPERATIONS			
10	MISSION AND OTHER FLIGHT OPERATIONS	5,372,399	4,772,399	— 600,000
20	FLEET AIR TRAINING	2,023,351	2,023,351	.....
30	AVIATION TECHNICAL DATA AND ENGINEERING SERVICES	56,225	56,225	.....
40	AIR OPERATIONS AND SAFETY SUPPORT	156,081	156,081	.....
50	AIR SYSTEMS SUPPORT	682,379	670,379	— 12,000
60	AIRCRAFT DEPOT MAINTENANCE	1,253,756	1,253,756	.....
70	AIRCRAFT DEPOT OPERATIONS SUPPORT	66,649	66,649	.....
80	AVIATION LOGISTICS	939,368	939,368	.....
	SHIP OPERATIONS			
90	MISSION AND OTHER SHIP OPERATIONS	4,439,566	3,819,566	— 620,000
100	SHIP OPERATIONS SUPPORT AND TRAINING	997,663	997,663	.....
110	SHIP DEPOT MAINTENANCE	8,751,526	8,141,526	— 610,000
120	SHIP DEPOT OPERATIONS SUPPORT	2,168,876	2,168,876	.....
	COMBAT COMMUNICATIONS/SUPPORT			
130	COMBAT COMMUNICATIONS AND ELECTRONIC WARFARE	1,349,593	1,343,293	— 6,300
150	SPACE SYSTEMS AND SURVEILLANCE	215,255	215,255	.....
160	WARFARE TACTICS	632,446	617,446	— 15,000
170	OPERATIONAL METEOROLOGY AND OCEANOGRAPHY	373,046	373,046	.....
180	COMBAT SUPPORT FORCES	1,452,075	1,452,075	.....
190	EQUIPMENT MAINTENANCE AND DEPOT OPERATIONS SUPPORT ..	153,719	153,719	.....
210	COMBATANT COMMANDERS CORE OPERATIONS	63,039	63,039	.....
220	COMBATANT COMMANDERS DIRECT MISSION SUPPORT	89,339	89,339	.....
230	MILITARY INFORMATION SUPPORT OPERATIONS	8,475	8,475	.....
240	CYBERSPACE ACTIVITIES	424,088	424,088	.....
	WEAPONS SUPPORT			
260	FLEET BALLISTIC MISSILE	1,361,947	1,361,947	.....
280	WEAPONS MAINTENANCE	823,952	823,952	.....
290	OTHER WEAPON SYSTEMS SUPPORT	494,101	474,101	— 20,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BASE SUPPORT			
300	ENTERPRISE INFORMATION TECHNOLOGY	921,936	921,936	.....
310	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	2,040,389	2,390,389	+ 350,000
320	BASE OPERATING SUPPORT	4,414,753	4,418,253	+ 3,500
	TOTAL, BUDGET ACTIVITY 1	41,725,992	40,196,192	- 1,529,800
	BUDGET ACTIVITY 2: MOBILIZATION			
	READY RESERVE AND PREPOSITIONING FORCES			
330	SHIP PREPOSITIONING AND SURGE	549,142	549,142	.....
340	READY RESERVE FORCE	310,805	310,805	.....
	ACTIVATIONS/INACTIVATIONS			
360	SHIP ACTIVATIONS/INACTIVATIONS	161,150	161,150	.....
	MOBILIZATION PREPAREDNESS			
370	FLEET HOSPITAL PROGRAM	120,338	120,338	.....
390	COAST GUARD SUPPORT	24,097	24,097	.....
	TOTAL, BUDGET ACTIVITY 2	1,165,532	1,165,532	.....
	BUDGET ACTIVITY 3: TRAINING AND RECRUITING			
	ACCESSION TRAINING			
400	OFFICER ACQUISITION	145,481	145,481	.....
410	RECRUIT TRAINING	9,637	9,637	.....
420	RESERVE OFFICERS TRAINING CORPS	149,687	151,187	+ 1,500
	BASIC SKILLS AND ADVANCED TRAINING			
430	SPECIALIZED SKILL TRAINING	879,557	793,557	- 86,000
450	PROFESSIONAL DEVELOPMENT EDUCATION	184,436	184,436	.....
460	TRAINING SUPPORT	223,159	223,159	.....
	RECRUITING, AND OTHER TRAINING AND EDUCATION			
470	RECRUITING AND ADVERTISING	181,086	181,086	.....
480	OFF-DUTY AND VOLUNTARY EDUCATION	96,006	96,006	.....
490	CIVILIAN EDUCATION AND TRAINING	72,083	72,083	.....
500	JUNIOR ROTC	54,156	55,106	+ 950
	TOTAL, BUDGET ACTIVITY 3	1,995,288	1,911,738	- 83,550
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	SERVICEWIDE SUPPORT			
510	ADMINISTRATION	1,089,964	1,069,964	- 20,000
530	CIVILIAN MANPOWER AND PERSONNEL MANAGEMENT	164,074	164,074	.....
540	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	418,350	418,350	.....
	LOGISTICS OPERATIONS AND TECHNICAL SUPPORT			
580	SERVICEWIDE TRANSPORTATION	167,106	167,106	.....
600	PLANNING, ENGINEERING AND PROGRAM SUPPORT	333,556	336,556	+ 3,000
610	ACQUISITION, LOGISTICS AND OVERSIGHT	663,690	663,690	.....
	SECURITY PROGRAMS			
650	NAVAL INVESTIGATIVE SERVICE	705,087	705,087	.....
	OTHER PROGRAMS			
	OTHER PROGRAMS	574,994	570,494	- 4,500
	TOTAL, BUDGET ACTIVITY 4	4,116,821	4,095,321	- 21,500
	LONG TERM TEMP DUTY WAIVERS .....	.....	1,400	+ 1,400
	PRICING ADJUSTMENT .....	.....	- 75,000	- 75,000
	PL115-68 IMPLEMENTATION .....	.....	1,000	+ 1,000
	TOTAL, OPERATION AND MAINTENANCE, NAVY	49,003,633	47,296,183	- 1,707,450

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1A1A	Mission and Other Flight Operations	5,372,399	4,772,399	– 600,000
	Maintain program affordability: Projected underexecution			– 100,000
	Transfer: From Title II to Title IX for OCO Operations ..			– 500,000
1A4N	Air Systems Support	682,379	670,379	– 12,000
	Maintain program affordability: Unjustified growth			– 12,000
1B1B	Mission and Other Ship Operations	4,439,566	3,819,566	– 620,000
	Maintain program affordability: Unjustified growth			– 120,000
	Transfer: From Title II to Title IX for OCO Operations ..			– 500,000
1B4B	Ship Depot Maintenance	8,751,526	8,141,526	– 610,000
	Transfer: To Other Procurement, Navy for the USS BOISE, USS NEW YORK and USS GUNSTON HALL availabilities			– 610,000
1C1C	Combat Communications and Electronic Warfare	1,349,593	1,343,293	– 6,300
	Improving funds management: Remove one-time fiscal year 2018 increases			– 25,000
	Program increase: SOUTHCOM ISR requirements			+ 18,700
1C4C	Warfare Tactics	632,446	617,446	– 15,000
	Maintain program affordability: Unjustified growth			– 15,000
1D7D	Other Weapon Systems Support	494,101	474,101	– 20,000
	Classified program adjustment			– 20,000
BSM1	Sustainment, Restoration and Modernization	2,040,389	2,390,389	+ 350,000
	Program increase			+ 350,000
BSS1	Base Operating Support	4,414,753	4,418,253	+ 3,500
	Maintain program affordability: Unjustified growth			– 27,000
	Program increase: Aqueous foam disposal and replacement			+ 28,000
	Program increase: Amphibious readiness group planning and design			+ 1,500
	Program increase: Prevention of child abuse and training on safe childcare practices			+ 1,000
3A3J	Reserve Officers Training Corps	149,687	151,187	+ 1,500
	Program increase: Navy ROTC			+ 1,500
3B1K	Specialized Skill Training	879,557	793,557	– 86,000
	Maintain program affordability: Ready, Relevant Learning funding ahead of need			– 86,000
3C5L	Junior ROTC	54,156	55,106	+ 950
	Program increase			+ 950
4A1M	Administration	1,089,964	1,069,964	– 20,000
	Improving funds management: Program decrease unaccounted for			– 20,000
4B2N	Planning, Engineering and Program Support	333,556	336,556	+ 3,000
	Program increase: Alternative energy			+ 3,000
999	Classified Programs	574,994	570,494	– 4,500
	Classified program adjustment			– 4,500
UNDIST	Program increase: Public Law 115–68 implementation at Combatant Commands		1,000	+ 1,000
UNDIST	Program increase: Joint travel regulation–long term temporary duty waivers		1,400	+ 1,400
UNDIST	Improving funds management: Navy supply management pricing adjustment to reflect correct rates		– 75,000	– 75,000

Public Shipyard Availabilities.—The Committee urges the Navy to further workforce development at each of its public shipyards and continue to invest in its Shipyard Infrastructure Optimization Plan, which would address infrastructure requirements necessary to support maintenance availabilities and the workforce at the pub-

lic shipyards. Additionally, the Committee directs the Secretary of the Navy to notify the congressional defense committees not later than 90 days before diverting from a public shipyard any currently scheduled surface ship or submarine availability. The notification shall include a justification of why the availability cannot be supported in the public shipyard without affecting Navy readiness and an explanation of the measures the Navy has taken to mitigate any harm to the operations, workload, and workforce development of the public shipyard that may result from diverting the availability.

Chief of Naval Air Training.—The Committee understands the critical training requirement and pilot shortfall that the Department of Defense is experiencing and encourages the Secretary of the Navy to seek alternate airfields, to include in-land locations, to expand training opportunities.

Naval Shipyard Apprentice Program.—The Committee directs that during fiscal year 2019 the Navy shall induct classes of no fewer than 100 apprentices, respectively, at each of the naval shipyards. The Committee further directs the Navy to include the costs of the fiscal year 2020 class of apprentices in its budget request.

U.S. Coast Guard.—The Committee is aware that Department of Defense [DOD] regulations currently restrict DOD mission appropriated funded activities from offering reimbursable rates to non-DOD agencies. This restriction forces the Navy to charge the U.S. Coast Guard fully burdened rates for drydocking services at Navy shipyards rather than reimbursable rates. Therefore, the Committee directs that funds appropriated under Operation and Maintenance, Navy may be used to pay overhead costs incurred by a Naval Shipyard when drydocking U.S. Coast Guard ships.

Advanced Skills Management Legacy System Upgrades.—The Committee is concerned that the Navy is not giving full consideration to commercial-off-the-shelf software solutions. The Secretary of the Navy is encouraged to use the best value procurement methods when upgrading legacy software systems.

Civilian Hiring Delays at Public Shipyards.—The Committee is aware that the Office of Civilian Human Resources has encountered extensive delays in processing new applicants and potential hires for the Department of the Navy. The Committee urges the Secretary of the Navy to increase awareness of civilian hiring needs at public shipyards and assess current timelines for processing new applicants and hires in order to avoid an impact on shipyard operations that may result in delays in completing submarine maintenance availabilities.

Fuel Depot Monitoring Enhancements.—The Committee encourages the Secretary of the Navy to work with local and State governments and willing private landowners to enhance groundwater monitoring on non-Federal lands surrounding Navy fuel storage facilities and depots to improve public confidence in the Navy's stewardship of groundwater and other environmental resources. The Committee further urges the Secretary of the Navy to prioritize this enhanced groundwater monitoring at its oldest fuel storage facilities and depots that have a documented history of fuel leaks.

National Oceanic and Atmospheric Administration Marine Operation Facilities.—The Consolidated Appropriations Act, 2018 (Public Law 115–141) directed the Secretary of the Navy to work with

the National Oceanic and Atmospheric Administration [NOAA] in order for NOAA to provide a report to the Commerce, Justice, Science Appropriations Subcommittee outlining the cost, scope, and timeline for constructing and outfitting new berthing facilities in Newport, Rhode Island by May 23, 2018. The language further directed NOAA to outline its partnership with the United States Navy and the United States Coast Guard on the associated shared responsibilities for constructing and using this facility. The Committee notes that this reporting requirement is overdue and expects its prompt delivery. In the meantime, the Committee encourages the Secretary of the Navy to consider funding planning and design activities for the pier at Naval Station Newport in fiscal year 2019 from within the Sustainment, Restoration and Modernization budget line item.

OPERATION AND MAINTENANCE, MARINE CORPS

Appropriations, 2018	\$6,605,546,000
Budget estimate, 2019	6,832,510,000
Committee recommendation	6,372,000,000

The Committee recommends an appropriation of \$6,372,000,000. This is \$460,510,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, MARINE CORPS			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	EXPEDITIONARY FORCES			
10	OPERATIONAL FORCES	873,320	637,320	- 236,000
20	FIELD LOGISTICS	1,094,187	1,094,187	.....
30	DEPOT MAINTENANCE	314,182	314,182	.....
	USMC PREPOSITIONING			
40	MARITIME PREPOSITIONING	98,136	98,136	.....
	COMBAT OPERATIONS/SUPPORT			
50	CYBERSPACE ACTIVITIES	183,546	183,546	.....
	BASE SUPPORT			
60	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	832,636	832,636	.....
70	BASE OPERATING SUPPORT	2,151,390	1,963,490	- 187,900
	TOTAL, BUDGET ACTIVITY 1	5,547,397	5,123,497	- 423,900
	BUDGET ACTIVITY 3: TRAINING AND RECRUITING			
	ACCESSION TRAINING			
80	RECRUIT TRAINING	16,453	16,453	.....
90	OFFICER ACQUISITION	1,144	1,144	.....
	BASIC SKILLS AND ADVANCED TRAINING			
100	SPECIALIZED SKILLS TRAINING	106,360	106,360	.....
110	PROFESSIONAL DEVELOPMENT EDUCATION	46,096	46,096	.....
120	TRAINING SUPPORT	389,751	389,751	.....
	RECRUITING AND OTHER TRAINING EDUCATION			
130	RECRUITING AND ADVERTISING	201,662	201,662	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
140	OFF-DUTY AND VOLUNTARY EDUCATION	32,461	32,461	.....
150	JUNIOR ROTC	24,217	24,607	+ 390
	TOTAL, BUDGET ACTIVITY 3	818,144	818,534	+ 390
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	SERVICEWIDE SUPPORT			
160	SERVICEWIDE TRANSPORTATION	29,735	29,735	.....
170	ADMINISTRATION	386,375	366,375	- 20,000
	SECURITY PROGRAMS			
	SECURITY PROGRAMS	50,859	50,859	.....
	TOTAL, BUDGET ACTIVITY 4	466,969	446,969	- 20,000
	OVERESTIMATION OF CIVILIAN FTE TARGETS		- 17,000	- 17,000
	TOTAL, OPERATION AND MAINTENANCE, MARINE CORPS	6,832,510	6,372,000	- 460,510

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1A1A	Operational Forces	873,320	637,320	- 236,000
	Improving funds management: Remove one-time fiscal year 2018 increase			- 25,000
	Maintain program affordability: Unjustified growth			- 16,000
	Program increase: Marine hearing enhancement and protection			+ 5,000
	Transfer: From Title II to Title IX for OCO Operations			- 200,000
BSS1	Base Operating Support	2,151,390	1,963,490	- 187,900
	Improving funds management: Program decrease unaccounted for			- 35,000
	Program increase: Prevention of child abuse and training on safe childcare practices			+ 1,000
	Transfer: From Title II to Title IX for OCO Operations			- 153,900
3C3F	Junior ROTC	24,217	24,607	+ 390
	Program increase			+ 390
4A4G	Administration	386,375	366,375	- 20,000
	Maintain program affordability: Unjustified growth			- 20,000
UNDIST	Improving funds management: Overestimation of civilian FTE		- 17,000	- 17,000

Marine Corps Civilian Personnel.—The Committee is aware that the Marine Corps operates under a Manage to Payroll concept that focuses on a funding level for civilian labor and adjusts the Full Time Equivalent [FTE] level to reflect the estimated number of workyears that funding level will afford. This is unlike the other military services where the civilian personnel funding estimates are built on the workload requirements. To better understand this concept, the Committee directs the Government Accountability Office to provide the congressional defense committees a report not later than 90 days after enactment of this act on the details of how the Marine Corps develops its civilian labor requirements (both FTEs and funding). The report should examine the benefits and shortfalls of this concept and make recommendations to either continue or change this approach.

OPERATION AND MAINTENANCE, AIR FORCE

Appropriations, 2018 \$39,544,193,000
 Budget estimate, 2019 42,060,568,000
 Committee recommendation 40,775,374,000

The Committee recommends an appropriation of \$40,775,374,000.
 This is \$1,285,194,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, AIR FORCE			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	AIR OPERATIONS			
10	PRIMARY COMBAT FORCES	758,178	758,178	.....
20	COMBAT ENHANCEMENT FORCES	1,509,027	1,227,027	- 282,000
30	AIR OPERATIONS TRAINING	1,323,330	1,280,730	- 42,600
40	DEPOT PURCHASE EQUIPMENT MAINTENANCE	3,511,830	2,994,830	- 517,000
50	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	2,892,705	2,917,705	+ 25,000
60	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	7,613,084	7,848,084	+ 235,000
70	FLYING HOUR PROGRAM	4,345,208	3,685,208	- 660,000
80	BASE OPERATING SUPPORT	5,989,215	6,016,115	+ 26,900
	COMBAT RELATED OPERATIONS			
90	GLOBAL C3I AND EARLY WARNING	928,023	928,023	.....
100	OTHER COMBAT OPERATIONS SUPPORT PROGRAMS	1,080,956	1,080,956	.....
110	CYBERSPACE ACTIVITIES	879,032	813,032	- 66,000
	SPACE OPERATIONS			
130	LAUNCH FACILITIES	183,777	183,777	.....
140	SPACE CONTROL SYSTEMS	404,072	404,072	.....
	COCOM			
170	US NORTHCOM/NORAD	187,375	187,375	.....
180	US STRATCOM	529,902	529,902	.....
190	US CYBERCOM	329,474	329,474	.....
200	US CENTCOM	166,024	166,024	.....
210	US SOCOM	723	723	.....
220	US TRANSCOM	535	535	.....
	OPERATING FORCES CLASSIFIED PROGRAMS			
		1,164,810	1,158,410	- 6,400
	TOTAL, BUDGET ACTIVITY 1	33,797,280	32,510,180	- 1,287,100
	BUDGET ACTIVITY 2: MOBILIZATION			
	MOBILITY OPERATIONS			
230	AIRLIFT OPERATIONS	1,307,695	1,157,695	- 150,000
240	MOBILIZATION PREPAREDNESS	144,417	144,417	.....
	TOTAL, BUDGET ACTIVITY 2	1,452,112	1,302,112	- 150,000
	BUDGET ACTIVITY 3: TRAINING AND RECRUITING			
	ACCESSION TRAINING			
280	OFFICER ACQUISITION	133,187	133,187	.....
290	RECRUIT TRAINING	25,041	25,041	.....
300	RESERVE OFFICER TRAINING CORPS (ROTC)	117,338	117,338	.....
	BASIC SKILLS AND ADVANCED TRAINING			
330	SPECIALIZED SKILL TRAINING	401,996	401,996	.....
340	FLIGHT TRAINING	477,064	477,064	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
350	PROFESSIONAL DEVELOPMENT EDUCATION	276,423	276,423	.....
360	TRAINING SUPPORT	95,948	95,948	.....
	RECRUITING, AND OTHER TRAINING AND EDUCATION			
380	RECRUITING AND ADVERTISING	154,530	154,530	.....
390	EXAMINING	4,132	4,132	.....
400	OFF DUTY AND VOLUNTARY EDUCATION	223,150	223,150	.....
410	CIVILIAN EDUCATION AND TRAINING	209,497	209,497	.....
420	JUNIOR ROTC	59,908	60,908	+ 1,000
	TOTAL, BUDGET ACTIVITY 3	2,178,214	2,179,214	+ 1,000
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	LOGISTICS OPERATIONS			
430	LOGISTICS OPERATIONS	681,788	681,788	.....
440	TECHNICAL SUPPORT ACTIVITIES	117,812	117,812	.....
	SERVICEWIDE ACTIVITIES			
480	ADMINISTRATION	953,102	933,102	- 20,000
490	SERVICEWIDE COMMUNICATIONS	358,389	424,389	+ 66,000
500	OTHER SERVICEWIDE ACTIVITIES	1,194,862	1,195,862	+ 1,000
510	CIVIL AIR PATROL CORPORATION	29,594	33,600	+ 4,006
	SUPPORT TO OTHER NATIONS			
530	INTERNATIONAL SUPPORT	74,959	74,959	.....
	SECURITY PROGRAMS			
	SECURITY PROGRAMS	1,222,456	1,178,956	- 43,500
	TOTAL, BUDGET ACTIVITY 4	4,632,962	4,640,468	+ 7,506
	PL115-68 IMPLEMENTATION .....	.....	1,000	+ 1,000
	7DAB FOR INDOPACOM .....	.....	142,400	+ 142,400
	TOTAL, OPERATION AND MAINTENANCE, AIR FORCE	42,060,568	40,775,374	- 1,285,194

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
011C	Combat Enhancement Forces	1,509,027	1,227,027	- 282,000
	Reduce duplication: Air Force-identified asset in title II for Battlefield Airborne Communications Node (BACN) due to adequate title IX funding. Partial transfer of this asset to O&M AF SAG 11Z and Military Personnel, Air Force for transition to the Operational Camouflage Pattern (OCP) uniform at the request of the Air Force .....	.....	.....	- 282,000
011D	Air Operations Training (OJT, Maintain Skills)	1,323,330	1,280,730	- 42,600
	Maintain program affordability: Unjustified growth .....	.....	.....	- 60,000
	Program increase: Training range upgrades to support F-35A beddown .....	.....	.....	+ 17,400
011M	Depot Purchase Equipment Maintenance	3,511,830	2,994,830	- 517,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 17,000
	Transfer: From Title II to Title IX for OCO Operations .....	.....	.....	- 500,000
011R	Facilities Sustainment, Restoration & Modernization	2,892,705	2,917,705	+ 25,000
	Program increase: Additional demo .....	.....	.....	+ 25,000
011W	Contractor Logistics Support and System Support	7,613,084	7,848,084	+ 235,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 90,000
	Program increase .....	.....	.....	+ 300,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: F-35 sustainment to accelerate depot component repair capability			+ 25,000
011Y	Flying Hour Program	4,345,208	3,685,208	- 660,000
	Maintain program affordability: Unjustified growth			- 160,000
	Transfer: From Title II to Title IX for OCO Operations ..			- 500,000
011Z	Base Support	5,989,215	6,016,115	+ 26,900
	Maintain program affordability: Unjustified growth			- 14,000
	Transfer: From Air Force-identified asset in SAG 11C to be used for fiscal year 2019 costs associated with the transition to the Operational Camouflage Pattern (OCP) uniform at the request of the Air Force			+ 35,900
	Program increase: Civil engineers equipment			+ 5,000
012D	Cyberspace Activities	879,032	813,032	- 66,000
	Transfer: Air Force-requested transfer to SAG 42B for Cloud Migration costs			- 66,000
999	Classified Programs	1,164,810	1,158,410	- 6,400
	Classified program adjustment			- 6,400
021A	Airlift Operations	1,307,695	1,157,695	- 150,000
	Maintain program affordability: Unjustified growth			- 150,000
033E	Junior ROTC	59,908	60,908	+ 1,000
	Program increase			+ 1,000
042A	Administration	953,102	933,102	- 20,000
	Maintain program affordability: Unjustified growth			- 20,000
042B	Service-wide Communications	358,389	424,389	+ 66,000
	Transfer: Air Force-requested transfer from SAG 12D for Cloud Migration costs			+ 66,000
042G	Other Service-wide Activities	1,194,862	1,195,862	+ 1,000
	Program increase: Prevention of child abuse and training on safe childcare practices			+ 1,000
042I	Civil Air Patrol	29,594	33,600	+ 4,006
	Program increase			+ 4,006
999	Classified Programs	1,222,456	1,178,956	- 43,500
	Classified program adjustment			- 3,500
	Maintain program affordability: Unjustified growth for security clearance investigations			- 40,000
UNDIST	Program increase: Public Law 115-68 implementation at Combatant Commands		1,000	+ 1,000
UNDIST	Program increase: Procurement of 7 DABS for INDOFACOM		142,400	+ 142,400

Properly Budgeting for Full Requirements.—During the review of the fiscal year 2018 President’s budget request, the Air Force revealed to the Committee that it starts each fiscal year with nearly \$1,000,000,000 in programmatic shortfalls in its operation and maintenance account for must-pay mission bills. The increases in readiness funding provided by the Bipartisan Budget Act of 2018 have allowed the Air Force to close that gap; however, the Committee continues to discover examples of the Air Force not programming or budgeting for the full amount of known requirements. This is not only evident in the larger programs such as Operational Support Airlift or Base Operations Support, but also very specific smaller programs such as the operational funding for the C-130H Weapons Instructor Course and the Advanced Airlift Tactics Training Center hosted by the 139th Airlift Wing with the Missouri Air National Guard. The Committee understands that the 139th Airlift Wing requirements have historically been sourced exclusively during the year of execution at the expense of other funded programs. Failure to properly budget resources for known requirements places unnecessary burdens on smaller programs, increases the prob-

ability of reprogramming requests, and often leads to an application of a tax against mission accounts to cover under-programmed requirements. The Committee recognizes the efforts made to improve the operation and maintenance budget formulation process to match historical execution and directs the Secretary of the Air Force to continue to emphasize properly programming resources in order to fully fund known requirements for the active, guard and reserve components.

Air Force Associate Units.—The Committee recognizes the importance of Total Force Integration within the Air Force and certain Air National Guard units who have a critical role in construction and engineering. This integration ensures cross-component interoperability to fill current and future mission requirements. The Committee encourages the Air Force to continue placing an increased focus on actively managing associate units between the Air National Guard and the active duty component and to establish robust memorandum of agreements to ensure units are not left without equipment when the active component deploys.

OPERATION AND MAINTENANCE, DEFENSE-WIDE

Appropriations, 2018	\$34,059,257,000
Budget estimate, 2019	36,352,625,000
Committee recommendation	35,662,783,000

The Committee recommends an appropriation of \$35,662,783,000. This is \$689,842,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, DEFENSE-WIDE			
	BUDGET ACTIVITY 1: OPERATING FORCES			
10	JOINT CHIEFS OF STAFF	430,215	430,995	+ 780
20	OFFICE OF THE SECRETARY OF DEFENSE	602,186	602,186	.....
40	SPECIAL OPERATIONS COMMAND	5,389,250	5,308,115	− 81,135
	TOTAL, BUDGET ACTIVITY 1	6,421,651	6,341,296	− 80,355
	BUDGET ACTIVITY 3: TRAINING AND RECRUITING			
50	DEFENSE ACQUISITION UNIVERSITY	181,601	181,601	.....
60	JOINT CHIEFS OF STAFF RECRUITING, AND OTHER TRAINING AND EDUCATION	96,565	96,565	.....
70	SPECIAL OPERATIONS COMMAND	370,583	370,583	.....
	TOTAL, BUDGET ACTIVITY 3	648,749	648,749	.....
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
80	CIVIL MILITARY PROGRAMS	166,131	204,131	+ 38,000
100	DEFENSE CONTRACT AUDIT AGENCY	625,633	625,633	.....
110	DEFENSE CONTRACT MANAGEMENT AGENCY	1,465,354	1,465,354	.....
120	DEFENSE HUMAN RESOURCES ACTIVITY	859,923	910,923	+ 51,000
130	DEFENSE INFORMATION SYSTEMS AGENCY	2,106,930	2,046,930	− 60,000
150	DEFENSE LEGAL SERVICES AGENCY	27,403	27,403	.....
160	DEFENSE LOGISTICS AGENCY	379,275	397,775	+ 18,500
170	DEFENSE MEDIA ACTIVITY	207,537	217,537	+ 10,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
180	DEFENSE PERSONNEL ACCOUNTING AGENCY	130,696	130,696	.....
190	DEFENSE SECURITY COOPERATION AGENCY	754,711	686,744	- 67,967
200	DEFENSE SECURITY SERVICE	789,175	772,816	- 16,359
220	DEFENSE TECHNOLOGY SECURITY AGENCY	34,951	34,951	.....
230	DEFENSE THREAT REDUCTION AGENCY	553,329	545,840	- 7,489
250	DEPARTMENT OF DEFENSE EDUCATION ACTIVITY	2,892,284	2,855,239	- 37,045
260	MISSILE DEFENSE AGENCY	499,817	499,817	.....
280	OFFICE OF ECONOMIC ADJUSTMENT	70,035	70,035	.....
290	OFFICE OF THE SECRETARY OF DEFENSE	1,519,655	1,547,883	+ 28,228
300	SPECIAL OPERATIONS COMMAND	97,787	99,787	+ 2,000
310	WASHINGTON HEADQUARTERS SERVICES	456,407	454,727	- 1,680
	OTHER PROGRAMS	15,645,192	15,104,857	- 540,335
	TOTAL, BUDGET ACTIVITY 4	29,282,225	28,699,078	- 583,147
	IMPACT AID		40,000	+ 40,000
	IMPACT AID FOR CHILDREN WITH DISABILITIES		10,000	+ 10,000
	HISTORICAL UNDEREXECUTION		- 93,340	- 93,340
	SEXUAL TRAUMA TREATMENT PILOT PROGRAM		2,000	+ 2,000
	VIETNAM DIOXIN REMEDIATION		15,000	+ 15,000
	TOTAL, OPERATION AND MAINTENANCE, DEFENSE-WIDE	36,352,625	35,662,783	- 689,842

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Joint Chiefs of Staff	430,215	430,995	+ 780
	Program increase: Operational logistics exercise elements			+ 2,500
	Improving Funds Management: Civilian FTE pricing			- 1,720
	Special Operations Command/Operating Forces	5,389,250	5,308,115	- 81,135
	Maintain Program Affordability: Base support			- 8,400
	Improving Funds Management: Civilian FTE pricing			- 14,785
	Maintain Program Affordability: Unjustified growth for contract services			- 11,800
	Maintain Program Affordability: Unjustified growth for TACLAN			- 18,150
	Maintain Program Affordability: Unjustified growth for maintenance			- 20,000
	Maintain Program Affordability: Unjustified growth for GM/CM			- 8,000
	Civil Military Programs	166,131	204,131	+ 38,000
	Program increase: Innovative readiness training			+ 10,000
	Program increase: National Guard Youth Challenge			+ 13,000
	Program increase: STARBASE			+ 15,000
	Defense Human Resources Activity	859,923	910,923	+ 51,000
	Program increase: Beyond the Yellow Ribbon			+ 20,000
	Program increase: Defense critical language and culture program			+ 6,000
	Program increase: Special Victims' Counsel			+ 25,000
	Defense Information Systems Agency	2,106,930	2,046,930	- 60,000
	Maintain Program Affordability: Unjustified growth for NBIS			- 60,000
	Defense Logistics Agency	379,275	397,775	+ 18,500
	Program increase: AM-2 airfield landing matting			+ 10,000
	Program increase: Procurement technical assistance program			+ 8,500

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Defense Media Activity	207,537	217,537	+ 10,000
	Program increase: IP streaming			+ 10,000
	Defense Security Cooperation Agency	754,711	686,744	- 67,967
	Maintain Program Affordability: Maintain level of effort—Regional Centers			- 3,000
	Maintain Program Affordability: Maintain level of effort—Wales Initiative			- 4,000
	Maintain Program Affordability: FTE overestimation—DSCA Headquarters			- 4,225
	Maintain Program Affordability: Maintain level of effort—Defense Institution Reform Building			- 5,000
	Maintain Program Affordability: Maintain level of effort—Security Cooperation			- 38,000
	Maintain Program Affordability: Maintain level of effort—South East Asia Maritime Security Initiative			- 13,742
	Defense Security Service	789,175	772,816	- 16,359
	Improving Funds Management: Civilian FTE pricing			- 5,202
	Maintain Program Affordability: Unjustified growth in travel			- 1,157
	Maintain Program Affordability: Unjustified growth for PSSD			- 10,000
	Defense Threat Reduction Agency	553,329	545,840	- 7,489
	Improving Funds Management: Remove one-time costs			- 3,878
	Maintain Program Affordability: JIDO mission enablers unjustified growth			- 3,611
	Department of Defense Education Activity	2,892,284	2,855,239	- 37,045
	Maintain Program Affordability: Unjustified growth for contract services			- 17,000
	Improving Funds Management: Civilian FTE pricing			- 12,300
	Improving Funds Management: Pricing adjustment			- 7,745
	Office of the Secretary of Defense	1,519,655	1,547,883	+ 28,228
	Program increase: Artificial Intelligence			+ 6,000
	Program increase: CDC water contamination study and assessment			+ 10,000
	Program increase: Clearinghouse			+ 1,000
	Program increase: Defense Environmental International Cooperations			+ 1,000
	Program increase: Defense Fellows Program			+ 10,000
	Program increase: DOD emerging contaminants			+ 1,000
	Program increase: DOD environmental resiliency			+ 1,000
	Program increase: Readiness and environmental protection initiative			+ 10,000
	Maintain Program Affordability: Unjustified growth for civilian personnel			- 3,672
	Maintain Program Affordability: Unjustified growth for contract services			- 8,100
	Special Operations Command/Admin & Svc-wide Activities ..	97,787	99,787	+ 2,000
	Program increase: Defense critical language and culture program			+ 2,000
	Washington Headquarters Services	456,407	454,727	- 1,680
	Improving Funds Management: Other Ops—Civilian FTE Pricing			- 1,680
	Classified Programs	15,645,192	15,104,857	- 540,335
	Classified adjustment			- 540,335
UNDIST	Program increase: Impact aid for children with disabilities ..		10,000	+ 10,000
UNDIST	Program increase: Impact aid for schools with military dependent students		40,000	+ 40,000
UNDIST	Program increase: Sexual trauma treatment pilot program ...		2,000	+ 2,000
UNDIST	Program increase: Vietnam dioxin remediation		15,000	+ 15,000
UNDIST	Improving Funds Management: Historical Underexecution		- 93,340	- 93,340

Special Victims' Counsel Program.—The Committee remains concerned with the level of sexual assault in the military and supports

the Department’s continuing efforts to strengthen its sexual assault prevention and response program. The needs of victims of sexual assault for legal advice and guidance are particularly acute. To ensure that the Department continues to make progress protecting a victim’s confidentiality and ending alienation during the investigation and prosecution of their case, the Committee recommends \$25,000,000 for implementation of the Special Victims’ Counsel Program across the services.

Maritime Security Initiative.—The Committee supports the efforts of the Department of Defense to address Asia-Pacific security concerns and improve the maritime security of our partners and allies through the Southeast Asia Maritime Security Initiative [MSI]. MSI is a dedicated funding line that supports equipment, supplies and services, training, and small-scale construction to support the maritime security missions of partner military and security forces. The Committee recommends \$84,500,000 for fiscal year 2019 for MSI, a 30 percent increase over the 2018 enacted amount, but \$13,500,000 less than the fiscal year 2019 budget request. The Committee notes that the Department requested 2-year funding for all MSI and other security cooperation programs, but only 25 percent of such funding is appropriated as 2-year funding. As such, the reduction reflects the Committee’s expectation, based on prior year execution, that the Department will not be able to execute funding, planned to be spent in 2 years, in only 1 year.

Defense Finance and Accounting Service.—The Committee supports efforts to find efficiencies and reduce unnecessary costs within the Department of Defense, including both the military services and the defense agencies. However, there are concerns about efforts to close or realign Defense Finance and Accounting Services [DFAS] installations. Therefore, prior to transferring any functions or implementing civilian reductions at a DFAS installation, the Committee directs the Secretary of Defense to provide the congressional defense committees a written report on any plan to do so and the Secretary must certify to such committees that the plan would reduce costs, increase efficiencies, and maintain the timeline for auditability of financial statements.

Defense Language and National Security Education Office.—The Committee recognizes that, in partnership with universities across the country, the Defense Language and National Security Education Office provides critical college accredited training for service members and government officials in a number of languages and strategic cultures. The Committee encourages the Department of Defense to continue placing a high priority on these programs and designates the funding included in the fiscal year 2019 President’s budget request for the Language Training Centers as a congressional special interest item to ensure warfighters, both conventional and special operations forces, receive the language and culture training needed to complete their missions effectively.

OPERATION AND MAINTENANCE, ARMY RESERVE

Appropriations, 2018	\$2,877,104,000
Budget estimate, 2019	2,916,909,000
Committee recommendation	2,854,909,000

The Committee recommends an appropriation of \$2,854,909,000. This is \$62,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, ARMY RESERVE			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	LAND FORCES			
10	MODULAR SUPPORT BRIGADES	13,867	13,867	.....
20	ECHELONS ABOVE BRIGADES	536,438	536,438	.....
30	THEATER LEVEL ASSETS	113,225	113,225	.....
40	LAND FORCES OPERATIONS SUPPORT	551,141	537,141	- 14,000
50	AVIATION ASSETS	89,073	89,073	.....
	LAND FORCES READINESS			
60	FORCES READINESS OPERATIONS SUPPORT	409,531	392,531	- 17,000
70	LAND FORCES SYSTEM READINESS	101,411	101,411	.....
80	DEPOT MAINTENANCE	60,114	60,114	.....
	LAND FORCES READINESS SUPPORT			
90	BASE OPERATIONS SUPPORT	595,728	579,728	- 16,000
100	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	304,658	304,658	.....
110	MANAGEMENT AND OPERATIONS HEADQUARTERS	22,175	22,175	.....
	TOTAL, BUDGET ACTIVITY 1	2,797,361	2,750,361	- 47,000
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	ADMINISTRATION AND SERVICEWIDE ACTIVITIES			
120	SERVICEWIDE TRANSPORTATION	11,832	11,832	.....
130	ADMINISTRATION	18,218	18,218	.....
140	SERVICEWIDE COMMUNICATIONS	25,069	25,069	.....
150	PERSONNEL/FINANCIAL ADMINISTRATION	6,248	6,248	.....
160	RECRUITING AND ADVERTISING	58,181	58,181	.....
	TOTAL, BUDGET ACTIVITY 4	119,548	119,548	.....
	OVERESTIMATION OF CIVILIAN FTE TARGETS .....	.....	- 15,000	- 15,000
	TOTAL, OPERATION AND MAINTENANCE, ARMY RESERVE	2,916,909	2,854,909	- 62,000

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
115	Land Forces Operations Support	551,141	537,141	- 14,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 14,000
121	Force Readiness Operations Support	409,531	392,531	- 17,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 17,000
131	Base Operations Support	595,728	579,728	- 16,000
	Improving funds management: Program decrease unaccounted for .....	.....	.....	- 16,000
UNDIST	Maintain program affordability: Overestimation of civilian FTE .....	.....	- 15,000	- 15,000

OPERATION AND MAINTENANCE, NAVY RESERVE

Appropriations, 2018	\$1,069,707,000
Budget estimate, 2019	1,027,006,000
Committee recommendation	1,018,006,000

The Committee recommends an appropriation of \$1,018,006,000. This is \$9,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, NAVY RESERVE			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	RESERVE AIR OPERATIONS			
10	MISSION AND OTHER FLIGHT OPERATIONS	569,584	563,584	- 6,000
20	INTERMEDIATE MAINTENANCE	6,902	6,902	.....
30	AIRCRAFT DEPOT MAINTENANCE	109,776	109,776	.....
40	AIRCRAFT DEPOT OPERATIONS SUPPORT	538	538	.....
50	AVIATION LOGISTICS	18,888	18,888	.....
	RESERVE SHIP OPERATIONS			
60	SHIP OPERATIONAL SUPPORT AND TRAINING	574	574	.....
	RESERVE COMBAT OPERATIONS SUPPORT			
70	COMBAT COMMUNICATIONS	17,561	17,561	.....
80	COMBAT SUPPORT FORCES	121,070	118,070	- 3,000
90	CYBERSPACE ACTIVITIES	337	337	.....
	RESERVE WEAPONS SUPPORT			
100	ENTERPRISE INFORMATION TECHNOLOGY	23,964	23,964	.....
	BASE OPERATING SUPPORT			
110	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	36,356	36,356	.....
120	BASE OPERATING SUPPORT	103,562	103,562	.....
	TOTAL, BUDGET ACTIVITY 1	1,009,112	1,000,112	- 9,000
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	ADMINISTRATION AND SERVICEWIDE ACTIVITIES			
130	ADMINISTRATION	1,868	1,868	.....
140	MILITARY MANPOWER & PERSONNEL	12,849	12,849	.....
160	ACQUISITION AND PROGRAM MANAGEMENT	3,177	3,177	.....
	TOTAL, BUDGET ACTIVITY 4	17,894	17,894	.....
	TOTAL, OPERATION AND MAINTENANCE, NAVY RESERVE	1,027,006	1,018,006	- 9,000

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1A1A	Mission and Other Flight Operations	569,584	563,584	- 6,000
	Maintain program affordability: Unjustified growth .....	.....	.....	- 6,000
1C6C	Combat Support Forces	121,070	118,070	- 3,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Improving funds management: Remove one-time fiscal year 2018 increase .....	.....	.....	- 3,000

OPERATION AND MAINTENANCE, MARINE CORPS RESERVE

Appropriations, 2018	\$284,837,000
Budget estimate, 2019	271,570,000
Committee recommendation	271,570,000

The Committee recommends an appropriation of \$271,570,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, MARINE CORPS RESERVE			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	EXPEDITIONARY FORCES			
10	OPERATING FORCES	99,173	99,173	.....
20	DEPOT MAINTENANCE	19,430	19,430	.....
30	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	39,962	39,962	.....
40	BASE OPERATING SUPPORT	101,829	101,829	.....
	TOTAL, BUDGET ACTIVITY 1	260,394	260,394	.....
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	ADMINISTRATION AND SERVICEWIDE ACTIVITIES			
60	ADMINISTRATION	11,176	11,176	.....
	TOTAL, BUDGET ACTIVITY 4	11,176	11,176	.....
	TOTAL, OPERATION & MAINTENANCE, MARINE CORPS RESERVE	271,570	271,570	.....

OPERATION AND MAINTENANCE, AIR FORCE RESERVE

Appropriations, 2018	\$3,202,307,000
Budget estimate, 2019	3,260,234,000
Committee recommendation	3,247,534,000

The Committee recommends an appropriation of \$3,247,534,000. This is \$12,700,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, AIR FORCE RESERVE			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	AIR OPERATIONS			
10	PRIMARY COMBAT FORCES	1,853,437	1,803,437	- 50,000
20	MISSION SUPPORT OPERATIONS	205,369	205,369	.....
30	DEPOT PURCHASE EQUIPMENT MAINTENANCE	345,576	345,576	.....
40	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	120,736	123,536	+ 2,800
50	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	241,239	284,239	+ 43,000
60	BASE OPERATING SUPPORT	385,922	385,922	.....
	TOTAL, BUDGET ACTIVITY 1	3,152,279	3,148,079	- 4,200
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	ADMINISTRATION AND SERVICEWIDE ACTIVITIES			
70	ADMINISTRATION	71,188	71,188	.....
80	RECRUITING AND ADVERTISING	19,429	19,429	.....
90	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	9,386	9,386	.....
100	OTHER PERSONNEL SUPPORT	7,512	7,512	.....
110	AUDIOVISUAL	440	440	.....
	TOTAL, BUDGET ACTIVITY 4	107,955	107,955	.....
	DECREASE UNACCOUNTED FOR .....	.....	- 8,500	- 8,500
	TOTAL, OPERATION AND MAINTENANCE, AIR FORCE RE-SERVE	3,260,234	3,247,534	- 12,700

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
011A	Primary Combat Forces	1,853,437	1,803,437	- 50,000
	Maintain program affordability: Projected underexecution .....	.....	.....	- 50,000
011R	Facilities Sustainment, Restoration & Modernization	120,736	123,536	+ 2,800
	Program increase: Additional demo .....	.....	.....	+ 2,800
011W	Contractor Logistics Support and System Support	241,239	284,239	+ 43,000
	Improving funds management: Program decrease unaccounted for .....	.....	.....	- 9,000
	Program increase .....	.....	.....	+ 52,000
UNDIST	Improving funds management: Program decrease unaccounted for .....	.....	- 8,500	- 8,500

OPERATION AND MAINTENANCE, ARMY NATIONAL GUARD

Appropriations, 2018	\$7,284,170,000
Budget estimate, 2019	7,399,295,000
Committee recommendation	7,261,295,000

The Committee recommends an appropriation of \$7,261,295,000. This is \$138,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, ARMY NATIONAL GUARD			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	LAND FORCES			
10	MANEUVER UNITS	810,269	790,269	-20,000
20	MODULAR SUPPORT BRIGADES	193,402	193,402	.....
30	ECHELONS ABOVE BRIGADE	753,815	753,815	.....
40	THEATER LEVEL ASSETS	84,124	84,124	.....
50	LAND FORCES OPERATIONS SUPPORT	31,881	31,881	.....
60	AVIATION ASSETS	973,874	973,874	.....
	LAND FORCES READINESS			
70	FORCE READINESS OPERATIONS SUPPORT	784,086	765,286	-18,800
80	LAND FORCES SYSTEMS READINESS	51,353	51,353	.....
90	LAND FORCES DEPOT MAINTENANCE	221,633	221,633	.....
	LAND FORCES READINESS SUPPORT			
100	BASE OPERATIONS SUPPORT	1,129,942	1,108,942	-21,000
110	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	919,947	919,947	.....
120	MANAGEMENT AND OPERATIONAL HEADQUARTERS	1,010,524	1,010,524	.....
	TOTAL, BUDGET ACTIVITY 1	6,964,850	6,905,050	-59,800
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	ADMINISTRATION AND SERVICEWIDE ACTIVITIES			
130	SERVICEWIDE TRANSPORTATION	10,017	10,017	.....
140	ADMINISTRATION	72,746	76,546	+3,800
150	SERVICEWIDE COMMUNICATIONS	83,105	83,105	.....
160	MANPOWER MANAGEMENT	10,678	10,678	.....
170	RECRUITING AND ADVERTISING	254,753	254,753	.....
180	REAL ESTATE MANAGEMENT	3,146	3,146	.....
	TOTAL, BUDGET ACTIVITY 4	434,445	438,245	+3,800
	UNJUSTIFIED GROWTH .....	.....	-88,000	-88,000
	WILDFIRE TRAINING .....	.....	6,000	+6,000
	TOTAL, OPERATION & MAINTENANCE, ARMY NATIONAL GUARD	7,399,295	7,261,295	-138,000

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
111	Maneuver Units	810,269	790,269	-20,000
	Maintain program affordability: Unjustified growth .....	.....	.....	-20,000
121	Force Readiness Operations Support	784,086	765,286	-18,800
	Improving funds management: Program decrease unaccounted for .....	.....	.....	-20,000
	Program increase: Advanced trauma training program .....	.....	.....	+1,200
131	Base Operations Support	1,129,942	1,108,942	-21,000
	Improving funds management: Program decrease unaccounted for .....	.....	.....	-25,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: Army National Guard preventative mental health program			+ 4,000
431	Administration	72,746	76,546	+ 3,800
	Program increase: State partnership program			+ 3,800
UNDIST	Maintain program affordability: Unjustified growth		- 88,000	- 88,000
UNDIST	Program increase: National Guard wildfire training		6,000	+ 6,000

Advanced Turbine Engine Army Maintenance [ATEAM].—The ATEAM is a military special repair activity located on Fort Riley, Kansas. The ATEAM provides rebuilt-AGT 1500 engines and X1100 transmissions in support of the Army National Guard, Army Material Command, the United States Marine Corps, the Tank and Automotive Command [TACOM], as well as foreign military partners. The Committee is encouraged that the U.S. Army, National Guard Bureau, TACOM and Kansas National Guard are establishing a Memorandum of Agreement to facilitate the contracting of parts and equipment when workload obligations exceed the capacity of the Kansas National Guard. However, authorities for Title 32 Federal technicians are not well defined as it relates to work on foreign military sales contracts specifically, such as Full Up Power Pack repairs. The unclear policies have hampered the ability of the ATEAM to meet obligations and maintain workload.

Therefore, the Chief, National Guard Bureau, in coordination with the Secretary of the Army, is directed to conduct a review and establish policies that clearly define ATEAM authorities to fulfill obligations. The review shall inform a report addressing the following: (1) the duties and responsibilities of the U.S. Army, National Guard Bureau, TACOM and the Kansas National Guard for the ATEAM to meet obligations; (2) an ATEAM workforce transition plan and policies for work on foreign military sales contracts; and (3) a justification from the Chief, National Guard Bureau, in coordination with the Kansas National Guard, that certifies any change in the workforce of the ATEAM will not adversely affect the ATEAM's ability to meet existing and future obligations of the U.S. Army and foreign military sales contracts. The report and a briefing on its findings to the House and Senate Appropriations Committees shall be completed not later 60 days after the enactment of this act.

OPERATION AND MAINTENANCE, AIR NATIONAL GUARD

Appropriations, 2018	\$6,900,798,000
Budget estimate, 2019	6,427,622,000
Committee recommendation	6,433,697,000

The Committee recommends an appropriation of \$6,433,697,000. This is \$6,075,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	OPERATION AND MAINTENANCE, AIR NATIONAL GUARD			
	BUDGET ACTIVITY 1: OPERATING FORCES			
	AIR OPERATIONS			
10	AIRCRAFT OPERATIONS	2,619,940	2,533,940	- 86,000
20	MISSION SUPPORT OPERATIONS	623,265	631,540	+ 8,275
30	DEPOT PURCHASE EQUIPMENT MAINTENANCE	748,287	748,287	.....
40	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	303,792	309,292	+ 5,500
50	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	1,061,759	1,061,759	.....
60	BASE OPERATING SUPPORT	988,333	1,023,633	+ 35,300
	TOTAL, BUDGET ACTIVITY 1	6,345,376	6,308,451	- 36,925
	BUDGET ACTIVITY 4: ADMIN & SERVICEWIDE ACTIVITIES			
	SERVICEWIDE ACTIVITIES			
70	ADMINISTRATION	45,711	45,711	.....
80	RECRUITING AND ADVERTISING	36,535	36,535	.....
	TOTAL, BUDGET ACTIVITY 4	82,246	82,246	.....
	DECREASE UNACCOUNTED FOR		- 18,000	- 18,000
	BUYBACK 3 PMAI JSTARS AIRCRAFT		61,000	+ 61,000
	TOTAL, OPERATION & MAINTENANCE, AIR NATIONAL GUARD	6,427,622	6,433,697	+ 6,075

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
011F	Aircraft Operations	2,619,940	2,533,940	- 86,000
	Maintain program affordability: Projected underexecution			- 80,000
	Improving funds management: Program decrease unaccounted for			- 6,000
011G	Mission Support Operations	623,265	631,540	+ 8,275
	Improving funds management: Program decrease unaccounted for			- 15,000
	Program increase: Disaster relief mobile kitchen trailers			+ 7,800
	Program increase: Air National Guard readiness training ranges			+ 9,000
	Program increase: Advanced trauma training program			+ 1,800
	Program increase: Air National Guard preventative mental health program			+ 4,000
	Program increase: State partnership program			+ 675
011R	Facilities Sustainment, Restoration & Modernization	303,792	309,292	+ 5,500
	Program increase: KC-46A emergent requirements			+ 5,500
011Z	Base Support	988,333	1,023,633	+ 35,300
	Transfer: Air National Guard-requested transfer for environmental projects from Environmental Restoration, Air Force account			+ 11,000
	Program increase: Cold weather aviation systems			+ 5,300
	Program increase: Sec. 315 of S.2987, Senate NDAA as reported			+ 19,000
UNDIST	Improving funds management: Program decrease unaccounted for		- 18,000	- 18,000
UNDIST	Program increase: Buyback of 3 PMAI JSTARS aircraft		61,000	+ 61,000

U.S. COURT OF APPEALS FOR THE ARMED FORCES

Appropriations, 2018	\$14,538,000
Budget estimate, 2019	14,662,000
Committee recommendation	14,662,000

The Committee recommends an appropriation of \$14,662,000. This is equal to the budget estimate.

ENVIRONMENTAL RESTORATION, ARMY

Appropriations, 2018	\$235,809,000
Budget estimate, 2019	203,449,000
Committee recommendation	228,449,000

The Committee recommends an appropriation of \$228,449,000. This is \$25,000,000 above the budget estimate to address costs associated with remediating contamination caused by perfluorinated chemicals.

ENVIRONMENTAL RESTORATION, NAVY

Appropriations, 2018	\$365,883,000
Budget estimate, 2019	329,253,000
Committee recommendation	329,253,000

The Committee recommends an appropriation of \$329,253,000. This is equal to the budget estimate.

ENVIRONMENTAL RESTORATION, AIR FORCE

Appropriations, 2018	\$352,549,000
Budget estimate, 2019	296,808,000
Committee recommendation	365,808,000

The Committee recommends an appropriation of \$365,808,000. This is \$69,000,000 above the budget estimate due to a decrease of \$11,000,000 which is transferred to Operation and Maintenance, Air National Guard for execution and an additional \$80,000,000 provided to address costs associated with remediating contamination caused by perfluorinated chemicals.

ENVIRONMENTAL RESTORATION, DEFENSE-WIDE

Appropriations, 2018	\$19,002,000
Budget estimate, 2019	8,926,000
Committee recommendation	8,926,000

The Committee recommends an appropriation of \$8,926,000. This is equal to the budget estimate.

ENVIRONMENTAL RESTORATION, FORMERLY USED DEFENSE SITES

Appropriations, 2018	\$248,673,000
Budget estimate, 2019	212,346,000
Committee recommendation	212,346,000

The Committee recommends an appropriation of \$212,346,000. This is equal to the budget estimate.

OVERSEAS HUMANITARIAN, DISASTER, AND CIVIC AID

Appropriations, 2018	\$129,900,000
Budget estimate, 2019	107,663,000
Committee recommendation	107,663,000

The Committee recommends an appropriation of \$107,663,000. This is equal to the budget estimate.

COOPERATIVE THREAT REDUCTION ACCOUNT

Appropriations, 2018	\$350,000,000
Budget estimate, 2019	335,240,000
Committee recommendation	335,240,000

The Committee recommends an appropriation of \$335,240,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Item	2019 budget estimate	Committee recommendation	Change from budget estimate
COOPERATIVE THREAT REDUCTION			
Strategic Offensive Arms Elimination	2,823	2,823	.....
Chemical Weapons Destruction	5,446	5,446	.....
Biological Threat Reduction	197,585	197,585	.....
Other Assessments/Admin Costs	25,448	25,448	.....
Global Nuclear Security	29,001	29,001	.....
WMD Proliferation Prevention	74,937	74,937	.....
Total, Cooperative Threat Reduction	335,240	335,240	.....

DEPARTMENT OF DEFENSE ACQUISITION WORKFORCE DEVELOPMENT FUND

Appropriations, 2018	\$500,000,000
Budget estimate, 2019	400,000,000
Committee recommendation	552,000,000

The Committee recommends an appropriation of \$552,000,000. This is \$152,000,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Training and Development	230,624	326,724	+ 96,100
	Program increase for unfunded requirement .....	.....	.....	+ 96,100
2	Retention and Recognition	16,200	25,700	+ 9,500
	Program increase for unfunded requirement .....	.....	.....	+ 9,500
3	Recruiting and Hiring	153,176	199,576	+ 46,400
	Program increase for unfunded requirement .....	.....	.....	+ 46,400

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Total, Department of Defense Acquisition Workforce Development Fund	400,000	552,000	+ 152,000

Department of Defense Acquisition Workforce Development Fund Unfunded Requirements.—The fiscal year 2019 President’s budget request includes \$400,000,000 for the Department of Defense Acquisition Workforce Development Fund [DAWDF]. Subsequent to submission of the budget request, the Under Secretary of Defense (Acquisition and Sustainment) submitted, in accordance with congressional direction, to the congressional defense committees, unfunded requirements of \$152,000,000 for the acquisition workforce in fiscal year 2019. The Committee supports robust funding for the acquisition workforce and recommends an increase of \$152,000,000.

Department of Defense Acquisition Workforce Development Fund [DAWDF] Reporting Requirements.—The Committee directs the Under Secretary for Defense (Acquisition and Sustainment) to continue providing the DAWDF Annual Report to the congressional defense committees, as modified for additional congressional reporting requirements. Further, the Under Secretary of Defense (Acquisition and Sustainment) is directed to provide the congressional defense committees, with the fiscal year 2020 President’s budget request, additional details regarding the total budgeted acquisition workforce by funding category, per previous congressional direction.

**TITLE III
PROCUREMENT**

Funds appropriated under this title provide the resources required to purchase military equipment and hardware, including aircraft, ships, missiles, combat vehicles, ammunition, weapons, electronic sensors and communications equipment, and other procurement items.

The President's fiscal year 2019 budget requests a total of \$130,464,596,000 for procurement appropriations.

SUMMARY OF COMMITTEE ACTION

The Committee recommends procurement appropriations totaling \$135,198,897,000 for fiscal year 2019. This is \$4,734,301,000 above the budget estimate.

Committee recommended procurement appropriations for fiscal year 2019 are summarized below:

SUMMARY OF PROCUREMENT APPROPRIATIONS

[In thousands of dollars]

Account	2019 budget estimate	Committee recommendation	Change from budget estimate
Procurement:			
Aircraft Procurement, Army	3,782,558	4,890,658	+ 1,108,100
Missile Procurement, Army	3,355,777	3,160,597	- 195,180
Procurement of Weapons and Tracked Combat Vehicles, Army	4,489,118	4,515,290	+ 26,172
Procurement of Ammunition, Army	2,234,761	2,283,369	+ 48,608
Other Procurement, Army	7,999,529	7,709,078	- 290,451
Aircraft Procurement, Navy	19,041,799	20,083,169	+ 1,041,370
Weapons Procurement, Navy	3,702,393	3,780,572	+ 78,179
Procurement of Ammunition, Navy and Marine Corps	1,006,209	970,454	- 35,755
Shipbuilding and Conversion, Navy	21,871,437	23,992,937	+ 2,121,500
Other Procurement, Navy	9,414,355	10,393,562	+ 979,207
Procurement, Marine Corps	2,860,410	2,800,997	- 59,413
Aircraft Procurement, Air Force	16,206,937	15,772,473	- 434,464
Missile Procurement, Air Force	2,669,454	2,614,954	- 54,500
Space Procurement, Air Force	2,527,542	2,224,142	- 303,400
Procurement of Ammunition, Air Force	1,587,304	1,564,880	- 22,424
Other Procurement, Air Force	20,890,164	20,839,366	- 50,798
Procurement, Defense-Wide	6,786,271	6,663,821	- 122,450
National Guard and Reserve Equipment .....	.....	900,000	+ 900,000
Defense Production Act Purchases	38,578	38,578	.....
Total	130,464,596	135,198,897	+ 4,734,301

REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

The Secretary of Defense is directed to continue to follow the reprogramming guidance as specified in the report accompanying the House version of the Department of Defense appropriations bill for fiscal year 2008 (House Report 110-279). Specifically, the dollar

threshold for reprogramming funds will remain at \$20,000,000 for procurement and \$10,000,000 for research, development, test and evaluation.

Also, the Under Secretary of Defense (Comptroller) is directed to continue to provide the congressional defense committees quarterly, spreadsheet-based DD Form 1416 reports for service and defense-wide accounts in titles III and IV of this act. Reports for titles III and IV shall comply with guidance specified in the explanatory statement accompanying the Department of Defense Appropriations Act for Fiscal Year 2006. The Department shall continue to follow the limitation that prior approval reprogrammings are set at either the specified dollar threshold or 20 percent of the procurement or research, development, test and evaluation line, whichever is less. These thresholds are cumulative from the base for reprogramming value as modified by any adjustments. Therefore, if the combined value of transfers into or out of a procurement (P-1), or a research, development, test and evaluation (R-1) line exceeds the identified threshold, the Secretary of Defense must submit a prior approval reprogramming to the congressional defense committees. In addition, guidelines on the application of prior approval reprogramming procedures for congressional special interest items are established elsewhere in this report.

FUNDING INCREASES

The funding increases outlined in the tables for each appropriation account shall be provided only for the specific purposes indicated in the tables.

PROCUREMENT SPECIAL INTEREST ITEMS

Items for which additional funds have been recommended or items for which funding is specifically reduced as shown in the tables detailing Committee recommended adjustments or in paragraphs using the phrase “only for” or “only to” are congressional special interest items for the purpose of the Base for Reprogramming (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the stated amount, as specifically addressed in elsewhere in this report.

PROCUREMENT OVERVIEW

Army Organic Industrial Base.—The Committee directs the Secretary of the Army to provide 45-day written notification to the congressional defense committees prior to the Secretary approving civilian reductions in force that will result in an employment loss of 50 or more full-time employees at any Army organic industrial base facility. The notification shall include the impact that the proposed reduction in force will have on the ability to maintain the organic industrial base critical manufacturing capabilities as delineated in the Army Organic Industrial Base Strategy Report, a detailed accounting of the costs of implementing the reduction in force, and an assessment of the cost of, and time necessary, to restore any lost capability to meet future organic wartime manufacturing needs.

Arsenal Sustainment Initiative.—The Committee continues to support the Department of the Army’s efforts to ensure that the critical manufacturing capabilities of the nation’s organic industrial base are maintained, and commends the Army for issuing a definitive make-or-buy directive for the manufacturing arsenals. The new guidance ensures that the arsenals will be given fair consideration for every Army acquisition; provides for a 30-day review of all such decisions by the Army Acquisition Executive; requires all private sector companies to consider the arsenals as a potential supplier of component parts; and provides for an annual review of this overall process. The Committee encourages the Army to implement the new directive consistently to ensure the arsenals have the workload necessary to maintain the proficiency and capacity to meet the manufacturing needs of the nation during war and peacetime. The Committee notes that it has not yet received detailed recommendations from the Secretary of Defense on how the Air Force, Navy, and Marine Corps can better use the arsenals for their manufacturing needs, or what opportunities may exist for the arsenals to assist the services and the Defense Logistics Agency to procure for our spare parts inventory, as required by Senate Report 114–63.

AIRCRAFT PROCUREMENT, ARMY

Appropriations, 2018	\$5,535,794,000
Budget estimate, 2019	3,782,558,000
Committee recommendation	4,890,658,000

The Committee recommends an appropriation of \$4,890,658,000. This is \$1,108,100,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	AIRCRAFT						
	FIXED WING						
2	UTILITY F/W CARGO AIRCRAFT		744		18,644		+ 17,900
3	MQ-1 UAV		43,326		40,226		- 3,100
4	RQ-11 (RAVEN)		46,416		46,416		
	ROTARY						
7	AH-64 APACHE BLOCK IIIA REMAN	48	753,248	48	753,248		
8	AH-64 APACHE BLOCK IIIA REMAN [AP-CY]		174,550		174,550		
9	AH-64 APACHE BLOCK IIIB NEW BUILD	12	284,687	12	1,004,687		+ 720,000
10	AH-64 APACHE BLOCK IIIB NEW BUILD [AP-CY]		58,600		58,600		
11	UH-60 BLACKHAWK (MYP)	49	988,810	49	1,308,310		+ 319,500
12	UH-60 BLACKHAWK (MYP) [AP-CY]		106,150		106,150		
13	UH-60 BLACKHAWK A AND L MODELS	18	146,138	18	150,138		+ 4,000
14	CH-47 HELICOPTER	6	99,278	6	99,278		
15	[AP-CY]		24,235		24,235		
	TOTAL, AIRCRAFT		2,726,182		3,784,482		+ 1,058,300
	MODIFICATION OF AIRCRAFT						
18	UNIVERSAL GROUND CONTROL EQUIPMENT		27,114		27,114		
19	GRAY EAGLE MODS2		97,781		97,781		
20	MULTI SENSOR ABN RECON (MIP)		52,274		52,274		
21	AH-64 MODS		104,996		104,996		
22	CH-47 CARGO HELICOPTER MODS		7,807		7,807		
23	GRCS SEMA MODS (MIP)		5,573		5,573		
24	ARL SEMA MODS (MIP)		7,522		7,522		
25	EMARSS SEMA MODS (MIP)		20,448		60,248		+ 39,800
26	UTILITY/CARGO AIRPLANE MODS		17,719		17,719		
27	UTILITY HELICOPTER MODS		6,443		16,443		+ 10,000
28	NETWORK AND MISSION PLAN		123,614		123,614		
29	COMMS, NAV SURVEILLANCE		161,969		161,969		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
30	DEGRADED VISUAL ENVIRONMENT		30,000		30,000		
31	GATM ROLLUP		26,848		26,848		
32	RQ-7 UAV MODS		103,246		103,246		
33	UAS MODS		17,644		17,644		
	TOTAL, MODIFICATION OF AIRCRAFT		810,998		860,798		+ 49,800
	SUPPORT EQUIPMENT AND FACILITIES						
	GROUND SUPPORT AVIONICS						
34	AIRCRAFT SURVIVABILITY EQUIPMENT		57,170		57,170		
35	SURVIVABILITY CM		5,853		5,853		
36	CMWS		13,496		13,496		
37	COMMON INFRARED COUNTERMEASURES		36,839		36,839		
	OTHER SUPPORT						
38	AVIONICS SUPPORT EQUIPMENT		1,778		1,778		
39	COMMON GROUND EQUIPMENT		34,818		34,818		
40	AIRCREW INTEGRATED SYSTEMS		27,243		27,243		
41	AIR TRAFFIC CONTROL		63,872		63,872		
42	INDUSTRIAL FACILITIES		1,417		1,417		
43	LAUNCHER, 2.75 ROCKET		1,901		1,901		
44	LAUNCHER GUIDED MISSILE: LONGBOW HELLIHRE XM2		991		991		
	TOTAL, SUPPORT EQUIPMENT AND FACILITIES		245,378		245,378		
	TOTAL, AIRCRAFT PROCUREMENT, ARMY		3,782,558		4,890,658		+ 1,108,100

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	Utility F/W Aircraft	744	18,644	+ 17,900
	Program increase: EMARSS-E			+ 17,900
3	MQ-1 UAV	43,326	40,226	- 3,100
	Improving funds management: Contractor Management Growth			- 3,100
9	AH-64 Apache Block IIIB New Build	284,687	1,004,687	+ 720,000
	Program increase: Additional helicopters			+ 720,000
11	UH-60 Blackhawk M Model [MYP]	988,810	1,308,310	+ 319,500
	Program increase: Fifteen aircraft for the ARNG			+ 319,500
13	UH-60 Black Hawk A and L Models	146,138	150,138	+ 4,000
	Program increase: ARNG UH/HH-60 Black Hawk SWIR integration			+ 4,000
25	EMARSS SEMA Mods [MIP]	20,448	60,248	+ 39,800
	Program increase: EMARSS-E Pods			+ 39,800
27	Utility Helicopter Mods	6,443	16,443	+ 10,000
	Program increase: Light Utility Helicopter sustainment plan			+ 10,000

AH-64 Apache Block IIIB New Build.—The Committee recommendation includes \$1,184,687,000 for the procurement of AH-64 Apache Block IIIB New Build aircraft, an increase of \$720,000,000 above the budget request. The Secretary of the Army is encouraged to increase readiness by addressing the shortfall of aircraft in the Army National Guard Apache battalions.

UH-60 Black Hawk.—The Committee recommendation includes \$1,308,310,000 for the procurement of 64 UH-60M Black Hawk aircraft, an increase of \$319,500,000 and 15 aircraft above the budget request. Of the 64 aircraft funded within the fiscal year 2019 President's budget request, 15 are designated only for the Army National Guard.

CH-47 Cargo Helicopter.—The Committee encourages the Army to accelerate retrofit of MH/CH-47 aircraft with vibration control systems to reduce aircrew fatigue, improve performance and increase operational time between maintenance of certain aircraft components.

MISSILE PROCUREMENT, ARMY

Appropriations, 2018	\$3,196,910,000
Budget estimate, 2019	3,355,777,000
Committee recommendation	3,160,597,000

The Committee recommends an appropriation of \$3,160,597,000. This is \$195,180,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	OTHER MISSILES						
	MISSILE PROCUREMENT, ARMY						
	SURFACE-TO-AIR MISSILE SYSTEM						
1	LOWER TIER AIR AND MISSILE DEFENSE [AMD]		111,395		105,395		-6,000
2	MSE MISSILE	179	871,276	179	871,276		
3	INDIRECT FIRE PROTECTION CAPABILITY		145,636		145,636		
4	INDIRECT FIRE PROTECTION CAPABILITY [AP-CY]		31,286		27,586		-3,700
6	AIR-TO-SURFACE MISSILE SYSTEM						
	JOINT AIR-TO-GROUND MSLs [JAGM]	1,046	276,462	1,046	276,462		
8	ANTI-TANK/ASSAULT MISSILE SYSTEM						
	JAVELIN (AAWS-M) SYSTEM SUMMARY	709	303,665	709	214,365		-89,300
9	TOW 2 SYSTEM SUMMARY	1,472	105,014	1,472	102,113		-2,901
10	TOW 2 SYSTEM SUMMARY [AP-CY]		19,949		19,949		
11	GUIDED MLRS ROCKET [GMLRS]	3,267	359,613	3,267	355,859		-3,754
12	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR)	2,214	20,964	2,214	20,964		
	TOTAL, OTHER MISSILES		2,245,260		2,139,605		-105,655
	MODIFICATION OF MISSILES						
	MODIFICATIONS						
15	PATRIOT MODS		313,228		313,228		
16	ATACMS MODS		221,656		171,656		-50,000
17	GMLRS MOD		266		266		
18	STINGER MODS		94,756		94,756		
19	AVENGER MODS		48,670		31,093		-17,577
20	ITAS/TOW MODS		3,173		3,173		
21	MLRS MODS		383,216		361,268		-21,948
22	HIMARS MODIFICATIONS		10,196		10,196		
	TOTAL, MODIFICATION OF MISSILES		1,075,161		985,636		-89,525
	SPARES AND REPAIR PARTS						
23	SPARES AND REPAIR PARTS		27,737		27,737		

24	SUPPORT EQUIPMENT AND FACILITIES						
	AIR DEFENSE TARGETS	6,417	6,417		6,417		
25	PRODUCTION BASE SUPPORT	1,202	1,202		1,202		
	TOTAL, SUPPORT EQUIPMENT AND FACILITIES	7,619	7,619		7,619		
	TOTAL, MISSILE PROCUREMENT, ARMY	3,355,777	3,355,777		3,160,597		- 195,180

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Lower Tier Air and Missile Defense [AMD]	111,395	105,395	- 6,000
	Improving funds management: Prior year carryover of support costs			- 6,000
4	INDIRECT FIRE PROTECTION CAPABILITY INC 2-I [AP-CY] ...	31,286	27,586	- 3,700
	Improving funds management: Forward financing program management			- 3,700
8	Javelin [Aaws-M] System Summary	303,665	214,365	- 89,300
	Improving funds management: CLU retrofits funded in Public Law 115-141			- 86,500
	Improving funds management: Forward financing support costs			- 2,800
9	Tow 2 System Summary	105,014	102,113	- 2,901
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 2,901
11	Guided MLRS Rocket [GMLRS]	359,613	355,859	- 3,754
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 3,754
16	ATACMS MODS	221,656	171,656	- 50,000
	Improving funds management: Munitions funded in Public Law 115-141			- 50,000
19	Avenger Mods	48,670	31,093	- 17,577
	Restoring acquisition accountability: M-SHORAD ahead of need			- 17,577
21	MLRS Mods	383,216	361,268	- 21,948
	Improving funds management: Obsolescence NRE previously funded			- 12,300
	Improving funds management: Unit cost savings			- 7,600
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 2,048

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES,
ARMY

Appropriations, 2018	\$4,391,573,000
Budget estimate, 2019	4,489,118,000
Committee recommendation	4,515,290,000

The Committee recommends an appropriation of \$4,515,290,000. This is \$26,172,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES (W&TCV), ARMY						
2	TRACKED COMBAT VEHICLES	131	479,801	131	478,606		-1,195
	ARMORED MULTI PURPOSE VEHICLE (AMPV)						
	MODIFICATION OF TRACKED COMBAT VEHICLES						
4	STRYKER (MOD)		287,490		127,301		-160,189
5	STRYKER UPGRADE	3	21,900	82	265,290	+79	+243,390
6	BRADLEY PROGRAM (MOD)		625,424		465,424		-160,000
7	M109 FOV MODIFICATIONS		26,482		26,482		
8	PALADIN INTEGRATED MANAGEMENT (PIM)	30	351,802	43	458,902	+13	+107,100
9	IMPROVED RECOVERY VEHICLE (M88A2 HERCULES)	26	110,500	26	110,500		
10	ASSAULT BRIDGE (MOD)		2,120		2,120		
11	ASSAULT BREACHER VEHICLE	12	62,407	12	62,407		
12	M88 FOV MODS		4,517		4,517		
13	JOINT ASSAULT BRIDGE	30	142,255	30	141,231		-1,024
14	M1 ABRAMS TANK (MOD)		927,600		925,041		-2,559
15	ABRAMS UPGRADE PROGRAM	95	1,075,999	95	1,072,243		-3,756
	TOTAL, TRACKED COMBAT VEHICLES		4,118,297		4,140,064		+21,767
	WEAPONS AND OTHER COMBAT VEHICLES						
18	M240 MEDIUM MACHINE GUN (7.62MM)		1,955		14,455		+12,500
19	MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON		23,345		23,345		
20	GUN AUTOMATIC 30MM M230		7,434				-7,434
21	MACHINE GUN, CAL. 50 M2 ROLL		22,330		22,330		
22	MORTAR SYSTEMS		12,470		12,470		
23	XM320 GRENADE LAUNCHER MODULE (GLM)		697		18,197		+17,500
24	COMPACT SEMI-AUTOMATIC SNIPER SYSTEM		46,236		46,236		
25	CARBINE		69,306		67,806		-1,500
26	SMALL ARMS—FIRE CONTROL		7,929				-7,929
27	COMMON REMOTELY OPERATED WEAPONS STATION		35,968		35,968		
28	MODULAR HANDGUN SYSTEM		48,251		48,251		
	MOD OF WEAPONS AND OTHER COMBAT VEH						
29	MK-19 GRENADE MACHINE GUN MODS		1,684		1,684		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
30	M777 MODS		3,086		3,086		
31	M4 CARBINE MODS		31,575		31,575		
32	M2 50 CAL MACHINE GUN MODS		21,600		14,178		-7,422
33	M249 SAW MACHINE GUN MODS		3,924		3,924		
34	M240 MEDIUM MACHINE GUN MODS		6,940		6,940		
35	SNIPER RIFLES MODIFICATIONS		2,747		2,747		
36	M119 MODIFICATIONS		5,704		4,394		-1,310
37	MORTAR MODIFICATION		3,965		3,965		
38	MODIFICATIONS LESS THAN \$5.0M (WOCV-WTCV)		5,577		5,577		
	SUPPORT EQUIPMENT AND FACILITIES						
39	ITEMS LESS THAN \$5.0M (WOCV-WTCV)		3,174		3,174		
40	PRODUCTION BASE SUPPORT (WOCV-WTCV)		3,284		3,284		
41	SMALL ARMS EQUIPMENT (SOLDIER ENH PROG)		1,640		1,640		
	TOTAL, WEAPONS AND OTHER COMBAT VEHICLES		370,821		375,226		+4,405
	TOTAL, PROCUREMENT OF W&TCV, ARMY		4,489,118		4,515,290		+26,172

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	Armored Multi Purpose Vehicle [AMPV]	479,801	478,606	- 1,195
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 1,195
4	Stryker (MOD)	287,490	127,301	- 160,189
	Transfer: Army requested transfer to W&TCV line 5			- 149,390
	Restoring acquisition accountability: Revised DVH acquisition strategy			- 5,000
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 5,799
5	Stryker Upgrade	21,900	265,290	+ 243,390
	Transfer: Army requested transfer from W&TCV line 4 ..			+ 149,390
	Program increase: DVHA1 conversions			+ 94,000
6	Bradley Program (MOD)	625,424	465,424	- 160,000
	Restoring acquisition accountability: Revised A4 acquisition strategy			- 160,000
8	Paladin Integrated Management [PIM]	351,802	458,902	+ 107,100
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 2,900
	Program increase: PIM production restoration			+ 110,000
13	Joint Assault Bridge	142,255	141,231	- 1,024
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 1,024
14	M1 Abrams Tank (MOD)	927,600	925,041	- 2,559
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 2,559
15	Abrams Upgrade Program	1,075,999	1,072,243	- 3,756
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 3,756
18	M240 Medium Machine Gun (7.62MM)	1,955	14,455	+ 12,500
	Program increase: M240 production			+ 12,500
20	GUN AUTOMATIC 30MM M230	7,434		- 7,434
	Restoring acquisition accountability: Ahead of need			- 7,434
23	XM320 Grenade Launcher Module [GLM]	697	18,197	+ 17,500
	Program increase			+ 17,500
25	Carbine	69,306	67,806	- 1,500
	Maintain program affordability: Unjustified management growth			- 1,500
26	Small Arms—Fire Control	7,929		- 7,929
	Restoring acquisition accountability: Unfinitized requirements			- 7,929
32	M2 50 Cal Machine Gun Mods	21,600	14,178	- 7,422
	Improving funds management: Prior year carryover			- 7,422
36	M119 Modifications	5,704	4,394	- 1,310
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 1,310

Army Stryker Double-V Hull A1.—Following the submission of the fiscal year 2019 President’s budget request, the Chief of Staff of the Army approved an Army Requirements Oversight Counsel [AROC] decision to upgrade and pure fleet all Flat-Bottom Hull [FBH] Stryker combat vehicles to the Double V–Hull A1 variant [DVHA1] in an effort to improve troop survivability and mobility. The fiscal year 2019 President’s budget request includes \$21,900,000 to upgrade three FBH Stryker vehicles to DVHA1 variants. Subsequent to the AROC decision, the Army requested a budget based transfer of \$149,390,000 to fund additional conver-

sions. With the transfer, the Army can resource 53 DVHA1 conversions totaling \$171,290,000. The Committee has also included a congressional adjustment of \$94,000,000 for 29 conversions. In addition, the Committee understands that the Army plans to submit a reprogramming request to the congressional defense committees with a request to repurpose fiscal year 2018 congressionally directed funding totaling \$285,000,000 for 91 DVHA1 conversions. If the reprogramming action is approved by the congressional defense committees, the Army will have sufficient resources to fund conversions for half the vehicles in a Stryker Brigade Combat Team [SBCT].

The Committee supports the net-zero fiscal year 2019 transfer request and additional funding for DVHA1 conversions, while anticipating the fiscal year 2018 reprogramming request. However, the Committee is concerned with the Army's ability to maintain this level of effort through resourcing decisions in the Future Years Defense Program profile within future Program Objective Memorandum and budgeting cycles. Therefore, the Secretary of the Army shall report to the congressional defense committees not later than 30 days after the enactment of this act, on the Army's acquisition strategy to upgrade and pure fleet the remaining FBH SBCTs to DVHA1 variants.

M4A1 Carbine Extended Forward Rail System.—The Army's Soldier Enhancement Program study published in December 2017 found that the United States Special Operations Command's extended free-float rail system is substantially more accurate than the Army's legacy M4A1 rail and readily available in the supply system. While the Committee supports the Army's modernization strategy which calls for developing and fielding the Next Generation Squad Automatic Weapon before developing and fielding the Next Generation Soldier Weapon, the Committee remains concerned that the Army is not accelerating modest and readily available upgrades to the M4A1 Carbine and thereby improving soldier lethality in the interim. Therefore, the Committee encourages the Secretary of the Army to accelerate adapting a government provided extended free-float rail system for the M4A1 carbine.

PROCUREMENT OF AMMUNITION, ARMY

Appropriations, 2018	\$2,548,740,000
Budget estimate, 2019	2,234,761,000
Committee recommendation	2,283,369,000

The Committee recommends an appropriation of \$2,283,369,000. This is \$48,608,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	PROCUREMENT OF AMMUNITION, ARMY						
	AMMUNITION						
	SMALL/MEDIUM CAL AMMUNITION						
1	CTG, 5.56MM, ALL TYPES		41,848		41,848		
2	CTG, 7.62MM, ALL TYPES		86,199		86,199		
3	CTG, HANDGUN, ALL TYPES		20,158		19,159		-999
4	CTG, .50 CAL, ALL TYPES		65,573		65,573		
5	CTG, 20MM, ALL TYPES		8,198		8,198		
7	CTG, 30MM, ALL TYPES		77,995		77,995		
8	CTG, 40MM, ALL TYPES		69,781		69,781		
	MORTAR AMMUNITION						
9	60MM MORTAR, ALL TYPES		45,280		45,280		
10	81MM MORTAR, ALL TYPES		46,853		47,403		+550
11	120MM MORTAR, ALL TYPES		83,003		82,853		-150
	TANK AMMUNITION						
12	CTG TANK 105MM AND 120MM: ALL TYPES		168,101		151,901		-16,200
	ARTILLERY AMMUNITION						
13	CTG, ARTY, 75MM AND 105MM: ALL TYPES		39,341		34,673		-4,668
14	ARTILLERY PROJECTILE, 155MM, ALL TYPES		211,442		221,442		+10,000
15	PROJ 155MM EXTENDED RANGE XM982	1,189	100,906	1,189	100,906		
16	ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL TYPES		236,677		206,677		-30,000
	MINES						
17	MINES AND CLEARING CHARGES, ALL TYPES		15,905		15,005		-900
	ROCKETS						
18	SHOULDER LAUNCHED MUNITIONS, ALL TYPES		4,503		4,503		
19	ROCKET, HYDRA 70, ALL TYPES		211,211		229,761		+18,550
	OTHER AMMUNITION						
20	CAD/PAD ALL TYPES		10,428		8,928		-1,500
21	DEMOLITION MUNITIONS, ALL TYPES		44,656		44,656		
22	GRENADES, ALL TYPES		19,896		39,896		+20,000

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
23	SIGNALS, ALL TYPES		10,121		8,121		-2,000
24	SIMULATORS, ALL TYPES		11,464		11,464		
	MISCELLANEOUS						
25	AMMO COMPONENTS, ALL TYPES		5,224		5,224		
26	NON-LETHAL AMMUNITION, ALL TYPES		4,310		2,810		-1,500
27	ITEMS LESS THAN \$5 MILLION		11,193		11,193		
28	AMMUNITION PECULIAR EQUIPMENT		10,500		10,500		
29	FIRST DESTINATION TRANSPORTATION (AMMO)		18,456		18,456		
30	CLOSEOUT LIABILITIES		100		100		
	TOTAL, AMMUNITION		1,679,322		1,670,505		-8,817
	AMMUNITION PRODUCTION BASE SUPPORT						
	PRODUCTION BASE SUPPORT						
32	PROVISION OF INDUSTRIAL FACILITIES		394,133		451,558		+ 57,425
33	CONVENTIONAL MUNITIONS DEMILITARIZATION, ALL		157,535		157,535		
34	ARMS INITIATIVE		3,771		3,771		
	TOTAL, AMMUNITION PRODUCTION BASE SUPPORT		555,439		612,864		+ 57,425
	TOTAL, PROCUREMENT OF AMMUNITION, ARMY		2,234,761		2,283,369		+ 48,608

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
3	CTG, Handgun, All Types	20,158	19,159	- 999
	Restoring acquisition accountability: requirement previously funded (CTG, 9MM High Pressure Test M905)			- 999
10	81MM Mortar, All Types	46,853	47,403	+ 550
	Restoring acquisition accountability: schedule slip (81MM HE M821)			- 4,450
	Program increase			+ 5,000
11	120MM Mortar, All Types	83,003	82,853	- 150
	Restoring acquisition accountability: LAP unit cost growth (120MM HE M933)			- 150
12	Cartridges, Tank, 105MM and 120MM, All Types	168,101	151,901	- 16,200
	Restoring acquisition accountability: Program delays (XM1147)			- 8,200
	Restoring acquisition accountability: schedule slip (120MM M829A4)			- 8,000
13	Artillery Cartridges, 75MM & 105MM, All Types	39,341	34,673	- 4,668
	Restoring acquisition accountability: requirement previously funded (105MM IR ILLUM M1064)			- 4,668
14	Artillery Projectile, 155MM, All Types	211,442	221,442	+ 10,000
	Realignment M795: Army requested			- 33,000
	Realignment BONUS: Army requested			+ 33,000
	Program increase: M1121			+ 5,000
	Program increase: M825			+ 5,000
16	Artillery Propellants, Fuzes and Primers, All	236,677	206,677	- 30,000
	Restoring acquisition accountability: requirement previously funded (PGK)			- 30,000
17	Mines & Clearing Charges, All Types	15,905	15,005	- 900
	Restoring acquisition accountability: unit cost growth (MK7)			- 500
	Restoring acquisition accountability: Production engineering growth (MK7)			- 400
19	Rocket, Hydra 70, All Types	211,211	229,761	+ 18,550
	Restoring acquisition accountability: Engineering cost growth (Guided Rockets)			- 11,450
	Program increase: Unfunded requirement			+ 30,000
20	CAD/PAD, All Types	10,428	8,928	- 1,500
	Improving funds management: Forward financing			- 1,500
22	Grenades, All Types	19,896	39,896	+ 20,000
	Program increase: M18 variants			+ 20,000
23	Signals, All Types	10,121	8,121	- 2,000
	Improving funds management: Forward financing			- 2,000
26	Non-Lethal Ammunition, All Types	4,310	2,810	- 1,500
	Improving funds management: Forward financing			- 1,500
32	Industrial Facilities	394,133	451,558	+ 57,425
	Program increase			+ 57,425

OTHER PROCUREMENT, ARMY

Appropriations, 2018	\$8,298,418,000
Budget estimate, 2019	7,999,529,000
Committee recommendation	7,709,078,000

The Committee recommends an appropriation of \$7,709,078,000. This is \$290,451,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	OTHER PROCUREMENT, ARMY						
	TACTICAL AND SUPPORT VEHICLES						
	TACTICAL VEHICLES						
1	TACTICAL TRAILERS/DOLLY SETS		16,512		16,512		
2	SEMITRAILERS, FLATBED		16,951		16,951		
3	HIGH MOBILITY MULTI-PURPOSE WHEELED VEHICLE (HMMWV)		50,123		170,123		+ 120,000
4	GROUND MOBILITY VEHICLES (GMV)		46,988		46,988		
6	JOINT LIGHT TACTICAL VEHICLE		1,319,436		1,302,473		- 16,963
7	TRUCK, DUMP, 20t (CCE)		6,480		6,480		
8	FAMILY OF MEDIUM TACTICAL VEH (FMTV)		132,882		132,882		
9	FIRETRUCKS & ASSOCIATED FIREFIGHTING EQUIP		14,842		14,842		
10	FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)		138,105		121,691		- 16,414
12	HEAVY EXPANDED MOBILE TACTICAL TRUCK EXT SERV		31,892		28,596		- 3,296
13	TACTICAL WHEELED VEHICLE PROTECTION KITS		38,128		38,128		
14	MODIFICATION OF IN SVC EQUIP		78,507		75,265		- 3,242
	NON-TACTICAL VEHICLES						
16	HEAVY ARMORED SEDAN		790		790		
17	PASSENGER CARRYING VEHICLES		1,390		1,390		
18	NONTACTICAL VEHICLES, OTHER		15,415		15,415		
	TOTAL, TACTICAL AND SUPPORT VEHICLES		1,908,441		1,988,526		+ 80,085
	COMMUNICATIONS AND ELECTRONICS EQUIPMENT						
	COMM—JOINT COMMUNICATIONS						
20	SIGNAL MODERNIZATION PROGRAM		150,777		86,507		- 64,270
21	TACTICAL NETWORK TECHNOLOGY MOD IN SERVICE		469,117		430,775		- 38,342
22	SITUATION INFORMATION TRANSPORT		62,727		62,727		
23	JOINT INCIDENT SITE COMMUNICATIONS CAPABILITY		13,895		13,895		
24	JCS-EQUIPMENT (USREDCOM)		4,866		4,866		
	COMM—SATELLITE COMMUNICATIONS						
27	DEFENSE ENTERPRISE WIDEBAND SATCOM SYSTEMS		108,133		108,133		
28	TRANSPORTABLE TACTICAL COMMAND COMMUNICATIONS		56,737		69,960		+ 13,223

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
29	SHF TERM		13,100		13,100		
30	SMART-T (SPACE)		9,160		9,160		
31	GLOBAL BROADCAST SVC—GBS		25,647		25,647		
32	ENROUTE MISSION COMMAND (EMC)		37,401		37,401		
	COMM—COMBAT SUPPORT COMM						
	COMM—C3 SYSTEM						
36	COE TACTICAL SERVER INFRASTRUCTURE (TSI)		20,500		20,500		
	COMM—COMBAT COMMUNICATIONS						
38	HANDHELD MANPACK SMALL FORM FIT (HMS)		351,565		298,475		— 53,090
40	RADIO TERMINAL SET, MIDS LVT(2)		4,641		4,641		
41	TRACTOR DESK		2,187		2,187		
42	TRACTOR RIDE		9,411		9,411		
44	SPIDER FAMILY OF NETWORKED MUNITIONS INCREASE		17,515		17,515		
45	TACTICAL COMMUNICATIONS AND PROTECTIVE SYSTEM		819		819		
46	UNIFIED COMMAND SUITE		17,807		17,807		
47	COTS COMMUNICATIONS EQUIPMENT		191,835		63,835		— 128,000
48	FAMILY OF MED COMM FOR COMBAT CASUALTY CARE		25,177		25,177		
	COMM—INTELLIGENCE COMM						
50	CI AUTOMATION ARCHITECTURE [IMP]		9,740		9,740		
51	DEFENSE MILITARY DECEPTION INITIATIVE		2,667		2,667		
	INFORMATION SECURITY						
53	FAMILY OF BIOMETRICS		8,319		8,319		
54	INFORMATION SYSTEM SECURITY PROGRAM—ISSP		2,000		2,000		
55	COMMUNICATIONS SECURITY (COMSEC)		88,337		88,337		
56	DEFENSIVE CYBER OPERATIONS		51,343		45,343		— 6,000
57	INSIDER THREAT PROGRAM—UNIT ACTIVITY MONITOR		330		330		
58	PERSISTENT CYBER TRAINING ENVIRONMENT		3,000				— 3,000
	COMM—LONG HAUL COMMUNICATIONS						
59	BASE SUPPORT COMMUNICATIONS		34,434		32,557		— 1,877
	COMM—BASE COMMUNICATIONS						
60	INFORMATION SYSTEMS		95,558		81,609		— 13,949

61	EMERGENCY MANAGEMENT MODERNIZATION PROGRAM	4,736	4,736	4,736	4,736	.....
62	HOME STATION MISSION COMMAND CENTERS (MSMCC)	24,479	24,479	24,479	24,479	.....
63	INSTALLATION INFO INFRASTRUCTURE MOD PROGRAM	216,433	216,433	174,938	-41,495	.....
	ELECT EQUIP					.....
	ELECT EQUIP—TACT INT REL ACT (TIARA)					.....
66	JT/CIBS-M [MIP]	10,268	10,268	10,268	-7,909	.....
68	DGCS-A [MIP]	261,863	261,863	253,954	7,909	.....
69	JOINT TACTICAL GROUND STATION [JTGS] [MIP]	5,434	5,434	5,434	.....	.....
70	TROJAN [MIP]	20,623	20,623	20,623	.....	.....
71	MOD OF IN-SVC EQUIP (INTEL SPT) [MIP]	45,998	45,998	45,998	.....	.....
72	CI HUMINT AUTO REPRING AND COLL[CHARGS][MIP]	296	296	296	.....	.....
76	ITEMS LESS THAN \$5.0M [MIP]	410	410	410	.....	.....
	ELECT EQUIP—ELECTRONIC WARFARE (EW)					.....
77	LIGHTWEIGHT COUNTER MORTAR RADAR	9,165	9,165	9,165	.....	.....
78	EW PLANNING AND MANAGEMENT TOOLS	5,875	5,875	5,875	.....	.....
79	AIR VIGILANCE (AV)	8,497	8,497	8,497	.....	.....
81	FAMILY OF PERSISTENT SURVEILLANCE CAP. [MIP]	.....	.....	1,585	+ 1,585	.....
82	COUNTERINTELLIGENCE/SECURITY COUNTERMEASURES	.....	.....	5,400	+ 5,400	.....
83	CI MODERNIZATION [MIP]	486	486	486	.....	.....
	ELECT EQUIP—TACTICAL SURV. (TAC SURV)					.....
84	SENTINEL MODS	79,629	79,629	77,752	-1,877	.....
85	NIGHT VISION DEVICES	153,180	153,180	155,680	+ 2,500	.....
87	SMALL TACTICAL OPTICAL RIFLE MOUNTED MLRF	22,882	22,882	22,882	.....	.....
88	RADIATION MONITORING SYSTEMS	17,393	17,393	17,393	.....	.....
90	INDIRECT FIRE PROTECTION FAMILY OF SYSTEMS	46,740	46,740	6,740	- 40,000	.....
91	FAMILY OF WEAPON SIGHTS (FWS)	140,737	140,737	125,513	- 15,224	.....
93	PROFILER	171	171	171	.....	.....
94	JOINT BATTLE COMMAND—PLATFORM [JBC-P]	405,239	405,239	383,691	- 21,548	.....
95	JOINT EFFECTS TARGETING SYSTEM (JETS)	66,574	66,574	66,574	.....	.....
96	MOD OF IN-SERVICE EQUIPMENT (LLDR)	20,783	20,783	20,783	.....	.....
97	COMPUTER BALLISTICS: LHMCB XM32	8,553	8,553	8,553	.....	.....
98	MORTAR FIRE CONTROL SYSTEM	21,489	21,489	21,489	.....	.....
99	COUNTERFIRE RADARS	162,121	162,121	162,121	.....	.....
	ELECT EQUIP—TACTICAL C2 SYSTEMS					.....
100	ARMY COMMAND POST INTEGRATED INFRASTRUCTURE	2,855	2,855	2,855	.....	.....
101	FIRE SUPPORT C2 FAMILY	19,153	19,153	19,153	.....	.....
102	AIR & MSL DEFENSE PLANNING & CONTROL SYS (AMD)	33,837	33,837	29,913	- 3,924	.....
103	LIFE CYCLE SOFTWARE SUPPORT [LCSS]	5,136	5,136	5,136	.....	.....

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
104	NETWORK MANAGEMENT INITIALIZATION AND SERVICE .....	.....	18,329	.....	15,087	.....	- 3,242
105	MANEUVER CONTROL SYSTEM (MCS) .....	.....	38,015	.....	29,144	.....	- 8,871
106	GLOBAL COMBAT SUPPORT SYSTEM-ARMY .....	.....	15,164	.....	15,164	.....	.....
107	INTEGRATED PERSONNEL AND PAY SYSTEM-ARMY .....	.....	29,239	.....	.....	.....	- 29,239
109	RECONNAISSANCE AND SURVEYING INSTRUMENT SET .....	.....	6,823	.....	6,823	.....	.....
110	MOD OF IN-SERVICE EQUIPMENT (ENFIRE) .....	.....	1,177	.....	1,177	.....	.....
111	ELECT EQUIP—AUTOMATION .....	.....	.....	.....	.....	.....	.....
112	ARMY TRAINING MODERNIZATION .....	.....	12,265	.....	12,265	.....	.....
113	AUTOMATED DATA PROCESSING EQUIPMENT .....	.....	201,875	.....	201,875	.....	.....
114	GENERAL FUND ENTERPRISE BUSINESS SYSTEM .....	.....	10,976	.....	10,976	.....	.....
115	HIGH PERF COMPUTING MOD PROGRAM .....	.....	66,330	.....	66,330	.....	.....
116	CONTRACT WRITING SYSTEM .....	.....	5,927	.....	5,927	.....	.....
117	RESERVE COMPONENT AUTOMATION SYS (RCAS) .....	.....	27,896	.....	27,896	.....	.....
118	ELECT EQUIP—AUDIO VISUAL SYS (AV) .....	.....	.....	.....	.....	.....	.....
119	TACTICAL DIGITAL MEDIA .....	.....	4,392	.....	4,392	.....	.....
120	ITEMS LESS THAN \$5M (SURVEYING EQUIPMENT) .....	.....	1,970	.....	1,970	.....	.....
121	ELECT EQUIP—SUPPORT .....	.....	506	.....	15,506	.....	+ 15,000
122	PRODUCTION BASE SUPPORT (C-E) .....	.....	.....	.....	144,500	.....	+ 144,500
124	BCT EMERGING TECHNOLOGIES .....	.....	.....	.....	.....	.....	.....
125	TOTAL, COMMUNICATIONS AND ELECTRONICS EQUIPMENT .....	.....	4,150,664	.....	3,851,015	.....	- 299,649
126	OTHER SUPPORT EQUIPMENT .....	.....	.....	.....	.....	.....	.....
127	CHEMICAL DEFENSIVE EQUIPMENT .....	.....	.....	.....	.....	.....	.....
128	PROTECTIVE SYSTEMS .....	.....	2,314	.....	2,314	.....	.....
129	FAMILY OF NON-LETHAL EQUIPMENT (FNLE) .....	.....	7,478	.....	7,478	.....	.....
130	CBRN DEFENSE .....	.....	173,954	.....	173,954	.....	.....
131	BRIDGING EQUIPMENT .....	.....	.....	.....	.....	.....	.....
132	TACTICAL BRIDGING .....	.....	98,229	.....	81,729	.....	- 16,500
133	TACTICAL BRIDGE, FLOAT-RIBBON .....	.....	64,438	.....	64,438	.....	.....
134	COMMON BRIDGE TRANSPORTER RECAP .....	.....	79,916	.....	78,892	.....	- 1,024

128	ENGINEER (NON-CONSTRUCTION) EQUIPMENT	8,471	8,471	8,471	8,471	8,471	8,471
129	HANDHELD STANDOFF MINEFIELD DETECTION SYS-HST	29,883	29,883	27,666	27,666	27,666	27,666
130	GROUND STANDOFF MINE DETECTION SYSTEM [GSTMIDS]	11,594	11,594	11,594	11,594	11,594	-2,217
131	AREA MINE DETECTION SYSTEM (AMDS)	40,834	40,834	40,834	40,834	40,834	
132	HUSKY MOUNTED DETECTION SYSTEM (HMDS)	4,029	4,029	4,029	4,029	4,029	
133	ROBOTIC COMBAT SUPPORT SYSTEM	14,208	14,208	18,826	18,826	18,826	+4,618
134	EOD ROBOTICS SYSTEMS RECAPITALIZATION	31,456	31,456	31,456	31,456	31,456	
135	ROBOTICS AND APPLIQUE SYSTEMS	1,748	1,748	1,748	1,748	1,748	
136	REMOTE DEMOLITION SYSTEMS	7,829	7,829	7,829	7,829	7,829	
137	ITEMS LESS THAN \$5M, COUNTERMINE EQUIPMENT	5,806	5,806	5,806	5,806	5,806	
138	FAMILY OF BOATS AND MOTORS						
	COMBAT SERVICE SUPPORT EQUIPMENT						
139	HEATERS AND ECUS	9,852	9,852	9,852	9,852	9,852	
140	SOLDIER ENHANCEMENT	1,103	1,103	1,103	1,103	1,103	
141	PERSONNEL RECOVERY SUPPORT SYSTEM (PRSS)	5,875	5,875	5,875	5,875	5,875	
142	GROUND SOLDIER SYSTEM	92,487	92,487	34,781	34,781	34,781	-57,706
143	MOBILE SOLDIER POWER	30,774	30,774	30,774	30,774	30,774	
145	FIELD FEEDING EQUIPMENT	17,521	17,521	17,521	17,521	17,521	
146	CARGO AERIAL DEL & PERSONNEL PARACHUTE SYSTEM	44,855	44,855	44,855	44,855	44,855	
147	FAMILY OF ENGR COMBAT AND CONSTRUCTION SETS	17,173	17,173	15,978	15,978	15,978	-1,195
148	ITEMS LESS THAN \$5M (ENG SPT)	2,000	2,000	2,000	2,000	2,000	
	PETROLEUM EQUIPMENT						
149	QUALITY SURVEILLANCE EQUIPMENT	1,770	1,770	1,770	1,770	1,770	
150	DISTRIBUTION SYSTEMS, PETROLEUM & WATER	39,730	39,730	35,635	35,635	35,635	-4,095
	MEDICAL EQUIPMENT						
151	COMBAT SUPPORT MEDICAL	57,752	57,752	77,752	77,752	77,752	+20,000
	MAINTENANCE EQUIPMENT						
152	MOBILE MAINTENANCE EQUIPMENT SYSTEMS	37,722	37,722	34,479	34,479	34,479	-3,243
153	ITEMS LESS THAN \$5.0M (MAINT EO)	4,985	4,985	4,985	4,985	4,985	
	CONSTRUCTION EQUIPMENT						
155	SCRAPERS, EARTHMOVING	7,961	7,961	7,961	7,961	7,961	
156	HYDRAULIC EXCAVATOR	1,355	1,355	1,355	1,355	1,355	
158	ALL TERRAIN CRANES	13,031	13,031	13,031	13,031	13,031	
159	HIGH MOBILITY ENGINEER EXCAVATOR (HMEEL) FOS	46,048	46,048	46,048	46,048	46,048	
160	ENHANCED RAPID AIRFIELD CONSTRUCTION CAPAP	980	980	980	980	980	
161	CONST EQUIP ESP	37,017	37,017	35,652	35,652	35,652	-1,365
162	ITEMS LESS THAN \$5.0M (CONST EQUIP)	6,103	6,103	6,103	6,103	6,103	

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
163	RAIL FLOAT CONTAINERIZATION EQUIPMENT		27,711		25,663		-2,048
164	ARMY WATERCRAFT ESP		8,385		8,385		
	ITEMS LESS THAN \$5.0M (FLOAT/RAIL)						
	GENERATORS						
165	GENERATORS AND ASSOCIATED EQUIPMENT		133,772		133,772		
166	TACTICAL ELECTRIC POWER RECAPITALIZATION		8,333		8,333		
	MATERIAL HANDLING EQUIPMENT						
167	FAMILY OF FORKLIFTS		12,901		12,901		
	TRAINING EQUIPMENT						
168	COMBAT TRAINING CENTERS SUPPORT		123,228		121,428		-1,800
169	TRAINING DEVICES, NONSYSTEM		228,598		228,598		
170	CLOSE COMBAT TACTICAL TRAINER		33,080		33,080		
171	AVIATION COMBINED ARMS TACTICAL TRAINER		32,700		32,700		
172	GAMING TECHNOLOGY IN SUPPORT OF ARMY TRAINING		25,161		25,161		
	TEST MEASURE AND DIG EQUIPMENT (TMD)						
173	CALIBRATION SETS EQUIPMENT		4,270		4,270		
174	INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)		76,295		72,542		-3,753
175	TEST EQUIPMENT MODERNIZATION (TEMOD)		9,806		9,806		
	OTHER SUPPORT EQUIPMENT						
176	M25 STABILIZED BINOCULAR		4,368		4,368		
177	RAPID EQUIPPING SOLDIER SUPPORT EQUIPMENT		9,879		11,879		+2,000
178	PHYSICAL SECURITY SYSTEMS (OPAS)		54,043		51,484		-2,559
179	BASE LEVEL COM'L EQUIPMENT		6,633		6,633		
180	MODIFICATION OF IN-SVC EQUIPMENT (OPA-3)		49,797		49,797		
181	PRODUCTION BASE SUPPORT (OTH)		2,301		2,301		
182	SPECIAL EQUIPMENT FOR USER TESTING		11,608		11,608		
183	TRACTOR YARD		4,956		4,956		
	TOTAL, OTHER SUPPORT EQUIPMENT		1,926,106		1,855,219		-70,887

184	SPARE AND REPAIR PARTS INITIAL SPARES—C&E	9,817	9,817	9,817	9,817	
999	TOTAL, SPARE AND REPAIR PARTS	9,817	9,817	9,817	9,817	
	CLASSIFIED PROGRAMS	4,501	4,501	4,501	4,501	
	TOTAL, OTHER PROCUREMENT, ARMY	7,999,529	7,999,529	7,709,078	7,709,078	-290,451

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
3	Ambulance, 4 LITTER, 5/4 TON, 4x4	50,123	170,123	+ 120,000
	Program increase: HMMWV ambulances			+ 120,000
6	Joint Light Tactical Vehicle	1,319,436	1,302,473	- 16,963
	Maintain program affordability: Maintain test support level of effort			- 16,963
10	Family of Heavy Tactical Vehicles [FHTV]	138,105	121,691	- 16,414
	Restoring acquisition accountability: CLS contract award delay			- 15,219
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 1,195
12	Hvy Expanded Mobile Tactical Truck Ext Serv	31,892	28,596	- 3,296
	Improving funds management: Prior year carryover			- 3,296
14	Modification of In Svc Equip	78,507	75,265	- 3,242
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 3,242
20	Signal Modernization Program	150,777	86,507	- 64,270
	Improving funds management: SFAB equipment funded in Public Law 115-141			- 41,000
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 2,900
	Restoring acquisition accountability: TROPO delays			- 20,370
21	Tactical Network Technology Mod In Svc	469,117	430,775	- 38,342
	Maintain program affordability: Unjustified equipment and support growth			- 35,000
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 3,342
28	Transportable Tactical Command Communications	56,737	69,960	+ 13,223
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 4,777
	Program increase			+ 18,000
38	Handheld Manpack Small Form Fit [HMS]	351,565	298,475	- 53,090
	Improving funds management: SFAB equipment funded in Public Law 115-141			- 51,591
	Improving funds management: Site activation carryover			- 1,499
47	COTS Communications Equipment	191,835	63,835	- 128,000
	Improving funds management: SFAB equipment funded in Public Law 115-141			- 128,000
56	Defensive CYBER Operations	51,343	45,343	- 6,000
	Insufficient budget justification: Program discrepancies			- 6,000
58	Persistent Cyber Training Environment	3,000		- 3,000
	Restoring acquisition accountability: Ahead of need			- 3,000
59	Base Support Communications	34,434	32,557	- 1,877
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 1,877
60	Information Systems	95,558	81,609	- 13,949
	Restoring acquisition accountability: ARCYBER funded in excess to requirement			- 13,949
63	Installation Info Infrastructure Mod Program	216,433	174,938	- 41,495
	Maintain program affordability: Unjustified growth			- 20,000
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 21,495
68	DCGS-A [MIP]	261,863	253,954	- 7,909
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			- 7,909
81	Family of Persistent Surveillance Cap. [MIP]		1,585	+ 1,585
	Program increase: SOUTHCOM force protection			+ 1,585
82	Counterintelligence/Security Countermeasures		5,400	+ 5,400
	Program increase: SOUTHCOM ISR requirements			+ 5,400
84	Sentinel Mods	79,629	77,752	- 1,877

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-1,877
85	Night Vision Devices	153,180	155,680	+2,500
	Program increase: Digital night vision test devices			+2,500
90	Indirect Fire Protection Family of Systems	46,740	6,740	-40,000
	Improving funds management: Forward financing support costs			-10,000
	Restoring acquisition accountability: Requirements previously funded			-30,000
91	Family of Weapon Sights [FWS]	140,737	125,513	-15,224
	Restoring acquisition accountability: FWS-S program delays			-15,224
94	Joint Battle Command—Platform [JBC-P]	405,239	383,691	-21,548
	Improving funds management: SFAB equipment funded in Public Law 115-141			-13,358
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-8,190
102	AIR & MSL Defense Planning & Control Sys	33,837	29,913	-3,924
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-3,924
104	Network Management Initialization and Service	18,329	15,087	-3,242
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-3,242
105	Maneuver Control System [MCS]	38,015	29,144	-8,871
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-8,871
107	Integrated Personnel and Pay System—Army [IPPS-A]	29,239		-29,239
	Restoring acquisition accountability: Release 3.0 delays ..			-29,239
119	Production Base Support [C-E]	506	15,506	+15,000
	Program increase: Advanced manufacturing			+15,000
120	BCT Emerging Technologies		144,500	+144,500
	Program increase: Cyber electromagnetic activities			+144,500
125	Tactical Bridging	98,229	81,729	-16,500
	Restoring acquisition accountability: LOCB acquisition strategy change			-16,500
127	Common Bridge Transporter [CBT] Recap	79,916	78,892	-1,024
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-1,024
129	Grnd Standoff Mine Detectn Sys [GSTAMIDS]	29,883	27,666	-2,217
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-2,217
133	EOD Robotics Systems Recapitalization	14,208	18,826	+4,618
	Transfer ground robotics MTRS standardization: Army-requested from RDT&E line 138			+4,618
142	Ground Soldier System	92,487	34,781	-57,706
	Improving funds management: SFAB equipment funded in Public Law 115-141			-56,000
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-1,706
147	Family of Engr Combat and Construction Sets	17,173	15,978	-1,195
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-1,195
150	Distribution Systems, Petroleum & Water	39,730	35,635	-4,095
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-4,095
151	Combat Support Medical	57,752	77,752	+20,000
	Program increase: Enhanced rotary wing medical kits			+10,000
	Program increase: Enhanced vehicle medical kits			+10,000
152	Mobile Maintenance Equipment Systems	37,722	34,479	-3,243
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-3,243
161	Const Equip Esp	37,017	35,652	-1,365
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-1,365

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
163	Army Watercraft Esp	27,711	25,663	-2,048
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-2,048
168	Combat Training Centers Support	123,228	121,428	-1,800
	Restoring acquisition accountability: Ahead of need			-1,800
174	Integrated Family of Test Equipment (IFTE)	76,295	72,542	-3,753
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-3,753
177	Rapid Equipping Soldier Support Equipment	9,879	11,879	+2,000
	Program increase: Rapid equipping force			+2,000
178	Physical Security Systems (OPA3)	54,043	51,484	-2,559
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for			-2,559

HMMWV Ambulances.—The Committee is concerned about the Army's current level of investment to modernize the active component ground ambulance fleet. To accelerate the modernization of ground ambulances, the Committee recommends an increase of \$120,000,000 over the fiscal year 2019 President's budget request.

Tactical Communication and Protective Systems.—The Committee is aware that hearing damage is a risk faced by warfighters both in combat and in training. The ability to hear clearly and quickly evaluate one's surroundings is essential for situational awareness and mission success. The Committee notes that technologies have been developed to allow radio operators to wear hearing protection without inhibiting situational awareness. The Committee is concerned that these technologies are not being acquired in conjunction with procurements of tactical radio. This means that many radios are issued with substandard hearing protection or are unable to be issued at all while awaiting deliveries of compliant headsets. The Committee encourages the Under Secretary of Defense for Personnel and Readiness to work in conjunction with the service acquisition executives to ensure that procurements of radios are in step with procurements of tactical hearing protection and communication devices so that a complete system with the most utility and protection available can be delivered to the warfighter.

Army Network Modernization Strategy.—The Committee continues to support the Department of the Army's efforts to modernize its air-land ad-hoc, mobile tactical communications and data networks and notes that, pursuant to section 112 of the 2018 National Defense Authorization Act (Public Law 115-91), the Army provided its network modernization strategy to Congress. The Committee further notes that the Army is currently staffing architecture and standards documents in addition to multiple overarching Information System Initial Capabilities Documents in support of network modernization efforts. However, the Committee is concerned that the modernization strategy is continuing to evolve and that the justification supporting the fiscal year 2019 President's budget request does not provide the requisite details to appropriately assess the resourcing requirements and acquisition objectives at the program, project, and activity level.

Therefore, not later than 90 days after the enactment of this act, the Program Executive Officer Command Control Communications-

Tactical [PEO C3T], in conjunction with the Director, Network Cross-Functional Team, shall submit a network acquisition roadmap to the congressional defense committees, to include detailed actions and milestones, which satisfies the following objectives: (1) describes the architecture and standards for the unified transport layer and common operating environment that will serve as integrating guidance for the development and acquisition of modernization technologies; (2) categorizes under capability sets, all current and future network acquisitions and modernization activities, to include currently funded programs and requirements that align with the Army’s network strategy; (3) development and approval of requirements documents that support the Army’s network strategy and serve as overarching guidance for enabling systems and technologies; (4) details the plan to develop, test with appropriate instrumentation, and field the integrated capabilities, as part of one or more programs of record or other acquisition efforts; (5) an accounting of the Army’s fiscal year 2019 budget request Future Year’s Defense Program profile for investment appropriations that support the Army’s network strategy based on the defined categories. This should include a detailed account of all programs, projects, and activities within existing budget line items, existing programs of records, and any future investments within the FYDP; and (6) a proposal to realign resources into budget line items by capability set or a plan for discernible cost elements and activities within the existing budget line items.

Additionally, the PEO C3T shall submit to the congressional defense committees a test and evaluation plan for the Secure But Unclassified [SBU] components of the Integrated Tactical Network architecture prior to fielding any additional SBU systems to operational units, beyond fiscal year 2019. Furthermore, the PEO C3T shall provide notification to the congressional defense committees upon completion of cyber and vulnerability test and evaluation of the enabling SBU capabilities.

AIRCRAFT PROCUREMENT, NAVY

Appropriations, 2018	\$19,957,380,000
Budget estimate, 2019	19,041,799,000
Committee recommendation	20,083,169,000

The Committee recommends an appropriation of \$20,083,169,000. This is \$1,041,370,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
AIRCRAFT PROCUREMENT, NAVY							
COMBAT AIRCRAFT							
1	F/A-18E/F (FIGHTER) HORNET [MYP]	24	1,937,553	24	1,852,953		- 84,600
2	F/A-18E/F (FIGHTER) HORNET [MYP] (AP)		58,799		58,799		
3	JOINT STRIKE FIGHTER CV	9	1,144,958	17	1,885,778	+ 8	+ 740,820
4	JOINT STRIKE FIGHTER CV [AP-CY]		140,010		140,010		
5	JSF STOVL	20	2,312,847	24	2,598,049	+ 4	+ 285,202
6	JSF STOVL [AP-CY]		228,492		228,492		
7	CH-53K (HEAVY LIFT)	8	1,113,804	8	1,022,804		- 91,000
8	CH-53K (HEAVY LIFT) [AP-CY]						
9	V-22 (MEDIUM LIFT)	7	161,079		161,079		
10	V-22 (MEDIUM LIFT) [AP-CY]		806,337	10	1,024,337	+ 3	+ 218,000
11	UH-1Y/AH-1Z	25	36,955		28,755		- 8,200
14	P-8A POSEIDON	10	820,755	25	820,755		
15	P-8A POSEIDON [AP-CY]		1,803,753	10	1,755,353		- 48,400
16	E-2D ADV HAWKEYE	4	180,000		180,000		
17	E-2D ADV HAWKEYE [AP-CY]		742,693	5	904,193	+ 1	+ 161,500
	TOTAL, COMBAT AIRCRAFT		11,728,769		12,902,091		+ 1,173,322
OTHER AIRCRAFT							
18	C-40A	2	206,000				
20	KC-130J	2	160,433	2	160,433	- 2	- 206,000
21	KC-130J [AP-CY]		110,013		102,013		- 8,000
22	MQ-4 TRITON	3	568,743	3	568,743		
23	MQ-4 TRITON [AP-CY]		58,522		58,522		
24	MQ-8 UAV		54,761		54,761		
25	STUASLO UAV		14,866		11,866		- 3,000
26	VH-92A EXECUTIVE HELO	6	649,015	6	649,015		
	TOTAL, OTHER AIRCRAFT		1,822,353		1,605,353		- 217,000
MODIFICATION OF AIRCRAFT							
27	AEA SYSTEMS		25,277		25,277		

28	AV-8 SERIES	58,577	58,577	58,577	58,577	.....
29	ADVERSARY	14,606	14,606	14,606	14,606	.....
30	F-18 SERIES	1,213,482	1,125,582	1,125,582	.....	-87,900
31	H-53 SERIES	70,997	70,997	70,997	70,997	.....
32	SH-60 SERIES	130,661	130,661	130,661	130,661	.....
33	H-1 SERIES	87,143	87,143	87,143	87,143	.....
34	EP-3 SERIES	3,633	3,633	3,633	3,633	.....
35	P-3 SERIES	803	803	803	803	.....
36	E-2 SERIES	88,780	80,980	80,980	80,980	-7,800
37	TRAINER A/C SERIES	11,660	11,660	11,660	11,660	.....
38	C-2A	11,327	8,327	8,327	8,327	-3,000
39	C-130 SERIES	79,075	70,575	70,575	70,575	-8,500
40	FEW56	597	597	597	597	.....
41	CARGO/TRANSPORT A/C SERIES	8,932	8,932	8,932	8,932	.....
42	E-6 SERIES	181,821	173,821	173,821	173,821	-8,000
43	EXECUTIVE HELICOPTERS SERIES	23,566	23,566	23,566	23,566	.....
44	SPECIAL PROJECT AIRCRAFT	7,620	7,620	7,620	7,620	.....
45	T-45 SERIES	195,475	195,475	195,475	195,475	.....
46	POWER PLANT CHANGES	21,521	21,521	21,521	21,521	.....
47	JPATS SERIES	27,644	27,644	27,644	27,644	.....
48	AVIATION LIFE SUPPORT MODS	15,864	15,864	15,864	15,864	.....
49	COMMON ECM EQUIPMENT	166,306	191,306	191,306	191,306	+25,000
50	COMMON AVIONICS CHANGES	117,551	117,551	117,551	117,551	.....
51	COMMON DEFENSIVE WEAPON SYSTEM	1,994	1,994	1,994	1,994	.....
52	ID SYSTEMS	40,696	37,696	37,696	37,696	-3,000
53	P-8 SERIES	71,251	71,251	71,251	71,251	.....
54	MAGTF EW FOR AVIATION	11,590	11,590	11,590	11,590	.....
55	MQ-8 SERIES	37,907	37,907	37,907	37,907	.....
57	V-22 (TILT/ROTOR ACFT) OSPREY	214,820	194,020	194,020	194,020	-20,800
58	NEXT GENERATION JAMMER (NGJ)	952	952	952	952	-952
59	F-35 STOVL SERIES	36,618	36,618	36,618	36,618	.....
60	F-35 CV SERIES	21,236	21,236	21,236	21,236	.....
61	QUICK REACTION CAPABILITY (QRC)	101,499	101,499	101,499	101,499	.....
62	MQ-4 SERIES	48,278	48,278	48,278	48,278	.....
63	RQ-21 SERIES	6,904	6,904	6,904	6,904	.....
	TOTAL, MODIFICATION OF AIRCRAFT	3,156,663	3,041,711	3,041,711	3,041,711	-114,952
64	AIRCRAFT SPARES AND REPAIR PARTS	1,792,920	1,992,920	1,992,920	1,992,920	+200,000
	SPARES AND REPAIR PARTS					

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES						
65	COMMON GROUND EQUIPMENT		421,606		421,606		
66	AIRCRAFT INDUSTRIAL FACILITIES		24,496		24,496		
67	WAR CONSUMABLES		42,108		42,108		
68	OTHER PRODUCTION CHARGES		1,444		1,444		
69	SPECIAL SUPPORT EQUIPMENT		49,489		49,489		
70	FIRST DESTINATION TRANSPORTATION		1,951		1,951		
	TOTAL, AIRCRAFT SUPPORT EQUIPMENT & FACILITIES		541,094		541,094		
	TOTAL, AIRCRAFT PROCUREMENT, NAVY		19,041,799		20,083,169		+ 1,041,370

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	F/A-18E/F (Fighter) Hornet	1,937,553	1,852,953	- 84,600
	Restoring acquisition accountability: Unit cost savings			- 54,100
	Maintain program affordability: Unjustified growth in support costs			- 30,500
3	Joint Strike Fighter CV	1,144,958	1,885,778	+ 740,820
	Program increase: Four aircraft for the Marine Corps			+ 398,000
	Program increase: Four aircraft for the Navy			+ 398,000
	Restoring acquisition accountability: Unit cost savings			- 55,180
5	JSF STOVL	2,312,847	2,598,049	+ 285,202
	Program increase: Four aircraft			+ 412,000
	Restoring acquisition accountability: Unit cost savings			- 126,798
7	CH-53K (Heavy Lift)	1,113,804	1,022,804	- 91,000
	Maintain program affordability: Unjustified support cost growth			- 91,000
9	V-22 (Medium Lift)	806,337	1,024,337	+ 218,000
	Program increase: Three aircraft for the Marine Corps			+ 240,000
	Restoring acquisition accountability: Unit cost savings			- 22,000
10	V-22 (Medium Lift)—AP	36,955	28,755	- 8,200
	Maintain program affordability: Excess to need			- 8,200
14	P-8A Poseidon	1,803,753	1,755,353	- 48,400
	Restoring acquisition accountability: Anticipated unit cost contract award savings			- 12,000
	Maintain program affordability: Excess support costs			- 36,400
16	E-2D Adv Hawkeye	742,693	904,193	+ 161,500
	Program increase: One aircraft			+ 170,000
	Restoring acquisition accountability: Unit cost savings			- 8,500
18	C-40A	206,000		- 206,000
	Improving funds management: Two C-40s funded in Public Law 115-141			- 206,000
21	KC-130J—AP	110,013	102,013	- 8,000
	Maintain program affordability: Excess advance procurement			- 8,000
25	STUASLO UAV	14,866	11,866	- 3,000
	Maintain program affordability: Excess production engineering support			- 3,000
30	F-18 Series	1,213,482	1,125,582	- 87,900
	Program increase: EA-18G reactive electronic attack measures technology			+ 13,900
	Restoring acquisition accountability: IRST modifications early to need			- 79,200
	Maintain program affordability: Unjustified growth in non-recurring engineering			- 22,600
36	E-2 Series	88,780	80,980	- 7,800
	Restoring acquisition accountability: SIPR CHAT mods early to need			- 5,300
	Restoring acquisition accountability: Navigation warfare mods early to need			- 2,500
38	C-2A	11,327	8,327	- 3,000
	Improving funds management: Forward financed			- 3,000
39	C-130 Series	79,075	70,575	- 8,500
	Improving funds management: Forward financed			- 8,500
42	E-6 Series	181,821	173,821	- 8,000
	Maintain program affordability: Excess installation costs			- 8,000
49	Common ECM Equipment	166,306	191,306	+ 25,000
	Program increase: F/A-18 E/F adaptive radar countermeasures			+ 25,000
52	ID Systems	40,696	37,696	- 3,000
	Maintain program affordability: Excess installation costs			- 3,000
57	V-22 (Tilt/Rotor ACFT) Osprey	214,820	194,020	- 20,800

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Restoring acquisition accountability: Common configuration unit cost savings			- 8,000
	Maintain program affordability: Excess support costs			- 12,800
58	Next Generation Jammer (NGJ)	952		- 952
	Restoring acquisition accountability: Procurement early to need			- 952
64	Spares and Repair Parts	1,792,920	1,992,920	+ 200,000
	Program increase			+ 200,000

WEAPONS PROCUREMENT, NAVY

Appropriations, 2018	\$3,510,590,000
Budget estimate, 2019	3,702,393,000
Committee recommendation	3,780,572,000

The Committee recommends an appropriation of \$3,780,572,000. This is \$78,179,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
WEAPONS PROCUREMENT, NAVY							
	BALLISTIC MISSILES						
	MODIFICATION OF MISSILES						
1	TRIDENT II MODS		1,078,750		1,078,750		
	SUPPORT EQUIPMENT AND FACILITIES						
2	MISSILE INDUSTRIAL FACILITIES		6,998		6,998		
	TOTAL BALLISTIC MISSILES		1,085,748		1,085,748		
	OTHER MISSILES						
	STRATEGIC MISSILES						
3	TOMAHAWK		98,570		98,570		
	TACTICAL MISSILES						
4	AMRAAM	140	211,058	140	211,058		
5	SIDEWINDER	191	77,927	249	122,927	+58	+45,000
6	JSOW		1,330		1,330		
7	STANDARD MISSILE	125	490,210	125	490,210		
8	STANDARD MISSILE (AP-CY)		125,683		125,683		
9	SMALL DIAMETER BOMB II	750	91,272	750	91,272		
10	RAM	120	96,221	120	96,221		
11	JOINT AIR GROUND MISSILE (JAGM)	75	24,109	75	24,109		
14	STAND OFF PRECISION GUIDED MUNITIONS (SOPGM)	31	11,378	31	11,378		
15	AERIAL TARGETS		137,137		129,437		-7,700
16	OTHER MISSILE SUPPORT		3,318		3,318		
17	LRASM	25	81,190	35	111,190	+10	+30,000
18	LCS OTH MISSILE	8	18,156	8	18,156		
	MODIFICATION OF MISSILES						
19	ESSM	45	98,384	45	98,384		
20	HARPOON MODS		14,840		26,840		+12,000
21	HARM MODS		187,985		187,985		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
23	SUPPORT EQUIPMENT AND FACILITIES		2,006		12,006		+ 10,000
24	WEAPONS INDUSTRIAL FACILITIES		66,779		66,779		
	FLEET SATELLITE COMM FOLLOW-ON						
25	ORDNANCE SUPPORT EQUIPMENT		62,008		62,008		
	ORDNANCE SUPPORT EQUIPMENT						
	TOTAL, OTHER MISSILES		1,899,561		1,988,861		+ 89,300
	TORPEDOES AND RELATED EQUIPMENT						
	TORPEDOES AND RELATED EQUIP						
26	SSTD		6,353		6,353		
27	MK-48 TORPEDO	45	92,616	50	103,616	+ 5	+ 11,000
28	ASW TARGETS		12,324		12,324		
	MOD OF TORPEDOES AND RELATED EQUIP						
29	MK-54 TORPEDO MODS		105,946		83,825		- 22,121
30	MK-48 TORPEDO ADCAP MODS		40,005		40,005		
31	QUICKSTRIKE MINE		9,758		9,758		
	SUPPORT EQUIPMENT						
32	TORPEDO SUPPORT EQUIPMENT		79,371		79,371		
33	ASW RANGE SUPPORT		3,872		3,872		
	DESTINATION TRANSPORTATION						
34	FIRST DESTINATION TRANSPORTATION		3,726		3,726		
	TOTAL, TORPEDOES AND RELATED EQUIPMENT		353,971		342,850		- 11,121
	OTHER WEAPONS						
	GUNS AND GUN MOUNTS						
35	SMALL ARMS AND WEAPONS		15,067		15,067		
	MODIFICATION OF GUNS AND GUN MOUNTS						
36	CWS MODS		63,318		63,318		
37	COAST GUARD WEAPONS		40,823		40,823		
38	GUN MOUNT MODS		74,618		74,618		

39	LCS MODULE WEAPONS	90	11,350	90	11,350	.....
41	AIRBORNE MINE NEUTRALIZATION SYSTEMS .....	.....	22,249	.....	22,249	.....
	TOTAL, OTHER WEAPONS .....	.....	227,425	.....	227,425	.....
43	SPARES AND REPAIR PARTS .....	.....	135,688	.....	135,688	.....
	TOTAL, WEAPONS PROCUREMENT, NAVY .....	.....	3,702,393	.....	3,780,572	+ 78,179

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
5	Sidewinder	77,927	122,927	+ 45,000
	Program increase: Additional munitions			+ 45,000
15	Aerial Targets	137,137	129,437	- 7,700
	Restoring acquisition accountability: BQM-177A acquisition strategy			- 7,700
17	LRASM	81,190	111,190	+ 30,000
	Program increase: Additional munitions			+ 30,000
20	Harpoon Mods	14,840	26,840	+ 12,000
	Program increase: Additional munitions			+ 12,000
23	Weapons Industrial Facilities	2,006	12,006	+ 10,000
	Program increase: NIROP facilitization			+ 10,000
27	MK-48 Torpedo	92,616	103,616	+ 11,000
	Program increase: Additional munitions			+ 11,000
29	MK-54 Torpedo Mods	105,946	83,825	- 22,121
	Restoring acquisition accountability: MK 54 Mod 0 installation ahead of need			- 4,212
	Restoring acquisition accountability: MK 54 Mod 1 contract delays			- 17,909

Next Generation Land Attack Weapon [NGLAW] and Interim Capabilities.—The fiscal year 2019 President's budget request includes \$16,900,000 to continue the Analysis of Alternatives [AoA] for the NGLAW. The Committee understands that NGLAW is intended to address the Navy's cruise missile strategy against future threats and targets in time to replace or modify existing weapons programs. The Committee notes that a capabilities based assessment conducted by the Navy deferred the NGLAW initial operating capability [IOC] requirement by several years and the Committee further notes that the AoA, which commenced in fiscal year 2017, has expanded in scope and its completion is delayed. Therefore, the Committee has supported efforts to sustain the industrial base and provide incremental improvements to existing capabilities as interim solutions. This includes investments in multiple capability upgrades and the acquisition of additional Tomahawk all-up rounds [AUR], most recently by providing \$102,000,000 above the President's budget request in the Department of Defense Appropriations Act, 2018 (Public Law 115-141), pursuant to the Navy's fiscal year 2018 enhancement request following enactment of the Bipartisan Budget Act of 2018 (Public Law 115-123).

The fiscal year 2019 President's budget request for Tomahawk does not include funding for new production AURs, reflecting the Navy's strategy to transition from new production to recertification and modernization activities. In addition, the Navy has proposed to repurpose the fiscal year 2018 appropriated increase for new production missiles, in contradiction to the Navy's request. The Committee directs the Secretary of the Navy to conduct a full review of the Tomahawk program including: an analysis of the viability of new production in fiscal year 2020; an analysis of the capacity for concurrent new production and recertification activities within existing facilities; revised cost and schedule projections for modifica-

tion and recertification activities, to include alternatives with and without concurrent new production; a detailed review of the execution of the fiscal year 2017 and 2018 new production congressional adds; certified courses of action and cost estimates for the \$102,000,000 new production funding added in fiscal year 2018, to include detailed actions and milestones; and an analysis of surface and sub-surface launched land attack weapons inventory and requirements projections through the NGLAW IOC date, to include Tomahawk and other weapons systems that may provide an interim capability. The Secretary of the Navy shall provide a report detailing the results of the review to the congressional defense committees not later than 90 days after enactment of this act.

In addition, the Committee is aware that a surface launched variant of the Long Range Anti-Ship Missile [LRASM] offers the potential to increase the fleet's surface warfare capability at a relatively low cost-per-kill while leveraging existing capability. Therefore, the Committee directs the Deputy Chief of Naval Operations for Warfare Systems to provide a report to the congressional defense committees not later than 90 days after the enactment of this act identifying the capabilities the surface launched LRASM could bring to the fleet. Further, the Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to identify costs to validate a surface launch LRASM and the benefits of fielding such a system.

Low-Yield Nuclear Warhead.—The Committee directs the Department of Defense, in consultation with the Secretary of Energy, to submit a report to the committee that details: (1) what Navy equities required to support a low-yield W-76 capability on operationally available submarine-launched ballistic missiles; (2) any changes to or additional crew and personnel training requirements necessary to support any such modifications, a timeline for completing such modifications and changes in order to permit deployment of such warheads as well as a timeline for actually loading and fielding such warheads; (3) rationale for deploying low-yield warhead(s) on a SLBM, each of which is accountable under the New Strategic Arms Reduction Treaty [New START], instead of taking advantage of Treaty attribution rules that count each U.S. strategic bomber as a single warhead; (4) and a description of actions that will be taken to mitigate risks of miscalculation associated with adversaries being unable to distinguish between a submarine-launched ballistic missile carrying a low-yield warhead and that of a missile carrying several high-yield warheads. The Committee directs that no fiscal year 2019 funding provided by this act shall be used to deploy such W76-2 low-yield nuclear Trident II D5 warheads until examination of the report by the Committee.

PROCUREMENT OF AMMUNITION, NAVY AND MARINE CORPS

Appropriations, 2018	\$804,335,000
Budget estimate, 2019	1,006,209,000
Committee recommendation	970,454,000

The Committee recommends an appropriation of \$970,454,000. This is \$35,755,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	PROC AMMO, NAVY						
	NAVY AMMUNITION						
1	GENERAL PURPOSE BOMBS		79,871		72,371		-7,500
2	JDM	3,688	87,900		87,900		-9,250
3	AIRBORNE ROCKETS, ALL TYPES		151,431		142,181		
4	MACHINE GUN AMMUNITION		11,344		11,344		
5	PRACTICE BOMBS		49,471		49,471		
6	CARTRIDGES & CART ACTUATED DEVICES		56,227		56,227		
7	AIR EXPENDABLE COUNTERMEASURES		66,382		66,382		
8	JATOS		2,907		2,907		
9	5 INCH/54 GUN AMMUNITION		72,657		72,477		-180
10	INTERMEDIATE CALIBER GUN AMMUNITION		33,613		32,813		-800
11	OTHER SHIP GUN AMMUNITION		42,142		42,142		
12	SMALL ARMS & LANDING PARTY AMMO		49,888		49,888		
13	PYROTECHNIC AND DEMOLITION		10,931		10,931		
15	AMMUNITION LESS THAN \$5 MILLION		1,106		1,106		
	TOTAL, PROC AMMO, NAVY		715,870		698,140		-17,730
	PROC AMMO, MARINE CORPS						
	MARINE CORPS AMMUNITION						
19	MORTARS		28,266		18,516		-9,750
21	DIRECT SUPPORT MUNITIONS		63,664		63,664		
22	INFANTRY WEAPONS AMMUNITION		59,295		51,020		-8,275
26	COMBAT SUPPORT MUNITIONS		31,577		31,577		
28	AMMO MODERNIZATION		15,001		15,001		
29	ARTILLERY MUNITIONS		86,297		86,297		
30	ITEMS LESS THAN \$5 MILLION		6,239		6,239		
	TOTAL, PROC AMMO, MARINE CORPS		290,339		272,314		-18,025
	TOTAL, PROCUREMENT OF AMMO, NAVY & MARINE CORPS		1,006,209		970,454		-35,755

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	General Purpose Bombs	79,871	72,371	- 7,500
	Improving funds management: Previously funded requirement (Q2181 Laser Guided Bombs)			- 7,500
3	Airborne Rockets, All Types	151,431	142,181	- 9,250
	Restoring acquisition accountability: Unit cost growth (MK 66)			- 2,300
	Improving funds management: Contract savings (APKWS) ..			- 4,900
	Restoring acquisition accountability: Excess product improvement growth (APKWS)			- 2,050
9	5 Inch/54 Gun Ammunition	72,657	72,477	- 180
	Restoring acquisition accountability: Unit cost growth (5"/54 propelling charge)			- 180
10	Intermediate Caliber Gun Ammunition	33,613	32,813	- 800
	Restoring acquisition accountability: Unit cost growth (57MM, HE-PD)			- 800
19	Mortars	28,266	18,516	- 9,750
	Improving funds management: Previously funded requirements			- 9,750
22	Infantry Weapons Ammunition	59,295	51,020	- 8,275
	Improving funds management: Previously funded requirement (7.62x39mm Non-Standard)			- 1,000
	Improving funds management: Contract delays (MK 281) ..			- 7,275

SHIPBUILDING AND CONVERSION, NAVY

Appropriations, 2018	\$23,824,738,000
Budget estimate, 2019	21,871,437,000
Committee recommendation	23,992,937,000

The Committee recommends an appropriation of \$23,992,937,000. This is \$2,121,500,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
SHIPBUILDING & CONVERSION, NAVY							
1	FLEET BALLISTIC MISSILE SHIPS						
	OHIO REPLACEMENT SUBMARINE (AP)		3,005,330		3,242,330		+ 237,000
OTHER WARSHIPS							
2	CARRIER REPLACEMENT PROGRAM (CVN 80)		1,598,181		1,573,181		- 25,000
4	VIRGINIA CLASS SUBMARINE	2	4,373,382	2	4,373,382		
5	VIRGINIA CLASS SUBMARINE [AP-CY]		2,796,401		2,796,401		
7	CVN REFUELING OVERHAULS [AP-CY]		449,597		449,597		
8	DDG 1000		270,965		270,965		
9	DDG-51	3	5,253,327	3	5,171,827		- 81,500
10	DDG-51 [AP-CY]		391,928		641,928		+ 250,000
11	LITTORAL COMBAT SHIP	1	646,244	2	1,121,244		+ 475,000
	TOTAL, OTHER WARSHIPS		15,780,025		16,398,525		+ 618,500
AMPHIBIOUS SHIPS							
12	LPD-17				500,000		+ 500,000
13	EXPEDITIONARY SEABASE	1	650,000	1	650,000		
14	LHA REPLACEMENT AP-CY				350,000		+ 350,000
	TOTAL, AMPHIBIOUS SHIPS		650,000		1,500,000		+ 850,000
AUXILIARIES, CRAFT, AND PRIOR-YEAR PROGRAM COSTS							
15	EXPEDITIONARY FAST TRANSPORT (EPF)			1	225,000		+ 225,000
16	TAO FLEET OILER	2	977,104	2	977,104		
17	TAO FLEET OILER [AP-CY]		75,046		75,046		
18	TOWING, SALVAGE, AND RESCUE SHIP (ATS)	1	80,517	1	80,517		
20	LCU 1700	2	41,520	2	41,520		
21	OUTFITTING		634,038		550,038		- 84,000
22	SHIP TO SHORE CONNECTOR	5	325,375	5	325,375		
23	SERVICE CRAFT		72,062		97,062		+ 25,000
24	LCAC SLEP	1	23,321	1	23,321		
28	COMPLETION OF PY SHIPBUILDING PROGRAMS		207,099		207,099		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
29	CABLE SHIP .....	.....	.....	1	250,000	+ 1	+ 250,000
	TOTAL, AUXILIARIES, CRAFT, AND PRIOR-YEAR PROGRAM .....	.....	2,436,082	.....	2,852,082	.....	+ 416,000
	TOTAL, SHIPBUILDING & CONVERSION, NAVY .....	.....	21,871,437	.....	23,992,937	.....	+ 2,121,500

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	OHIO Replacement Submarine (AP)	3,005,330	3,242,330	+ 237,000
	Improving funds management: Excess incentive fees ...	.....	.....	- 13,000
	Program increase: Submarine industrial base expansion .....	.....	.....	+ 250,000
2	Carrier Replacement Program (CVN 80)	1,598,181	1,573,181	- 25,000
	Transfer funding to RDN, line 84: CVN 78 Full Ship Shock Trial .....	.....	.....	- 25,000
9	DDG-51	5,253,327	5,171,827	- 81,500
	Restoring acquisition accountability: Excess growth in multiyear procurement program .....	.....	.....	- 81,500
10	DDG-51 [AP-CY]	391,928	641,928	+ 250,000
	Program increase: Advance procurement for an additional fiscal year 2020 ship .....	.....	.....	+ 250,000
11	Littoral Combat Ship	646,244	1,121,244	+ 475,000
	Program increase: Additional ship .....	.....	.....	+ 475,000
12	LPD-17 .....	.....	500,000	+ 500,000
	Program increase: Advance procurement for FY 2020 LPD Flight II and/or MYP EOQ .....	.....	.....	+ 500,000
14	LHA Replacement [AP-CY] .....	.....	350,000	+ 350,000
	Program increase: Advance procurement for LHA-9 .....	.....	.....	+ 350,000
15	Expeditionary Fast Transport (EPF) .....	.....	225,000	+ 225,000
	Program increase: Additional ship .....	.....	.....	+ 225,000
21	Outfitting	634,038	550,038	- 84,000
	Improving funds management: Outfitting and post delivery funding early to need .....	.....	.....	- 84,000
23	Service Craft	72,062	97,062	+ 25,000
	Program increase: Accelerate detail design and construction of YP-703 flight II .....	.....	.....	+ 25,000
29	Cable Ship .....	.....	250,000	+ 250,000
	Program increase .....	.....	.....	+ 250,000

Submarine Industrial Base.—The fiscal year 2019 President’s budget request includes \$3,005,330,000 for advance procurement to support the construction of the Ohio Replacement Submarine. The Committee supports this request and recommends an additional \$250,000,000 to enhance the submarine industrial base. Further, the Committee notes that \$225,000,000 above the President’s budget request was provided by Congress in fiscal year 2018 for the same purpose. The Committee supports the submarine shipbuilding supply base in light of the Navy’s projected future workload, as defined in the Navy’s “Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2019” (30-year shipbuilding plan), but is concerned that the Navy is not budgeting the necessary resources to increase capacity and create multiple suppliers for critical submarine components, despite the Navy’s stated concerns over the submarine industrial base. Therefore, the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Assistant Secretary of the Navy (Financial Management and Comptroller) are directed to brief the congressional defense committees on the Navy’s acquisition strategy and associated necessary resources to support the submarine industrial base in the President’s fiscal year 2020 budget.

CVN 80.—The fiscal year 2019 President’s budget request includes \$1,598,181,000 for the Aircraft Carrier Replacement Pro-

gram. The Committee supports the funding requested to maintain the aircraft carrier fleet consistent with the Navy’s 30 year ship-building plan. However, the Committee understands that the Navy may pursue block buy authority for a two-ship-buy, to include CVN 81, and notes that the construction award for CVN 80 has slipped from March 2018 to December 2018 while negotiations between the Navy and the shipbuilder are ongoing. To date, the Committee has not received any documentation related to a block buy proposal. The Committee notes that an accurate independent cost estimate and Navy budget profile are required for the congressional defense committees to make an informed decision on the proposal. Therefore, the Committee designates the funding appropriated for the Carrier Replacement Program funding line be applied only to CVN 80 and directs that no funds provided in fiscal year 2019 be applied to the procurement of CVN 81 components.

OTHER PROCUREMENT, NAVY

Appropriations, 2018	\$7,941,018,000
Budget estimate, 2019	9,414,355,000
Committee recommendation	10,393,562,000

The Committee recommends an appropriation of \$10,393,562,000. This is \$979,207,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	OTHER PROCUREMENT, NAVY						
	SHIPS SUPPORT EQUIPMENT						
	SHIP PROPULSION EQUIPMENT						
1	SURFACE POWER EQUIPMENT		19,700		19,700		
	GENERATORS						
3	SURFACE COMBATANT HM&E		23,495		23,495		
	NAVIGATION EQUIPMENT						
4	OTHER NAVIGATION EQUIPMENT		63,330		69,330		+6,000
	PERISCOPES						
5	SUB PERISCOPES AND IMAGING SUPPORT EQUIPMENT PROGRAM		178,421		178,421		
	OTHER SHIPBOARD EQUIPMENT						
6	DDG MOD		487,999		469,499		-18,500
7	FIREFIGHTING EQUIPMENT		28,143		28,143		
8	COMMAND AND CONTROL SWITCHBOARD		2,248		2,248		
9	LHA/LHD MIDLIFE		37,694		37,694		
	SUBTOTAL		37,694		37,694		
10	POLLUTION CONTROL EQUIPMENT		20,883		20,883		
11	SUBMARINE SUPPORT EQUIPMENT		37,155		37,155		
12	VIRGINIA CLASS SUPPORT EQUIPMENT		66,328		66,328		
13	LCS CLASS SUPPORT EQUIPMENT		47,241		47,241		
14	SUBMARINE BATTERIES		27,987		25,085		-2,902
15	LPD CLASS SUPPORT EQUIPMENT		65,033		65,033		
16	DDG-1000 SUPPORT EQUIPMENT		89,700		57,700		-32,000
17	STRATEGIC PLATFORM SUPPORT EQUIP		22,254		22,254		
18	DSSP EQUIPMENT		3,629		3,629		
19	CRUISER MODERNIZATION		276,446		276,446		
20	LOAC		3,709		3,709		
21	UNDERWATER EOD PROGRAMS		78,807		78,807		
22	ITEMS LESS THAN \$5 MILLION		126,865		126,865		
23	CHEMICAL WARFARE DETECTORS		2,966		2,966		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
24	SUBMARINE LIFE SUPPORT SYSTEM .....	.....	11,968	.....	6,924	.....	-5,044
25	REACTOR PLANT EQUIPMENT .....	.....	346,325	.....	346,325	.....	.....
26	REACTOR POWER UNITS .....	.....	497,063	.....	497,063	.....	.....
	REACTOR COMPONENTS .....	.....	.....	.....	.....	.....	.....
27	OCEAN ENGINEERING .....	.....	10,706	.....	10,706	.....	.....
	DIVING AND SALVAGE EQUIPMENT .....	.....	.....	.....	.....	.....	.....
28	SMALL BOATS .....	.....	49,771	.....	49,771	.....	.....
	STANDARD BOATS .....	.....	.....	.....	.....	.....	.....
	PRODUCTION FACILITIES EQUIPMENT .....	.....	.....	.....	.....	.....	.....
29	OPERATING FORCES IPE .....	.....	225,181	.....	401,181	.....	+176,000
	OTHER SHIP SUPPORT .....	.....	.....	.....	.....	.....	.....
31	LCS COMMON MISSION MODULES EQUIPMENT .....	.....	46,732	.....	33,237	.....	-13,495
32	LCS MCM MISSION MODULES .....	.....	124,147	.....	116,381	.....	-7,766
33	LCS ASW MISSION MODULES .....	.....	57,294	.....	.....	.....	-57,294
34	LCS SUW MISSION MODULES .....	.....	26,006	.....	14,065	.....	-11,941
35	LCS IN-SERVICE MODERNIZATION .....	.....	70,526	.....	70,526	.....	.....
	LOGISTICS SUPPORT .....	.....	.....	.....	.....	.....	.....
36	LSD MIDLIFE AND MODERNIZATION .....	.....	4,784	.....	4,784	.....	.....
XX	SHIP OVERHAUL, MODERNIZATION AND REPAIR .....	.....	.....	.....	610,000	.....	+610,000
	SUBTOTAL .....	.....	4,784	.....	614,784	.....	+610,000
	TOTAL, SHIPS SUPPORT EQUIPMENT .....	.....	3,180,536	.....	3,823,594	.....	+643,058
	COMMUNICATIONS AND ELECTRONICS EQUIPMENT .....	.....	.....	.....	.....	.....	.....
	SHIP SONARS .....	.....	.....	.....	.....	.....	.....
37	SPO-9B RADAR .....	.....	20,309	.....	19,179	.....	-1,130
38	AMWQQ-89 SURF ASW COMBAT SYSTEM .....	.....	115,459	.....	115,459	.....	.....
39	SSN ACOUSTICS EQUIPMENT .....	.....	318,189	.....	332,189	.....	+14,000
40	UNDERSEA WARFARE SUPPORT EQUIPMENT .....	.....	10,134	.....	10,134	.....	.....

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
72	SHIPBOARD COMMUNICATIONS	.....	45,450	.....	45,450	.....	.....
73	SHIPBOARD TACTICAL COMMUNICATIONS	.....	105,087	.....	105,087	.....	.....
74	SHIP COMMUNICATIONS AUTOMATION	.....	41,123	.....	41,123	.....	.....
	COMMUNICATIONS ITEMS UNDER \$5M	.....		.....		.....	.....
	SUBMARINE COMMUNICATIONS	.....		.....		.....	.....
75	SUBMARINE BROADCAST SUPPORT	.....	30,897	.....	30,897	.....	.....
76	SUBMARINE COMMUNICATION EQUIPMENT	.....	78,580	.....	78,580	.....	.....
	SATELLITE COMMUNICATIONS	.....		.....		.....	.....
77	SATELLITE COMMUNICATIONS SYSTEMS	.....	41,205	.....	41,205	.....	.....
78	NAVY MULTIBAND TERMINAL (NMT)	.....	113,885	.....	113,885	.....	.....
	SHORE COMMUNICATIONS	.....		.....		.....	.....
79	JCS COMMUNICATIONS EQUIPMENT	.....	4,292	.....	4,292	.....	.....
	CRYPTOGRAPHIC EQUIPMENT	.....		.....		.....	.....
80	INFO SYSTEMS SECURITY PROGRAM (ISSP)	.....	153,526	.....	153,526	.....	.....
81	MIO INTEL EXPLOITATION TEAM	.....	951	.....	951	.....	.....
	CRYPTOLOGIC EQUIPMENT	.....		.....		.....	.....
82	CRYPTOLOGIC COMMUNICATIONS EQUIP	.....	14,209	.....	17,009	.....	+2,800
	OTHER ELECTRONIC SUPPORT	.....		.....		.....	.....
86	COAST GUARD EQUIPMENT	.....	40,713	.....	40,713	.....	.....
	TOTAL, COMMUNICATIONS AND ELECTRONICS EQUIPMENT	.....	3,176,305	.....	3,477,852	.....	+301,547
	AVIATION SUPPORT EQUIPMENT	.....		.....		.....	.....
	SONOBUOYS	.....		.....		.....	.....
88	SONOBUOYS—ALL TYPES	.....	177,891	.....	216,191	.....	+38,300
	AIRCRAFT SUPPORT EQUIPMENT	.....		.....		.....	.....
	WEAPONS RANGE SUPPORT EQUIPMENT	.....		.....		.....	.....
89	AIRCRAFT SUPPORT EQUIPMENT	.....	93,864	.....	93,864	.....	.....
90	ADVANCED ARRESTING GEAR (AAG)	.....	111,724	.....	111,724	.....	.....
91	METEOROLOGICAL EQUIPMENT	.....	11,054	.....	11,054	.....	.....
92	OTHER PHOTOGRAPHIC EQUIPMENT (DCRS/DPL)	.....	21,072	.....	21,072	.....	.....
93		.....	656	.....	656	.....	.....

94	AIRBORNE MINE COUNTERMEASURES	11,299	11,299	11,299	11,299	.....	.....	.....	.....
95	LAMPS EQUIPMENT	594	594	594	594	.....	.....	.....	.....
96	AVIATION SUPPORT EQUIPMENT	39,374	39,374	37,026	37,026	.....	.....	.....	-2,348
97	UMCS-UNMAN CARRIER AVIATION (UCA) MISSION CONTROL	35,405	35,405	28,179	28,179	.....	.....	.....	-7,226
	TOTAL, AVIATION SUPPORT EQUIPMENT	502,933	502,933	531,659	531,659	.....	.....	.....	+ 28,726
	ORDNANCE SUPPORT EQUIPMENT								
	SHIP GUN SYSTEM EQUIPMENT								
98	SHIP GUN SYSTEMS EQUIPMENT	5,337	5,337	5,337	5,337	.....	.....	.....	.....
	SHIP MISSILE SYSTEMS EQUIPMENT								
99	SHIP MISSILE SUPPORT EQUIPMENT	213,090	213,090	202,071	202,071	.....	.....	.....	- 11,019
100	TOMAHAWK SUPPORT EQUIPMENT	92,890	92,890	92,890	92,890	.....	.....	.....	.....
	FBM SUPPORT EQUIPMENT								
101	STRATEGIC MISSILE SYSTEMS EQUIP	271,817	271,817	271,817	271,817	.....	.....	.....	.....
	ASW SUPPORT EQUIPMENT								
102	SSN COMBAT CONTROL SYSTEMS	129,501	129,501	129,501	129,501	.....	.....	.....	.....
103	ASW SUPPORT EQUIPMENT	19,436	19,436	19,436	19,436	.....	.....	.....	.....
	OTHER ORDNANCE SUPPORT EQUIPMENT								
104	EXPLOSIVE ORDNANCE DISPOSAL EQUIP	14,258	14,258	14,258	14,258	.....	.....	.....	.....
105	ITEMS LESS THAN \$5 MILLION	5,378	5,378	5,378	5,378	.....	.....	.....	.....
	OTHER EXPENDABLE ORDNANCE								
106	SUBMARINE TRAINING DEVICE MODS	65,543	65,543	65,543	65,543	.....	.....	.....	.....
107	SURFACE TRAINING EQUIPMENT	230,425	230,425	227,791	227,791	.....	.....	.....	-2,634
	TOTAL, ORDNANCE SUPPORT EQUIPMENT	1,047,675	1,047,675	1,034,022	1,034,022	.....	.....	.....	-13,653
	CIVIL ENGINEERING SUPPORT EQUIPMENT								
108	PASSENGER CARRYING VEHICLES	4,867	4,867	4,867	4,867	.....	.....	.....	.....
109	GENERAL PURPOSE TRUCKS	2,674	2,674	2,674	2,674	.....	.....	.....	.....
110	CONSTRUCTION & MAINTENANCE EQUIP	20,994	20,994	20,994	20,994	.....	.....	.....	.....
111	FIRE FIGHTING EQUIPMENT	17,189	17,189	17,189	17,189	.....	.....	.....	.....
112	TACTICAL VEHICLES	19,916	19,916	19,916	19,916	.....	.....	.....	.....
113	AMPHIBIOUS EQUIPMENT	7,400	7,400	7,400	7,400	.....	.....	.....	.....
114	POLLUTION CONTROL EQUIPMENT	2,713	2,713	2,713	2,713	.....	.....	.....	.....
115	ITEMS UNDER \$5 MILLION	35,540	35,540	35,540	35,540	.....	.....	.....	.....
116	PHYSICAL SECURITY VEHICLES	1,155	1,155	1,155	1,155	.....	.....	.....	.....

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	TOTAL, CIVIL ENGINEERING SUPPORT EQUIPMENT		112,448		112,448		
117	SUPPLY SUPPORT EQUIPMENT						
	SUPPLY EQUIPMENT		18,786		18,786		
118	FIRST DESTINATION TRANSPORTATION		5,375		5,375		
119	SPECIAL PURPOSE SUPPLY SYSTEMS		580,371		580,371		
	TOTAL, SUPPLY SUPPORT EQUIPMENT		604,532		604,532		
	PERSONNEL AND COMMAND SUPPORT EQUIPMENT						
	TRAINING DEVICES						
120	TRAINING SUPPORT EQUIPMENT		3,400		3,400		
121	TRAINING AND EDUCATION EQUIPMENT		24,283		24,283		
	COMMAND SUPPORT EQUIPMENT						
122	COMMAND SUPPORT EQUIPMENT		66,681		66,681		
123	MEDICAL SUPPORT EQUIPMENT		3,352		3,352		
125	NAVAL MIP SUPPORT EQUIPMENT		1,984		1,984		
126	OPERATING FORCES SUPPORT EQUIPMENT		15,131		15,131		
127	CAISR EQUIPMENT		3,576		3,576		
128	ENVIRONMENTAL SUPPORT EQUIPMENT		31,902		31,902		
129	PHYSICAL SECURITY EQUIPMENT		175,436		195,436		+ 20,000
130	ENTERPRISE INFORMATION TECHNOLOGY		25,393		25,393		
133	NEXT GENERATION ENTERPRISE SERVICE		96,269		96,269		
	TOTAL, PERSONNEL AND COMMAND SUPPORT EQUIPMENT		447,407		467,407		+ 20,000
134	SPARES AND REPAIR PARTS		326,838		326,367		-471
	CLASSIFIED PROGRAMS		15,681		15,681		
	TOTAL, OTHER PROCUREMENT, NAVY		9,414,355		10,393,562		+ 979,207

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
4	Other Navigation Equipment	63,330	69,330	+ 6,000
	Restoring acquisition accountability: Production engineering excess growth			- 4,000
	Program increase: Accelerate ECDIS-N 9.4, 9.4, 9.5 implementation			+ 10,000
6	DDG Mod	487,999	469,499	- 18,500
	Insufficient budget justification: Aegis modernization testing			- 9,500
	Insufficient budget justification: Combat system ship qualification trials			- 9,000
14	Submarine Batteries	27,987	25,085	- 2,902
	Restoring acquisition accountability: Unit cost growth			- 2,902
16	DDG 1000 Class Support Equipment	89,700	57,700	- 32,000
	Restoring acquisition accountability: DDG 1002 data center ahead of need			- 32,000
24	Submarine Life Support System	11,968	6,924	- 5,044
	Restoring acquisition accountability: Low pressure electrolyzer early to need			- 5,044
29	Operating Forces Ipe	225,181	401,181	+ 176,000
	Program increase: Shipyard investment acceleration			+ 176,000
31	LCS Common Mission Modules Equipment	46,732	33,237	- 13,495
	Restoring acquisition accountability: EMM mission package computing environment ahead of need			- 8,986
	Restoring acquisition accountability: EMM training equipment ahead of need			- 4,509
32	LCS MCM Mission Modules	124,147	116,381	- 7,766
	Restoring acquisition accountability: AMNS unit cost growth			- 3,026
	Restoring acquisition accountability: Knifefish unit cost growth			- 4,740
33	LCS ASW Mission Modules	57,294		- 57,294
	Restoring acquisition accountability: ASW mission modules ahead of need			- 57,294
34	LCS SUW Mission Modules	26,006	14,065	- 11,941
	Restoring acquisition accountability: Excess surface-to surface mission module ahead of test			- 11,941
xx	Ship Overhaul, Modernization and Repair		610,000	+ 610,000
	Transfer: From Operation and Maintenance, Navy line 1B4B Ship Depot Maintenance for the USS BOISE, USS NEW YORK and USS GUNSTON HALL availabilities			+ 610,000
37	SPQ-9B Radar	20,309	19,179	- 1,130
	Restoring acquisition accountability: Installation funding early to need			- 1,130
39	SSN Acoustic Equipment	318,189	332,189	+ 14,000
	Program increase			+ 14,000
42	SSTD	11,277	2,977	- 8,300
	Restoring acquisition accountability: AN/SLQ-25E delay			- 8,300
43	Fixed Surveillance System	237,780	644,680	+ 406,900
	Program acceleration			+ 406,900
45	AN/SLQ-32	420,344	348,266	- 72,078
	Restoring acquisition accountability: Excess Block 3 systems			- 60,376
	Restoring acquisition accountability: Excess Block 3 installation funding			- 11,702
46	Shipboard IW Exploit	220,883	218,103	- 2,780

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Restoring acquisition accountability: Increment F kit cost growth			-2,780
48	Cooperative Engagement Capability	44,173	34,821	-9,352
	Restoring acquisition accountability: Common array block antenna			-9,352
52	Minesweeping System Replacement	35,709	33,339	-2,370
	Restoring acquisition accountability: Knifefish unit cost growth			-2,370
64	CANES	423,027	399,944	-23,083
	Restoring acquisition accountability: Installations previously funded			-23,083
66	CANES-Intell	54,465	51,405	-3,060
	Restoring acquisition accountability: Installations previously funded			-3,060
82	Cryptologic Communications Equip	14,209	17,009	+2,800
	Program increase: SOUTHCOM ISR requirements			+2,800
88	Sonobuoys—All Types	177,891	216,191	+38,300
	Program increase			+38,300
96	Aviation Support Equipment	39,374	37,026	-2,348
	Improving funds management: JHMCS night vision unit cost growth			-2,348
97	UMCS—Unman Carrier Aviation (UCA) Mission Cntrl	35,405	28,179	-7,226
	Restoring acquisition accountability: MD-5A procurement ahead of need			-3,742
	Restoring acquisition accountability: Ship change document ahead of need			-3,484
99	Ship Missile Support Equipment	213,090	202,071	-11,019
	Restoring acquisition accountability: ESSM missile launcher upgrade funding unjustified			-4,619
	Restoring acquisition accountability: RAM ORDALTs for block 2B ahead of need			-6,400
107	Surface Training Equipment	230,425	227,791	-2,634
	Restoring acquisition accountability: BFTT upgrade kits installation funding ahead of need			-2,634
129	Physical Security Equipment	175,436	195,436	+20,000
	Program increase: New Navy port waterborne security barriers			+20,000
134	Spares and Repair Parts	326,838	326,367	-471
	Program termination: Hybrid electric drive spares			-471

PROCUREMENT, MARINE CORPS

Appropriations, 2018	\$1,942,737,000
Budget estimate, 2019	2,860,410,000
Committee recommendation	2,800,997,000

The Committee recommends an appropriation of \$2,800,997,000. This is \$59,413,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
PROCUREMENT, MARINE CORPS							
WEAPONS AND COMBAT VEHICLES							
TRACKED COMBAT VEHICLES							
1	AAV7A1 PIP	30	156,249	96,836	96,836		-59,413
2	AMPHIBIOUS COMBAT VEHICLE 1.1		167,478	30	167,478		
3	LAV PIP		43,701	43,701	43,701		
ARTILLERY AND OTHER WEAPONS							
5	155MM LIGHTWEIGHT TOWED HOWITZER		47,158	47,158	47,158		
6	ARTILLERY WEAPONS SYSTEM		134,246	134,246	134,246		
7	WEAPONS AND COMBAT VEHICLES UNDER \$5 MILLION		40,687	40,687	40,687		
8	OTHER SUPPORT		22,904	22,904	22,904		
	MODIFICATION KITS						
	TOTAL, WEAPONS AND COMBAT VEHICLES		612,423	553,010	553,010		-59,413
GUIDED MISSILES AND EQUIPMENT							
GUIDED MISSILES							
9	GROUND BASED AIR DEFENSE		18,334	18,334	18,334		
10	JAVELIN	5	3,020	5	3,020		
11	FOLLOW ON TO SIMAW/FOAWIS		13,760	13,760	13,760		
12	ANTI-ARMOR WEAPONS SYSTEM-HEAVY (AAWS-H)/TOW		59,702	59,702	59,702		
	TOTAL, GUIDED MISSILES AND EQUIPMENT		94,816	94,816	94,816		
COMMUNICATIONS AND ELECTRONICS EQUIPMENT							
COMMAND AND CONTROL SYSTEMS							
13	COMMON AVIATION COMMAND AND CONTROL SYS		35,467	35,467	35,467		
REPAIR AND TEST EQUIPMENT							
14	REPAIR AND TEST EQUIPMENT		46,081	46,081	46,081		
15	MODIFICATION KITS		971	971	971		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	OTHER SUPPORT (TEL)						
16	COMMAND AND CONTROL		69,203		69,203		
17	ITEMS UNDER \$5 MILLION (COMM & ELEC)		14,269		14,269		
	AIR OPERATIONS C2 SYSTEMS						
18	RADAR + EQUIPMENT (NON-TEL)		6,694		6,694		
19	RADAR SYSTEMS		224,969	3	224,969		
	GROUND/AIR TASK ORIENTED RADAR						
21	INTELL/COMM EQUIPMENT (NON-TEL)		1,187		1,187		
22	GCSS-MC		60,189		60,189		
23	FIRE SUPPORT SYSTEM		73,848		73,848		
25	INTELLIGENCE SUPPORT EQUIPMENT		3,848		3,848		
26	UNMANNED AIR SYSTEMS (INTEL)		16,081		16,081		
	DGCS-MC						
	OTHER SUPPORT (NON-TEL)						
30	NEXT GENERATION ENTERPRISE NETWORK (NGEN)		87,120		87,120		
31	COMMON COMPUTER RESOURCES		68,914		68,914		
32	COMMAND POST SYSTEMS		124,838		124,838		
33	RADIO SYSTEMS		279,680		279,680		
34	COMM SWITCHING & CONTROL SYSTEMS		36,649		36,649		
35	COMM & ELEC INFRASTRUCTURE SUPPORT		83,971		83,971		
	TOTAL, COMMUNICATIONS AND ELECTRONICS EQUIPMENT		1,233,979		1,233,979		
	SUPPORT VEHICLES						
36	ADMINISTRATIVE VEHICLES		25,441		25,441		
	COMMERCIAL CARGO VEHICLES						
	TACTICAL VEHICLES						
37	MOTOR TRANSPORT MODIFICATIONS		11,392		11,392		
38	JOINT LIGHT TACTICAL VEHICLE		607,011		607,011		
39	FAMILY OF TACTICAL TRAILERS		2,393		2,393		
40	TRAILERS		6,540		6,540		

	TOTAL, SUPPORT VEHICLES	652,777	652,777		
	ENGINEER AND OTHER EQUIPMENT				
	ENGINEER AND OTHER EQUIPMENT				
41	ENVIRONMENTAL CONTROL EQUIP ASSORT	496	496		
42	TACTICAL FUEL SYSTEMS	54	54		
43	POWER EQUIPMENT ASSORTED	21,062	21,062		
44	AMPHIBIOUS SUPPORT EQUIPMENT	5,290	5,290		
45	EOD SYSTEMS	47,854	47,854		
	MATERIALS HANDLING EQUIPMENT				
46	PHYSICAL SECURITY EQUIPMENT	28,306	28,306		
	GENERAL PROPERTY				
47	FIELD MEDICAL EQUIPMENT	33,513	33,513		
48	TRAINING DEVICES	52,040	52,040		
49	FAMILY OF CONSTRUCTION EQUIPMENT	36,156	36,156		
50	FAMILY OF INTERNALLY TRANSPORTABLE VEHICLE (ITV)	606	606		
	OTHER SUPPORT				
51	ITEMS LESS THAN \$5 MILLION	11,608	11,608		
	TOTAL, ENGINEER AND OTHER EQUIPMENT	236,985	236,985		
53	SPARES AND REPAIR PARTS	25,804	25,804		
	CLASSIFIED PROGRAMS	3,626	3,626		
	TOTAL, PROCUREMENT, MARINE CORPS	2,860,410	2,800,997		59,413

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	AAV7A1 PIP	156,249	96,836	- 59,413
	Restoring acquisition accountability: Program delays– survivability upgrade			- 59,413

Assault Amphibious Vehicle—Survivability Upgrade [AAV–SU].— The Committee notes efforts by the Marine Corps to enhance the maneuverability, survivability and combat effectiveness of the legacy AAV vehicle fleet and its Assault Amphibian Battalions while maintaining critical amphibious lift and armored personnel carrier capabilities. The Committee remains concerned with the current production schedule and unit cost estimates due to recent further delays in the delivery of required test assets and changes in the vehicle design. Therefore, the Committee provides adequate funding to maintain progress towards award of a full rate production contract, and encourages the Commandant of the Marine Corps to provide an updated program schedule and production plan to the congressional defense committees that reflects a more accurate cost assessment and an achievable production schedule.

AIRCRAFT PROCUREMENT, AIR FORCE

Appropriations, 2018	\$18,504,556,000
Budget estimate, 2019	16,206,937,000
Committee recommendation	15,772,473,000

The Committee recommends an appropriation of \$15,772,473,000. This is \$434,464,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
AIRCRAFT PROCUREMENT, AIR FORCE							
COMBAT AIRCRAFT							
TACTICAL FORCES							
1	F-35	48	4,261,021	48	4,021,021	.....	-240,000
2	F-35 [AP-CY] .....	.....	406,000	.....	526,000	.....	+120,000
3	C-135B	2	222,176	2	222,176	.....	.....
	TOTAL, COMBAT AIRCRAFT .....	.....	4,889,197	.....	4,769,197	.....	-120,000
AIRLIFT AIRCRAFT/TACTICAL AIRLIFT							
4	KC-46A TANKER	15	2,559,911	15	2,415,491	.....	-144,420
OTHER AIRLIFT							
5	C-130J .....	.....	35,858	.....	35,858	.....	.....
6	HC-130J	1	129,437	1	86,981	.....	-42,456
8	MC-130J	6	770,201	6	727,879	.....	-42,322
9	MC-130J (AP) .....	.....	218,000	.....	218,000	.....	.....
	TOTAL, AIRLIFT AIRCRAFT .....	.....	3,713,407	.....	3,484,209	.....	-229,198
OTHER AIRCRAFT							
HELICOPTERS							
11	COMBAT RESCUE HELICOPTER	10	680,201	10	630,201	.....	-50,000
MISSION SUPPORT AIRCRAFT							
13	CIVIL AIR PATROL A/C	4	2,719	4	10,800	.....	+8,081
OTHER AIRCRAFT							
14	TARGET DRONES	48	139,053	48	139,053	.....	.....
15	COMPASS CALL MODS	1	108,113	1	108,113	.....	.....
17	MQ-9	8	221,707	14	255,903	.....	+34,196
18	O/A-X LIGHT ATTACK AIRCRAFT .....	.....	.....	.....	300,000	.....	+300,000
	TOTAL, OTHER AIRCRAFT .....	.....	1,151,793	.....	1,444,070	.....	+292,277

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
MODIFICATION OF INSERVICE AIRCRAFT							
STRATEGIC AIRCRAFT							
19	B-2A .....	.....	60,301	.....	57,200	.....	-3,101
20	B-1B .....	.....	51,290	.....	35,690	.....	-15,600
21	B-52 .....	.....	105,519	.....	117,230	.....	+11,711
TACTICAL AIRCRAFT							
23	A-10 .....	.....	98,720	.....	92,710	.....	-6,010
24	C-130J .....	.....	10,831	.....	.....	.....	-10,831
25	F-15 .....	.....	548,109	.....	456,647	.....	-91,462
26	F-16 .....	.....	324,323	.....	304,323	.....	-20,000
27	F-22A .....	.....	250,710	.....	250,710	.....	.....
29	F-35 MODIFICATIONS .....	.....	247,271	.....	156,971	.....	-90,300
30	F-15 EPAW .....	.....	147,685	.....	197,685	.....	+50,000
31	INCREMENT 3.2B .....	.....	9,007	.....	9,007	.....	.....
33	KC-46A TANKER .....	.....	8,547	.....	8,547	.....	.....
AIRLIFT AIRCRAFT							
34	C-5 .....	.....	77,845	.....	71,835	.....	-6,010
36	C-17A .....	.....	102,121	.....	102,121	.....	.....
37	C-21 .....	.....	17,516	.....	17,516	.....	.....
38	C-32A .....	.....	4,537	.....	4,537	.....	.....
39	C-37A .....	.....	419	.....	419	.....	.....
TRAINER AIRCRAFT							
41	GLIDER MODS .....	.....	137	.....	137	.....	.....
42	T6 .....	.....	22,550	.....	22,550	.....	.....
43	T-1 .....	.....	21,952	.....	21,952	.....	.....
44	T-38 .....	.....	70,623	.....	70,623	.....	.....
OTHER AIRCRAFT							
45	U-2 MODS .....	.....	48,774	.....	48,774	.....	.....
46	KC-10A (ATCA) .....	.....	11,104	.....	11,104	.....	.....
47	C-12 .....	.....	4,900	.....	4,900	.....	.....
48	VC-25A MOD .....	.....	36,938	.....	27,238	.....	-9,700
49	C-40 .....	.....	251	.....	251	.....	.....

50	C-130				147,094				
51	C130J MODS				127,434				+ 125,000
52	C-135				91,410				- 4,611
53	OC-135B				5,913				- 21,666
54	COMPASS CALL MODS				49,885				
55	COMBAT FLIGHT INSPECTION (CFIN)				499				
56	RC-135				394,532				- 3,000
57	E-3				133,906				- 17,041
58	E-4				67,858				
59	E-8				24,807				+ 14,888
60	AIRBORNE WARNING AND CONTROL SYSTEM				57,780				
61	FAMILY OF BEYOND LINE-OF-SIGHT TERMINALS	3			11,283				- 3,010
62	H-1				2,940				
63	H-60				55,466				
64	RC-4 UAV MODS				123,715				+ 100,000
65	HC/MC-130 MODIFICATIONS				37,754				
66	OTHER AIRCRAFT				62,010				
67	MQ-9 MODS				146,648				- 24,900
69	CV-22 MODS				60,416				
	TOTAL, MODIFICATION OF INSERVICE AIRCRAFT				3,671,986				- 25,643
70	AIRCRAFT SPARES AND REPAIR PARTS				778,508				- 177,900
	INITIAL SPARES/REPAIR PARTS				778,508				- 177,900
	TOTAL, AIRCRAFT SPARES AND REPAIR PARTS				778,508				- 177,900
	AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES								
	COMMON SUPPORT EQUIPMENT								
71	AIRCRAFT REPLACEMENT SUPPORT EQUIP				81,241				
	POST PRODUCTION SUPPORT								
74	B-2A				1,763				1,763
75	B-2B				35,861				35,861
76	B-52				12,819				12,819
77	C-17A				10,114				10,114
79	F-15				2,545				2,545
81	F-16 POST PRODUCTION SUPPORT				11,718				4,518
82	F-22A				14,489				14,489
83	OTHER AIRCRAFT				9,928				9,928
84	RC-4 POST PRODUCTION CHARGES				40,641				40,641

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
86	INDUSTRIAL PREPAREDNESS	.....	17,378	.....	17,378	.....	.....
	INDUSTRIAL PREPAREDNESS	.....		.....		.....	.....
	WAR CONSUMIBLES	.....	29,342	.....	29,342	.....	.....
88	WAR CONSUMIBLES	.....	29,342	.....	29,342	.....	.....
	OTHER PRODUCTION CHARGES	.....		.....		.....	.....
	OTHER PRODUCTION CHARGES	.....	1,502,386	.....	1,335,586	.....	-166,800
89	TOTAL, AIRCRAFT SUPPORT EQUIPMENT AND FACILITIES	.....	1,770,225	.....	1,596,225	.....	-174,000
	CLASSIFIED PROGRAMS	.....	28,278	.....	28,278	.....	.....
	TOTAL, AIRCRAFT PROCUREMENT, AIR FORCE	.....	16,206,937	.....	15,772,473	.....	-434,464

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	F-35	4,261,021	4,021,021	-240,000
	Restoring acquisition accountability: Unit cost savings ..			-240,000
2	F-35 [AP-CY]	406,000	526,000	+120,000
	Program increase: Advance procurement for additional FY 2020 aircraft			+120,000
4	KC-46A Tanker	2,559,911	2,415,491	-144,420
	Restoring acquisition accountability: Unit cost savings ..			-41,700
	Improving funds management: Interim contractor support excess to need			
6	HC-130J	129,437	86,981	-102,720
	Restoring acquisition accountability: Unit cost growth			-42,456
	Restoring acquisition accountability: Spares funding ahead of need			-11,000
8	MC-130J	770,201	727,879	-31,456
	Restoring acquisition accountability: Unit cost growth			-42,322
11	Combat Rescue Helicopter	680,201	630,201	-42,322
	Restoring acquisition accountability: Excess unit cost			-50,000
13	Civil Air Patrol A/C	2,719	10,800	+8,081
	Program increase			+8,081
17	MQ-9	221,707	255,903	+34,196
	Program increase: Accelerate advanced battle management system			+120,000
	Restoring acquisition accountability: Prior year unit cost savings			
	Restoring acquisition accountability: Dual ground control station funding excess to need			-5,664
18	O/A-X Light Attack Aircraft		300,000	-80,140
	Program increase: Procurement of aircraft and long lead materials			+300,000
19	B-2A	60,301	57,200	+300,000
	Restoring acquisition accountability: Common very low frequency terminal installations previously funded			-3,101
20	B-1B	51,290	35,690	-15,600
	Restoring acquisition accountability: Integrated battle station excess to need			-9,400
	Restoring acquisition accountability: MIDS-JTRS ahead of need			-3,719
	Restoring acquisition accountability: Radio crypto ahead of need			-1,181
	Restoring acquisition accountability: ADS-B out ahead of need			-1,300
21	B-52	105,519	117,230	+11,711
	Program increase: LRASM certification			+10,000
	Program increase: B-52 infrared threat defense UON			+16,400
	Program increase: B-52 mission data recorder			+5,000
	Transfer crypto modernization: Air Force-requested to RDAF line 173			-14,759
	Restoring acquisition accountability: Bomber tactical data link ahead of need			-2,976
	Restoring acquisition accountability: Airspace compliance ahead of need			-1,954
23	A-10	98,720	92,710	-6,010
	Improving funds management: ADS-B out delay			-6,010
24	C-130J	10,831		-10,831
	Insufficient budget justification: Unjustified request			-10,831
25	F-15	548,109	456,647	-91,462
	Program increase: ALQ-128			+10,000
	Restoring acquisition accountability: APG-82 unit cost growth			-6,311

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Restoring acquisition accountability: APG-82 ICS excess growth			-10,000
	Restoring acquisition accountability: APG-82 installation cost growth			-6,535
	Restoring acquisition accountability: APG-63 ahead of need			-69,130
	Restoring acquisition accountability: APG-63 installation cost growth			-9,486
26	F-16	324,323	304,323	-20,000
	Restoring acquisition accountability: MIDS-JITRS excess growth			-20,000
29	F-35 Modifications	247,271	156,971	-90,300
	Maintain program affordability: Concurrency growth			-90,300
30	F-15 EPAW	147,685	197,685	+50,000
	Program increase: Eagle passive active warning survivability systems for F-15Cs			+50,000
34	C-5	77,845	71,835	-6,010
	Restoring acquisition accountability: CMC and weather radar contract delay			-6,010
48	VC-25A Mod	36,938	27,238	-9,700
	Restoring acquisition accountability: Chiller replacement terminated			-9,700
50	C-130	22,094	147,094	+125,000
	Program increase: C-130H modernization			+125,000
51	C-130J Mods	132,045	127,434	-4,611
	Restoring acquisition accountability: Block 8.1 b kit unit cost growth			-4,611
52	C-135	113,076	91,410	-21,666
	Restoring acquisition accountability: AERO-I satcom replacement ahead of need			-21,666
56	RC-135	394,532	391,532	-3,000
	Restoring acquisition accountability: Combat sent install funding excess to need			-3,000
57	E-3	133,906	116,865	-17,041
	Restoring acquisition accountability: Electronic protection excess to need			-17,041
59	E-8	9,919	24,807	+14,888
	Transfer common data link: Air Force requested from RDAF line 213			+14,888
61	Family of Beyond Line-of-Sight Terminals	14,293	11,283	-3,010
	Restoring acquisition accountability: FAB-T unit cost growth			-3,010
64	RQ-4 Mods	23,715	123,715	+100,000
	Program increase: Battlefield airborne communication node mission			+100,000
67	MQ-9 Mods	171,548	146,648	-24,900
	Restoring acquisition accountability: GCS block 30 upgrades excess to need			-24,900
70	Initial Spares/Repair Parts	956,408	778,508	-177,900
	Improving funds management: KC-46A spares excess to requirement			-133,000
	Improving funds management: F-15 spares excess to requirement			-29,500
	Improving funds management: E-3 spares excess to requirement			-15,400
81	F-16	11,718	4,518	-7,200
	Improving funds management: Funds excess to need			-7,200
89	Other Production Charges	1,502,386	1,335,586	-166,800
	Classified adjustment			-166,800

Light Attack Aircraft.—The Committee understands that the Air Force is pursuing a new light attack aircraft using a rapid prototyping acquisition strategy in order to procure a low-cost aircraft

that provides close air support capability in permissive threat environments, build capability among allies and international partnerships, and reduce operational tempo on more expensive fourth and fifth generation fighter aircraft. While the Committee is supportive of these efforts, it is disappointed that the Air Force has relied on additional funding provided by Congress in order to facilitate the ongoing experiment. The Department of Defense Appropriations Act, 2018, provided \$100,000,000 to continue the experimentation program. However, the Air Force did not request any funding in the fiscal year 2019 President's budget request, while programming \$2,469,000,000 for procurement of light attack aircraft in fiscal years 2020 through 2024.

As Air Force leadership has continually stressed the importance of rapid procurement and fielding of this new capability, the Committee recommends \$300,000,000 for procurement of light attack aircraft and long lead materials. The Committee expects timely and complete communication from the Air Force on prototyping and experimentation activities. Accordingly, the Committee directs the Secretary of the Air Force, or her designee, to brief the House and Senate Appropriations Committees not fewer than 30 days prior to obligation of light attack procurement funding. This brief should clearly define objectives and requirements, transition plans, technology and manufacturing readiness levels, test activities, costs, schedules, and performance metrics. It should also include an acquisition strategy for the light attack program along with an execution plan for the fiscal year 2019 procurement funding.

C-135B Aircraft.—The fiscal year 2019 budget request includes \$222,176,000 for two replacement aircraft for the OC-135Bs currently performing unarmed observation flights over signatory nations to the Open Skies Treaty. While the Committee recommends fully funding this request, it is dismayed at the lack of justification materials, including an acquisition strategy, that were provided to the Committee. The Air Force is currently finalizing the detailed systems requirement document and is expected to finalize its acquisition strategy in August 2018. The Committee directs the Secretary of the Air Force to provide a report to the congressional defense committees not fewer than 30 days prior to the obligation of C-135B procurement funding that details the acquisition strategy, approved requirements, schedule, and cost estimates associated with these new aircraft.

Transfer of HC-130H Aircraft.—The Committee recognizes that the National Defense Authorization Act for Fiscal Year 2014 requirement for the Air Force to modify seven HC-130s to facilitate transfer from the U.S. Coast Guard to the U.S. Forest Service for wildfire suppression operations is predicated on a requirement that may no longer be valid. Funding provided for these modifications is currently being held by the Air Force pending an updated requirement validation from the U.S. Forest Service. The Committee strongly encourages the Secretary of the Air Force to notify the congressional defense committees before any prior year funds are obligated for this purpose.

MISSILE PROCUREMENT, AIR FORCE

Appropriations, 2018	\$2,207,747,000
Budget estimate, 2019	2,669,454,000
Committee recommendation	2,614,954,000

The Committee recommends an appropriation of \$2,614,954,000. This is \$54,500,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	MISSILE PROCUREMENT, AIR FORCE						
	BALLISTIC MISSILES						
	MISSILE REPLACEMENT EQUIPMENT—BALLISTIC						
1	MISSILE REPLACEMENT EQ—BALLISTIC		36,786		18,066		- 18,720
	OTHER MISSILES						
	TACTICAL						
2	JOINT AIR—SURFACE STANDOFF MISSILE (JASSM)	312	430,708	312	541,228		+ 110,520
3	LONG RANGE ANTI—SHIP MISSILE (LRASM)	12	44,185	15	54,385	+ 3	+ 10,200
4	SEAWINDER (AIM—9X)	256	121,253	256	121,253		
5	AWRAAM	220	337,886	220	337,886		
6	PREDATOR HELIFIRE MISSILE	1,338	113,765	1,338	33,765		- 80,000
7	SMALL DIAMETER BOMB	2,917	105,034	2,917	35,034		- 70,000
8	SMALL DIAMETER BOMB II	510	100,861	510	100,861		
	INDUSTRIAL FACILITIES						
9	INDUSTRIAL PREPAREDNESS/POLLUTION PREVENTION		787		787		
	TOTAL, OTHER MISSILES		1,254,479		1,225,199		- 29,280
	MODIFICATION OF INSERVICE MISSILES						
	CLASS IV						
10	ICBM FUZE MOD		15,767		15,767		
11	ICBM FUZE MOD (CAP—CY)		4,100		4,100		
12	MM III MODIFICATIONS		129,199		127,699		- 1,500
13	AGM—650 MAVERICK		288		288		
14	AIR LAUNCH CRUISE MISSILE		47,632		47,632		
	TOTAL, MODIFICATION OF INSERVICE MISSILES		196,986		195,486		- 1,500
	SPARES AND REPAIR PARTS						
16	INITIAL SPARES/REPAIR PARTS		97,481		97,481		
	SPECIAL PROGRAMS						
18	SPECIAL UPDATE PROGRAMS		188,539		183,539		- 5,000

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	CLASSIFIED PROGRAMS		895,183		895,183		
	TOTAL, SPECIAL PROGRAMS		1,083,722		1,078,722		-5,000
	TOTAL, MISSILE PROCUREMENT, AIR FORCE		2,669,454		2,614,954		-54,500

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Missile Replacement Eq-Ballistic	36,786	18,066	- 18,720
	Restoring acquisition accountability: TERP schedule adjustments			- 18,720
2	Joint Air-Surface Standoff Missile	430,708	541,228	+ 110,520
	Improving funds management: Forward financing support costs			- 14,480
	Program increase			+ 125,000
3	LRASM	44,185	54,385	+ 10,200
	Program increase: Restore reduction			+ 10,200
6	Predator Hellfire Missile	113,765	33,765	- 80,000
	Improving funds management: Munitions funded in Public Law 115-141			- 50,000
	Improving funds management: Prior year carryover			- 30,000
7	Small Diameter Bomb	105,034	35,034	- 70,000
	Improving funds management: Munitions funded in Public Law 115-141			- 50,000
	Improving funds management: Prior year carryover			- 20,000
12	MM III Modifications	129,199	127,699	- 1,500
	Maintain program affordability: Unjustified program management growth			- 1,500
18	Special Update Programs	188,539	183,539	- 5,000
	Classified adjustment			- 5,000

SPACE PROCUREMENT, AIR FORCE

Appropriations, 2018	\$3,552,175,000
Budget estimate, 2019	2,527,542,000
Committee recommendation	2,224,142,000

The Committee recommends an appropriation of \$2,224,142,000. This is \$303,400,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	SPACE PROGRAMS						
1	ADVANCED EHF		29,829		29,829		
2	AF SATELLITE COMM SYSTEM		35,400		40,400		+ 5,000
3	COUNTERSPACE SYSTEMS		1,121		1,121		
4	FAMILY OF BEYOND LINE-OF-SIGHT TERMINALS		27,867		27,867		
5	WIDEBAND GAPPILLER SATELLITES		61,606		12,106		- 49,500
6	GENERAL INFORMATION TECHNOLOGY—SPACE		3,425		3,425		
7	GPS III SPACE SEGMENT		69,386		69,386		
8	GLOBAL POSITIONING (SPACE)		2,181		2,181		
9	INTEG BROADCAST SERV		16,445		16,445		
10	SPACEBORNE EQUIP (COMSEC)		31,895		31,895		
12	MILSATCOM TERMINALS		11,265		11,265		
13	EVOLVED EXPENDABLE LAUNCH VEH CAPABILITY		709,981		615,081		- 94,900
14	EVOLVED EXPENDABLE LAUNCH VEH (SPACE)	5	994,555	4	830,555		- 164,000
15	SBIR HIGH (SPACE)		138,397		138,397		
17	NUDET DETECTION SYSTEM SPACE		7,705		7,705		
18	ROCKET SYSTEM LAUNCH PROGRAM		47,609		47,609		
19	SPACE FENCE		51,361		51,361		
20	SPACE MODS SPACE		148,065		148,065		
21	SPACE/LIFT RANGE SYSTEM SPACE		117,637		117,637		
22	INITIAL SPARES/REPAIR PARTS		21,812		21,812		
	TOTAL, SPACE PROCUREMENT, AIR FORCE		2,527,542		2,224,142		- 303,400

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	AF Satellite Comm System	35,400	40,400	+ 5,000
	Program increase: GPS cyber security			+ 5,000
5	Wideband Gapfiller Satellites (Space)	61,606	12,106	- 49,500
	Transfer to RDAF line 127: Pathfinder #5			- 49,500
13	Evolved Expendable Launch Capability	709,981	615,081	- 94,900
	Restoring acquisition accountability: STP-4 launch early to need			- 44,900
	Improving funds management: Historical underrun			- 50,000
14	Evolved Expendable Launch Veh (Space)	994,555	830,555	- 164,000
	Restoring acquisition accountability: STP-4 launch early to need			- 164,000

PROCUREMENT OF AMMUNITION, AIR FORCE

Appropriations, 2018	\$1,651,977,000
Budget estimate, 2019	1,587,304,000
Committee recommendation	1,564,880,000

The Committee recommends an appropriation of \$1,564,880,000. This is \$22,424,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
PROCUREMENT OF AMMUNITION, AIR FORCE							
PROCUREMENT OF AMMO, AIR FORCE							
1	ROCKETS		345,911		344,911		-1,000
2	CARTRIDGES		163,840		163,840		
BOMBS							
3	PRACTICE BOMBS		20,876		20,876		
4	GENERAL PURPOSE BOMBS		259,308		259,308		
5	MASSIVE ORDNANCE PENETRATOR (MOP)		38,111		38,111		
6	JOINT DIRECT ATTACK MUNITION	7,899	234,198	7,899	234,198		
7	B61	250	109,292	250	99,492		-9,800
8	B61		52,731		52,731		
FLARE, IR MUI-7B							
9	CAD/PAD		51,455		51,455		
10	EXPLOSIVE ORDNANCE DISPOSAL (EOD)		6,038		6,038		
11	SPARES AND REPAIR PARTS		524		524		
12	MODIFICATIONS		1,270		847		-423
13	ITEMS LESS THAN \$5,000,000		4,604		3,070		-1,534
FLARES/FUZES							
15	FLARES		125,286		125,286		
16	FUZES		109,358		99,691		-9,667
TOTAL, PROCUREMENT OF AMMO, AIR FORCE			1,522,802		1,500,378		-22,424
WEAPONS							
17	SMALL ARMS		64,502		64,502		
TOTAL, PROCUREMENT OF AMMUNITION, AIR FORCE			1,587,304		1,564,880		-22,424

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Rockets	345,911	344,911	- 1,000
	Restoring acquisition accountability: Hardware end item cost growth (2.75 Warhead WP Smoke)			- 1,000
7	B61	109,292	99,492	- 9,800
	Restoring acquisition accountability: Support cost growth			- 9,800
12	Modifications	1,270	847	- 423
	Insufficient budget justification: Modifications			- 423
13	Items Less Than \$5,000,000	4,604	3,070	- 1,534
	Insufficient budget justification: Items Less Than \$5,000,000			- 1,534
16	Fuzes	109,358	99,691	- 9,667
	Restoring acquisition accountability: Unit cost discrepancy and support cost growth (FMU-139 D/B)			- 9,667

OTHER PROCUREMENT, AIR FORCE

Appropriations, 2018	\$20,503,273,000
Budget estimate, 2019	20,890,164,000
Committee recommendation	20,839,366,000

The Committee recommends an appropriation of \$20,839,366,000. This is \$50,798,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	OTHER PROCUREMENT, AIR FORCE						
	VEHICULAR EQUIPMENT						
	PASSENGER CARRYING VEHICLES						
1	PASSENGER CARRYING VEHICLE		6,949		6,949		
2	CARGO + UTILITY VEHICLES						
3	FAMILY MEDIUM TACTICAL VEHICLE		36,002		36,002		
4	CAP VEHICLES		1,022		1,700		+ 678
5	ITEMS LESS THAN \$5M (CARGO AND UTILITY VEHICLES)		42,696		42,696		
6	SPECIAL PURPOSE VEHICLES						
7	JOINT LIGHT TACTICAL VEHICLE		30,145		34,142		+ 3,997
8	SECURITY AND TACTICAL VEHICLES		1,230		1,230		
9	ITEMS LESS THAN \$5M (SPECIAL PURPOSE VEHICLES)		43,003		55,008		+ 12,005
10	FIRE FIGHTING EQUIPMENT						
11	FIRE FIGHTING/CRASH RESCUE VEHICLES		23,328		32,708		+ 9,380
12	MATERIALS HANDLING EQUIPMENT						
13	ITEMS LESS THAN \$5M (MATERIALS HANDLING EQUIPMENT)		11,537		21,125		+ 9,588
14	BASE MAINTENANCE SUPPORT						
15	RUNWAY SNOW REMOVAL & CLEANING EQUIP		37,600		38,279		+ 679
16	ITEMS LESS THAN \$5M (BASE MAINTENANCE SUPPORT VEHICLES)		104,923		104,923		
	TOTAL, VEHICULAR EQUIPMENT		338,435		374,762		+ 36,327
	ELECTRONICS AND TELECOMMUNICATIONS EQUIP						
	COMM SECURITY EQUIPMENT(COMSEC)						
	COMSEC EQUIPMENT		114,372		118,972		+ 4,600
	INTELLIGENCE PROGRAMS						
17	INTERNATIONAL INTEL TECH AND ARCHITECTURES		8,290		8,290		
18	INTELLIGENCE TRAINING EQUIPMENT		2,099		2,099		
19	INTELLIGENCE COMM EQUIP		37,415		37,415		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	OTHER BASE MAINTENANCE AND SUPPORT EQUIP						
51	PERSONAL SAFETY AND RESCUE EQUIP ITEMS LESS THAN \$5,000,000 (SAFETY)		51,906		51,906		
52	DEPOT PLANT + MATERIALS HANDLING EQ MECHANIZED MATERIAL HANDLING		88,298		88,298		
53	BASE SUPPORT EQUIPMENT						
54	BASE PROCURED EQUIPMENT		17,031		17,031		
55	ENGINEERING AND EOD EQUIPMENT		82,635		82,635		
56	MOBILITY EQUIPMENT		9,549		20,877		+ 11,328
	ITEMS LESS THAN \$5M (BASE SUPPORT)		24,005		29,005		+ 5,000
58	SPECIAL SUPPORT PROJECTS						
59	DARP RC135		26,262		26,262		
61	DISTRIBUTED GROUND SYSTEMS SPECIAL UPDATE PROGRAM		448,290 913,813		378,490 900,813		- 69,800 - 13,000
	TOTAL, OTHER BASE MAINTENANCE AND SUPPORT EQUIP		1,661,789		1,595,317		- 66,472
63	SPARE AND REPAIR PARTS						
64	SPARES AND REPAIR PARTS UNDISTRIBUTED CLASSIFIED PROGRAMS		86,365 17,258,069		86,365 17,372,214		- 20,000 + 114,145
	TOTAL, OTHER PROCUREMENT, AIR FORCE		20,890,164		20,839,366		- 50,798

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
3	Cap Vehicles	1,022	1,700	+ 678
	Program increase: Civil air patrol—vehicles			+ 678
5	Joint Light Tactical Vehicle	30,145	34,142	+ 3,997
	Program increase: Procurement of 7 DABs for INDOPACOM			+ 3,997
7	Special Purpose Vehicles	43,003	55,008	+ 12,005
	Program increase: Procurement of 7 DABs for INDOPACOM			+ 12,005
8	Fire Fighting/Crash Rescue Vehicles	23,328	32,708	+ 9,380
	Program increase: Procurement of 7 DABs for INDOPACOM			+ 9,380
9	Materials Handling Vehicles	11,537	21,125	+ 9,588
	Program increase: Procurement of 7 DABs for INDOPACOM			+ 9,588
10	Runway Snow Remov And Cleaning Equ	37,600	38,279	+ 679
	Program increase: Procurement of 7 DABs for INDOPACOM			+ 679
12	Comsec Equipment	114,372	118,972	+ 4,600
	Program increase: Missile electronic encryption device ...			+ 12,900
	Maintain Program Affordability: Unjustified growth for COMSEC equipment			- 8,300
16	Air Traffic Control & Landing Sys	57,937	42,937	- 15,000
	Maintain Program Affordability: D-RAPCON			- 15,000
20	Weather Observation Forecast	45,020	52,520	+ 7,500
	Program increase: Portable doppler radar			+ 7,500
29	Air Force Physical Security System	159,313	47,115	- 112,198
	Program increase: Procurement of 7 DABs for INDOPACOM			+ 2,002
	Improving Funds Management: JUON funded in Public Law 115-141			- 114,200
30	Combat Training Ranges	132,675	236,175	+ 103,500
	Program increase: ANG electronic warfare range requirements—threat emitters			+ 40,000
	Program increase: Threat simulators and equipment to support F-35A beddown			+ 63,500
42	AFNET	102,836	76,836	- 26,000
	Improving Funds Management: ARAD enterprise software funded in Public Law 115-141			- 26,000
45	Tactical C-E Equipment	161,231	87,531	- 73,700
	Improving Funds Management: Carryover			- 10,000
	Improving Funds Management: Previously funded requirement			- 63,700
48	CCTV/Audiovisual Equipment	6,505	3,005	- 3,500
	Improving Funds Management: Carryover			- 3,500
55	Mobility Equipment	9,549	20,877	+ 11,328
	Program increase: Procurement of 7 DABs for INDOPACOM			+ 11,328
56	Base Maintenance and Support Equipment	24,005	29,005	+ 5,000
	Program increase: Precision approach radar			+ 5,000
59	DCGS-AF	448,290	378,490	- 69,800
	Improving Funds Management: OA forward buys funded in Public Law 115-141			- 69,800
61	Special Update Program	913,813	900,813	- 13,000
	Classified Adjustment			- 13,000
999	Classified Programs	17,258,069	17,372,214	+ 114,145
	Classified Adjustment			+ 114,145

Basic Expeditionary Airfield Resources Energy Efficiency.—The Committee notes that providing adequate living conditions ensures that deployed forces are more combat effective. Therefore, the Committee encourages the Secretary of the Air Force to leverage existing technologies, such as reusable and re-deployable insulation systems, in order to reduce logistics and sustainment costs associated with shelters in the Basic Expeditionary Airfield Resources [BEAR] program.

PROCUREMENT, DEFENSE-WIDE

Appropriations, 2018	\$5,429,270,000
Budget estimate, 2019	6,786,271,000
Committee recommendation	6,663,821,000

The Committee recommends an appropriation of \$6,663,821,000. This is \$122,450,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	PROCUREMENT, DEFENSE-WIDE						
	MAJOR EQUIPMENT						
	MAJOR EQUIPMENT, DCAA						
1	MAJOR EQUIPMENT ITEMS LESS THAN \$5M		2,542		2,542		
2	MAJOR EQUIPMENT, DCMA						
	MAJOR EQUIPMENT		3,873		3,873		
3	MAJOR EQUIPMENT, DHRA						
	PERSONNEL ADMINISTRATION		10,630		10,630		
	MAJOR EQUIPMENT, DISA						
7	INFORMATION SYSTEMS SECURITY		21,590		21,590		
8	TELEPORT PROGRAM		33,905		33,905		
9	ITEMS LESS THAN \$5M		27,886		24,071		-3,815
10	NET CENTRIC ENTERPRISE SERVICES (NCES)		1,017		1,017		
11	DEFENSE INFORMATION SYSTEMS NETWORK		150,674		150,674		
13	WHITE HOUSE COMMUNICATION AGENCY		94,610		94,610		
14	SENIOR LEADERSHIP ENTERPRISE		197,246				-197,246
16	JOINT REGIONAL SECURITY STACKS (JRSS)		140,338		140,338		
17	JOINT SERVICE PROVIDER		107,182		100,442		-6,740
	MAJOR EQUIPMENT, DLA						
18	MAJOR EQUIPMENT		5,225		5,225		
	MAJOR EQUIPMENT, DDMAC						
19	A—WEAPON SYSTEM COST	3	13,106	3	13,106		
	MAJOR EQUIPMENT, DODEA						
20	AUTOMATION/EDUCATIONAL SUPPORT & LOGISTICS		1,723		862		-861
	MAJOR EQUIPMENT, DSS						
21	MAJOR EQUIPMENT		1,196		598		-598
	MAJOR EQUIPMENT, DEFENSE THREAT REDUCTION AGENCY						
23	VEHICLES		207		207		
24	OTHER MAJOR EQUIPMENT		5,592		5,592		

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
26	MAJOR EQUIPMENT, MDA						
27	THAAD SYSTEM	82	874,068	82	1,014,068		+ 140,000
28	GROUND BASED MIDCOURSE	14	409,000	14	450,000		+ 41,000
29	GROUND BASED MIDCOURSE [AP-CY]		115,000		115,000		
30	AEGIS BMD	43	593,488	43	708,694		+ 115,206
31	AEGIS BMD (AP)		115,206				- 115,206
32	BMDs AN/TPY-2 RADARS		13,185		13,185		
33	ISRAELI PROGRAMS		80,000		80,000		
34	SHORT RANGE BALLISTIC MISSILE DEFENSE (SRBMD)		50,000		50,000		
35	AEGIS ASHORE PHASE III		15,000		35,000		+ 20,000
36	IRON DOME SYSTEM		70,000		70,000		
	AEGIS BMD HARDWARE AND SOFTWARE	28	97,057	28	97,057		
42	MAJOR EQUIPMENT, NSA						
	INFORMATION SYSTEMS SECURITY PROGRAM [ISSP]		5,403		30,703		+ 25,300
43	MAJOR EQUIPMENT, OSD						
	MAJOR EQUIPMENT, OSD		35,295		35,295		
44	MAJOR EQUIPMENT, TJS						
45	MAJOR EQUIPMENT, TJS-CE212		4,360		4,360		
	MAJOR EQUIPMENT, WHS		904		904		
46	MAJOR EQUIPMENT, WHS		497		497		
	TOTAL, MAJOR EQUIPMENT		3,297,005		3,314,045		+ 17,040
	SPECIAL OPERATIONS COMMAND						
	AVIATION PROGRAMS						
50	SOF ROTARY WING UPGRADES AND SUSTAINMENT		148,351		139,612		- 8,739
51	UNMANNED ISR		57,708		57,708		
52	NON-STANDARD AVIATION		18,731		18,731		
53	SOF U-28		32,301		32,301		
54	MH-47 CHINOOK		131,033		131,033		
55	CY-22 SOF MODIFICATION		32,529		32,529		

56	MQ-9 UNMANNED AERIAL VEHICLE	24,621	24,621	24,621	24,621	.....
57	PRECISION STRIKE PACKAGE	226,965	226,965	226,965	226,965	.....
58	AC/MC-130J	165,813	165,813	155,681	10,132	.....
59	C-130 MODIFICATIONS	80,274	80,274	80,274	.....	.....
60	SHIPBUILDING .....	.....	.....	.....	.....	.....
	UNDERWATER SYSTEMS	136,723	136,723	123,071	13,652	.....
	AMMUNITION PROGRAMS .....	.....	.....	.....	.....	.....
61	SOF ORDNANCE ITEMS UNDER \$5,000,000	357,742	357,742	325,042	32,700	.....
	OTHER PROCUREMENT PROGRAMS .....	.....	.....	.....	.....	.....
62	SOF INTELLIGENCE SYSTEMS	85,699	85,699	85,699	.....	.....
63	DGGS-SOF	17,863	17,863	17,863	.....	.....
64	OTHER ITEMS UNDER \$5,000,000	112,117	112,117	106,250	5,867	.....
65	SOF COMBATANT CRAFT SYSTEMS	7,313	7,313	15,913	+8,600	.....
66	SPECIAL PROGRAMS	14,026	14,026	14,026	.....	.....
67	TACTICAL VEHICLES	88,608	88,608	85,608	3,000	.....
68	WARRIOR SYSTEMS UNDER \$5,000,000	438,590	438,590	415,590	23,000	.....
69	COMBAT MISSION REQUIREMENTS	19,408	19,408	19,408	.....	.....
70	SOF GLOBAL VIDEO SURVEILLANCE ACTIVITIES	6,281	6,281	6,281	.....	.....
71	SOF OPERATIONAL ENHANCEMENTS INTELLIGENCE	18,509	18,509	18,509	.....	.....
73	SOF OPERATIONAL ENHANCEMENTS	367,433	367,433	332,333	35,100	.....
	TOTAL, SPECIAL OPERATIONS COMMAND	2,588,638	2,588,638	2,465,048	123,590	.....
	CHEMICAL/BIOLOGICAL DEFENSE .....	.....	.....	.....	.....	.....
76	CHEMICAL BIOLOGICAL SITUATIONAL AWARENESS	166,418	166,418	161,918	4,500	.....
77	CB PROTECTION AND HAZARD MITIGATION	144,519	144,519	142,519	2,000	.....
	TOTAL, CHEMICAL/BIOLOGICAL DEFENSE	310,937	310,937	304,437	6,500	.....
	CLASSIFIED PROGRAMS	589,691	589,691	580,291	9,400	.....
	TOTAL, PROCUREMENT, DEFENSE-WIDE	6,786,271	6,786,271	6,663,821	122,450	.....

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
9	Items Less Than \$5 Million	27,886	24,071	- 3,815
	Maintain program affordability: Unjustified growth			- 3,815
14	Senior Leadership Enterprise	197,246		- 197,246
	Insufficient budget justification: Lack of supporting justification			- 197,246
16	Joint Service Provider	107,182	100,442	- 6,740
	Maintain program affordability: Unjustified growth in end user services			- 6,740
20	Automation/Educational Support & Logistics	1,723	862	- 861
	Improving funds management: Prior year carryover			- 861
21	Major Equipment	1,196	598	- 598
	Improving funds management: Prior year carryover			- 598
26	THAAD	874,068	1,014,068	+ 140,000
	Program increase: THAAD interceptors			+ 140,000
27	Ground Based Midcourse	409,000	450,000	+ 41,000
	Transfer: Transfer funding for missile field components from Research, Development, Test and Evaluation, Defense-wide, line 73 for proper execution: Transfer requested by Missile Defense Agency			+ 41,000
29	Aegis BMD	593,488	708,694	+ 115,206
	Transfer: Transfer from line 30 for additional SM-3 Block IIA interceptors			+ 115,206
30	Aegis BMD [AP-CY]	115,206		- 115,206
	Restoring acquisition accountability: Lack of justification—transfer to line 29 for additional SM-3 Block IIA interceptors			- 115,206
34	Aegis Ashore Phase III	15,000	35,000	+ 20,000
	Program increase: AEGIS Ashore Poland			+ 20,000
42	Information Systems Security Program [ISSP]	5,403	30,703	+ 25,300
	Program increase: Sharkseer			+ 25,300
50	Rotary Wing Upgrades and Sustainment	148,351	139,612	- 8,739
	Maintain program affordability: MPU unjustified request			- 6,914
	Restoring acquisition accountability: NGEN FLIR delays			- 1,825
58	AC/MC-130J	165,813	155,681	- 10,132
	Improving funds management: RFCM ICS carryover			- 2,132
	Maintain program affordability: MC-130J SMS unjustified growth			- 8,000
60	Underwater Systems	136,723	123,071	- 13,652
	Restoring acquisition accountability: DCS components ahead of need			- 13,652
61	Ordnance Items <\$5M	357,742	325,042	- 32,700
	Restoring acquisition accountability: SOPGM unit cost adjustments			- 25,000
	Restoring acquisition accountability: 30MM and 105MM unit cost adjustments			- 7,700
64	Other Items <\$5M	112,117	106,250	- 5,867
	Restoring acquisition accountability: MMP-M ahead of need			- 5,867
65	Combatant Craft Systems	7,313	15,913	+ 8,600
	Program increase: Combatant craft			+ 8,600
67	Tactical Vehicles	88,608	85,608	- 3,000
	Improving funds management: Requirements funded in Public Law 115-141			- 3,000
68	Warrior Systems <\$5M	438,590	415,590	- 23,000
	Improving funds management: Requirements funded in Public Law 115-141			- 23,000
73	Operational Enhancements	367,433	332,333	- 35,100

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Improving funds management: Requirements funded in Public Law 115–141			– 35,100
74	Chemical Biological Situational Awareness	166,418	161,918	– 4,500
	Maintain program affordability: Unjustified growth			– 7,500
	Program increase: CBRN dismantled reconnaissance system			+ 3,000
75	CB Protection & Hazard Mitigation	144,519	142,519	– 2,000
	Maintain program affordability: Unjustified growth			– 3,000
	Program increase: DfOS CIDAS			+ 1,000
999	Classified Programs	589,691	580,291	– 9,400
	Classified adjustment			– 9,400

Chemical Biological Protective Shelter [CBPS].—The Committee recognizes the need for a highly mobile, self-contained collective protection system that can provide a contamination free working area for Echelon I and II medical treatment facilities and other selected units. CBPS satisfies that requirement and consists of a self-contained and self-powered shelter that is modularized and integrated into a service selected prime-mover. Therefore, the Committee supports the fiscal year 2019 President’s budget request of \$17,673,000 for the CBPS program.

NATIONAL GUARD AND RESERVE EQUIPMENT

Appropriations, 2018	¹ \$1,300,000,000
Budget estimate, 2019	
Committee recommendation	900,000,000

¹ Provided in Public Law 115–141, title IX.

The Committee recommends an appropriation of \$900,000,000. This is \$900,000,000 above the budget estimate.

The appropriation includes direction for the component commanders of the Army Reserve, Marine Forces Reserve, Air Force Reserve, Army National Guard and Air National Guard to submit to the congressional defense committees a detailed assessment of their component’s modernization priorities, not later than 30 days after enactment of this act.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Item	2019 budget estimate	Committee recommendation	Change from budget estimate
NATIONAL GUARD AND RESERVE EQUIPMENT			
RESERVE EQUIPMENT:			
ARMY RESERVE:			
Program increase: Miscellaneous equipment		124,500	+ 124,500
NAVY RESERVE:			
Program increase: Miscellaneous equipment		45,000	+ 45,000
MARINE CORPS RESERVE:			
Program increase: Miscellaneous equipment		9,000	+ 9,000

[In thousands of dollars]

Item	2019 budget estimate	Committee recommendation	Change from budget estimate
AIR FORCE RESERVE:			
Program increase: Miscellaneous equipment		138,500	+ 138,500
TOTAL, RESERVE EQUIPMENT		317,000	+ 317,000
NATIONAL GUARD EQUIPMENT:			
ARMY NATIONAL GUARD:			
Program increase: Miscellaneous equipment		291,500	+ 291,500
AIR NATIONAL GUARD:			
Program increase: Miscellaneous equipment		291,500	+ 291,500
TOTAL, NATIONAL GUARD EQUIPMENT		583,000	+ 583,000
TOTAL, NATIONAL GUARD AND RESERVE EQUIPMENT		900,000	+ 900,000

High-Priority Items.—The Committee directs that the National Guard and Reserve Equipment account shall be executed by the Chiefs of the National Guard and reserve components with priority consideration given to the following items: Acoustic Hailing Devices, Arctic Sustainment Package, Cold Weather and Mountaineering Gear and Equipment, Commercial Off-the-Shelf Simulation Devices, Detect and Avoid Systems for MQ-9 Aircraft, Digital Radar Warning Receivers for F-16s, MQ-9 Deployable Launch & Recovery Element Mission Support Kits, Radiac Sets, and Small Unit Support Vehicles.

Commercial Off-the-Shelf Simulation Devices.—The Committee commends the Army National Guard for its innovative approach to acquiring commercial off-the-shelf simulation devices. Utilizing COTS training devices enables the Guard to provide high quality, timely simulation training at an affordable cost. The Committee encourages the Guard to continue utilizing COTS simulation training devices and to consider a service and support business model for simulation training in order to maximize the benefits of modern, realistic training scenarios.

DEFENSE PRODUCTION ACT PURCHASES

Appropriations, 2018	\$67,401,000
Budget estimate, 2019	38,578,000
Committee recommendation	38,578,000

The Committee recommends an appropriation of \$38,578,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
1	DEFENSE PRODUCTION ACT PURCHASES		38,578		38,578		
	TOTAL, DEFENSE PRODUCTION ACT PURCHASES		38,578		38,578		

Defense Production Act.—The fiscal year 2019 budget request includes \$38,578,000 for the Defense Production Act [DPA] Fund. For the second consecutive year, the Committee supports the DPA Fund budget request but does not provide additional funding. The Committee remains supportive of DPA’s unique mission to address single points of failure in supply chains, support emerging technology, expand Defense-centric companies into commercial sectors, and improve the manufacturing capacity of companies when there are few market incentives. However, the Committee is concerned with the management of the DPA Fund. Despite recent Congressional adds to the DPA Fund, the Committee notes the gradual decrease of debits to the DPA Fund for projects since fiscal year 2015. Therefore, the Committee directs the Secretary of Defense to report to the congressional defense committees not later than 30 days after enactment of this act on the management of the DPA Fund, to include an update on the status and plan to accelerate the execution of funds, the way forward on the Executive Agent issue, and explanations on the differences between the projects requested in the budget request and subsequent funding profiles provided during the year of execution.

JOINT URGENT OPERATIONAL NEEDS FUND

Appropriations, 2018	
Budget estimate, 2019	\$100,025,000
Committee recommendation	

The Committee recommends no funding for the Joint Urgent Operational Needs Fund.

TITLE IV

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

Funds appropriated under this title provide the resources required to conduct a program of research, development, test and evaluation, including research in basic science, applied research, advanced technology development, demonstration and validation, engineering and manufacturing development, and operational systems development.

The President's fiscal year 2019 budget requests a total of \$91,056,950,000 for research, development, test and evaluation appropriations.

SUMMARY OF COMMITTEE ACTION

The Committee recommends research, development, test and evaluation appropriations totaling \$95,131,819,000 for fiscal year 2019. This is \$4,074,869,000 above the budget estimate.

Committee recommended research, development, test and evaluation appropriations for fiscal year 2019 are summarized below:

SUMMARY OF RESEARCH, DEVELOPMENT, TEST AND EVALUATION APPROPRIATIONS

[In thousands of dollars]

Account	2019 budget estimate	Committee recommendation	Change from budget estimate
Research, Development, Test and Evaluation:			
Research, Development, Test and Evaluation, Army	10,159,379	10,812,458	+ 653,079
Research, Development, Test and Evaluation, Navy	18,481,666	18,992,064	+ 510,398
Research, Development, Test and Evaluation, Air Force	40,178,343	40,896,667	+ 718,324
Research, Development, Test and Evaluation, Defense-Wide	22,016,553	24,049,621	+ 2,033,068
Operational Test and Evaluation, Defense	221,009	381,009	+ 160,000
Total	91,056,950	95,131,819	+ 4,074,869

REPROGRAMMING GUIDANCE FOR ACQUISITION ACCOUNTS

The Secretary of Defense is directed to continue to follow the reprogramming guidance as specified in the report accompanying the House version of the Department of Defense appropriations bill for fiscal year 2008 (House Report 110-279). Specifically, the dollar threshold for reprogramming funds will remain at \$20,000,000 for procurement and \$10,000,000 for research, development, test and evaluation.

Also, the Under Secretary of Defense (Comptroller) is directed to continue to provide the congressional defense committees quarterly, spreadsheet-based DD Form 1416 reports for service and defense-wide accounts in titles III and IV of this act. Reports for titles III and IV shall comply with guidance specified in the explanatory statement accompanying the Department of Defense Appropria-

tions Act for Fiscal Year 2006. The Department shall continue to follow the limitation that prior approval reprogrammings are set at either the specified dollar threshold or 20 percent of the procurement or research, development, test and evaluation line, whichever is less. These thresholds are cumulative from the base for reprogramming value as modified by any adjustments. Therefore, if the combined value of transfers into or out of a procurement (P-1), or a research, development, test and evaluation (R-1) line exceeds the identified threshold, the Secretary of Defense must submit a prior approval reprogramming to the congressional defense committees. In addition, guidelines on the application of prior approval reprogramming procedures for congressional special interest items are established elsewhere in this report.

FUNDING INCREASES

The funding increases outlined in the tables for each appropriation account shall be provided only for the specific purposes indicated in the tables.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION SPECIAL INTEREST ITEMS

Items for which additional funds have been recommended or items for which funding is specifically reduced as shown in the tables detailing Committee recommended adjustments or in paragraphs using the phrase “only for” or “only to” are congressional special interest items for the purpose of the Base for Reprogramming [DD Form 1414]. Each of these items must be carried on the DD Form 1414 at the stated amount, as specifically addressed in elsewhere in this report.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION OVERVIEW

Basic Research.—The Committee understands that basic research is the foundation for Department of Defense innovation and future technologies. As the Under Secretary of Defense (Research and Engineering) recently testified before the Committee: “The Department of Defense has the third largest investment among Federal agencies in basic research at U.S. universities, who have, through years of continued investments, been the source of many of today’s transformational technologies. Traditionally, the Department has viewed the role of universities as producing the research innovation, the Department of Defense labs as the mechanism to nurture these findings and to render them defense-applicable, and the defense industrial base to integrate these new technologies into acquisition programs.” Accordingly, the Committee recommends a total basic research investment of \$2,798,456,000, an increase of \$529,280,000 above the fiscal year 2019 budget request. This includes an additional \$125,000,000 in Research, Development, Test and Evaluation, Army; \$125,000,000 in Research, Development, Test and Evaluation, Navy; \$125,000,000 in Research, Development, Test and Evaluation, Air Force; and \$100,000,000 in Research, Development, Test and Evaluation, Defense-Wide.

Directed Energy.—The 2018 National Defense Strategy describes a changing security environment due to rapid technological ad-

vancements and the changing character of war. The Committee understands that directed energy, a family of emerging non-kinetic capabilities, will play a key role in shaping the air, maritime, and ground battlefield environments. The Committee has been supportive of the Department's directed energy activities to date to ensure that these capabilities are an operational advantage for the U.S. military. The Committee supports additional investments to further develop directed energy technology and transition these activities to both offensive and defensive capabilities in the future. As a result, the Committee recommends an additional \$316,500,000 above the President's budget request for directed energy activities. Specifically, the Committee recommends an additional \$150,000,000 for Air Force prototyping activities to support the application of directed energy technology for air base air defense, precision attack, and aircraft self-protection. These investments are intended to support the Air Force Directed Energy Weapon Flight Plan and the continued development of high energy lasers and high-power microwave weapons. Additional investments to advance the development of directed energy capabilities by the Missile Defense Agency are addressed separately.

Hypersonics.—The 2018 National Defense Strategy identifies hypersonics as a key technology to ensure that the United States maintains its technology superiority and ability to fight and win the wars in the future. The fiscal year 2019 President's budget request invests in both offensive and defensive hypersonics capabilities. The Committee understands that the Department of Defense is accelerating existing efforts in hypersonics to counter the progress made by near peer threats. To support and accelerate several of the Department's current activities, the Committee recommends an increase of \$928,600,000 over the President's budget request to support hypersonics research and prototyping efforts. Specifically, the Committee recommends an additional \$345,000,000 for the Office of the Secretary of Defense to accelerate prompt global strike capability development as well as an additional \$50,000,000 for the Defense Advanced Research Projects Agency to develop offensive hypersonic weapons. Further, the recommendation includes an additional \$300,000,000 to support the Air Force's decision to accelerate prototyping efforts for the air launched rapid response weapon and hypersonic conventional strike weapon. Finally, the Committee recommends an additional \$113,000,000 for the Navy and the Strategic Capabilities Office to design, fabricate, and test an advanced rail gun mount and continue development of associated hypervelocity projectile. Additional investments to advance the development of hypersonic capabilities by the Missile Defense Agency are addressed separately.

Department of Defense Test and Evaluation Infrastructure.—The 2018 National Defense Strategy addresses the increasingly complex global threat environment driven in part by rapid technological advancements. The fiscal year 2019 President's budget request proposes investments in several programs that support a more capable and lethal force to prepare for this threat environment, including directed energy, hypersonics, advanced computing, big data analytics, artificial intelligence, autonomy, and robotics programs; the

Committee recommends targeted increases in these high priority areas to further accelerate U.S. technological innovation.

The Committee believes that concurrent with investments in leap-ahead technological advancements, an investment in the Department of Defense test and evaluation infrastructure is required to increase testing range space and availability and to ensure continued independent and objective assessments of weapon system capabilities. Therefore, after consultation with the Under Secretary of Defense (Research and Engineering) and Director, Operational Test and Evaluation, the Committee recommends an increase of \$846,000,000 above the President's budget request for the Army, Navy, Air Force and Office, Director, Operational Test and Evaluation to modernize the Department of Defense test and evaluation infrastructure in areas such as hypersonics, directed energy, augmented intelligence, machine learning and robotics.

The Committee directs the Under Secretary of Defense (Research and Engineering), in conjunction with the Director, Operational Test and Evaluation, and the Secretaries of the Army, Navy and Air Force, to conduct an in-depth assessment of the Department of Defense test and evaluation infrastructure and to identify improvements required to address future warfighting capabilities. The assessment shall be provided to the congressional defense committees not later than with the submission of the fiscal year 2020 President's budget request and shall include proposed coordinated investments by warfighting area in priority order and with associated cost estimates.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

Appropriations, 2018	\$10,647,426,000
Budget estimate, 2019	10,159,379,000
Committee recommendation	10,812,458,000

The Committee recommends an appropriation of \$10,812,458,000. This is \$653,079,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY			
	BASIC RESEARCH			
1	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	11,585	11,585	.....
2	DEFENSE RESEARCH SCIENCES	276,912	377,912	+ 101,000
3	UNIVERSITY RESEARCH INITIATIVES	65,283	65,283	.....
4	UNIVERSITY AND INDUSTRY RESEARCH CENTERS	92,115	127,865	+ 35,750
	TOTAL, BASIC RESEARCH	445,895	582,645	+ 136,750
	APPLIED RESEARCH			
5	MATERIALS TECHNOLOGY	28,600	58,600	+ 30,000
6	SENSORS AND ELECTRONIC SURVIVABILITY	32,366	85,866	+ 53,500
7	TRACTOR HIP	8,674	8,674	.....
8	TRACTOR JACK	400	400	.....
9	AVIATION TECHNOLOGY	64,847	76,847	+ 12,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
10	ELECTRONIC WARFARE TECHNOLOGY	25,571	25,571	.....
11	MISSILE TECHNOLOGY	50,183	75,183	+ 25,000
12	ADVANCED WEAPONS TECHNOLOGY	29,502	34,502	+ 5,000
13	ADVANCED CONCEPTS AND SIMULATION	28,500	28,500	.....
14	COMBAT VEHICLE AND AUTOMOTIVE TECHNOLOGY	70,450	95,450	+ 25,000
15	BALLISTICS TECHNOLOGY	75,541	75,541	.....
16	CHEMICAL, SMOKE AND EQUIPMENT DEFEATING TECHNOLOGY ...	5,032	5,032	.....
17	JOINT SERVICE SMALL ARMS PROGRAM	12,394	12,394	.....
18	WEAPONS AND MUNITIONS TECHNOLOGY	40,444	65,944	+ 25,500
19	ELECTRONICS AND ELECTRONIC DEVICES	58,283	83,283	+ 25,000
20	NIGHT VISION TECHNOLOGY	29,582	29,582	.....
21	COUNTERMINE SYSTEMS	21,244	27,244	+ 6,000
22	HUMAN FACTORS ENGINEERING TECHNOLOGY	24,131	26,631	+ 2,500
23	ENVIRONMENTAL QUALITY TECHNOLOGY	13,242	21,242	+ 8,000
24	COMMAND, CONTROL, COMMUNICATIONS TECHNOLOGY	55,003	55,003	.....
25	COMPUTER AND SOFTWARE TECHNOLOGY	14,958	14,958	.....
26	MILITARY ENGINEERING TECHNOLOGY	78,159	98,159	+ 20,000
27	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	21,862	21,862	.....
28	WARFIGHTER TECHNOLOGY	40,566	49,566	+ 9,000
29	MEDICAL TECHNOLOGY	90,075	90,075	.....
	TOTAL, APPLIED RESEARCH	919,609	1,166,109	+ 246,500
	ADVANCED TECHNOLOGY DEVELOPMENT			
30	WARFIGHTER ADVANCED TECHNOLOGY	39,338	39,338	.....
31	MEDICAL ADVANCED TECHNOLOGY	62,496	70,496	+ 8,000
32	AVIATION ADVANCED TECHNOLOGY	124,958	133,958	+ 9,000
33	WEAPONS AND MUNITIONS ADVANCED TECHNOLOGY	102,686	244,503	+ 141,817
34	COMBAT VEHICLE AND AUTOMOTIVE ADVANCED TECHNOLOGY ...	119,739	166,239	+ 46,500
35	SPACE APPLICATION ADVANCED TECHNOLOGY	13,000	51,000	+ 38,000
36	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	8,044	8,044	.....
37	TRACTOR HIKE	22,631	22,631	.....
38	NEXT GENERATION TRAINING & SIMULATION SYSTEMS	25,682	25,682	.....
40	COMBATING TERRORISM, TECHNOLOGY DEVELOPMENT	3,762	36,762	+ 33,000
41	TRACTOR NAIL	4,896	4,896	.....
42	TRACTOR EGGS	6,041	6,041	.....
43	ELECTRONIC WARFARE TECHNOLOGY	31,491	41,491	+ 10,000
44	MISSILE AND ROCKET ADVANCED TECHNOLOGY	61,132	86,132	+ 25,000
45	TRACTOR CAGE	16,845	16,845	.....
46	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM ...	183,322	218,322	+ 35,000
47	LANDMINE WARFARE AND BARRIER ADVANCED TECHNOLOGY	11,104	17,104	+ 6,000
48	JOINT SERVICE SMALL ARMS PROGRAM	5,885	22,805	+ 16,920
49	NIGHT VISION ADVANCED TECHNOLOGY	61,376	61,376	.....
50	ENVIRONMENTAL QUALITY TECHNOLOGY DEMONSTRATIONS	9,136	29,136	+ 20,000
51	MILITARY ENGINEERING ADVANCED TECHNOLOGY	25,864	95,464	+ 69,600
52	ADVANCED TACTICAL COMPUTER SCIENCE & SENSOR TECHNOLOGY	34,883	43,883	+ 9,000
53	COMMAND, CONTROL, COMMUNICATIONS ADVANCED TECHNOLOGY	52,387	52,387	.....
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	1,026,698	1,494,535	+ 467,837
	DEMONSTRATION & VALIDATION			
54	ARMY MISSILE DEFENSE SYSTEMS INTEGRATION	10,777	55,477	+ 44,700
56	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	42,802	49,602	+ 6,800
57	LANDMINE WARFARE AND BARRIER—ADV DEV	45,254	45,254	.....
58	SMOKE, OBSCURANT AND TARGET DEFEATING SYS—ADV DEV	22,700	22,700	.....
59	TANK AND MEDIUM CALIBER AMMUNITION	41,974	41,974	.....
60	ARMORED SYSTEM MODERNIZATION—ADV DEV	119,395	63,585	- 55,810
61	SOLDIER SUPPORT AND SURVIVABILITY	8,746	8,746	.....
62	TACTICAL ELECTRONIC SURVEILLANCE SYSTEM—AD	35,667	35,667	.....
63	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT	7,350	7,350	.....
64	ENVIRONMENTAL QUALITY TECHNOLOGY	14,749	14,749	.....
65	NATO RESEARCH AND DEVELOPMENT	3,687	3,687	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
66	AVIATION—ADV DEV	10,793	86,193	+ 75,400
67	LOGISTICS AND ENGINEER EQUIPMENT—ADV DEV	14,248	17,248	+ 3,000
68	MEDICAL SYSTEMS—ADV DEV	34,284	37,284	+ 3,000
69	SOLDIER SYSTEMS—ADVANCED DEVELOPMENT	18,044	18,044	.....
70	ROBOTICS DEVELOPMENT	95,660	72,260	– 23,400
71	CROSS FUNCTIONAL TEAM (CFT) ADVANCED DEVELOPMENT	38,000	25,000	– 13,000
72	ANALYSIS OF ALTERNATIVES	9,765	9,765	.....
73	FUTURE TACTICAL UNMANNED AIRCRAFT SYSTEM (FUAS)	12,393	12,393	.....
74	LOWER TIER AIR MISSILE DEFENSE (LTAMID) SENSOR	120,374	87,874	– 32,500
75	TECHNOLOGY MATURATION INITIATIVES	95,347	95,347	.....
76	MANEUVER—SHORT RANGE AIR DEFENSE (M–SHORAD)	95,085	56,085	– 39,000
77	TRACTOR BEAM	52,894	52,894	.....
	SYNTHETIC TRAINING ENVIRONMENT REFINEMENT AND			
79	PROTOTYPING	77,939	77,939	.....
80	INDIRECT FIRE PROTECTION CAPABILITY INCREMENT 2—INTERC	51,030	51,030	.....
81	CYBERSPACE OPERATIONS FORCES AND FORCE SUPPORT	65,817	47,417	– 18,400
82	ASSURED POSITIONING, NAVIGATION AND TIMING (PNT)	146,300	111,300	– 35,000
83	ARMY SPACE SYSTEMS INTEGRATION	38,319	38,319	.....
	TOTAL, DEMONSTRATION & VALIDATION	1,329,393	1,245,183	– 84,210
	ENGINEERING & MANUFACTURING DEVELOPMENT			
84	AIRCRAFT AVIONICS	32,293	32,293	.....
85	ELECTRONIC WARFARE DEVELOPMENT	78,699	58,699	– 20,000
88	TRACTOR CAGE	17,050	17,050	.....
89	INFANTRY SUPPORT WEAPONS	83,155	57,355	– 25,800
90	MEDIUM TACTICAL VEHICLES	3,704	3,704	.....
85	JAVELIN	10,623	5,623	– 5,000
92	FAMILY OF HEAVY TACTICAL VEHICLES	11,950	11,950	.....
93	AIR TRAFFIC CONTROL	12,347	12,347	.....
95	LIGHT TACTICAL WHEELED VEHICLES	8,212	1,278	– 6,934
96	ARMORED SYSTEMS MODERNIZATION (ASM)—ENG DEV	393,613	393,613	.....
97	NIGHT VISION SYSTEMS—SDD	139,614	138,614	– 1,000
98	COMBAT FEEDING, CLOTHING, AND EQUIPMENT	4,507	7,507	+ 3,000
99	NON-SYSTEM TRAINING DEVICES—SDD	49,436	44,436	– 5,000
100	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE—SDD ...	95,172	88,172	– 7,000
101	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	22,628	22,628	.....
102	AUTOMATIC TEST EQUIPMENT DEVELOPMENT	13,297	10,697	– 2,600
103	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)—SDD	9,145	9,145	.....
104	BRILLIANT ANTI-ARMOR SUBMUNITION (BAT)	9,894	6,894	– 3,000
105	COMBINED ARMS TACTICAL TRAINER (CATT) CORE	21,964	21,964	.....
106	BRIGADE ANALYSIS, INTEGRATION AND EVALUATION	49,288	49,288	.....
107	WEAPONS AND MUNITIONS—SDD	183,100	184,959	+ 1,859
108	LOGISTICS AND ENGINEER EQUIPMENT—SDD	79,706	79,706	.....
109	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS—SDD	15,970	15,970	.....
110	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT	44,542	44,542	.....
111	LANDMINE WARFARE/BARRIER—SDD	50,817	45,117	– 5,700
112	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFT- WARE	178,693	163,693	– 15,000
113	RADAR DEVELOPMENT	39,338	39,338	.....
114	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEB)	37,851	37,851	.....
115	FIREFINDER	45,473	45,473	.....
116	SOLDIER SYSTEMS—WARRIOR DEM/VAL	10,395	10,395	.....
117	SUITE OF SURVIVABILITY ENHANCEMENT SYSTEMS -EMD	69,204	52,904	– 16,300
118	ARTILLERY SYSTEMS	1,781	1,781	.....
119	INFORMATION TECHNOLOGY DEVELOPMENT	113,758	80,376	– 33,382
120	INTEGRATED PERSONNEL AND PAY SYSTEM—ARMY (IPPS–A)	166,603	155,103	– 11,500
121	ARMORED MULTI-PURPOSE VEHICLE	118,239	118,239	.....
	INTEGRATED GROUND SECURITY SURVEILLANCE RESPONSE			
122	CAPABILITY (IGSSR–C)	3,211	3,211	.....
123	JOINT TACTICAL NETWORK CENTER (JTNC)	15,889	15,889	.....
124	JOINT TACTICAL NETWORK (JTN)	41,972	41,972	.....
125	TRACTOR TIRE	41,166	41,166	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
126	GROUND-BASED OPERATIONAL SURVEILLANCE SYSTEM—			
	EXPEDITIONARY (GBOSS-E)	5,175	5,175	.....
127	TACTICAL SECURITY SYSTEM (TSS)	4,496	4,496	.....
128	COMMON INFRARED COUNTERMEASURES (CIRCM)	51,178	25,178	- 26,000
129	COMBATING WEAPONS OF MASS DESTRUCTION (CWMD)	11,311	11,311	.....
131	NUCLEAR BIOLOGICAL CHEMICAL RECONNAISSANCE VEHICLE ...	17,154	13,054	- 4,100
132	DEFENSIVE CYBER TOOL DEVELOPMENT	36,626	30,126	- 6,500
133	TACTICAL NETWORK RADIO SYSTEMS (LOW-TIER)	3,829	3,829	.....
134	CONTRACT WRITING SYSTEM	41,928	41,928	.....
135	MISSILE WARNING SYSTEM MODERNIZATION (MWSM)	28,276	6,276	- 22,000
136	AIRCRAFT SURVIVABILITY DEVELOPMENT	21,965	21,965	.....
137	INDIRECT FIRE PROTECTION CAPABILITY INC 2—BLOCK 1	157,710	145,710	- 12,000
138	GROUND ROBOTICS	86,167	61,549	- 24,618
139	EMERGING TECHNOLOGY INITIATIVES	42,866	68,266	+ 25,400
140	AMF JOINT TACTICAL RADIO SYSSTEM	15,984	15,984	.....
141	JOINT AIR-TO-GROUND MISSILE (JAGM)	11,773	11,773	.....
142	ARMY INTEGRATED AIR AND MISSILE DEFENSE (AIAMD)	277,607	322,607	+ 45,000
143	NATIONAL CAPABILITIES INTEGRATION	12,340	12,340	.....
144	JOINT LIGHT TACTICAL VEHICLE ENG AND MANUFACTURING	2,686	.....	- 2,686
145	AVIATION GROUND SUPPORT EQUIPMENT	2,706	7,706	+ 5,000
147	TROJAN—RH12	4,521	4,521	.....
150	ELECTRONIC WARFARE DEVELOPMENT	8,922	8,922	.....
151	TRACTOR BEARS	23,170	23,170	.....
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	3,192,689	3,016,828	- 175,861
	RDT&E MANAGEMENT SUPPORT			
152	THREAT SIMULATOR DEVELOPMENT	12,835	28,835	+ 16,000
153	TARGET SYSTEMS DEVELOPMENT	12,135	32,135	+ 20,000
154	MAJOR T&E INVESTMENT	82,996	182,996	+ 100,000
155	RAND ARROYO CENTER	19,821	19,821	.....
156	ARMY KWAJALEIN ATOLL	246,574	246,574	.....
157	CONCEPTS EXPERIMENTATION PROGRAM	30,430	30,430	.....
159	ARMY TEST RANGES AND FACILITIES	305,759	430,759	+ 125,000
160	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	62,379	84,879	+ 22,500
161	SURVIVABILITY/LETHALITY ANALYSIS	40,496	40,496	.....
162	AIRCRAFT CERTIFICATION	3,941	3,941	.....
163	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES	9,767	9,767	.....
164	MATERIEL SYSTEMS ANALYSIS	21,226	21,226	.....
165	EXPLOITATION OF FOREIGN ITEMS	13,026	13,026	.....
166	SUPPORT OF OPERATIONAL TESTING	52,718	52,718	.....
167	ARMY EVALUATION CENTER	57,049	57,049	.....
168	ARMY MODELING AND SIMULATION X-CMD COLLABORATION AND INTEG	2,801	2,801	.....
169	PROGRAMWIDE ACTIVITIES	60,942	60,942	.....
170	TECHNICAL INFORMATION ACTIVITIES	29,050	29,050	.....
171	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY	42,332	56,332	+ 14,000
172	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	3,216	3,216	.....
173	MANAGEMENT HEADQUARTERS (RESEARCH AND DEVELOPMENT)	54,145	54,145	.....
174	MILITARY GROUND-BASED CREW TECHNOLOGY	4,896	4,896	.....
175	RONALD REAGAN BALLISTIC MISSILE DEFENSE TEST SITE	63,011	63,011	.....
176	COUNTERINTEL AND HUMAN INTEL MODERNIZATION	2,636	2,636	.....
177	ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	88,300	88,300	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,322,481	1,619,981	+ 297,500
	OPERATIONAL SYSTEMS DEVELOPMENT			
181	MLRS PRODUCT IMPROVEMENT PROGRAM	8,886	6,886	- 2,000
182	TRACTOR PULL	4,067	4,067	.....
183	ANTI-TAMPER TECHNOLOGY SUPPORT	4,254	4,254	.....
184	WEAPONS AND MUNITIONS PRODUCT IMPROVEMENT PROGRAMS	16,022	16,022	.....
185	TRACTOR SMOKE	4,577	4,577	.....
186	LONG RANGE PRECISION FIRES (LRPF)	186,475	159,475	- 27,000
187	APACHE PRODUCT IMPROVEMENT PROGRAM	31,049	24,049	- 7,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
188	BLACKHAWK RECAP/MODERNIZATION	35,240	35,240	.....
189	CHINOOK HELICOPTER PRODUCT IMPROVEMENT PROGRAM	157,822	153,822	- 4,000
190	FIXED WING AIRCRAFT	4,189	4,189	.....
191	IMPROVED TURBINE ENGINE PROGRAM	192,637	189,137	- 3,500
194	AVIATION ROCKET SYSTEM PRODUCT IMPROVEMENT AND DEVELOPMENT	60,860	41,860	- 19,000
195	UNMANNED AIRCRAFT SYSTEM UNIVERSAL PRODUCTS	52,019	38,519	- 13,500
196	FAMILY OF BIOMETRICS	2,400	2,400	.....
197	PATRIOT PRODUCT IMPROVEMENT	65,369	75,369	+ 10,000
198	AEROSTAT JOINT PROJECT OFFICE	1	.....	- 1
199	JOINT AUTOMATED DEEP OPERATION COORDINATION SYSTEM	30,954	30,954	.....
200	COMBAT VEHICLE IMPROVEMENT PROGRAMS	411,927	336,427	- 75,500
202	155MM SELF-PROPELLED HOWITZER IMPROVEMENTS	40,676	30,676	- 10,000
203	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS	17,706	17,706	.....
204	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	146	146	.....
205	DIGITIZATION	6,316	6,316	.....
206	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	1,643	1,643	.....
207	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	4,947	4,947	.....
208	TRACTOR CARD	34,050	34,050	.....
210	MATERIALS HANDLING EQUIPMENT	1,464	1,464	.....
211	ENVIRONMENTAL QUALITY TECHNOLOGY—OPERATIONAL SYSTEM	249	249	.....
212	LOWER TIER AIR AND MISSILE DEFENSE (AMD) SYSTEM	79,283	78,798	- 485
213	GUIDED MULTIPLE-LAUNCH ROCKET SYSTEM (GMLRS)	154,102	89,102	- 65,000
216	SECURITY AND INTELLIGENCE ACTIVITIES	12,280	12,280	.....
217	INFORMATION SYSTEMS SECURITY PROGRAM	68,533	46,017	- 22,516
218	GLOBAL COMBAT SUPPORT SYSTEM	68,619	48,884	- 19,735
220	WWMCCS/GLOBAL COMMAND AND CONTROL SYSTEM	2,034	2,034	.....
223	COMBINED ADVANCED APPLICATIONS	1,500	1,500	.....
224	INTEGRATED BROADCAST SERVICE (IBS)	450	450	.....
225	TACTICAL UNMANNED AERIAL VEHICLES	6,000	6,000	.....
226	AIRBORNE RECONNAISSANCE SYSTEMS	12,416	12,416	.....
227	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	38,667	27,667	- 11,000
229	RQ-11 UAV	6,180	6,180	.....
230	RQ-7 UAV	12,863	12,863	.....
231	BIOMETRICS ENABLED INTELLIGENCE	4,310	4,310	.....
233	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	53,958	88,758	+ 34,800
234	SATCOM GROUND ENVIRONMENT (SPACE)	12,119	12,119	.....
235	JOINT TACTICAL GROUND SYSTEM	7,400	7,400	.....
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,916,659	1,681,222	- 235,437
9999	CLASSIFIED PROGRAMS	5,955	5,955	.....
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY	10,159,379	10,812,458	+ 653,079

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	Defense Research Sciences	276,912	377,912	+ 101,000
	Basic research program increase .....	.....	.....	+ 100,000
	Program increase: UAV fuel systems enhancements ..	.....	.....	+ 1,000
4	University and Industry Research Centers	92,115	127,865	+ 35,750
	Basic research program increase .....	.....	.....	+ 25,000
	Program increase: Materials in extreme dynamic environments .....	.....	.....	+ 8,750
	Program increase: University assisted hypervelocity testing .....	.....	.....	+ 2,000
5	Materials Technology	28,600	58,600	+ 30,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: Advanced polymers			+ 5,000
	Program increase: Highly durable advanced polymers for lightweight armor			+ 5,000
	Program increase: Materials research for affordability, performance, and environmental sustainability			+ 10,000
	Program increase: Advanced materials processing			+ 10,000
6	Sensors and Electronic Survivability	32,366	85,866	+ 53,500
	Program increase			+ 5,000
	Program increase: Advanced space data exploitation and integration program			+ 9,500
	Program increase: Agile manufacturing materials processing			+ 15,000
	Program increase: Open campus initiative			+ 4,000
	Program increase: Small satellite technology development			+ 20,000
9	Aviation Technology	64,847	76,847	+ 12,000
	Program increase: Adaptive flight controls			+ 7,000
	Program increase: Aviation and missile technology transfer and innovation			+ 5,000
11	Missile Technology	50,183	75,183	+ 25,000
	Program increase: Air vehicle development and sustainment			+ 15,000
	Program increase: Enterprise science and technology prototyping			+ 10,000
12	Advanced Weapons Technology	29,502	34,502	+ 5,000
	Program increase: COE in high-energy laser and optical technology			+ 5,000
14	Combat Vehicle and Automotive Technology	70,450	95,450	+ 25,000
	Program increase: Advanced materials development for survivability			+ 15,000
	Program increase: Highly electrified vehicles and infrastructure connectivity			+ 4,000
	Program increase: Structural thermoplastics for vehicles			+ 6,000
18	Weapons and Munitions Technology	40,444	65,944	+ 25,500
	Program increase: Advanced warheads technology			+ 2,500
	Program increase: Medium caliber lightweight composite barrels			+ 10,000
	Program increase: Novel printed armaments components			+ 13,000
19	Electronics and Electronic Devices	58,283	83,283	+ 25,000
	Program increase: Silicon carbide research			+ 20,000
	Program increase: Tactical power generation and storage systems			+ 5,000
21	Countermeasures Systems	21,244	27,244	+ 6,000
	Program increase: Developing and improving counter-IED sensors			+ 3,000
	Program increase: Development of soil parameters			+ 3,000
22	Human Factors Engineering Technology	24,131	26,631	+ 2,500
	Program increase			+ 2,500
23	Environmental Quality Technology	13,242	21,242	+ 8,000
	Program increase: Mobile environmental containment sensors			+ 8,000
26	Military Engineering Technology	78,159	98,159	+ 20,000
	Program increase: Cellulose nanocomposites research			+ 15,000
	Program increase: Innovative construction materials for cold regions			+ 4,000
	Program increase: Vehicle-born IED screening			+ 1,000
28	Warfighter Technology	40,566	49,566	+ 9,000
	Program increase: Expeditionary mobile base camp technology			+ 9,000
31	Medical Advanced Technology	62,496	70,496	+ 8,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: Peer-reviewed military burn research program			+ 8,000
32	Aviation Advanced Technology	124,958	133,958	+ 9,000
	Program increase: Stretch broken composite material forms			+ 4,000
	Program increase: Surface tolerant adhesives			+ 5,000
33	Weapons and Munitions Advanced Technology	102,686	244,503	+ 141,817
	Program increase: Accelerate ERCA gun			+ 20,000
	Program increase: High energy laser			+ 20,000
	Program increase: Long range precision fires			+ 101,817
34	Combat Vehicle and Automotive Advanced Technology	119,739	166,239	+ 46,500
	Program increase: Airless tire technology demonstration			+ 4,000
	Program increase: HMMWV automotive enhancements			+ 10,000
	Program increase: HMMWV autonomy			+ 3,000
	Program increase: HMMWV power system			+ 2,000
	Program increase: HMMWV torque monitoring			+ 3,000
	Program increase: Modular scalable powertrain			+ 2,500
	Program increase: Next gen combat vehicle			+ 7,000
	Program increase: Combat vehicle weight reduction initiative			+ 10,000
	Program increase: Multi-sensor augmented reality system for tactical land vehicles			+ 5,000
35	Space Application Advanced Technology	13,000	51,000	+ 38,000
	Program increase: Network			+ 2,000
	Program increase: Assured positioning, navigation, and timing for space and missile defense assets			+ 6,000
	Program increase: Global communications research ..			+ 10,000
	Program increase: Tactical small launch			+ 20,000
40	Combating Terrorism—Technology Development	3,762	36,762	+ 33,000
	Program increase: Artificial intelligence enabled sensor networks			+ 8,000
	Program increase: Enhanced propulsion systems for UAS			+ 6,000
	Program increase: Lightweight, low power radar systems			+ 8,000
	Program increase: Long endurance UAV research			+ 8,000
	Program increase: Open source ISR research			+ 3,000
43	Electronic Warfare Technology	31,491	41,491	+ 10,000
	Program increase: Tactical cyber-electronic warfare readiness initiative			+ 10,000
44	Missile and Rocket Advanced Technology	61,132	86,132	+ 25,000
	Program increase: Cyber security			+ 15,000
	Program increase: Tactically mobile, shoot-on-the-move SHORAD demonstration			+ 10,000
46	High Performance Computing Modernization Program	183,322	218,322	+ 35,000
	Program increase			+ 35,000
47	Landmine Warfare and Barrier Advanced Technology	11,104	17,104	+ 6,000
	Program increase: Multi-sensor drone swarms for explosive hazard detection			+ 6,000
48	Joint Service Small Arms Program	5,885	22,805	+ 16,920
	Program increase: Soldier lethality			+ 16,920
50	Environmental Quality Technology Demonstrations	9,136	29,136	+ 20,000
	Program increase: Autonomous transport innovation			+ 5,000
	Program increase: Environmental sensors for explosives			+ 2,000
	Program increase: Rapid safe advanced carbon nanotechnology materials			+ 8,000
	Program increase: Smart bases			+ 5,000
51	Military Engineering Advanced Technology	25,864	95,464	+ 69,600
	Program increase: Additive manufacturing/3-D printing			+ 2,000
	Program increase: Advanced polymer development ..			+ 20,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: Bathymetric-topographic LiDAR research			+ 8,200
	Program increase: Centrifuge enabled research			+ 2,500
	Program increase: Energy technology research in cold and arctic regions			+ 4,000
	Program increase: ERDC collaboration			+ 2,000
	Program increase: Extreme terrain research			+ 4,000
	Program Increase: Natural gas technology			+ 4,000
	Program increase: Reliable distributed energy in austere environments			+ 3,000
	Program Increase: Research facility modernization ...			+ 2,000
	Program increase: Research in the permafrost environment			+ 4,000
	Program increase: Resilient energy systems			+ 1,000
	Program increase: Secure and resilient power generation in cold region environments			+ 5,000
	Program Increase: Silicon anode technology			+ 4,000
	Program increase: Transportation infrastructure evaluation system			+ 3,900
52	Advanced Tactical Computer Science and Sensor Technology	34,883	43,883	+ 9,000
	Program increase: Assured position, navigation, and timing			+ 9,000
54	Army Missile Defense Systems Integration	10,777	55,477	+ 44,700
	Program increase: Counter-UAS mission capabilities			+ 8,700
	Program increase: Electromagnetic attack and protect			+ 10,000
	Program increase: Inertial measurement unit hardware-in-the-loop			+ 11,000
	Program increase: Integrated environmental control and power			+ 15,000
56	Air and Missile Defense Systems Engineering	42,802	49,602	+ 6,800
	Program increase: Interoperability of integrated air and missile defense			+ 20,000
	Restoring acquisition accountability: ALPS lack of directed requirement			- 13,200
60	Armored System Modernization—Adv Dev	119,395	63,585	- 55,810
	Program increase: Armored advanced fuel cell prototypes			+ 5,000
	Restoring acquisition accountability: MFV prototyping acceleration ahead of need			- 60,810
66	Aviation—Adv Dev	10,793	86,193	+ 75,400
	Program increase: Future vertical lift			+ 75,400
67	Logistics and Engineer Equipment—Adv Dev	14,248	17,248	+ 3,000
	Program increase: Tactical electric program research for remote and forward operating bases			+ 3,000
68	Medical Systems—Adv Dev	34,284	37,284	+ 3,000
	Program increase: Transport telemedicine program ...			+ 3,000
70	Robotics Development	95,660	72,260	- 23,400
	Restoring acquisition accountability: RCV Phase 2 funding ahead of need			- 23,400
71	Cross Functional Team (CFT) Advanced Development & Prototyping	38,000	25,000	- 13,000
	Program increase: Early long range precision fires hypersonic capability			+ 25,000
	Restoring acquisition accountability: Lack of strategy			- 38,000
74	Lower Tier Air Missile Defense (LTAMD) Sensor	120,374	87,874	- 32,500
	Restoring acquisition accountability: TMRR contract excess funding			- 24,000
	Restoring acquisition accountability: Test funding ahead of need			- 8,500
76	Maneuver—Short Range Air Defense (M-SHORAD)	95,085	56,085	- 39,000
	Restoring acquisition accountability: Program growth ahead of acquisition strategy			- 39,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
81	Cyberspace Operations Forces and Force Support	65,817	47,417	-18,400
	Restoring acquisition accountability: Funding ahead of requirements finalization			-5,400
	Reduce duplication: CORA-P funded in line 177			-13,000
82	Assured Positioning, Navigation and Timing (PNT)	146,300	111,300	-35,000
	Improving funds management: Prior year carryover due to program delay			-35,000
85	Electronic Warfare Development	78,699	58,699	-20,000
	Restoring acquisition accountability: Funding excess to need			-20,000
89	Infantry Support Weapons	83,155	57,355	-25,800
	Program increase: Soldier enhancement program			+6,200
	Restoring acquisition accountability: NGSAR EMD funding ahead of need			-22,000
	Restoring acquisition accountability: Small arms fire control funding ahead of requirement			-10,000
91	JAVELIN	10,623	5,623	-5,000
	Restoring acquisition accountability: Lightweight CLU development delay			-5,000
95	Light Tactical Wheeled Vehicles	8,212	1,278	-6,934
	Restoring acquisition accountability: Excess GMV test funding			-2,705
	Restoring acquisition accountability: JLTV-RV test funding ahead of need			-4,229
97	Night Vision Systems—Eng Dev	139,614	138,614	-1,000
	Restoring acquisition accountability: ENVG-B follow-on test funding ahead of need			-1,000
98	Combat Feeding, Clothing, and Equipment	4,507	7,507	+3,000
	Program increase: Modular glove system			+3,000
99	Non-System Training Devices—Eng Dev	49,436	44,436	-5,000
	Insufficient budget justification: Unjustified request			-5,000
100	Air Defense Command, Control and Intelligence—Eng Dev	95,172	88,172	-7,000
	Program increase: All digital radar			+8,000
	Improving funds management: Prior year carryover			-15,000
102	Automatic Test Equipment Development	13,297	10,697	-2,600
	Improving funds management: Prior year carryover			-2,600
104	Brilliant Anti-Armor Submunition (BAT)	9,894	6,894	-3,000
	Improving funds management: Prior year carryover			-3,000
107	Weapons and Munitions—Eng Dev	183,100	184,959	+1,859
	Program increase: Test and evaluation of M999 155mm			+12,000
	Restoring acquisition accountability: NGSW ammo EMD funding ahead of need			-4,250
	Improving funds management: AMP fuze risk reduction excess to need			-5,891
111	Landmine Warfare/Barrier—Eng Dev	50,817	45,117	-5,700
	Improving funds management: Prior year carryover			-5,700
112	Army Tactical Command & Control Hardware & Software	178,693	163,693	-15,000
	Restoring acquisition accountability: TNOM funding ahead of need			-5,000
	Restoring acquisition accountability: CPI2 program delay			-10,000
117	Suite of Survivability Enhancement Systems—EMD	69,204	52,904	-16,300
	Restoring acquisition accountability: Army revised Stryker test requirement			-16,300
119	Information Technology Development	113,758	80,376	-33,382
	Insufficient budget justification: AcqBiz unjustified request			-14,382
	Improving funds management: Prior year carryover			-19,000
120	Integrated Personnel and Pay System—Army (IPPS-A)	166,603	155,103	-11,500
	Restoring acquisition accountability: Excess funding due to test delays			-10,000
	Restoring acquisition accountability: Program management growth			-1,500

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
128	Common Infrared Countermeasures (CIRCM)	51,178	25,178	-26,000
	Improving funds management: Prior year carryover due to program delay			-26,000
131	Nuclear Biological Chemical Reconnaissance Vehicle (NBCRV) Sensor Suite	17,154	13,054	-4,100
	Improving funds management: Excess test funding due to program delay			-4,100
132	Defensive CYBER Tool Development	36,626	30,126	-6,500
	Improving funds management: Prior year carryover ...			-6,500
135	Missile Warning System Modernization (MWSM)	28,276	6,276	-22,000
	Restoring acquisition accountability: Funding early to need			-22,000
137	Indirect Fire Protection Capability Inc 2—Block 1	157,710	145,710	-12,000
	Insufficient budget justification: Unjustified request			-12,000
138	Ground Robotics	86,167	61,549	-24,618
	Transfer ground robotics MTRS standardization: Army-requested to OPA line 133			-4,618
	Restoring acquisition accountability: CRS-I contract delay			-12,000
	Improving funds management: SMET contract delay			-8,000
139	Emerging Technology Initiatives	42,866	68,266	+25,400
	Program increase: ISR quick reaction capability			+25,400
142	Army Integrated Air and Missile Defense (AIAMD)	277,607	322,607	+45,000
	Program increase: Accelerated integration to counter emerging threats			+30,000
	Program increase: Cyber security research			+15,000
144	Joint Light Tactical Vehicle (JLTV) ED	2,686		-2,686
	Restoring acquisition accountability: Funds excess to need			-2,686
145	Aviation Ground Support Equipment	2,706	7,706	+5,000
	Program increase: Next generation health monitoring system			+5,000
152	Threat Simulator Development	12,835	28,835	+16,000
	Program increase: Integrated threat force cyber threat simulators			+6,000
	Program increase: Threat cyberspace operations			+10,000
153	Target Systems Development	12,135	32,135	+20,000
	Program increase: Cyber virtualization center			+20,000
154	Major T&E Investment	82,996	182,996	+100,000
	Program increase			+100,000
159	Army Test Ranges and Facilities	305,759	430,759	+125,000
	Program increase			+100,000
	Program increase: Distributed environment for system-of-system cyber security testing			+10,000
	Program increase: Directed energy workloads management			+15,000
160	Army Technical Test Instrumentation and Targets	62,379	84,879	+22,500
	Program increase: Cyber security of space and missile defense assets			+22,500
171	Munitions Standardization, Effectiveness and Safety	42,332	56,332	+14,000
	Program increase: Life cycle pilot process			+10,000
	Program increase: Polymer cased small arms ammunition			+4,000
181	MLRS Product Improvement Program	8,886	6,886	-2,000
	Improving funds management: Prior year carryover ...			-2,000
186	Long Range Precision Fires (LRPF)	186,475	159,475	-27,000
	Improving funds management: TMRR excess growth			-25,000
	Restoring acquisition accountability: Program management excess growth			-2,000
187	Apache Product Improvement Program	31,049	24,049	-7,000
	Restoring acquisition accountability: Product development previously funded			-6,000
	Restoring acquisition accountability: Testing previously funded			-1,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
189	Chinook Product Improvement Program	157,822	153,822	- 4,000
	Restoring acquisition accountability: Program management excess			- 4,000
191	Improved Turbine Engine Program	192,637	189,137	- 3,500
	Restoring acquisition accountability: Test funding ahead of need			- 3,500
194	Aviation Rocket System Product Improvement and Development	60,860	41,860	- 19,000
	Improving funds management: Lightweight precision munition lack of strategy			- 19,000
195	Unmanned Aircraft System Universal Products	52,019	38,519	- 13,500
	Improving funds management: Prior year carryover due to program delay			- 13,500
197	Patriot Product Improvement	65,369	75,369	+ 10,000
	Program increase			+ 10,000
198	Aerostat Joint Project—COCOM Exercise	1		- 1
	Program termination			- 1
200	Combat Vehicle Improvement Programs	411,927	336,427	- 75,500
	Program increase: Advanced Abrams thermal management system and integration			+ 16,000
	Program increase: Certification of wireless intercom capabilities			+ 5,000
	Program increase: Improved recovery vehicle (M88A2 Hercules)			+ 18,000
	Program increase: Stryker power system			+ 3,000
	Improving funds management: Hercules prior year carryover			- 6,000
	Improving funds management: Abrams ECP V3 excess funding due to test delay			- 5,000
	Restoring acquisition accountability: Abrams ECP V4 excess growth			- 10,000
	Restoring acquisition accountability: Bradley ECP A5 excess			- 80,000
	Restoring acquisition accountability: Stryker 30mm ECP delay			- 16,500
202	155mm Self-Propelled Howitzer Improvements	40,676	30,676	- 10,000
	Improving funds management: Prior year carryover			- 10,000
212	Lower Tier Air and Missile Defense [AMD] System	79,283	78,798	- 485
	Insufficient budget justification: Unjustified request			- 485
213	Guided Multiple-Launch Rocket System [GMLRS]	154,102	89,102	- 65,000
	Restoring acquisition accountability: Extended range development contract delay			- 50,000
	Improving funds management: Test funding ahead of need			- 15,000
217	Information Systems Security Program	68,533	46,017	- 22,516
	Program increase: Cyber security operations center			+ 18,500
	Restoring acquisition accountability: Program delay			- 41,016
218	Global Combat Support System	68,619	48,884	- 19,735
	Restoring acquisition accountability: Business intelligence/Business warehouse funding ahead of need			- 8,584
	Restoring acquisition accountability: Army pre-positioned stock funding ahead of need			- 11,151
227	Distributed Common Ground/Surface Systems	38,667	27,667	- 11,000
	Restoring acquisition accountability: CD2 funding excess to need			- 5,000
	Improving funds management: Test funding excess to need			- 5,000
	Restoring acquisition accountability: CD3 funding ahead of need			- 1,000
233	End Item Industrial Preparedness Activities	53,958	88,758	+ 34,800
	Program increase: Engineering data synchronization software pilot program			+ 9,800

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: Nanoscale and microscale materials .....	.....	.....	+ 20,000
	Program increase: Power take off hybridization .....	.....	.....	+ 5,000

Soldier Fitness Program and Suicide Prevention Program.—The fiscal year 2019 budget request includes \$5,639,000 for the Soldier Fitness Program and Suicide Prevention Program. While the Committee is fully supportive of these programs, it is dismayed that, for the second year in a row, the budget justification materials for them lacked sufficient detail and substance. The Committee directs the Army to provide full justification for these programs with the fiscal year 2020 budget submission.

Manufacturing Technologies for Unmanned Aerial Systems [UAS].—The Committee encourages the Secretary of the Army to invest in technologies that vastly improve the mechanical durability of unmanned aerial propulsion systems and utilize multi-fuel capable, hybrid electric propulsion. Such technologies should focus on reducing the wear of components and lowering component weights through innovative computational design while also employing directed energy deposition processes based on rapid and predictive simulation tools.

Life Cycle Pilot Process.—The Committee commends the Army for its continuing work in Transformative Manufacturing Technology and strongly encourages the Secretary of the Army to dedicate resources to further the development and equipping of the national technical industrial base with these new and emerging transformative manufacturing and ammunition technologies.

Strategic Materials Research.—The Committee continues to recognize the importance of the Army Research Laboratory [ARL] in expanding research, education, and technology development efforts in materials and metals processing science and engineering, aiming to transform the affordability, performance and environmental sustainability of strategic materials. The Committee further notes that ARL's Open Campus concept benefits the Army, the academic community, and industry through collaboration involving ARL's research staff and facilities, leading to continued technological superiority for the U.S. warfighter. The Committee encourages the Army to consider accelerating expansion of its Open Campus approach to its Materials and Manufacturing Science laboratories in order to benefit strategic materials research.

Mobile Camouflage Systems.—The Committee notes that mobile camouflage systems may provide enhanced signature management protection, reduce heat and temperature inside and around combat vehicles, and yield fuel savings without interfering with the operation of the vehicles. The Committee is aware of the Army's ongoing operational testing of mobile camouflage systems at the National Training Center and elsewhere and encourages further acceleration of those efforts.

Next Generation Body Armor.—The Committee commends the Army's efforts in advanced research in next generation body armor and the use of cutting-edge material to improve individual protec-

tion, mobility, and survivability on the battlefield. The Committee understands that industry is also investing in this technology and encourages the Army to continue partnering with industry to lighten soldier load, increase individual protection, and enhance soldier survivability.

Material Development, Characterization, and Computational Modeling.—The Committee recognizes the importance of evaluating materials and technologies as well as designing and developing methodologies and models to enable enhanced lethality and survivability. Methods such as computational research allow for the development of models that predict the mechanical properties of materials that are used in research and development at the U.S. Army Research Laboratory [ARL]. These models and simulations, which are based on quantum mechanics, statistical mechanics principles and thermodynamic simulations, and are tested via cold spray synthesis and mechanical testing, provide a cost savings to the Department of Defense by simulating materials prior to testing them to ensure mechanical properties will work together. Additionally, these methodologies allow for the enhanced development of technologies such as lightweight armors, protective structures, kinetic energy active protection, ballistic shock and mine blast protection, helmet technologies to prevent traumatic brain injury, and numerous other uses. The Committee encourages ARL to continue the utilization of computational modeling and simulations research to achieve greater cost savings.

Adaptive Red Team Support.—The Committee supports the work of the Army’s Adaptive Red Team Technical Support and Operational Analysis program and understands it provides vital feedback on information technology system vulnerabilities and limitations. Highlighting these vulnerabilities has translated into more secure and resilient systems as well as increased production cost savings in the acquisition process. Therefore, the Committee encourages the Secretary of the Army to continue to invest in Adaptive Red Team programs.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

Appropriations, 2018	\$18,010,754,000
Budget estimate, 2019	18,481,666,000
Committee recommendation	18,992,064,000

The Committee recommends an appropriation of \$18,992,064,000. This is \$510,398,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY			
	BASIC RESEARCH			
1	UNIVERSITY RESEARCH INITIATIVES	119,433	154,433	+ 35,000
2	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	19,237	19,237	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
3	DEFENSE RESEARCH SCIENCES	458,708	564,208	+ 105,500
	TOTAL, BASIC RESEARCH	597,378	737,878	+ 140,500
	APPLIED RESEARCH			
4	POWER PROJECTION APPLIED RESEARCH	14,643	27,643	+ 13,000
5	FORCE PROTECTION APPLIED RESEARCH	124,049	177,549	+ 53,500
6	MARINE CORPS LANDING FORCE TECHNOLOGY	59,607	66,607	+ 7,000
7	COMMON PICTURE APPLIED RESEARCH	36,348	36,348	.....
8	WARFIGHTER SUSTAINMENT APPLIED RESEARCH	56,197	61,282	+ 5,085
9	ELECTROMAGNETIC SYSTEMS APPLIED RESEARCH	83,800	83,800	.....
10	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH	42,998	79,998	+ 37,000
11	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH	6,349	6,349	.....
12	UNDERSEA WARFARE APPLIED RESEARCH	58,049	78,049	+ 20,000
13	FUTURE NAVAL CAPABILITIES APPLIED RESEARCH	147,771	147,771	.....
14	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH	37,545	37,545	.....
15	INNOVATIVE NAVAL PROTOTYPES (INP) APPLIED RESEARCH	159,697	159,697	.....
16	SCIENCE AND TECHNOLOGY MANAGEMENT—ONR HEAD- QUARTERS	64,418	64,418	.....
	TOTAL, APPLIED RESEARCH	891,471	1,027,056	+ 135,585
	ADVANCED TECHNOLOGY DEVELOPMENT			
19	FORCE PROTECTION ADVANCED TECHNOLOGY	2,423	36,557	+ 34,134
20	ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY .....	.....	8,804	+ 8,804
21	MARINE CORPS ADVANCED TECHNOLOGY DEMONSTRATION [ATD]	150,245	177,245	+ 27,000
22	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT	13,313	13,313	.....
23	NAVY ADVANCED TECHNOLOGY DEVELOPMENT [ATD]	131,502	.....	- 131,502
24	FUTURE NAVAL CAPABILITIES ADVANCED TECHNOLOGY DEV	232,996	240,496	+ 7,500
25	MANUFACTURING TECHNOLOGY PROGRAM	58,657	58,657	.....
26	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY .....	.....	9,877	+ 9,877
28	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS .....	.....	67,830	+ 67,830
29	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY ..	.....	13,172	+ 13,172
30	INNOVATIVE NAVAL PROTOTYPES (INP) ADVANCED TECHNOLOGY ..	161,859	275,859	+ 114,000
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	750,995	901,810	+ 150,815
	DEMONSTRATION & VALIDATION			
31	AIR/OCEAN TACTICAL APPLICATIONS	29,747	29,747	.....
32	AVIATION SURVIVABILITY	7,050	7,050	.....
33	AIRCRAFT SYSTEMS	793	793	.....
34	ASW SYSTEMS DEVELOPMENT	7,058	7,058	.....
35	TACTICAL AIRBORNE RECONNAISSANCE	3,540	3,540	.....
36	ADVANCED COMBAT SYSTEMS TECHNOLOGY	59,741	56,831	- 2,910
37	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	62,727	122,827	+ 60,100
38	SURFACE SHIP TORPEDO DEFENSE	8,570	8,570	.....
39	CARRIER SYSTEMS DEVELOPMENT	5,440	5,440	.....
40	PILOT FISH	162,222	138,722	- 23,500
41	RETRACT LARCH	11,745	11,745	.....
42	RETRACT JUNIPER	114,265	114,265	.....
43	RADIOLOGICAL CONTROL	740	740	.....
44	SURFACE ASW	1,122	1,122	.....
45	ADVANCED SUBMARINE SYSTEM DEVELOPMENT	109,086	103,999	- 5,087
46	SUBMARINE TACTICAL WARFARE SYSTEMS	9,374	12,374	+ 3,000
47	SHIP CONCEPT ADVANCED DESIGN	89,419	116,419	+ 27,000
48	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	13,348	13,348	.....
49	ADVANCED NUCLEAR POWER SYSTEMS	256,137	256,137	.....
50	ADVANCED SURFACE MACHINERY SYSTEMS	22,109	27,109	+ 5,000
51	CHALK EAGLE	29,744	29,744	.....
52	LITTORAL COMBAT SHIP [LCS]	27,997	27,997	.....
53	COMBAT SYSTEM INTEGRATION	16,351	27,051	+ 10,700
54	OHIO REPLACEMENT PROGRAM	514,846	542,846	+ 28,000
55	LITTORAL COMBAT SHIP [LCS] MISSION MODULES	103,633	103,633	.....
56	AUTOMATED TEST AND RE-TEST	7,931	7,931	.....
57	FRIGATE DEVELOPMENT	134,772	134,772	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
58	CONVENTIONAL MUNITIONS	9,307	9,307	.....
60	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM	1,828	1,828	.....
61	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	43,148	43,148	.....
62	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT	5,915	5,915	.....
63	ENVIRONMENTAL PROTECTION	19,811	19,811	.....
64	NAVY ENERGY PROGRAM	25,656	32,656	+ 7,000
65	FACILITIES IMPROVEMENT	5,301	5,301	.....
66	CHALK CORAL	267,985	267,985	.....
67	NAVY LOGISTIC PRODUCTIVITY	4,059	4,059	.....
68	RETRACT MAPLE	377,878	318,878	- 59,000
69	LINK PLUMERIA	381,770	381,770	.....
70	RETRACT ELM	60,535	60,535	.....
73	NATO RESEARCH AND DEVELOPMENT	9,652	9,652	.....
74	LAND ATTACK TECHNOLOGY	15,529	5,700	- 9,829
75	JOINT NONLETHAL WEAPONS TESTING	27,581	27,581	.....
76	JOINT PRECISION APPROACH AND LANDING SYSTEMS	101,566	101,566	.....
77	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS	223,344	131,914	- 91,430
78	F/A-18 INFRARED SEARCH AND TRACK (IRST)	108,700	108,700	.....
79	DIGITAL WARFARE OFFICE	26,691	26,691	.....
80	SMALL AND MEDIUM UNMANNED UNDERSEA VEHICLES	16,717	16,717	.....
81	UNMANNED UNDERSEA VEHICLE CORE TECHNOLOGIES	30,187	30,187	.....
82	RAPID PROTOTYPING, EXPERIMENTATION AND DEMONSTRATION	48,796	33,796	- 15,000
83	LARGE UNMANNED UNDERSEA VEHICLES	92,613	45,613	- 47,000
84	GERALD R. FORD CLASS NUCLEAR AIRCRAFT CARRIER	58,121	83,121	+ 25,000
86	LITTORAL AIRBORNE MCM	17,622	17,622	.....
87	SURFACE MINE COUNTERMEASURES	18,154	18,154	.....
88	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES	47,278	47,278	.....
90	NEXT GENERATION LOGISTICS	11,081	6,135	- 4,946
92	RAPID TECHNOLOGY CAPABILITY PROTOTYPE	7,107	7,107	.....
93	LX (R)	5,549	5,549	.....
94	ADVANCED UNDERSEA PROTOTYPING	87,669	112,669	+ 25,000
95	PRECISION STRIKE WEAPONS DEVELOPMENT PROGRAM	132,818	119,918	- 12,900
96	SPACE & ELECTRONIC WARFARE [SEW] ARCHITECTURE/ENGINE	7,230	7,230	.....
97	OFFENSIVE ANTI-SURFACE WARFARE WEAPON DEVELOPMENT	143,062	143,062	.....
99	ASW SYSTEMS DEVELOPMENT—MIP	8,889	8,889	.....
100	ADVANCED TACTICAL UNMANNED AIRCRAFT SYSTEM	25,291	11,291	- 14,000
101	ADVANCED TACTICAL UNMANNED AIRCRAFT SYSTEM	9,300	9,300	.....
102	ELECTRONIC WARFARE DEVELOPMENT—MIP	466	466	.....
	TOTAL, DEMONSTRATION & VALIDATION	4,293,713	4,198,911	- 94,802
	ENGINEERING & MANUFACTURING DEVELOPMENT			
103	TRAINING SYSTEM AIRCRAFT	12,798	12,798	.....
104	OTHER HELO DEVELOPMENT	32,128	32,128	.....
105	AV-8B AIRCRAFT—ENG DEV	46,363	46,363	.....
107	STANDARDS DEVELOPMENT	3,771	3,771	.....
108	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT	16,611	16,611	.....
109	AIR/OCEAN EQUIPMENT ENGINEERING	17,368	17,368	.....
110	P-3 MODERNIZATION PROGRAM	2,134	2,134	.....
111	WARFARE SUPPORT SYSTEM	9,729	9,729	.....
112	TACTICAL COMMAND SYSTEM	57,688	57,688	.....
113	ADVANCED HAWKEYE	223,565	238,065	+ 14,500
114	H-1 UPGRADES	58,097	58,097	.....
116	ACOUSTIC SEARCH SENSORS	42,485	42,485	.....
117	V-22A	143,079	143,079	.....
118	AIR CREW SYSTEMS DEVELOPMENT	20,980	30,980	+ 10,000
119	EA-18	147,419	242,719	+ 95,300
120	ELECTRONIC WARFARE DEVELOPMENT	89,824	115,224	+ 25,400
121	EXECUTIVE HELO DEVELOPMENT	245,064	245,064	.....
123	NEXT GENERATION JAMMER [NGJ]	459,529	459,529	.....
124	JOINT TACTICAL RADIO SYSTEM—NAVY [JTRS—Navy]	3,272	3,272	.....
125	NEXT GENERATION JAMMER [NGJ] INCREMENT II	115,253	99,253	- 16,000
126	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	397,403	396,403	- 1,000
127	LPD-17 CLASS SYSTEMS INTEGRATION	939	939	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
128	SMALL DIAMETER BOMB (SDB)	104,448	104,448	.....
129	STANDARD MISSILE IMPROVEMENTS	165,881	190,881	+ 25,000
130	AIRBORNE MCM	10,831	10,831	.....
131	NAVAL INTEGRATED FIRE CONTROL-COUNTER AIR SYSTEMS ENG	33,429	33,429	.....
132	ADVANCED ABOVE WATER SENSORS	35,635	35,635	.....
133	SSN-688 AND TRIDENT MODERNIZATION	126,932	126,932	.....
134	AIR CONTROL	62,448	62,448	.....
135	SHIPBOARD AVIATION SYSTEMS	9,710	13,710	+ 4,000
136	COMBAT INFORMATION CENTER CONVERSION	19,303	19,303	.....
137	AIR AND MISSILE DEFENSE RADAR (AMDR) SYSTEM	27,059	27,059	.....
138	ADVANCED ARRESTING GEAR (AAG)	184,106	184,106	.....
139	NEW DESIGN SSN	148,233	160,233	+ 12,000
140	SUBMARINE TACTICAL WARFARE SYSTEM	60,824	65,824	+ 5,000
141	SHIP CONTRACT DESIGN/LIVE FIRE T&E	60,062	71,062	+ 11,000
142	NAVY TACTICAL COMPUTER RESOURCES	4,642	4,642	.....
144	MINE DEVELOPMENT	25,756	25,756	.....
145	LIGHTWEIGHT TORPEDO DEVELOPMENT	95,147	63,147	- 32,000
146	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	7,107	7,107	.....
147	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS	6,539	6,539	.....
148	JOINT STANDOFF WEAPON SYSTEMS	441	441	.....
149	SHIP SELF DEFENSE (DETECT & CONTROL)	180,391	180,391	.....
150	SHIP SELF DEFENSE (ENGAGE: HARD KILL)	178,538	182,538	+ 4,000
151	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	120,507	120,507	.....
152	INTELLIGENCE ENGINEERING	29,715	29,715	.....
153	MEDICAL DEVELOPMENT	8,095	8,095	.....
154	NAVIGATION/ID SYSTEM	121,026	121,026	.....
155	JOINT STRIKE FIGHTER (JSF)—EMD	66,566	66,566	.....
156	JOINT STRIKE FIGHTER (JSF)	65,494	65,494	.....
159	INFORMATION TECHNOLOGY DEVELOPMENT	14,005	14,005	.....
160	INFORMATION TECHNOLOGY DEVELOPMENT	268,567	218,567	- 50,000
161	ANTI-TAMPER TECHNOLOGY SUPPORT	5,618	5,618	.....
162	CH-53K	326,945	331,945	+ 5,000
164	MISSION PLANNING	32,714	32,714	.....
165	COMMON AVIONICS	51,486	51,486	.....
166	SHIP TO SHORE CONNECTOR (SSC)	1,444	1,444	.....
167	T-AO (X)	1,298	1,298	.....
168	UNMANNED CARRIER AVIATION	718,942	668,942	- 50,000
169	JOINT AIR-TO-GROUND MISSILE (JAGM)	6,759	16,559	+ 9,800
171	MULTI-MISSION MARITIME AIRCRAFT [MMA]	37,296	37,296	.....
172	MULTI-MISSION MARITIME AIRCRAFT [MMA] INCREMENT 3	160,389	160,389	.....
173	MARINE CORPS ASSAULT VEHICLES SYSTEM DEVELOPMENT AND DEMO	98,223	48,923	- 49,300
174	JOINT LIGHT TACTICAL VEHICLE (JLTV) SYSTEM DEVELOPMENT AND DEMO	2,260	.....	- 2,260
175	DDG-1000	161,264	140,264	- 21,000
180	TACTICAL CRYPTOLOGIC SYSTEMS	44,098	52,998	+ 8,900
182	CYBER OPERATIONS TECHNOLOGY DEVELOPMENT	6,808	6,808	.....
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	6,042,480	6,050,820	+ 8,340
	RDT&E MANAGEMENT SUPPORT			
183	THREAT SIMULATOR DEVELOPMENT	94,576	94,576	.....
184	TARGET SYSTEMS DEVELOPMENT	10,981	10,981	.....
185	MAJOR T&E INVESTMENT	77,014	183,014	+ 106,000
186	JOINT THEATER AIR AND MISSILE DEFENSE ORGANIZATION	48	48	.....
187	STUDIES AND ANALYSIS SUPPORT—NAVY	3,942	3,942	.....
188	CENTER FOR NAVAL ANALYSES	48,797	48,797	.....
189	NEXT GENERATION FIGHTER	5,000	5,000	.....
191	TECHNICAL INFORMATION SERVICES	1,029	1,029	.....
192	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	87,565	87,565	.....
193	STRATEGIC TECHNICAL SUPPORT	4,231	4,231	.....
194	RDT&E SCIENCE AND TECHNOLOGY MANAGEMENT	1,072	1,072	.....
195	RDT&E SHIP AND AIRCRAFT SUPPORT	97,471	97,471	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
196	TEST AND EVALUATION SUPPORT	373,834	473,834	+ 100,000
197	OPERATIONAL TEST AND EVALUATION CAPABILITY	21,554	21,554	.....
198	NAVY SPACE AND ELECTRONIC WARFARE [SEW] SUPPORT	16,227	16,227	.....
200	MARINE CORPS PROGRAM WIDE SUPPORT	24,303	24,303	.....
201	MANAGEMENT HEADQUARTERS—R&D	43,262	43,262	.....
202	WARFARE INNOVATION MANAGEMENT	41,918	41,918	.....
203	ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	7,000	7,000	.....
204	ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	48,800	48,800	.....
205	INSIDER THREAT	1,682	1,682	.....
206	MANAGEMENT HEADQUARTERS (DEPARTMENTAL SUPPORT ACTIVITIES)	1,579	1,579	.....
208	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	8,684	8,684	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,020,569	1,226,569	+ 206,000
	OPERATIONAL SYSTEMS DEVELOPMENT			
210	HARPOON MODIFICATIONS	5,426	5,426	.....
211	F-35 C2D2	259,122	199,560	- 59,562
212	F-35 C2D2	252,360	194,352	- 58,008
213	COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	130,515	130,515	.....
214	DEPLOYABLE JOINT COMMAND AND CONTROL	3,127	3,127	.....
215	STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	157,679	167,879	+ 10,200
216	SSBN SECURITY TECHNOLOGY PROGRAM	43,198	43,198	.....
217	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	11,311	11,311	.....
218	NAVY STRATEGIC COMMUNICATIONS	39,313	39,313	.....
219	F/A-18 SQUADRONS	193,086	202,886	+ 9,800
220	FLEET TACTICAL DEVELOPMENT	25,014	1,344	- 23,670
221	SURFACE SUPPORT	11,661	11,661	.....
222	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	282,395	282,395	.....
223	INTEGRATED SURVEILLANCE SYSTEM	36,959	71,959	+ 35,000
224	SHIP-TOWED ARRAY SURVEILLANCE SYSTEMS	15,454	15,454	.....
225	AMPHIBIOUS TACTICAL SUPPORT UNITS	6,073	6,073	.....
226	GROUND/AIR TASK ORIENTED RADAR	45,029	45,029	.....
227	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	104,903	104,903	.....
228	CRYPTOLOGIC DIRECT SUPPORT	4,544	4,544	.....
229	ELECTRONIC WARFARE [EW] READINESS SUPPORT	66,889	66,889	.....
230	HARM IMPROVEMENT	120,762	120,762	.....
231	TACTICAL DATA LINKS	104,696	116,696	+ 12,000
232	SURFACE ASW COMBAT SYSTEM INTEGRATION	28,421	28,421	.....
233	MK-48 ADCAP	94,155	68,255	- 25,900
234	AVIATION IMPROVEMENTS	121,805	138,805	+ 17,000
235	OPERATIONAL NUCLEAR POWER SYSTEMS	117,028	117,028	.....
236	MARINE CORPS COMMUNICATIONS SYSTEMS	174,779	174,779	.....
237	COMMON AVIATION COMMAND AND CONTROL SYSTEM	4,826	4,826	.....
238	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS	97,152	97,152	.....
239	MARINE CORPS COMBAT SERVICES SUPPORT	30,156	30,156	.....
240	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS [MIP]	39,976	39,976	.....
241	AMPHIBIOUS ASSAULT VEHICLE	22,637	22,637	.....
242	TACTICAL AIM MISSILES	40,121	40,121	.....
243	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	32,473	27,473	- 5,000
249	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES	23,697	23,697	.....
250	INFORMATION SYSTEMS SECURITY PROGRAM	44,228	44,228	.....
252	JOINT MILITARY INTELLIGENCE PROGRAMS	6,081	6,081	.....
253	TACTICAL UNMANNED AERIAL VEHICLES	8,529	8,529	.....
254	UAS INTEGRATION AND INTEROPERABILITY	41,212	41,212	.....
255	DISTRIBUTED COMMON GROUND SYSTEMS/SURFACE SYSTEMS ..	7,687	7,687	.....
256	DISTRIBUTED COMMON GROUND SYSTEMS/SURFACE SYSTEMS ..	42,846	42,846	.....
257	MQ-4C TRITON	14,395	14,395	.....
258	MQ-8 UAV	9,843	24,143	+ 14,300
259	RQ-11 UAV	524	524	.....
260	SMALL (LEVEL 0) TACTICAL UAS (STUASLO)	5,360	5,360	.....
261	RQ-21A	10,914	10,914	.....
262	MULTI-INTELLIGENCE SENSOR DEVELOPMENT	81,231	81,231	.....
263	UNMANNED AERIAL SYSTEMS (UAS) PAYLOADS [MIP]	5,956	5,956	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
264	RQ-4 MODERNIZATION	219,894	219,894	.....
265	MODELING AND SIMULATION SUPPORT	7,097	7,097	.....
266	DEPOT MAINTENANCE (NON-IF)	36,560	46,560	+ 10,000
267	MARITIME TECHNOLOGY (MARITECH)	7,284	27,284	+ 20,000
268	SATELLITE COMMUNICATIONS (SPACE)	39,174	39,174	.....
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	3,335,557	3,291,717	- 43,840
9999	CLASSIFIED PROGRAMS	1,549,503	1,557,303	+ 7,800
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	18,481,666	18,992,064	+ 510,398

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	University Research Initiatives	119,433	154,433	+ 35,000
	Basic research program increase .....	.....	.....	+ 25,000
	Program increase: Aircraft fleet readiness and sustainment .....	.....	.....	+ 10,000
3	Defense Research Sciences	458,708	564,208	+ 105,500
	Basic research program increase .....	.....	.....	+ 100,000
	Program increase: Navy ROTC cybersecurity training program .....	.....	.....	+ 5,500
4	Power Projection Applied Research	14,643	27,643	+ 13,000
	Program increase: Directed energy .....	.....	.....	+ 4,000
	Program increase: High performance microwave systems for counter-UAS defense .....	.....	.....	+ 9,000
5	Force Protection Applied Research	124,049	177,549	+ 53,500
	Program increase: Advanced energetics research .....	.....	.....	+ 7,500
	Program increase: Advanced hull form development and demonstration .....	.....	.....	+ 8,000
	Program increase: Hybrid composite structures research for enhanced mobility .....	.....	.....	+ 5,000
	Program increase: Navy alternative energy research .....	.....	.....	+ 25,000
	Program increase: Power generation and storage research .....	.....	.....	+ 5,000
	Program increase: Standoff detection of buried hazards and munitions .....	.....	.....	+ 3,000
6	Marine Corps Landing Force Technology	59,607	66,607	+ 7,000
	Program increase: Interdisciplinary expeditionary cybersecurity research .....	.....	.....	+ 5,000
	Program increase: Marine Corps asset life-cycle management .....	.....	.....	+ 2,000
8	Warfighter Sustainment Applied Research	56,197	61,282	+ 5,085
	Transfer from line 23: Retain previous budget structure .....	.....	.....	+ 2,685
	Program increase .....	.....	.....	+ 2,400
10	Ocean Warfighting Environment Applied Research	42,998	79,998	+ 37,000
	Program increase: Acoustics research .....	.....	.....	+ 2,000
	Program increase: Multi-modal detection research .....	.....	.....	+ 10,000
	Program increase: Naval Special Warfare superiority in undersea and maritime environments .....	.....	.....	+ 10,000
	Program increase: Persistent maritime surveillance .....	.....	.....	+ 15,000
12	Undersea Warfare Applied Research	58,049	78,049	+ 20,000
	Program increase .....	.....	.....	+ 20,000
19	Force Protection Advanced Technology	2,423	36,557	+ 34,134
	Transfer from line 23: Retain previous budget structure .....	.....	.....	+ 34,134
20	Electromagnetic Systems Advanced Technology .....	.....	8,804	+ 8,804
	Transfer from line 23: Retain previous budget structure .....	.....	.....	+ 8,804

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
21	USMC Advanced Technology Demonstration [ATD]	150,245	177,245	+ 27,000
	Program increase: Common unmanned aerial vehicle simulation system			+ 10,000
	Program increase: Flight motion simulator and testing of UAVs			+ 6,000
	Program increase: Modular advanced armed robotic system 2.0			+ 4,000
	Program increase: UAS air-delivered extended range munitions demo			+ 7,000
23	Navy Advanced Technology Development [ATD]	131,502		- 131,502
	Transfer to line 19: Retain previous budget structure			- 34,134
	Transfer to line 20: Retain previous budget structure			- 8,804
	Transfer to line 26: Retain previous budget structure			- 4,877
	Transfer to line 28: Retain previous budget structure			- 67,830
	Transfer to line 29: Retain previous budget structure			- 13,172
	Transfer to line 8: Retain previous budget structure			- 2,685
24	Future Naval Capabilities Advanced Technology Development	232,996	240,496	+ 7,500
	Program increase: Advanced development of high yield conventional energetics			+ 7,500
26	Warfighter Protection Advanced Technology		9,877	+ 9,877
	Transfer from line 23: Retain previous budget structure			+ 4,877
	Program increase: Novel therapeutic interventions research			+ 5,000
28	Navy Warfighting Experiments and Demonstrations		67,830	+ 67,830
	Transfer from line 23: Retain previous budget structure			+ 67,830
29	Mine and Expeditionary Warfare Advanced Technology		13,172	+ 13,172
	Transfer from line 23: Retain previous budget structure			+ 13,172
30	Innovative Naval Prototypes (INP) Advanced Technology Development	161,859	275,859	+ 114,000
	Program increase: Electromagnetic railgun			+ 15,000
	Program increase: Rail gun with hypervelocity projectile			+ 99,000
36	Advanced Combat Systems Technology	59,741	56,831	- 2,910
	Maintaining program affordability: Project 3422 unjustified program growth			- 2,910
37	Surface and Shallow Water Mine Countermeasures	62,727	122,827	+ 60,100
	Program increase: Medium displacement unmanned surface vehicle			+ 42,000
	Program increase: Navy identified MCM USV requirement			+ 14,100
	Program increase: Navy identified UISS requirement			+ 4,000
40	PILOT FISH	162,222	138,722	- 23,500
	Program adjustment			- 23,500
45	Advanced Submarine System Development	109,086	103,999	- 5,087
	Project 2096: SL-UKAS program termination			- 5,087
46	Submarine Tactical Warfare Systems	9,374	12,374	+ 3,000
	Program increase: Advanced submarine electronic warfare systems			+ 3,000
47	Ship Concept Advanced Design	89,419	116,419	+ 27,000
	Program increase: CHAMP acceleration			+ 18,000
	Program increase: Cyber Boundary Defense—CPSD cyber security cap devel			+ 9,000
50	Advanced Surface Machinery Systems	22,109	27,109	+ 5,000
	Program increase: Silicon carbide power electronics			+ 5,000
53	Combat System Integration	16,351	27,051	+ 10,700
	Program increase: Cyber Boundary Defense—Strike Force Interoperability			+ 10,700
54	Ohio Replacement	514,846	542,846	+ 28,000
	Program increase: Advanced materials propeller program			+ 15,000
	Program increase: Naval Propulsion Foundry Center facility power upgrades			+ 13,000
64	Navy Energy Program	25,656	32,656	+ 7,000
	Program increase: Marine hydrokinetic energy			+ 7,000
68	RETRACT MAPLE	377,878	318,878	- 59,000
	Program adjustment			- 59,000
74	Land Attack Technology	15,529	5,700	- 9,829

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Restoring acquisition accountability: Project 3401 lack of program funding			- 14,829
	Program increase: Guided projectile			+ 5,000
77	Directed Energy and Electric Weapon Systems	223,344	131,914	- 91,430
	Restoring acquisition accountability: Project 3402 additional prototypes			- 106,430
	Program increase: Electromagnetic railgun			+ 15,000
82	Rapid Prototyping, Experimentation and Demonstration	48,796	33,796	- 15,000
	Insufficient budget justification: TBD initiatives program adjustment			- 15,000
83	Large Unmanned Undersea Vehicles	92,613	45,613	- 47,000
	Transfer funding to XLUUV: Transfer to line 94 for updated acquisition strategy			- 25,000
	Restoring acquisition accountability: Change in acquisition strategy to accelerate delta design			- 22,000
84	Gerald R. Ford Class Nuclear Aircraft Carrier (CVN 78—80) ...	58,121	83,121	+ 25,000
	Transfer funding from SCN: CVN 78 Full Ship Shock Trial			+ 25,000
90	Expeditionary Logistics	11,081	6,135	- 4,946
	Program termination: Project 2743			- 4,946
94	Advanced Undersea Prototyping	87,669	112,669	+ 25,000
	Transfer funding from LDUUV: Updated acquisition strategy			+ 25,000
95	Precision Strike Weapons Development Program	132,818	119,918	- 12,900
	Restoring acquisition accountability: Project 3378 schedule delays			- 12,900
97	Offensive Anti-Surface Warfare Weapon Development	143,062	143,062	
	Restoring acquisition accountability: Additional capabilities program adjustment —transfer to fully fund operational test requirements for additional capabilities			[-20,000]
	Restoring acquisition accountability: Transfer from additional capabilities to fully fund operational test requirements for additional capabilities			[+ 20,000]
100	Advanced Tactical Unmanned Aircraft System	25,291	11,291	- 14,000
	Restoring acquisition accountability: Project 3135 program adjustment			- 14,000
113	Advanced Hawkeye	223,565	238,065	+ 14,500
	Improving funds management: Excess carryover			- 25,000
	Program increase: Cyber Boundary Defense—E-2D AHE			+ 27,500
	Program increase: E-2D Hawkeye advanced radar			+ 12,000
118	Air Crew Systems Development	20,980	30,980	+ 10,000
	Program increase: Advance aircrew physiological monitoring			+ 10,000
119	EA-18	147,419	242,719	+ 95,300
	Program increase: EA-18G reactive electronic attack measures research			+ 95,300
120	Electronic Warfare Development	89,824	115,224	+ 25,400
	Program termination: UAS EW Payload			- 6,200
	Program increase: EA-18G offensive airborne electronic attack special mission pod			+ 31,600
125	Next Generation Jammer [NGJ] Increment II	115,253	99,253	- 16,000
	Restoring acquisition accountability: Technology demonstration contracts award delays			- 16,000
126	Surface Combatant Combat System Engineering	397,403	396,403	- 1,000
	Restoring acquisition accountability: Far Term Interoperability Improvement Plan unjustified growth			- 11,000
	AEGIS force-level interoperability definition and analysis			+ 10,000
129	Standard Missile Improvements	165,881	190,881	+ 25,000
	Program increase: SM-6 electronics unit			+ 25,000
135	Shipboard Aviation Systems	9,710	13,710	+ 4,000
	Program increase: Improving aircraft carrier readiness ...			+ 4,000
139	New Design SSN	148,233	160,233	+ 12,000
	Program increase: New design SSN			+ 12,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
140	Submarine Tactical Warfare System	60,824	65,824	+ 5,000
	Program increase: Submarine tactical warfare system ...			+ 5,000
141	Ship Contract Design/ Live Fire T&E	60,062	71,062	+ 11,000
	Program increase: DDG 51 advance degaussing mine protection system retrofit			+ 5,000
	Program increase: Planning to support FY 2021 award of LHA-9			+ 6,000
145	Lightweight Torpedo Development	95,147	63,147	- 32,000
	Restoring acquisition accountability: Project 3418 post-system design and engineering funds early to need ...			- 32,000
150	Ship Self Defense (Engage: Hard Kill)	178,538	182,538	+ 4,000
	Program increase: Condition based maintenance			+ 4,000
160	Information Technology Development	268,567	218,567	- 50,000
	Improving funds management: Project 2905 excess program growth			- 35,000
	Improving funds management: Project 3432 excess program growth and concurrency			- 25,000
	Program increase: Advanced radar condition based maintenance			+ 10,000
162	CH-53K RDTE	326,945	331,945	+ 5,000
	Program increase: Common lightweight cargo system ...			+ 5,000
168	Unmanned Carrier Aviation (UCA)	718,942	668,942	- 50,000
	Improving funds management: Test equipment early to need			- 50,000
169	Joint Air-to-Ground Missile (JAGM)	6,759	16,559	+ 9,800
	Program increase: Marine Corps joint air-to-ground missile for fixed wing aircraft			+ 9,800
173	Marine Corps Assault Vehicles System Development & Demonstration	98,223	48,923	- 49,300
	Restoring acquisition accountability: Project 0026 excess concurrency			- 49,300
174	Joint Light Tactical Vehicle (JLTV) System Development & Demonstration	2,260		- 2,260
	Improving funds management: Funds excess to need ...			- 2,260
175	DDG-1000	161,264	140,264	- 21,000
	Restoring acquisition accountability: Program adjustment due to lack of acquisition and test strategies ...			- 21,000
180	Tactical Cryptologic Systems	44,098	52,998	+ 8,900
	Program increase: Integrated fires acceleration			+ 8,900
185	Major T&E Investment	77,014	183,014	+ 106,000
	Program increase			+ 100,000
	Program increase: Ground based sense-and-avoid			+ 6,000
196	Test and Evaluation Support	373,834	473,834	+ 100,000
	Program increase			+ 100,000
211	Operational F-35 C2D2	259,122	199,560	- 59,562
	Restoring acquisition accountability: C2D2 Phase 2 contract award delays			- 18,384
	Restoring acquisition accountability: C2D2 flight test contract award delays			- 5,335
	Improving funds management: ECASE excess growth			- 7,904
	Improving funds management: Developmental Foundation excess growth			- 24,554
	Improving funds management: Fixed JPO costs excess growth			- 3,385
212	Operational F-35 C2D2	252,360	194,352	- 58,008
	Restoring acquisition accountability: C2D2 Phase 2 contract award delays			- 17,904
	Restoring acquisition accountability: C2D2 flight test contract award delays			- 5,196
	Improving funds management: ECASE excess growth			- 7,697
	Improving funds management: Developmental Foundation excess growth			- 23,913
	Improving funds management: Fixed JPO costs excess growth			- 3,297

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
215	Strategic Sub & Weapons System Support	157,679	167,879	+ 10,200
	Program increase: Autonomous strategic force protection sensor network			+ 2,700
	Program increase: Model based engineering for strategic weapons programs			+ 7,500
219	F/A-18 Squadrons	193,086	202,886	+ 9,800
	Program increase: Navy joint air-to-ground missile for fixed wing aircraft			+ 9,800
220	Fleet Telecommunications (Tactical)	25,014	1,344	- 23,670
	Program termination: High frequency over-the-horizon robust enterprise			- 23,670
223	Integrated Surveillance System	36,959	71,959	+ 35,000
	Program increase: Additional TRAPS units			+ 35,000
231	Tactical Data Links	104,696	116,696	+ 12,000
	Program increase: Tactical targeting network technology acceleration			+ 12,000
233	MK-48 ADCAP	94,155	68,255	- 25,900
	Improving funds management: TI-1 phasing			- 25,900
234	Aviation Improvements	121,805	138,805	+ 17,000
	Program increase: Cyber Boundary Defense—portable electronic maintenance aids			+ 2,000
	Program increase: F/A-18E/F engine enhancements			+ 15,000
243	Advanced Medium Range Air-to-Air Missile (AMRAAM)	32,473	27,473	- 5,000
	Restoring acquisition accountability: Systems improvement program acceleration and growth			- 5,000
258	MQ-8 UAV	9,843	24,143	+ 14,300
	Program increase: Radar integration			+ 5,500
	Program increase: Weapons capability integration			+ 8,800
266	Depot Maintenance (Non-IF)	36,560	46,560	+ 10,000
	Program increase: MH-60 SLAP			+ 10,000
267	Maritime Technology (MARITECH)	7,284	27,284	+ 20,000
	Program increase: Advanced additive technologies for sustainment of Navy assets			+ 20,000
XXX	Classified Programs	1,549,503	1,557,303	+ 7,800
	Classified adjustment			+ 7,800

Accelerated Acquisitions.—The fiscal year 2019 President’s budget request includes \$1,402,333,000, an increase of 150 percent over amounts enacted in fiscal year 2018, for programs designated as accelerated acquisitions in accordance with Chief of Naval Operations and Secretary of the Navy Instructions 5000.53 and 5000.42, respectively. The Committee supports efforts to rapidly deliver capability to the Warfighter in a responsible manner and recommends \$1,204,903,000 for these programs in fiscal year 2019.

The Committee notes ongoing efforts by the Navy to reorganize its internal processes as it relates to the alignment of requirements, acquisition strategies and budgets for accelerated acquisition programs and expects this will lead to improved coordination among all stakeholders. The Committee is concerned by repeated instances in which the designation as an accelerated acquisition program has apparently led to imprudent program management decisions affecting contracting actions and funding execution. Therefore, the Committee directs the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Assistant Secretary of the Navy (Financial Management and Comptroller) to report to the congressional defense committees, not later than 30 days after enactment of this Act, on acquisition strategy management and fiscal controls in place to ensure the appropriate manage-

ment of resources for Navy accelerated acquisition programs. Further, the Assistant Secretary of the Navy (Research, Development and Acquisition) is directed to provide, with submission of the fiscal year 2020 President's budget request, to the congressional defense committees the acquisition strategy for each designated accelerated acquisition program, and the Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to certify that the fiscal year 2020 President's budget fully funds such acquisition strategies, to include the associated test requirements identified in the test plan for each program, as agreed to by the Chief of Naval Operations, the Assistant Secretary of the Navy (Research, Development and Acquisition) and the Director, Operational Test and Evaluation per previous congressional direction. Finally, the Assistant Secretary of the Navy (Research, Development and Acquisition) is directed to identify to the congressional defense committees any additional training requirements levied on the acquisition workforce associated with the execution of accelerated acquisition programs.

Office of Naval Research Budget Structure.—The fiscal year 2019 President's budget request includes \$2,239,844,000 for science and technology research. The Committee recognizes the criticality of investing in Navy foundational research to ensure U.S. technical superiority in the coming decades and recommends \$2,666,744,000 for Navy science and technology research, an increase of \$426,900,000 over the budget request.

The Committee notes that the budget request proposes the consolidation of several program elements into a single, larger program element that would provide unprecedented programmatic and fiscal flexibility for advanced technology development. The Committee notes its support for the consolidation of multiple program elements and the increased flexibility associated with that realignment in previous years; however, the Committee is concerned that a further realignment of program elements would erode programmatic and fiscal transparency, and reorient foundational long-term science and technology research to near-term priorities. Therefore, the Committee rejects the proposal to consolidate multiple program elements and establish a single new program element in fiscal year 2019 and recommends retaining the existing program element budget structure for naval research. The Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to follow this budget structure in future budget submissions.

Solid State Laser—Technology Maturation.—The Committee notes and supports the Navy's increased investment in several directed energy programs, to include the Solid State—Technology Maturation [SSL—TM] program, which is intended to accelerate the evaluation of the military utility of laser weapons across a range of Navy mission applications by fielding initial capabilities on surface ships. The Committee notes that since its inception, the SSL—TM program scope has expanded and development costs have tripled. Further, cost overruns have occurred at multiple program levels, and significant concurrency between the development and fielding efforts are creating further risk to cost and schedule. Therefore, the Committee directs the Government Accountability Office [GAO]

to provide to the congressional defense committees, not later than 90 days after enactment of this Act, a report reviewing the SSL-TM program. At a minimum, the report should review: (1) program requirements, including changes thereto; (2) technology readiness levels including maturity relative to requirements; (3) the current acquisition strategy and program baseline(s); (4) the SSL-TM test strategy and associated resourcing; (5) contract strategy, and (6) the program management structure.

Common Hull Auxiliary Multi-Mission Platform [CHAMP].—The fiscal year 2019 President’s budget request includes \$18,000,000 to initiate industry studies on common hull concepts and acquisition approaches to replace aging mission-specific sealift and auxiliary ships that provide hospital services, aviation support, submarine tending, command and control, or sealift. The Committee understands that CHAMP is intended to reduce life cycle costs, leverage reconfigurable force packages and stabilize the industrial base. Based on information provided by the Navy, the Committee further understands that current Navy plans for the acquisition of CHAMP could be accelerated by as much as 5 years, and therefore recommends an additional \$18,000,000 for industry studies and requirements definition. The Assistant Secretary of the Navy (Research, Development and Acquisition) is directed to provide to the congressional defense committees, with the fiscal year 2020 President’s budget, an updated acquisition strategy for CHAMP, to include requirements, acquisition milestones and cost estimates, as informed by industry studies. To stabilize the domestic shipbuilding industrial base, including the supply chain, the Committee encourages the Navy to consider the domestic sourcing requirements historically placed on sealift and auxiliary ships to CHAMP.

Future Surface Combatant.—The fiscal year 2019 President’s budget request includes \$37,267,000 in fiscal year 2019, and \$35,230,000 in fiscal year 2020 for the development of future surface combatants [FSC] requirements and an Analysis of Alternatives [AoA]. The Committee notes the extensive scope of the FSC AoA and directs the Director, Surface Warfare to submit with the fiscal year 2020 President’s budget request an updated Surface Capability Evolution Plan [SCEP] to the congressional defense committees. Further, the Assistant Secretary of the Navy (Research, Development and Acquisition) is directed to provide with the fiscal year 2020 President’s budget request the acquisition strategies for each element of the SCEP, and the Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to provide the cost estimate for each element of the SCEP and to identify the funds included in the budget request in support of these acquisition strategies.

F/A-18 and EA-18G Research and Development Efforts.—The fiscal year 2019 President’s budget includes \$578,605,000 for various efforts to modernize and upgrade the F/A-18 and EA-18G, including F/A-18 Block III development which consists of 5 distinct efforts, Infrared Search and Track systems, EA-18G systems development, Multi-System Integration, physiological episode mitigation, F/A-18 radar upgrades, and F/A-18E/F service life assessment and extension programs. The Committee notes the improved briefing materials provided in support of the budget request, as requested

by the Committee, but believes that further improvement, to include timeliness in providing requested materials, could be achieved. Therefore, the Program Manager, PMA-265, is directed to provide supplemental budget materials, as previously requested by the Committee, with the budget briefing materials in support of future budget requests.

*Large Displacement Unmanned Undersea Vehicle [LDUUV].—*The fiscal year 2019 President's budget includes \$92,613,000 to initiate the fabrication of two Phase I prototype LDUUVs. Subsequent to the budget submission, the Navy informed the Committee of plans to revise its LDUUV acquisition strategy and accelerate the LDUUV program by removing Phase II from the acquisition strategy and transitioning the Phase I design to industry 5 years earlier than previously planned, which eliminates the need for Phase II funding. The Committee supports the proposed acceleration of the program; however is concerned that the revised program schedule may be unaffordable. Therefore, the Committee recommends reducing the scope of the Phase I effort and further accelerating the transition of the LDUUV design to industry. The Assistant Secretary of the Navy (Research, Development and Acquisition) is directed to provide the congressional defense committees, with the fiscal year 2020 President's budget request, an updated LDUUV acquisition strategy, and the Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to provide updated cost estimates for the LDUUV program and to certify full funding in the budget request for the revised acquisition strategy.

CVN 78 Full Ship Shock Trials.—The fiscal year 2019 President's budget request includes no funds to conduct Full Ship Shock Trials [FSST] on CVN 78. The Committee notes that full-scale ship shock trials on CVN 78 were included in the original CVN 78 test plans and that the need for FSST was subsequently reaffirmed by the Director, Operational Test and Evaluation, the then-Under Secretary of Defense (Acquisition, Technology and Logistics) and Congress. The Committee notes that subsequent to the fiscal year 2019 President's budget submission, the Secretary of Defense denied a request by the Navy to waive CVN 78 FSST in accordance with section 121(b) of the Fiscal Year 2018 National Defense Authorization Act, and that the Navy now plans to conduct FSST on CVN 78, as directed. The Committee understands that this requires \$25,000,000 in fiscal year 2019 and recommends transferring those funds from other CVN programs, as delineated in the tables for Committee Recommended Adjustments for the Research, Development, Test and Evaluation, Navy and Shipbuilding and Conversion, Navy accounts. The Committee further understands that the Navy will fully budget for additional CVN 78 FSST requirements in the fiscal year 2020 President's budget request.

CVN 78 Sortie Generation Rate.—The Committee notes that the sortie generation rate [SGR] is a significant driver of the CVN 78 design. The Committee understands that the reliability of key systems may impact SGR and that the SGR demonstration schedule and execution are under review. The Program Executive Officer, Aircraft Carriers, in coordination with the Director, Operational Test and Evaluation is directed to provide, with the fiscal year 2020 President's budget request, to the congressional defense com-

mittees an updated plan for the SGR demonstration schedule and test requirements. The Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to certify SGR demonstration full funding with the fiscal year 2020 President's budget request.

Extra Large Unmanned Underwater Vehicle.—The fiscal year 2019 President's budget request includes \$117,856,000 in various program elements for the development of Extra Large Unmanned Underwater Vehicles [XLUUV] and associated payloads in response to a Joint Emergent Operational Need [JEON] from U.S. Pacific Command. The Committee notes that two competitive design contracts were awarded by the Navy for Phase 1 of the program and that the Navy had planned to conduct a competitive selection for Phase 2 in 2018. Subsequent to the submission of the fiscal year 2019 President's budget request, the Navy revised its acquisition strategy and informed the Committee that the Navy now plans to award Phase 2 fabrication contracts to both vendors. The Committee understands that this requires \$25,000,000 in fiscal year 2019 above the budget request and that additional funds will be required in fiscal years 2020—2023, which the Navy will include in the fiscal year 2020 President's budget request. The Committee agrees with the revised acquisition strategy to allow for greater competition and recommends \$25,000,000 above the budget request in fiscal year 2019, as required. The Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to certify, with the fiscal year 2020 President's budget request, full funding for the Navy's revised acquisition strategy.

Offensive Anti-Surface Warfare Increment I/Long Range Anti-Ship Missile Operational Test.—The Offensive Anti-Surface Warfare [OASuW] Increment I/Long Range Anti-Ship Missile [LRASM] will provide an early operational capability in 2018 in support of an Urgent Operational Needs Statement [UONS] from US. Pacific Fleet. The Committee notes that in the fiscal year 2019 President's budget request, the Navy has included \$129,400,000 in fiscal years 2019 and 2020 for OASuW Increment I/LRASM capability improvements, which the Committee fully supports. However, the Committee is concerned that the Navy has not agreed to a test plan for these capability improvements with the Director, Operational Test and Evaluation, nor budgeted for any operational test requirements.

The Committee does not agree with this approach and directs that of the funds requested in fiscal year 2019 for OASuW Increment I/LRASM capability improvements, no less than \$20,000,000 be applied toward operational test. Further, the Committee directs the Director, Operational Test and Evaluation, in coordination with the Deputy Chief of Naval Operations for Warfare Systems to provide to the congressional defense committees, with the fiscal year 2020 President's budget request, a plan for OASuW Increment I/LRASM full independent operational test [IOT&E]; the Assistant Secretary of the Navy (Research, Development and Acquisition) is directed to submit an acquisition strategy that supports that test strategy; and the Assistant Secretary of the Navy (Financial Management and Comptroller) is directed to certify that the fiscal year 2020 President's budget request for OASuW Increment I/LRASM

fully funds the development of capability improvements and the associated operational test strategy. Finally, the Committee directs that not more than \$25,000,000 may be obligated for OASuW Increment I/LRASM capability improvements in fiscal year 2019 until the Deputy Chief of Naval Operations for Warfare Systems certifies the requirements for capability improvements to the congressional defense committees.

Next Generation Jammer Low Band.—The fiscal year 2019 President's budget request includes \$99,253,000 for the Next Generation Jammer Low Band program to continue the execution of up to three Demonstration of Existing Technology [DET] contracts, which the Navy plans to award in 2018. The Committee understands that the DET contracts will inform the acquisition strategy for the program and that the Navy is considering applying certain acceleration acquisition authorities. The Assistant Secretary of the Navy (Research, Development and Acquisition) is directed to provide to the congressional defense committees, with the fiscal year 2020 President's budget request, the acquisition strategies under consideration for further development of Next Generation Jammer Low Band.

AEGIS Modernization.—The fiscal year 2019 President's budget request includes \$396,403,000 to develop modifications to the AEGIS Weapon system and integrate combat capabilities developed by the Navy and the Missile Defense Agency into the AEGIS Combat System, an increase of \$44,874,000 over amounts appropriated in fiscal year 2018. The Committee notes the improved joint briefing materials provided by the Navy and the Missile Defense Agency in support of the budget request and directs the Program Executive Officer, Integrated Warfare Systems, and the Director, Missile Defense Agency to continue to provide these materials, as subsequently modified per congressional request, in future budget briefings.

Manpower, Personnel, Training and Education Transformation Program.—The fiscal year 2019 President's budget request includes \$99,300,000 for Manpower, Personnel, Training and Education [MPT&E] transformation, an increase of \$73,200,000 over amounts appropriated for fiscal year 2018. The Committee notes progress made by the Navy in managing this program; however, the Committee also notes that the MPT&E transformation requirements, acquisition strategy and a holistic cost estimate remain to be completed. The Committee recommends \$64,300,000, an increase of \$40,100,000 over amounts appropriated in fiscal year 2018, to allow for continued program progress and directs the Assistant Secretary of the Navy (Research, Development and Acquisition) to provide with the fiscal year 2020 President's request the MPT&E acquisition strategy and the Assistant Secretary of the Navy (Financial Management and Comptroller) to provide the associated cost estimate.

Amphibious Combat Vehicle 1.2.—The fiscal year 2019 President's budget request includes \$55,800,000 for the Amphibious Combat Vehicle [ACV] 1.2 program, an increase of \$26,400,000 over amounts previously programmed for that effort for fiscal year 2019. The Committee notes the significant ACV 1.2 program concurrency with the ACV 1.1 development and production program,

to include the modification of ACV 1.1 test vehicles for ACV 1.2 developmental test. Noting the Marine Corps' historical struggles with replacing its amphibious assault vehicle fleet, the Committee is concerned with the programmatic and cost risk this strategy brings to both the ACV 1.1 and 1.2 programs. The Committee directs the Assistant Secretary of the Navy (Research, Development, and Acquisition) to submit, not later than 30 days after Milestone C for ACV 1.1, an updated cost and schedule estimate for ACV 1.2.

DDG 1000 Mission Change.—The fiscal year 2019 President's request includes \$40,852,000 in fiscal year 2019 and \$396,194,000 over the next 5 years in research, development, test and evaluation for development efforts in support of new DDG 1000 mission requirements. The Committee notes that the requirements, schedules and revised Test and Evaluation Master Plan in support of the new DDG 1000 mission are not yet complete and therefore recommends a reduction of \$21,000,000.

Hydrographic Survey System Upgrade for Diver Propulsion Devices.—The Committee understands the Marine Corps is seeking to upgrade existing diver propulsion devices [DPD] assets to enable precise navigation and autonomous hydrographic survey. The Committee encourages the Secretary of the Navy to develop an autonomous hydrographic survey capability for the DPD which provides other advanced capabilities through retrofitting of existing DPD units, and supports autonomous hydrographic survey for inspection and analysis of critical littoral waterways.

Aircraft Fleet Readiness and Sustainment.—The Committee remains concerned with the challenges faced by the Navy and Marine Corps to maintain the readiness of their air vehicle fleets, and extend the useful life of aging aircraft. The Committee notes the valuable role university research institutions can provide in conducting research and development that translates into technological capabilities to address these readiness gaps. Therefore, the Committee recommends \$10,000,000 for aircraft fleet readiness and sustainment research conducted at universities with state-of-the-art capabilities in structures and materials to support these efforts.

Advanced Hull Form Development and Demonstration.—The Committee has supported the Navy's investment in sophisticated computer hydrodynamic modeling and simulation tools for the design, testing, and analysis of high-performance and high-efficiency hull forms of small planing boats. The Committee recommends \$8,000,000 for an advanced hull form development and prototype demonstration and at-sea testing initiative to accelerate the development and transition of advanced hull designs, particularly hull forms that reduce injury to craft operators and warfighters.

Power Generation and Storage Research.—The Committee continues to support Navy investments in power generation and energy storage research, and recommends an increase of \$5,000,000 for that purpose. The Committee understands that development and deployment of lithium-ion batteries are critical to Department of Defense missions, but that safety incidents restrict their operational use. Therefore, the Committee believes that the development and qualification of materials technologies, including non-flammable electrolytes, to reduce the risk of thermal runaway and

improve safety in lithium-ion batteries should be a research priority.

Marine Corps Asset Life-Cycle Management.—The Committee supports the Marine Corps' efforts to substantially reduce costs associated with routine maintenance and recommends \$2,000,000 for further research and development in the areas of remanufacturing and vehicle behavior monitoring.

Maritime Robotics Technology.—The Committee notes the Department of the Navy investments to develop autonomous systems and capabilities in support of future naval capabilities. The Committee encourages the Navy to continue its support for the cost-effective development of maritime robotic systems, including research, testing, and demonstration of unmanned underwater vehicle security and surveillance systems, robotic inspection and survey tools for vessels and port facilities, munition retrieval, environmental monitoring, including acoustic and non-acoustic detection capability improvements, shared autonomy, adaptive decision-making, docking, 3-D imaging, power and data transfer. The Committee believes that university-based research and innovation centered on the development of maritime robotic technology could be essential in maintaining competitive advantage in the future.

Silicon Carbide Power Electronics.—The Committee supports the Navy's investment to develop advanced power and energy technology to meet requirements for higher electric power loads through efficient means. The Committee understands that use of silicon carbide power modules may reduce the size and weight of power conversion modules and other electronic systems necessary for advanced sensors and weapon systems. The Committee recommends \$5,000,000 for silicon carbide power electronics research and encourages the Secretary of the Navy to continue to invest in advanced power and energy technology and accelerate the qualification of silicon carbide power modules to be used on highpower, mission critical Navy platforms.

Improving Performance of Military Platforms.—Turbulent boundary layers form in the air or in water along the surfaces of all aircraft and marine platforms, and produce a force that opposes the motion of the vehicle. The Committee understands that mitigating such drag is central to the goals of reducing fuel consumption and optimizing performance of military platforms, such as ships, submarines, and transport and fighter aircraft. However, the Committee notes that there exists only limited domestic capability to experimentally study these phenomena. Therefore, the Committee encourages the Chief of Naval Research to examine the Navy's infrastructure and technical capabilities to experimentally quantify aircraft and marine platforms relevant turbulent boundary layers at high spatial and temporal resolution, and to address any identified gaps in experimental and modeling capabilities.

E2-D Hawkeye Advanced Radar.—The Committee recognizes the importance for the Navy to improve the airborne surveillance and battle management command and control systems of the E-2D Hawkeye to protect against sophisticated adversaries with anti-ship cruise and ballistic missiles. Therefore, the Committee recommends \$12,000,000 to continue improving the radar capability of the E-2D Hawkeye. Further, to stay ahead of the evolving threat,

the Committee directs the Deputy Chief of Naval Operations for Warfare Systems to complete a comprehensive review of the E-2D radar to determine if there are unmet requirements for an Advanced Radar that could improve airborne surveillance and battle management command and control systems of the E-2D Hawkeye, and to report to the congressional defense committees not later than 90 days after enactment of this act on the findings of such review.

Advanced Additive Technologies For Sustainment of Navy Assets.—The Committee recognizes the need to accelerate the delivery of technical capabilities to support the warfighter and to advance technologies that will modernize and sustain military systems in an efficient, cost-effective manner. The Committee recommends \$20,000,000 to support the development of advanced additive technologies for sustainment of Navy assets, including cold spray.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

Appropriations, 2018	\$37,428,078,000
Budget estimate, 2019	40,178,343,000
Committee recommendation	40,896,667,000

The Committee recommends an appropriation of \$40,896,667,000. This is \$718,324,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE			
	BASIC RESEARCH			
1	DEFENSE RESEARCH SCIENCES	348,322	448,322	+ 100,000
2	UNIVERSITY RESEARCH INITIATIVES	154,991	179,991	+ 25,000
3	HIGH ENERGY LASER RESEARCH INITIATIVES	14,506	14,506	.....
	TOTAL, BASIC RESEARCH	517,819	642,819	+ 125,000
	APPLIED RESEARCH			
4	MATERIALS	125,373	161,373	+ 36,000
5	AEROSPACE VEHICLE TECHNOLOGIES	130,547	147,047	+ 16,500
6	HUMAN EFFECTIVENESS APPLIED RESEARCH	112,518	114,018	+ 1,500
7	AEROSPACE PROPULSION	190,919	230,419	+ 39,500
8	AEROSPACE SENSORS	166,534	171,534	+ 5,000
9	SCIENCE AND TECHNOLOGY MANAGEMENT—MAJOR HEAD- QUARTERS	8,288	8,288	.....
11	CONVENTIONAL MUNITIONS	112,841	112,841	.....
12	DIRECTED ENERGY TECHNOLOGY	141,898	141,898	.....
13	DOMINANT INFORMATION SCIENCES AND METHODS	162,420	175,420	+ 13,000
14	HIGH ENERGY LASER RESEARCH	43,359	45,859	+ 2,500
15	SPACE TECHNOLOGY	117,645	121,645	+ 4,000
	TOTAL, APPLIED RESEARCH	1,312,342	1,430,342	+ 118,000
	ADVANCED TECHNOLOGY DEVELOPMENT			
16	ADVANCED MATERIALS FOR WEAPON SYSTEMS	34,426	42,926	+ 8,500
17	SUSTAINMENT SCIENCE AND TECHNOLOGY (S&T)	15,150	15,150	.....
18	ADVANCED AEROSPACE SENSORS	39,968	44,968	+ 5,000
19	AEROSPACE TECHNOLOGY DEV/DEMO	121,002	126,002	+ 5,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
20	AEROSPACE PROPULSION AND POWER TECHNOLOGY	115,462	141,462	+ 26,000
21	ELECTRONIC COMBAT TECHNOLOGY	55,319	55,319	.....
22	ADVANCED SPACECRAFT TECHNOLOGY	54,895	70,895	+ 16,000
23	MAUI SPACE SURVEILLANCE SYSTEM [MSSS]	10,674	10,674	.....
24	HUMAN EFFECTIVENESS ADVANCED TECHNOLOGY DEVELOPMENT	36,463	36,463	.....
25	CONVENTIONAL WEAPONS TECHNOLOGY	194,981	204,981	+ 10,000
26	ADVANCED WEAPONS TECHNOLOGY	43,368	53,368	+ 10,000
27	MANUFACTURING TECHNOLOGY PROGRAM	42,025	65,825	+ 23,800
28	BATTLESPACE KNOWLEDGE DEVELOPMENT & DEMONSTRATION ..	51,064	51,064	.....
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	814,797	919,097	+ 104,300
	ADVANCED COMPONENT DEVELOPMENT			
30	INTELLIGENCE ADVANCED DEVELOPMENT	5,568	5,568	.....
32	COMBAT IDENTIFICATION TECHNOLOGY	18,194	18,194	.....
33	NATO RESEARCH AND DEVELOPMENT	2,305	2,305	.....
35	INTERCONTINENTAL BALLISTIC MISSILE	41,856	41,856	.....
36	POLLUTION PREVENTION—DEM/VAL .....	.....	200	+ 200
37	LONG RANGE STRIKE	2,314,196	2,276,496	− 37,700
38	INTEGRATED AVIONICS PLANNING AND DEVELOPMENT	14,894	81,271	+ 66,377
39	ADVANCED TECHNOLOGY AND SENSORS	34,585	34,585	.....
40	NATIONAL AIRBORNE OPS CENTER [NAOC] RECAP	9,740	7,440	− 2,300
41	TECHNOLOGY TRANSFER	12,960	16,960	+ 4,000
42	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM	71,501	32,501	− 39,000
43	CYBER RESILIENCY OF WEAPON SYSTEMS—ACS	62,618	62,618	.....
46	DEPLOYMENT AND DISTRIBUTION ENTERPRISE R&D	28,350	28,350	.....
48	TECH TRANSITION PROGRAM	1,186,075	195,462	− 990,613
48A	ADVANCED ENGINE DEVELOPMENT .....	.....	651,355	+ 651,355
48B	HYPERSONICS PROTOTYPING .....	.....	558,058	+ 558,058
48C	DIRECTED ENERGY PROTOTYPING .....	.....	150,000	+ 150,000
49	GROUND BASED STRATEGIC DETERRENT	345,041	345,041	.....
50	NEXT GENERATION AIR DOMINANCE	503,997	392,997	− 111,000
51	THREE DIMENSIONAL LONG-RANGE RADAR	40,326	25,426	− 14,900
52	UNIFIED PLATFORM (UP)	29,800	29,800	.....
54	COMMON DATA LINK EXECUTIVE AGENT (CDL EA)	41,880	41,880	.....
55	MISSION PARTNER ENVIRONMENTS	10,074	10,074	.....
56	CYBER OPERATIONS TECHNOLOGY DEVELOPMENT	253,825	253,825	.....
57	ENABLED CYBER ACTIVITIES	16,325	16,325	.....
59	CONTRACTING INFORMATION TECHNOLOGY SYSTEM	17,577	17,577	.....
60	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT) (SPACE)	286,629	256,629	− 30,000
61	EO/IR WEATHER SYSTEMS	7,940	7,940	.....
62	WEATHER SYSTEM FOLLOW-ON	138,052	138,052	.....
63	SPACE SITUATION AWARENESS SYSTEMS	39,338	29,338	− 10,000
64	MIDTERM POLAR MILSATCOM SYSTEM	383,113	383,113	.....
65	SPACE CONTROL TECHNOLOGY	91,018	76,018	− 15,000
66	SPACE SECURITY AND DEFENSE PROGRAM	45,542	45,542	.....
67	PROTECTED TACTICAL ENTERPRISE SERVICE (PTES)	51,419	46,419	− 5,000
68	PROTECTED TACTICAL SERVICE (PTS)	29,776	29,776	.....
69	PROTECTED SATCOM SERVICES (PSCS)—AGGREGATED	29,379	29,379	.....
70	OPERATIONALLY RESPONSIVE SPACE	366,050	371,050	+ 5,000
	TOTAL, ADVANCED COMPONENT DEVELOPMENT	6,529,943	6,709,420	+ 179,477
	ENGINEERING & MANUFACTURING DEVELOPMENT			
71	FUTURE ADVANCED WEAPON ANALYSIS & PROGRAMS	39,602	39,602	.....
72	INTEGRATED AVIONICS PLANNING AND DEVELOPMENT	58,531	58,531	.....
73	NUCLEAR WEAPONS SUPPORT	4,468	4,468	.....
74	ELECTRONIC WARFARE DEVELOPMENT	1,909	1,909	.....
75	TACTICAL DATA NETWORKS ENTERPRISE	207,746	257,746	+ 50,000
76	PHYSICAL SECURITY EQUIPMENT	14,421	14,421	.....
74	SMALL DIAMETER BOMB [SDB]	73,158	78,158	+ 5,000
81	AIRBORNE ELECTRONIC ATTACK	7,153	7,153	.....
83	ARMAMENT/ORDNANCE DEVELOPMENT	58,590	58,590	.....
84	SUBMUNITIONS	2,990	2,990	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
85	AGILE COMBAT SUPPORT	20,028	23,528	+ 3,500
86	JOINT DIRECT ATTACK MUNITION	15,787	.....	- 15,787
87	LIFE SUPPORT SYSTEMS	8,919	8,919	.....
88	COMBAT TRAINING RANGES	35,895	43,895	+ 8,000
89	F-35—EMD	69,001	69,001	.....
91	LONG RANGE STANDOFF WEAPON	614,920	624,920	+ 10,000
92	ICBM FUZE MODERNIZATION	172,902	172,902	.....
97	KC-46	88,170	80,170	- 8,000
98	ADVANCED PILOT TRAINING	265,465	265,465	.....
99	COMBAT RESCUE HELICOPTER	457,652	384,652	- 73,000
105	ACQUISITION WORKFORCE—GLOBAL BATTLE MANAGEMENT	3,617	3,617	.....
106	B-2 DEFENSIVE MANAGEMENT SYSTEM	261,758	261,758	.....
107	NUCLEAR WEAPONS MODERNIZATION	91,907	84,907	- 7,000
108	F-15 EPAWSS	137,095	137,095	.....
109	STAND IN ATTACK WEAPON	43,175	14,975	- 28,200
110	ADVANCED COMMUNICATIONS SYSTEMS	14,888	14,888	.....
111	FULL COMBAT MISSION TRAINING	1,015	1,015	.....
112	NEXTGEN JSTARS .....	.....	30,000	+ 30,000
116	C-32 EXECUTIVE TRANSPORT RECAPITALIZATION	7,943	7,943	.....
117	PRESIDENTIAL AIRCRAFT REPLACEMENT	673,032	616,372	- 56,660
118	AUTOMATED TEST SYSTEMS	13,653	13,653	.....
119	COMBAT SURVIVOR EVADER LOCATOR	939	939	.....
120	GPS IIIC	451,889	401,889	- 50,000
121	SPACE SITUATION AWARENESS OPERATIONS	46,668	46,668	.....
122	COUNTERSPACE SYSTEMS	20,676	20,676	.....
123	SPACE SITUATION AWARENESS SYSTEMS	134,463	134,463	.....
124	SPACE FENCE	20,215	20,215	.....
125	ADVANCED EHF MILSATCOM (SPACE)	151,506	151,506	.....
126	POLAR MILSATCOM (SPACE)	27,337	27,337	.....
127	WIDEBAND GLOBAL SATCOM (SPACE)	3,970	53,470	+ 49,500
128	SPACE BASED INFRARED SYSTEM [SBIRS] HIGH EMD	60,565	60,565	.....
129	NEXT-GEN OPIR	643,126	743,126	+ 100,000
130	EVOLVED EXPENDABLE LAUNCH VEHICLE PROGRAM (SPACE)—EMD	245,447	445,447	+ 200,000
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	5,272,191	5,489,544	+ 217,353
	RDT&E MANAGEMENT SUPPORT			
131	THREAT SIMULATOR DEVELOPMENT	34,256	34,256	.....
132	MAJOR T&E INVESTMENT	91,844	266,844	+ 175,000
133	RAND PROJECT AIR FORCE	34,614	34,614	.....
135	INITIAL OPERATIONAL TEST & EVALUATION	18,043	18,043	.....
136	TEST AND EVALUATION SUPPORT	692,784	697,784	+ 5,000
137	ACQ WORKFORCE—GLOBAL POWER	233,924	226,075	- 7,849
138	ACQ WORKFORCE—GLOBAL VIG & COMBAT SYS	263,488	243,853	- 19,635
139	ACQ WORKFORCE—GLOBAL REACH	153,591	145,230	- 8,361
140	ACQ WORKFORCE—CYBER, NETWORK, & BUS SYS	232,315	217,900	- 14,415
141	ACQ WORKFORCE—GLOBAL BATTLE MGMT	169,868	157,472	- 12,396
142	ACQ WORKFORCE—CAPABILITY INTEGRATION	226,219	221,126	- 5,093
143	ACQ WORKFORCE—ADVANCED PRGM TECHNOLOGY	38,400	32,796	- 5,604
144	ACQ WORKFORCE—NUCLEAR SYSTEMS	125,761	123,175	- 2,586
147	MANAGEMENT HQ—R&D	10,642	9,815	- 827
148	FACILITIES RESTORATION & MODERNIZATION—TEST & EVAL	162,216	262,216	+ 100,000
149	FACILITIES SUSTAINMENT—TEST AND EVALUATION SUPPORT	28,888	28,888	.....
150	REQUIREMENTS ANALYSIS AND MATURATION	35,285	48,285	+ 13,000
153	ENTERPRISE INFORMATION SERVICES (EIS)	20,545	20,545	.....
154	ACQUISITION AND MANAGEMENT SUPPORT	12,367	12,367	.....
155	GENERAL SKILL TRAINING	1,448	1,448	.....
157	INTERNATIONAL ACTIVITIES	3,998	3,998	.....
158	SPACE TEST AND TRAINING RANGE DEVELOPMENT	23,254	23,254	.....
159	SPACE AND MISSILE CENTER (SMC) CIVILIAN WORKFORCE	169,912	169,912	.....
160	SPACE & MISSILE SYSTEMS CENTER—MHA	10,508	10,508	.....
161	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	19,721	19,721	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
162	SPACE TEST PROGRAM (STP)	25,620	25,620	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	2,839,511	3,055,745	+ 216,234
	OPERATIONAL SYSTEMS DEVELOPMENT			
165	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING	11,344	11,344	.....
167	AIR FORCE INTEGRATED MILITARY HUMAN RESOURCES SYSTEM	47,287	41,102	- 6,185
168	ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY	32,770	32,770	.....
169	FOREIGN MATERIEL ACQUISITION AND EXPLOITATION	68,368	68,368	.....
170	HC/MC-130 RECAP RDT&E	32,574	32,574	.....
171	NC3 INTEGRATION	26,112	19,312	- 6,800
172	ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	99,100	75,950	- 23,150
173	B-52 SQUADRONS	280,414	329,173	+ 48,759
174	AIR-LAUNCHED CRUISE MISSILE [ALCM]	5,955	5,955	.....
175	B-1B SQUADRONS	76,030	63,230	- 12,800
176	B-2 SQUADRONS	105,561	105,561	.....
177	MINUTEMAN SQUADRONS	156,047	156,047	.....
179	WORLDWIDE JOINT STRATEGIC COMMUNICATIONS	10,442	18,442	+ 8,000
180	INTEGRATED STRATEGIC PLANNING & ANALYSIS NETWORK	22,833	22,833	.....
181	ICBM REENTRY VEHICLES	18,412	18,412	.....
183	UH-1N REPLACEMENT PROGRAM	288,022	288,022	.....
184	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION	9,252	9,252	.....
186	MQ-9 UAV	115,345	115,345	.....
188	A-10 SQUADRONS	26,738	26,738	.....
189	F-16 SQUADRONS	191,564	185,864	- 5,700
190	F-15E SQUADRONS	192,883	176,483	- 16,400
191	MANNED DESTRUCTIVE SUPPRESSION	15,238	15,238	.....
192	F-22 SQUADRONS	603,553	588,453	- 15,100
193	F-35 SQUADRONS	549,501	428,315	- 121,186
194	TACTICAL AIM MISSILES	37,230	37,230	.....
195	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	61,393	51,293	- 10,100
196	COMBAT RESCUE-PARARESCUE	647	647	.....
198	PRECISION ATTACK SYSTEMS PROCUREMENT	14,891	14,891	.....
199	COMPASS CALL	13,901	13,901	.....
200	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	121,203	121,203	.....
202	JOINT AIR-TO-SURFACE STANDOFF MISSILE [JASSM]	60,062	42,472	- 17,590
203	AIR AND SPACE OPERATIONS CENTER [AOC]	106,102	106,102	.....
204	CONTROL AND REPORTING CENTER [CRC]	6,413	10,413	+ 4,000
205	AIRBORNE WARNING AND CONTROL SYSTEM [AWACS]	120,664	130,664	+ 10,000
206	TACTICAL AIRBORNE CONTROL SYSTEMS	2,659	2,659	.....
208	COMBAT AIR INTELLIGENCE SYSTEM ACTIVITIES	10,316	10,316	.....
209	TACTICAL AIR CONTROL PARTY-MOD	6,149	6,149	.....
210	C2ISR TACTICAL DATA LINK	1,738	1,738	.....
211	DCAPES	13,297	13,297	.....
212	NATIONAL TECHNICAL NUCLEAR FORENSICS	1,788	1,788	.....
213	JOINT SURVEILLANCE/TARGETATTACK RADAR SYSTEM [JSTARS] ..	14,888	.....	- 14,888
214	SEEK EAGLE	24,699	24,699	.....
215	USAF MODELING AND SIMULATION	17,078	17,078	.....
216	WARGAMING AND SIMULATION CENTERS	6,141	6,141	.....
218	DISTRIBUTED TRAINING AND EXERCISES	4,225	4,225	.....
219	MISSION PLANNING SYSTEMS	63,653	63,653	.....
220	TACTICAL DECEPTION	6,949	6,949	.....
221	AF OFFENSIVE CYBERSPACE OPERATIONS	40,526	40,526	.....
222	AF DEFENSIVE CYBERSPACE OPERATIONS	24,166	39,166	+ 15,000
223	JOINT CYBER COMMAND AND CONTROL [JCC2]	13,000	13,000	.....
224	UNIFIED PLATFORM (UP)	28,759	21,559	- 7,200
229	GLOBAL SENSOR INTEGRATED ON NETWORK (GSIN)	3,579	3,579	.....
230	NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES)	29,620	29,620	.....
237	AIR FORCE SPACE AND CYBER NON-TRADITIONAL ISR FOR BATTLESPACE AWARENESS	6,633	6,633	.....
238	E-4B NATIONAL AIRBORNE OPERATIONS CENTER [NAOC]	57,758	57,758	.....
240	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	99,088	67,088	- 32,000
241	HIGH FREQUENCY RADIO SYSTEMS	51,612	51,612	.....
242	INFORMATION SYSTEMS SECURITY PROGRAM	34,612	34,612	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
244	GLOBAL FORCE MANAGEMENT—DATA INITIATIVE	2,170	2,170	.....
246	AIRBORNE SIGINT ENTERPRISE	106,873	109,873	+ 3,000
247	COMMERCIAL ECONOMIC ANALYSIS	3,472	3,472	.....
250	C2 AIR OPERATIONS SUITE—C2 INFO SERVICES	8,608	8,608	.....
251	CCMD INTELLIGENCE INFORMATION TECHNOLOGY	1,586	1,586	.....
252	GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	4,492	4,492	.....
254	WEATHER SERVICE	26,942	31,942	+ 5,000
255	AIR TRAFFIC CONTROL, APPROACH, & LANDING SYSTEM (ATC) ..	6,271	11,271	+ 5,000
256	AERIAL TARGETS	8,383	8,383	.....
259	SECURITY AND INVESTIGATIVE ACTIVITIES	418	418	.....
261	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	3,845	3,845	.....
268	DRAGON U-2	48,518	58,518	+ 10,000
269	ENDURANCE UNMANNED AERIAL VEHICLES .....	.....	15,000	+ 15,000
270	AIRBORNE RECONNAISSANCE SYSTEMS	175,334	175,334	.....
271	MANNED RECONNAISSANCE SYSTEMS	14,223	14,223	.....
272	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	24,554	24,554	.....
273	RQ-4 UAV	221,690	221,690	.....
274	NETWORK-CENTRIC COLLABORATIVE TARGET (TIARA)	14,288	14,288	.....
275	NATO AGS	51,527	51,527	.....
276	SUPPORT TO DCGS ENTERPRISE	26,579	26,579	.....
278	INTERNATIONAL INTELLIGENCE TECHNOLOGY AND ARCHITECTURES	8,464	8,464	.....
280	RAPID CYBER ACQUISITION	4,303	4,303	.....
284	PERSONNEL RECOVERY COMMAND & CTRL (PRC2)	2,466	2,466	.....
285	INTELLIGENCE MISSION DATA (IMD)	4,117	4,117	.....
287	C-130 AIRLIFT SQUADRON	105,988	105,988	.....
288	C-5 AIRLIFT SQUADRONS	25,071	25,071	.....
289	C-17 AIRCRAFT	48,299	48,299	.....
290	C-130J PROGRAM	15,409	15,409	.....
291	LARGE AIRCRAFT IR COUNTERMEASURES [LAIRCM]	4,334	4,334	.....
292	KC-135S	3,493	3,493	.....
293	KC-10S	6,569	6,569	.....
294	OPERATIONAL SUPPORT AIRLIFT	3,172	3,172	.....
295	CV-22	18,502	18,502	.....
296	AMC COMMAND AND CONTROL SYSTEM	1,688	1,688	.....
297	SPECIAL TACTICS / COMBAT CONTROL	2,541	2,541	.....
298	DEPOT MAINTENANCE (NON-IF)	1,897	1,897	.....
299	MAINTENANCE, REPAIR & OVERHAUL SYSTEM	50,933	50,933	.....
300	LOGISTICS INFORMATION TECHNOLOGY [LOGIT]	13,787	13,787	.....
301	SUPPORT SYSTEMS DEVELOPMENT	4,497	4,497	.....
302	OTHER FLIGHT TRAINING	2,022	2,022	.....
303	OTHER PERSONNEL ACTIVITIES	108	108	.....
304	JOINT PERSONNEL RECOVERY AGENCY	2,023	2,023	.....
305	CIVILIAN COMPENSATION PROGRAM	3,772	3,772	.....
306	PERSONNEL ADMINISTRATION	6,358	6,358	.....
307	AIR FORCE STUDIES AND ANALYSIS AGENCY	1,418	1,418	.....
308	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT ..	99,734	93,834	- 5,900
309	SERVICE SUPPORT TO STRATCOM—SPACE ACTIVITIES	14,161	14,161	.....
310	AF TENCAP	26,986	26,986	.....
311	FAMILY OF ADVANCED BLOS TERMINALS (FAB-T)	80,168	60,168	- 20,000
312	SATELLITE CONTROL NETWORK (SPACE)	17,808	27,808	+ 10,000
314	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL SEGMENTS)	8,937	8,937	.....
315	SPACE AND MISSILE TEST AND EVALUATION CENTER	59,935	59,935	.....
316	SPACE INNOVATION, INTEGRATION AND RAPID TECHNOLOGY DEVELOPMENT	21,019	21,019	.....
317	INTEGRATED BROADCAST SERVICE (IBS)	8,568	8,568	.....
318	SPACELIFT RANGE SYSTEM (SPACE)	10,641	20,641	+ 10,000
319	GPS III SPACE SEGMENT	144,543	144,543	.....
320	SPACE SUPERIORITY INTELLIGENCE	16,278	16,278	.....
321	JSPOC MISSION SYSTEM	72,256	72,256	.....
322	NATIONAL SPACE DEFENSE CENTER	42,209	42,209	.....
325	NUDET DETECTION SYSTEM (SPACE)	19,778	19,778	.....
326	SPACE SITUATION AWARENESS OPERATIONS	19,572	19,572	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
327	GLOBAL POSITIONING SYSTEM III—OPERATIONAL CONTROL SEGMENT	513,235	513,235	.....
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	6,357,616	6,186,376	- 171,240
9999	CLASSIFIED PROGRAMS	16,534,124	16,463,324	- 70,800
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, AIR FORCE	40,178,343	40,896,667	+ 718,324

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Defense Research Sciences	348,322	448,322	100,000
	Basic research program increase			+ 100,000
2	University Research Initiatives	154,991	179,991	25,000
	Basic research program increase			+ 25,000
4	Materials	125,373	161,373	36,000
	Program increase: Certification of advanced composites			+ 15,000
	Program increase: Coating technologies			+ 10,000
	Program increase: High performance materials			+ 8,000
	Program increase: Turbine airfoil demonstration			+ 3,000
5	Aerospace Vehicle Technologies	130,547	147,047	16,500
	Program increase: Human-machine teaming			+ 4,000
	Program increase: Hypersonic wind tunnels			+ 5,000
	Program increase: Hypersonic vehicle structures			+ 7,500
6	Human Effectiveness Applied Research	112,518	114,018	1,500
	Program increase: Warfighter physiology program			+ 1,500
7	Aerospace Propulsion	190,919	230,419	39,500
	Program increase: Thermal management technologies			+ 6,000
	Program increase: Centers of excellence			+ 5,000
	Program increase: Next generation hall thrusters			+ 10,000
	Program increase: Next generation heat exchangers			+ 6,500
	Program Increase: MADDIE—modular arrays for energy			+ 12,000
8	Aerospace Sensors	166,534	171,534	5,000
	Program increase: Air Force Minority Leaders Program			+ 5,000
13	Dominant Information Sciences and Methods	162,420	175,420	13,000
	Program increase: Cyber testbed for unidentified c-UAS			+ 5,500
	Program increase: Quantum computing CoE			+ 7,500
14	High Energy Laser Research	43,359	45,859	2,500
	Program increase: Directed energy research			+ 2,500
15	Space Technology	117,645	121,645	4,000
	Program increase: Advanced materials and process for magnetic graphene memory systems			+ 4,000
16	Advanced Materials for Weapon Systems	34,426	42,926	8,500
	Program increase: Metals affordability research			+ 8,500
18	Advanced Aerospace Sensors	39,968	44,968	5,000
	Program increase: Sensor integration			+ 5,000
19	Aerospace Technology Dev/Demo	121,002	126,002	5,000
	Program increase: Aircraft winglets and drag reduction devices			+ 5,000
20	Aerospace Propulsion and Power Technology	115,462	141,462	26,000
	Program increase: Chemical apogee engines			+ 2,500

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: Upper stage engine maturation ..			+ 8,500
	Program increase: Silicon carbide research			+ 15,000
22	Advanced Spacecraft Technology	54,895	70,895	16,000
	Program increase: Radiation hardened microelec- tronic processors			+ 6,000
	Program increase: Space laser communications sys- tems			+ 10,000
25	Conventional Weapons Technology	194,981	204,981	10,000
	Program increase: Rotary launcher development			+ 10,000
26	Advanced Weapons Technology	43,368	53,368	10,000
	Program increase: Demonstrator laser weapon sys- tem			+ 10,000
27	Manufacturing Technology Program	42,025	65,825	23,800
	Program increase: F-35 battery technology			+ 9,800
	Program increase: Materials development research			+ 10,000
	Program increase: Modeling technology for small turbine engines			+ 4,000
36	Pollution Prevention—Dem/Val		200	200
	Program increase: Alternative energy aircraft tugs ..			+ 200
37	Long Range Strike—Bomber	2,314,196	2,276,496	- 37,700
	Classified adjustment			- 37,700
38	Integrated Avionics Planning and Development	14,894	81,271	66,377
	Transfer: Air Force requested from RDTE lines 42, 86, and 202			+ 66,377
40	National Airborne Ops Center (NAOC) Recap	9,740	7,440	- 2,300
	Restoring acquisition accountability: Materiel solu- tion analysis funding early to need			- 2,300
41	Technology Transfer	12,960	16,960	4,000
	Program increase: Technology partnerships			+ 4,000
42	Hard and Deeply Buried Target Defeat System (HDBTDS) Program	71,501	32,501	- 39,000
	Transfer: Air Force requested to RDTE line 38			- 33,000
	Restoring acquisition accountability: Advanced 5,000 pound penetrator test and evaluation funding early to need			- 6,000
48	Tech Transition Program	1,186,075	195,462	- 990,613
	Transfer to lines 48a and 48b			- 1,048,413
	Program increase: Alternative energy research			+ 5,000
	Program increase: Rapid sustainment initiative			+ 42,800
	Program increase: Technology transition initiatives			+ 10,000
48a	Advanced Engine Development		651,355	+ 651,355
	Transfer from line 48			+ 790,355
	Maintain program affordability: Unjustified growth in Adaptive Engine Transition Program			- 139,000
48b	Hypersonics Prototyping		558,058	558,058
	Transfer from line 48			+ 258,058
	Program increase: Air-launched rapid response weapon			+ 79,700
	Program increase: Hypersonic conventional strike weapon			+ 220,300
48c	Directed Energy Prototyping		150,000	150,000
	Program increase: Directed energy prototyping			+ 150,000
50	Next Generation Air Dominance	503,997	392,997	- 111,000
	Classified adjustment			- 111,000
51	Three Dimensional Long-Range Radar (3DELRR)	40,326	25,426	- 14,900
	Maintain program affordability: EMD unit funding excess to need			- 14,900
60	NAVSTAR Global Positioning System (User Equipment) (SPACE)	286,629	256,629	- 30,000
	Improving funds management: Increment 2 devel- opment funded in Public Law 115-141			- 30,000
63	Space Situation Awareness Systems	39,338	29,338	- 10,000
	Contradiction in justification books/briefs			- 10,000
65	Space Control Technology	91,018	76,018	- 15,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Improving funds management: Space defense force packaging funded in Public Law 115-141			- 15,000
67	Protected Tactical Enterprise Service (PTES)	51,419	46,419	- 5,000
	Restoring acquisition accountability: Schedule slip			- 5,000
70	Operationally Responsive Space	366,050	371,050	5,000
	Restoring acquisition accountability: Phasing—Solar Power Project Air Demonstration			- 105,000
	Program increase: Blackjack			+ 110,000
75	Tactical Data Networks Enterprise	207,746	257,746	50,000
	Program increase: Accelerate 21st Century battle management command and control			+ 50,000
77	Small Diameter Bomb [SDB] —EMD	73,158	78,158	5,000
	Program increase: Precise navigation			+ 5,000
85	Agile Combat Support	20,028	23,528	3,500
	Program increase: Explosion resistant window technology			+ 3,500
86	Joint Direct Attack Munition	15,787		- 15,787
	Transfer: Air Force requested to RDTE line 38			- 15,787
88	Combat Training Ranges	35,895	43,895	8,000
	Program increase: F-35 advanced threat simulator			+ 8,000
91	Long Range Standoff Weapon	614,920	624,920	10,000
	Program increase			+ 10,000
97	KC-46	88,170	80,170	- 8,000
	Improving funds management: Forward financed			- 8,000
99	Combat Rescue Helicopter	457,652	384,652	- 73,000
	Maintain program affordability: Development funding excess to need			- 73,000
107	Nuclear Weapons Modernization	91,907	84,907	- 7,000
	Maintain program affordability: Test support excess to need			- 7,000
109	Stand In Attack Weapon	43,175	14,975	- 28,200
	Restoring acquisition accountability: Unclear acquisition strategy			- 28,200
115	JSTARS Recap		30,000	30,000
	Program increase: Continue JSTARS recap GMTI radar development			+ 30,000
117	Presidential Aircraft Recapitalization (PAR)	673,032	616,372	- 56,660
	Restoring acquisition accountability: EMD Hot Start unjustified			- 5,100
	Maintain program affordability: EMD funding unjustified			- 51,560
120	GPS IIC	451,889	401,889	- 50,000
	Restoring acquisition accountability: Acquisition strategy undefined			- 50,000
127	Wideband Global SATCOM (SPACE)	3,970	53,470	49,500
	Transfer: Pathfinder #5 from SPAF Line 5			+ 49,500
129	Next-Generation OPIR	643,126	743,126	100,000
	Program increase: Accelerate sensor development			+ 100,000
130	Evolved Expendable Launch Vehicle Program (SPACE)—EMD	245,447	445,447	200,000
	Program increase			+ 200,000
132	Major T&E Investment	91,844	266,844	175,000
	Program increase			+ 150,000
	Program increase: Eastern Gulf test and training range			+ 10,000
	Program increase: Instrumentation technology			+ 10,000
	Program increase: UAV electronic warfare capabilities			+ 5,000
136	Test and Evaluation Support	692,784	697,784	5,000
	Program increase: Avionics cyber range			+ 5,000
137	Acq Workforce- Global Power	233,924	226,075	- 7,849
	Maintain program affordability: Unjustified growth			- 7,849
138	Acq Workforce- Global Vig & Combat Sys	263,488	243,853	- 19,635
	Maintain program affordability: Unjustified growth			- 19,635

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
139	Acq Workforce- Global Reach	153,591	145,230	- 8,361
	Maintain program affordability: Unjustified growth			- 8,361
140	Acq Workforce- Cyber, Network, & Bus Sys	232,315	217,900	- 14,415
	Maintain program affordability: Unjustified growth			- 14,415
141	Acq Workforce- Global Battle Mgmt	169,868	157,472	- 12,396
	Maintain program affordability: Unjustified growth			- 12,396
142	Acq Workforce- Capability Integration	226,219	221,126	- 5,093
	Maintain program affordability: Unjustified growth			- 5,093
143	Acq Workforce- Advanced Prgm Technology	38,400	32,796	- 5,604
	Maintain program affordability: Unjustified growth			- 5,604
144	Acq Workforce- Nuclear Systems	125,761	123,175	- 2,586
	Maintain program affordability: Unjustified growth			- 2,586
147	Management HQ—R&D	10,642	9,815	- 827
	Maintain program affordability: Unjustified growth			- 827
148	Facilities Restoration and Modernization—Test and Evaluation Support	162,216	262,216	100,000
	Program increase			+ 100,000
150	Requirements Analysis and Maturation	35,285	48,285	13,000
	Program increase: Nuclear modernization analytics			+ 8,000
	Program increase: Nuclear deterrence research			+ 5,000
167	AF Integrated Personnel and Pay System (AF-IPPS)	47,287	41,102	- 6,185
	Maintain program affordability: Management services excess to need			- 6,185
171	NC3 Integration	26,112	19,312	- 6,800
	Maintain program affordability: Unjustified growth in direct mission support			- 6,800
172	Assessments and Evaluations Cyber Vulnerabilities	99,100	75,950	- 23,150
	Maintain program affordability: Unjustified growth in infrastructure pilot programs			- 23,150
173	B-52 Squadrons	280,414	329,173	48,759
	Transfer crypto modernization: Air Force—requested from APAF line 21			+ 14,759
	Program increase: B-52 infrared threat defense UON			+ 24,000
	Program increase: B-52 mission data recorder			+ 10,000
175	B-1B Squadrons	76,030	63,230	- 12,800
	Maintain program affordability: Fully integrated targeting pod funding excess to need			- 12,800
179	Worldwide Joint Strategic Communications	10,442	18,442	8,000
	Program increase: NC3 architecture			+ 8,000
189	F-16 Squadrons	191,564	185,864	- 5,700
	Restoring acquisition accountability: Communications suite upgrade early to need			- 5,700
190	F-15E Squadrons	192,883	176,483	- 16,400
	Maintain program affordability: Operational flight plan funding excess to need			- 41,400
	Program increase: Electronic warfare receiver upgrades			+ 25,000
192	F-22A Squadrons	603,553	588,453	- 15,100
	Restoring acquisition accountability: Navigation systems program delay			- 15,100
193	F-35 Squadrons	549,501	428,315	- 121,186
	Restoring acquisition accountability: C2D2 Phase 2 contract award delays			- 33,492
	Restoring acquisition accountability: C2D2 flight test contract award delays			- 9,719
	Improving funds management: ECASE excess growth			- 14,399
	Improving funds management: Developmental Foundation excess growth			- 44,733
	Improving funds management: Fixed JPO costs excess growth			- 6,168
	Improving funds management: DCA excess growth			- 12,675
195	Advanced Medium Range Air-to-Air Missile (AMRAAM) ...	61,393	51,293	- 10,100

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Restoring acquisition accountability: SIP 4 early to need			- 10,100
202	Joint Air-to-Surface Standoff Missile [JASSM]	60,062	42,472	- 17,590
	Transfer: Air Force requested to RDTE line 38			- 17,590
204	Control and Reporting Center [CRC]	6,413	10,413	4,000
	Program increase: Fund CRC Mode 5 implementation			+ 4,000
205	Airborne Warning and Control System [AWACS]	120,664	130,664	10,000
	Program increase: Accelerate 21st Century battle management command and control			+ 10,000
213	Joint Surveillance/Target Attack Radar System [JSTARS] ..	14,888		- 14,888
	Transfer common data link program: Air Force-requested to APAF line 59			- 14,888
222	AF Defensive Cyberspace Operations	24,166	39,166	15,000
	Program increase: Internet of Things protective technologies			+ 7,500
	Program increase: Transportation cyber research ..			+ 7,500
224	Unified Platform (UP)	28,759	21,559	- 7,200
	Restoring acquisition accountability: Lack of justification on foundational efforts			- 7,200
240	Minimum Essential Emergency Communications Network (MEECN)	99,088	67,088	- 32,000
	Maintain program affordability: Unjustified growth in Global Aircrew Strategic Network Terminal Inc 2			- 32,000
246	Airborne SIGINT Enterprise	106,873	109,873	3,000
	Program increase: SIGINT sensor development			+ 3,000
254	Weather Service	26,942	31,942	5,000
	Program increase: Commercial weather system follow-on ..			+ 5,000
255	Air Traffic Control, Approach, and Landing System (ATCALS)	6,271	11,271	5,000
	Program increase: Air traffic management of UAS operations			+ 5,000
268	Dragon U-2	48,518	58,518	10,000
	Program increase: Sensor development			+ 10,000
269	Endurance Unmanned Aerial Vehicles		15,000	15,000
	Program increase: Ultra-long endurance aircraft ..			+ 15,000
308	Financial Management Information Systems Development ..	99,734	93,834	- 5,900
	Maintain program affordability: Increment 2 excess to need			- 5,900
311	Family of Advanced BLoS Terminals (FAB-T)	80,168	60,168	- 20,000
	Restoring acquisition accountability: FET terminals early to need			- 20,000
312	Satellite Control Network (SPACE)	17,808	27,808	10,000
	Program increase: Commercial augmentation service			+ 10,000
318	Spacelift Range System (SPACE)	10,641	20,641	10,000
	Program increase: Space launch range services and capability			+ 10,000
999	Classified Programs	16,534,124	16,463,324	- 70,800
	Classified adjustment			- 70,800

Advanced Composites.—The Committee recognizes the unique role of the Air Force in developing advanced composites for next generation air and space vehicles. The Committee also recognizes the contribution of university research institutions to the Air Force in understanding the technology, processes, and materials used in advanced composites manufacturing as well as addressing shortages of qualified scientists and engineers. The Committee recommends additional funding in applied research and encourages the Air Force to continue to support the test, evaluation, and cer-

tification of advanced composites at academic institutions with proven capabilities in aviation and aerospace.

Technology Transfer.—The Committee recognizes the importance of technology transfer between the Federal Government and non-Federal entities, such as academia, nonprofit organizations, and State and local governments. Technology transfer lowers the cost of new defense-related technology development and ensures that taxpayer investments in research and development benefit the economy and the industrial base. The Committee encourages the Department of Defense to continue placing an increased focus on technology transfer programs by allocating sufficient funding and leveraging the work being performed by Federal laboratories.

Prototyping and Experimentation.—The fiscal year 2019 President's budget request includes \$1,186,075,000 in the Technology Transition Program to demonstrate, prototype, and experiment with innovative technologies and concepts to accelerate their transition to acquisition programs and eventual operational use. Specifically, the Technology Transition Program includes the Adaptive Engine Transition Program [AETP], hypersonics prototyping, smaller lifecycle developmental prototyping efforts, and experimentation campaigns. The Committee remains supportive of these activities, but is concerned about the amount of transparency and budget documentation provided in the budget request. Therefore, the Committee recommendation includes separate budget lines and program elements for the larger activities within the Technology Transition Program, to include AETP, hypersonics prototyping, and directed energy prototyping. The Committee recommends keeping the shorter-term prototyping and experimentation activities in the Technology Transition Program for greater flexibility to explore new ideas, concepts, and technologies. The Committee continues to expect timely and complete communication from the Air Force on prototyping and experimentation activities to include objectives and requirements, transition plans, technology and manufacturing readiness levels, test activities, costs, schedules, and performance metrics.

Air Force Alternative Energy Research.—The Committee is concerned that the Air Force is under-emphasizing the transition of alternative energy research into Air Force enterprise requirements. Therefore, the Committee directs the Secretary of the Air Force to report to the congressional defense committees not later than 90 days after enactment of this act detailing how the Air Force aligns its alternative energy research agenda with enterprise requirements. The report should include the metrics used to evaluate how the expenditure of funds serve the goals identified in its Energy Flight Plan: 2017–2036 and how the Air Force plans to transition existing alternative energy research, development, test and evaluation projects to meet Air Force energy requirements.

Advanced Pilot Training Program.—The fiscal year 2019 President's budget request includes \$265,465,000 to develop the Advanced Pilot Trainer, a modern system to train 4th and 5th generation pilots. The Committee understands that the Air Force plans to complete source selection and award the engineering, manufacturing, and development [EMD] contract in the summer of 2018. Given the age and the cost of sustaining the legacy T–38C pilot

training system as well as the Air Force's growing pilot shortage, the Committee encourages the Air Force to not further delay the award of the EMD contract and subsequently consider options to accelerate the program after contract award.

SPACE PROGRAMS

Space Acquisition Strategy.—The Committee supports the Air Force's plans to develop more capable and defensible satellites and appreciates the intention to be faster, more agile, and more innovative. The Committee also understands that there will be risks and tradeoffs with such a shift in strategy that will mean less predictability and possibly failures. The Committee's concerns, articulated in the Department of Defense Appropriations Act, 2018 (Public Law 115–141), are not about the risks involved with innovation or speed, but rather the risks involved with redeveloping nearly every major space system simultaneously. As noted last year, the Air Force is beginning development efforts for space situation awareness; position, navigation, and timing; weather; overhead persistent infrared; wide-band communications; and protected communications, with major changes to the program of record planned in nearly every case. The Committee remains concerned that the decision to accept less predictability and the possibility of failure in all of these programs simultaneously may pose unacceptable risks to constellation sustainment. These risks may be compounded in an environment where the acquisition workforce, rooted in contemplation and caution, is asked to shift its culture toward speed and agility for so many efforts. Moreover, the Committee is concerned that the funding peaks and troughs that will likely result from simultaneous architecture recapitalization may not take into account budget realities and may risk sustainment of the industrial base at levels adequate for future program needs. The Committee looks forward to receiving the report directed last year that will provide an assessment of these issues and looks forward to working with the Department to achieve the best way forward for the future of these space programs.

Next-Generation Overhead Persistent Infrared.—The fiscal year 2019 President's budget request includes \$643,126,000 for Next-Generation Overhead Persistent Infrared [OPIR], the successor to the Space Based Infrared System [SBIRS]. This is in addition to the \$327,002,000 appropriated in the Department of Defense Appropriations Act, 2018 (Public Law 115–141) for the start of Next-Gen OPIR, following a shift in the Air Force strategy away from a prior plan to purchase additional SBIRS space vehicles. The Committee is supportive of the Air Force's efforts to provide improved missile warning capabilities that are more survivable against emerging threats. However, the Committee has concerns about several shifts in the program plans over the past year, delays in providing a spend plan for the program, and requests for additional funds so soon after the program's start. The Committee is hopeful that these initial hiccups do not signal challenges ahead in meeting the aggressive timelines laid out by the Department. The Committee agrees with Air Force and Department leadership that Next-Gen OPIR will be a pacesetter for rapid acquisition of space programs. Therefore, despite these concerns, the Committee rec-

ommends fully funding the Air Force budget request. In addition, the Committee recommends an additional \$100,000,000 for advanced sensor development. The Committee reiterates guidance from last year that OPIR is designated as a congressional special interest item and continues to direct the Secretary of the Air Force to provide quarterly briefings to the congressional defense committees detailing progress against cost and schedule milestones.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE

Appropriations, 2018	\$22,010,975,000
Budget estimate, 2019	22,016,553,000
Committee recommendation	24,049,621,000

The Committee recommends an appropriation of \$24,049,621,000. This is \$2,033,068,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	RESEARCH, DEVELOPMENT, TEST & EVAL, DEFENSE-WIDE			
	BASIC RESEARCH			
1	DTRA UNIVERSITY STRATEGIC PARTNERSHIP BASIC RESEARCH ..	37,023	37,023	.....
2	DEFENSE RESEARCH SCIENCES	422,130	422,680	+ 550
3	BASIC RESEARCH INITIATIVES	42,702	54,702	+ 12,000
4	BASIC OPERATIONAL MEDICAL RESEARCH SCIENCE	47,825	45,275	- 2,550
5	NATIONAL DEFENSE EDUCATION PROGRAM	85,919	200,919	+ 115,000
6	HISTORICALLY BLACK COLLEGES & UNIV (HBCU)	30,412	32,412	+ 2,000
7	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	42,103	42,103	.....
	TOTAL, BASIC RESEARCH	708,114	835,114	+ 127,000
	APPLIED RESEARCH			
8	JOINT MUNITIONS TECHNOLOGY	19,170	21,670	+ 2,500
9	BIOMEDICAL TECHNOLOGY	101,300	86,700	- 14,600
11	LINCOLN LABORATORY RESEARCH PROGRAM	51,596	51,596	.....
12	APPLIED RESEARCH FOR ADVANCEMENT S&T PRIORITIES	60,688	60,688	.....
13	INFORMATION AND COMMUNICATIONS TECHNOLOGY	395,317	379,817	- 15,500
14	BIOLOGICAL WARFARE DEFENSE	38,640	38,640	.....
15	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	192,674	192,674	.....
16	CYBER SECURITY RESEARCH	14,969	14,969	.....
17	TACTICAL TECHNOLOGY	335,466	321,966	- 13,500
18	MATERIALS AND BIOLOGICAL TECHNOLOGY	226,898	218,898	- 8,000
19	ELECTRONICS TECHNOLOGY	333,847	363,847	+ 30,000
20	WEAPONS OF MASS DESTRUCTION DEFEAT TECHNOLOGIES	161,151	157,151	- 4,000
21	SOFTWARE ENGINEERING INSTITUTE	9,300	9,300	.....
22	SPECIAL OPERATIONS TECHNOLOGY DEVELOPMENT	35,921	35,921	.....
	TOTAL, APPLIED RESEARCH	1,976,937	1,953,837	- 23,100
	ADVANCED TECHNOLOGY DEVELOPMENT			
23	JOINT MUNITIONS ADVANCED TECH INSENSITIVE MUNITIONS AD	25,598	25,598	.....
24	COMBATING TERRORISM TECHNOLOGY SUPPORT	125,271	120,271	- 5,000
25	FOREIGN COMPARATIVE TESTING	24,532	22,332	- 2,200
27	COUNTERPROLIFERATION INITIATIVES—PROLIF PREV & DEFEAT	299,858	270,858	- 29,000
28	ADVANCED CONCEPTS AND PERFORMANCE ASSESSMENT	13,017	13,017	.....
29	WEAPONS TECHNOLOGY .....	.....	13,400	+ 13,400
31	ADVANCED RESEARCH	20,365	42,565	+ 22,200
32	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT	18,644	18,644	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
34	ADVANCED AEROSPACE SYSTEMS	277,603	327,603	+ 50,000
35	SPACE PROGRAMS AND TECHNOLOGY	254,671	249,671	- 5,000
36	ANALYTIC ASSESSMENTS	19,472	18,472	- 1,000
37	ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS	37,263	37,263	.....
38	ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS—MHA	13,621	13,621	.....
39	COMMON KILL VEHICLE TECHNOLOGY	189,753	56,753	- 133,000
40	DEFENSE INNOVATION UNIT EXPERIMENTAL (DIUX)	29,364	29,364	.....
41	TECHNOLOGY INNOVATION	83,143	83,143	.....
42	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—ADVANCED DEV	142,826	142,826	.....
43	RETRACT LARCH	161,128	161,128	.....
44	JOINT ELECTRONIC ADVANCED TECHNOLOGY	12,918	12,918	.....
45	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	106,049	93,049	- 13,000
46	NETWORKED COMMUNICATIONS CAPABILITIES	12,696	12,696	.....
47	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROG	114,637	159,887	+ 45,250
48	MANUFACTURING TECHNOLOGY PROGRAM	49,667	67,167	+ 17,500
49	EMERGING CAPABILITIES TECHNOLOGY DEVELOPMENT	48,338	60,838	+ 12,500
50	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	11,778	19,778	+ 8,000
52	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	76,514	86,514	+ 10,000
53	MICROELECTRONIC TECHNOLOGY DEVELOPMENT AND SUPPORT	168,931	203,931	+ 35,000
54	JOINT WARFIGHTING PROGRAM	5,992	5,992	.....
55	ADVANCED ELECTRONICS TECHNOLOGIES	111,099	118,599	+ 7,500
56	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS	185,984	185,984	.....
57	NETWORK-CENTRIC WARFARE TECHNOLOGY	438,569	434,069	- 4,500
58	SENSOR TECHNOLOGY	190,128	173,601	- 16,527
59	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT	13,564	11,564	- 2,000
60	SOFTWARE ENGINEERING INSTITUTE	15,050	15,050	.....
61	QUICK REACTION SPECIAL PROJECTS	69,626	59,626	- 10,000
62	ENGINEERING SCIENCE AND TECHNOLOGY	19,415	19,415	.....
63	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM	69,533	69,533	.....
64	TEST & EVALUATION SCIENCE & TECHNOLOGY	96,389	132,389	+ 36,000
65	OPERATIONAL ENERGY CAPABILITY IMPROVEMENT	40,582	40,582	.....
66	CWMD SYSTEMS	26,644	26,644	.....
67	SPECIAL OPERATIONS ADVANCED TECHNOLOGY DEVELOPMENT ..	79,380	79,380	.....
	TOTAL, ADVANCED TECHNOLOGY DEVELOPMENT	3,699,612	3,735,735	+ 36,123
	DEMONSTRATION & VALIDATION			
68	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	28,140	28,140	.....
69	WALKOFF	92,222	92,222	.....
70	ACQUISITION ENTERPRISE DATA AND INFORMATION SERVICES ...	2,506	2,506	.....
71	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	40,016	42,016	+ 2,000
72	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	214,173	398,273	+ 184,100
73	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT ...	926,359	803,359	- 123,000
74	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	129,886	113,496	- 16,390
75	BALLISTIC MISSILE DEFENSE SENSORS	220,876	359,176	+ 138,300
76	BALLISTIC MISSILE DEFENSE ENABLING PROGRAMS	540,926	638,426	+ 97,500
77	SPECIAL PROGRAMS—MDA	422,348	422,348	.....
78	AEGIS BMD	767,539	773,520	+ 5,981
	BALLISTIC MISSILE DEFENSE COMMAND AND CONTROL, BATTLE MANAGEMENT	475,168	565,368	+ 90,200
82	BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT	48,767	48,767	.....
83	BALLISTIC MISSILE DEFENSE INTERGRATION AND OPERATIONS. CENTER (MDIOC)	54,925	54,925	.....
84	REGARDING TRENCH	16,916	16,916	.....
85	SEA BASED X-BAND RADAR (SBX)	149,715	136,715	- 13,000
86	ISRAELI COOPERATIVE PROGRAMS	300,000	300,000	.....
87	BALLISTIC MISSILE DEFENSE TEST	365,681	518,848	+ 153,167
88	BALLISTIC MISSILE DEFENSE TARGETS	517,852	561,352	+ 43,500
89	HUMANITARIAN DEMINING	11,347	11,347	.....
90	COALITION WARFARE	8,528	8,528	.....
91	DEPARTMENT OF DEFENSE CORROSION PROGRAM	3,477	8,477	+ 5,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
92	TECHNOLOGY MATURATION INITIATIVES	148,822	316,822	+ 168,000
93	MISSILE DEFEAT PROJECT	58,607	43,607	- 15,000
	COUNTER IMPROVISED-THREAT DEMONSTRATION, PROTOTYPE DEVELOPMENT, AND TESTING	12,993	.....	- 12,993
94	HYPERSONIC DEFENSE	120,444	130,944	+ 10,500
95	ADVANCED INNOVATIVE TECHNOLOGIES	1,431,702	1,496,336	+ 64,634
96A	JOINT ARTIFICIAL INTELLIGENCE CENTER .....	.....	83,000	+ 83,000
97	TRUSTED AND ASSURED MICROELECTRONICS	233,142	595,642	+ 362,500
98	RAPID PROTOTYPING PROGRAM	99,333	99,333	.....
99	DOD UNMANNED AIRCRAFT SYSTEM (UAS) COMMON DEVELOPMENT	3,781	7,781	+ 4,000
100	PACIFIC DISCRIMINATING RADAR	95,765	73,147	- 22,618
101	WARGAMING AND SUPPORT FOR STRATEGIC ANALYSIS (SSA)	3,768	3,768	.....
103	JOINT C5 CAPABILITY DEVELOPMENT, INTEGRATION AND INTEROPERABILITY	22,435	22,435	.....
104	LONG RANGE DISCRIMINATION RADAR	164,562	164,562	.....
105	IMPROVED HOMELAND DEFENSE INTERCEPTORS	561,220	421,820	- 139,400
106	BMD TERMINAL DEFENSE SEGMENT TEST	61,017	61,017	.....
107	AEGIS BMD TEST	95,756	95,756	.....
108	BALLISTIC MISSILE DEFENSE SENSOR TEST	81,001	81,001	.....
109	LAND-BASED SM-3 [LBSM3]	27,692	27,692	.....
111	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT TEST	81,934	72,634	- 9,300
112	MULTI-OBJECT KILL VEHICLE	8,256	3,256	- 5,000
113	ENTERPRISE INFORMATION TECHNOLOGY SYSTEMS	2,600	2,600	.....
114	JOINT ELECTROMAGNETIC TECHNOLOGY [JET] PROGRAM	3,104	3,104	.....
115	CYBER SECURITY INITIATIVE	985	985	.....
116	SPACE TRACKING AND SURVEILLANCE SYSTEM	36,955	36,955	.....
117	BALLISTIC MISSILE DEFENSE SYSEM SPACE PROGRAMS	16,484	121,984	+ 105,500
	TOTAL, DEMONSTRATION & VALIDATION	8,709,725	9,870,906	+ 1,161,181
	ENGINEERING & MANUFACTURING DEVELOPMENT			
118	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT	8,333	8,333	.....
119	PROMPT GLOBAL STRIKE CAPABILITY DEVELOPMENT	263,414	615,914	+ 352,500
120	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	388,701	329,909	- 58,792
121	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM [JTIDS]	19,503	29,503	+ 10,000
122	WEAPONS OF MASS DESTRUCTION DEFEAT CAPABILITIES	6,163	6,163	.....
123	INFORMATION TECHNOLOGY DEVELOPMENT	11,988	11,988	.....
124	HOMELAND PERSONNEL SECURITY INITIATIVE	296	296	.....
125	DEFENSE EXPORTABILITY PROGRAM	1,489	1,489	.....
126	OUS(D) IT DEVELOPMENT INITIATIVES	9,590	9,590	.....
127	DOD ENTERPRISE SYSTEMS DEVELOPMENT AND DEMONSTRATION	3,173	3,173	.....
128	DCMO POLICY AND INTEGRATION	2,105	2,105	.....
129	DEFENSE AGENCY INITIATIVES FINANCIAL SYSTEM	21,156	21,156	.....
130	DEFENSE RETIRED AND ANNUITANT PAY SYSTEM (DRAS)	10,731	10,731	.....
132	DEFENSE-WIDE ELECTRONIC PROCUREMENT CAPABILITIES	6,374	6,374	.....
133	TRUSTED & ASSURED MICROELECTRONICS	56,178	98,678	+ 42,500
134	GLOBAL COMBAT SUPPORT SYSTEM	2,512	2,512	.....
135	DOD ENTERPRISE ENERGY INFORMATION MANAGEMENT (EIM)	2,435	2,435	.....
136	CWMD SYSTEMS: SYSTEM DEVELOPMENT AND DEMONSTRATION	17,048	17,048	.....
	TOTAL, ENGINEERING & MANUFACTURING DEVELOPMENT	831,189	1,177,397	+ 346,208
	RDT&E MANAGEMENT SUPPORT			
137	DEFENSE READINESS REPORTING SYSTEM [DRRS]	6,661	6,661	.....
138	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	4,088	4,088	.....
139	CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT	258,796	278,096	+ 19,300
140	ASSESSMENTS AND EVALUATIONS	31,356	31,356	.....
141	MISSION SUPPORT	65,646	65,646	.....
142	JOINT MISSION ENVIRONMENT TEST CAPABILITY [JMETC]	84,184	89,184	+ 5,000
143	TECHNICAL STUDIES, SUPPORT AND ANALYSIS	22,576	22,576	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
144	JOINT INTEGRATED AIR AND MISSILE DEFENSE ORGANIZATION ...	52,565	52,565	.....
145	CLASSIFIED PROGRAM USD(P) .....	.....	100,000	+ 100,000
146	SYSTEMS ENGINEERING	38,872	38,872	.....
147	STUDIES AND ANALYSIS SUPPORT	3,534	3,534	.....
148	NUCLEAR MATTERS—PHYSICAL SECURITY	5,050	5,050	.....
149	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	11,450	11,450	.....
150	GENERAL SUPPORT TO USD (INTELLIGENCE)	1,693	5,693	+ 4,000
151	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	102,883	102,883	.....
159	SMALL BUSINESS INNOVATION RESEARCH/TECHNOLOGY TRANSFER	2,545	2,545	.....
160	DEFENSE TECHNOLOGY ANALYSIS	24,487	27,487	+ 3,000
161	DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	56,853	56,853	.....
162	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING & EVALUATION	24,914	24,914	.....
163	DEVELOPMENT TEST AND EVALUATION	20,179	25,179	+ 5,000
164	MANAGEMENT HEADQUARTERS (RESEARCH & DEVELOPMENT) ...	13,643	13,643	.....
165	MANAGEMENT HEADQUARTERS DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	4,124	4,124	.....
166	BUDGET AND PROGRAM ASSESSMENTS	5,768	5,768	.....
167	ODNA TECHNOLOGY AND RESOURCE ANALYSIS	1,030	1,030	.....
168	DEFENSE DIGITAL SERVICE (DDS) DEVELOPMENT SUPPORT	1,000	1,000	.....
169	ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	3,400	3,400	.....
170	ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	4,000	4,000	.....
171	DEFENSE OPERATIONS SECURITY (OPSEC)	3,008	10,008	+ 7,000
172	JOINT STAFF ANALYTICAL SUPPORT	6,658	6,658	.....
175	SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES	652	652	.....
176	DEFENSE MILITARY DECEPTION PROGRAM OFFICE	1,005	1,005	.....
177	COMBINED ADVANCED APPLICATIONS	21,363	16,363	- 5,000
180	INTELLIGENCE CAPABILITIES AND INNOVATION INVESTMENTS	109,529	259,529	+ 150,000
181	CWMD SYSTEMS: RDT&E MANAGEMENT SUPPORT	1,244	1,244	.....
184	COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION	42,940	42,940	.....
185	MANAGEMENT HEADQUARTERS—MDA	28,626	28,626	.....
187	JOINT SERVICE PROVIDER (JSP)	5,104	5,104	.....
9999	CLASSIFIED PROGRAMS	45,604	45,604	.....
	TOTAL, RDT&E MANAGEMENT SUPPORT	1,117,030	1,405,330	+ 288,300
	OPERATIONAL SYSTEMS DEVELOPMENT			
189	ENTERPRISE SECURITY SYSTEM (ESS)	9,750	9,750	.....
190	REGIONAL INTERNATIONAL OUTREACH & PARTNERSHIP FOR PEAC	1,855	1,855	.....
191	OVERSEAS HUMANITARIAN ASSISTANCE SHARED INFORMATION SY	304	304	.....
192	INDUSTRIAL BASE ANALYSIS AND SUSTAINMENT SUPPORT	10,376	63,876	+ 53,500
193	OPERATIONAL SYSTEMS DEVELOPMENT	5,915	5,915	.....
194	GLOBAL THEATER SECURITY COOPERATION MANAGEMENT	5,869	5,869	.....
195	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS D	48,741	42,385	- 6,356
196	PLANNING AND DECISION AID SYSTEM	3,037	3,037	.....
197	C4I INTEROPERABILITY	62,814	62,814	.....
203	DEFENSE INFO INFRASTRUCTURE ENGINEERING & INTEGRATION	16,561	16,561	.....
204	LONG HAUL COMMUNICATIONS (DCS)	14,769	14,769	.....
205	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK	17,579	17,579	.....
207	KEY MANAGEMENT INFRASTRUCTURE (KMI)	31,737	31,737	.....
208	INFORMATION SYSTEMS SECURITY PROGRAM	7,940	7,940	.....
209	INFORMATION SYSTEMS SECURITY PROGRAM	229,252	229,252	.....
210	INFORMATION SYSTEMS SECURITY PROGRAM	19,611	19,611	.....
211	GLOBAL COMMAND AND CONTROL SYSTEM	46,900	46,900	.....
212	JOINT SPECTRUM CENTER (DEFENSE SPECTRUM ORGANIZATION)	7,570	7,570	.....
213	JOINT INFORMATION ENVIRONMENT (JIE)	7,947	7,947	.....
215	FEDERAL INVESTIGATIVE SERVICES INFORMATION TECHNOLOGY	39,400	39,400	.....
224	POLICY R&D PROGRAMS	6,262	6,262	.....
225	NET CENTRICITY	16,780	16,780	.....
227	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	6,286	6,286	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
230	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	2,970	2,970	.....
233	INSIDER THREAT	5,954	5,954	.....
234	HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM	2,198	1,198	- 1,000
240	INTELLIGENCE MISSION DATA (IMD)	6,889	6,889	.....
242	LOGISTICS SUPPORT ACTIVITIES	1,317	1,317	.....
243	PACIFIC DISASTER CENTERS	1,770	1,770	.....
244	DEFENSE PROPERTY ACCOUNTABILITY SYSTEM	1,805	1,805	.....
246	MQ-9 UAV	18,403	18,403	.....
248	AVIATION SYSTEMS	184,993	182,862	- 2,131
249	SPECIAL OPERATIONS INTELLIGENCE SYSTEMS DEVELOPMENT ...	10,625	10,625	.....
250	SOF OPERATIONAL ENHANCEMENTS	102,307	102,307	.....
251	WARRIOR SYSTEMS	46,942	55,642	+ 8,700
252	SPECIAL PROGRAMS	2,479	2,479	.....
253	UNMANNED ISR	27,270	33,270	+ 6,000
254	SOF TACTICAL VEHICLES	1,121	1,121	.....
255	SOF MARITIME SYSTEMS	42,471	42,471	.....
256	SOF GLOBAL VIDEO SURVEILLANCE ACTIVITIES	4,780	4,780	.....
257	SOF OPERATIONAL ENHANCEMENTS INTELLIGENCE	12,176	12,176	.....
258	TELEPORT PROGRAM	2,323	723	- 1,600
300	NATIONAL SECURITY INNOVATION ACTIVITIES .....	.....	75,000	+ 75,000
	TOTAL, OPERATIONAL SYSTEMS DEVELOPMENT	1,096,048	1,228,161	+ 132,113
999	CLASSIFIED PROGRAMS	3,877,898	3,843,141	- 34,757
	TOTAL, RESEARCH, DEVELOPMENT, TEST & EVAL, DEF- WIDE	22,016,553	24,049,621	+ 2,033,068

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	Defense Research Sciences	422,130	422,680	+ 550
	Program increase: DARPA foundational and applied artificial intelligence .....	.....	.....	+ 15,000
	Improving Funds Management: Program delays .....	.....	.....	- 14,450
3	Basic Research Initiatives	42,702	54,702	+ 12,000
	Program increase: DEPCOR .....	.....	.....	+ 12,000
4	Basic Operational Medical Research Science	47,825	45,275	- 2,550
	Improving Funds Management: Program delays .....	.....	.....	- 12,550
	Program increase: TBI Treatment for blast injuries .....	.....	.....	+ 10,000
5	National Defense Education Program	85,919	200,919	+ 115,000
	Basic research program increase .....	.....	.....	+ 100,000
	Program increase: Manufacturing engineering education program .....	.....	.....	+ 15,000
6	Historically Black Colleges and Universities/Minority Institutions	30,412	32,412	+ 2,000
	Program increase .....	.....	.....	+ 2,000
8	Joint Munitions Technology	19,170	21,670	+ 2,500
	Program increase: Insensitive munitions .....	.....	.....	+ 2,500
9	Biomedical Technology	101,300	86,700	- 14,600
	Improving Funds Management: Program delays .....	.....	.....	- 14,600
13	Information & Communications Technology	395,317	379,817	- 15,500
	Program increase: DARPA foundational and applied artificial intelligence .....	.....	.....	+ 35,000
	Improving Funds Management: Program delays .....	.....	.....	- 50,500
17	Tactical Technology	335,466	321,966	- 13,500
	Improving Funds Management: Program delays .....	.....	.....	- 16,000
	Program increase .....	.....	.....	+ 2,500
18	Materials and Biological Technology	226,898	218,898	- 8,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Improving Funds Management: Program delays			- 8,000
19	Electronics Technology	333,847	363,847	+ 30,000
	Program increase: DARPA electronics resurgence initiative			+ 30,000
20	Counter Weapons of Mass Destruction Applied Research	161,151	157,151	- 4,000
	JIDO unjustified base budget request			- 4,000
24	Combating Terrorism Technology Support	125,271	120,271	- 5,000
	Improving funds management: Unjustified growth			- 30,000
	Transfer funding from RDDW OCO Line 24: Anti-Tunneling			+ 25,000
25	Foreign Comparative Testing	24,532	22,332	- 2,200
	Improving funds management: Prior year carryover			- 2,200
27	Counter Weapons of Mass Destruction Advanced Technology Development	299,858	270,858	- 29,000
	JIDO unjustified base budget request			- 29,000
29	Weapons Technology		13,400	+ 13,400
	Program increase: Hypersonic Defense			+ 13,400
31	Advanced Research	20,365	42,565	+ 22,200
	Program increase: Hypersonic Defense			+ 22,200
34	Advanced Aerospace Systems	277,603	327,603	+ 50,000
	Program increase: Hypersonics weapons programs development and transition			+ 50,000
35	Space Programs and Technology	254,671	249,671	- 5,000
	Insufficient budget justification: RASR			- 5,000
36	Analytic Assessments	19,472	18,472	- 1,000
	Improving funds management: Prior year carryover			- 1,000
39	Common Kill Vehicle Technology	189,753	56,753	- 133,000
	Transfer to line 92 for low power laser demonstrator prototypes post-PDR risk reduction through CDR only			- 78,000
	Restoring acquisition accountability: program adjustment			- 55,000
45	Joint Capability Technology Demonstrations	106,049	93,049	- 13,000
	Improving funds management: Prior year carryover			- 13,000
47	Defense-Wide Manufacturing Science and Technology Program	114,637	159,887	+ 45,250
	Program increase: Manufacturing engineering programs			+ 5,000
	Program increase: Manufacturing innovation institutes			+ 10,250
	Program increase: Advanced manufacturing			+ 30,000
48	Manufacturing Technology Program	49,667	67,167	+ 17,500
	Program increase			+ 2,500
	Program increase: All solid-state battery development			+ 10,000
	Program increase: Digital innovative design for reliable casting performance			+ 5,000
49	Emerging Capabilities Technology Development	48,338	60,838	+ 12,500
	Improving funds management: Prior year carryover			- 5,000
	Program increase: Disruptive technology and operational concept for air and missile defense			+ 7,500
	Program increase: High-altitude optical reconnaissance unit and sensors			+ 10,000
50	Generic Logistics R&D Technology Demonstrations	11,778	19,778	+ 8,000
	Program increase: Liquid hydrocarbon fuels			+ 7,000
	Program increase			+ 1,000
52	Strategic Environmental Research Program	76,514	86,514	+ 10,000
	Readiness Increase			+ 10,000
53	Microelectronics Technology Development and Support	168,931	203,931	+ 35,000
	Program increase: Trusted foundry			+ 30,000
	Program increase: Tunable filter, support for microelectronics development			+ 5,000
55	Advanced Electronics Technologies	111,099	118,599	+ 7,500
	Program increase: Support for the electronics resurgence initiative			+ 7,500
57	Network-Centric Warfare Technology	438,569	434,069	- 4,500
	Improving Funds Management: Program delays			- 4,500
58	Sensor Technology	190,128	173,601	- 16,527
	Improving Funds Management: Program delays			- 18,027
	Program increase: Sensors and processing systems technology			+ 1,500
59	Distributed Learning Advanced Technology Development	13,564	11,564	- 2,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Improving funds management: Prior year carryover			- 2,000
61	Quick Reaction Special Projects	69,626	59,626	- 10,000
	Improving funds management: Prior year carryover			- 10,000
64	Test & Evaluation Science & Technology	96,389	132,389	+ 36,000
	Program Increase: Additive manufacturing for hypersonic affordability			+ 5,000
	Program Increase: Advanced technology development			+ 16,000
	Program increase: Hypersonics and directed energy test ..			+ 10,000
	Program increase: Workforce development			+ 5,000
65	Operational Energy Capability Improvement	40,582	40,582	
	Improving funds management: Prior year carryover			- 5,000
	Program increase			+ 5,000
71	Environmental Security Technical Certification Program	40,016	42,016	+ 2,000
	Program increase: Technology demonstration program			+ 2,000
72	Ballistic Missile Defense Terminal Defense Segment	214,173	398,273	+ 184,100
	Program increase: USFK JEON			+ 184,100
73	Ballistic Missile Defense Midcourse Defense Segment	926,359	803,359	- 123,000
	Improving funds management: Boosters with RKV's funded in Public Law 115-141			- 52,000
	Improving funds management: NRE funded in Public Law 115-141			- 65,000
	Transfer funding for missile field components to Procurement, Defense-wide, line 27 for proper execution: Transfer requested by Missile Defense Agency			- 41,000
	Program increase: Cybersecurity			+ 10,000
	Program increase: Discrimination capabilities			+ 25,000
74	Chemical and Biological Defense Program—Dem/Val	129,886	113,496	- 16,390
	Improving Funds Management: Program delays			- 16,390
75	Ballistic Missile Defense Sensors	220,876	359,176	+ 138,300
	Program increase: Cybersecurity			+ 5,000
	Program increase: Discrimination capabilities			+ 93,000
	Program increase: Systems engineering			+ 16,300
	Program increase: USFK JEON			+ 24,000
76	BMD Enabling Programs	540,926	638,426	+ 97,500
	Program increase: Cyber assessment			+ 16,200
	Program increase: Cybersecurity			+ 40,000
	Program increase: Discrimination capabilities			+ 4,000
	Program increase: Facilities, sustainment, restoration and modernization			+ 3,200
	Program increase: Systems engineering			+ 34,100
78	AEGIS BMD	767,539	773,520	+ 5,981
	Program increase: Discrimination capabilities			+ 4,000
	Program increase: Facilities, sustainment, restoration and modernization			+ 1,981
81	Ballistic Missile Defense Command and Control, Battle Management and Communication	475,168	565,368	+ 90,200
	Restoring acquisition accountability: Spiral 8.2-3 scope adjustment			- 6,200
	Restoring acquisition accountability: BMDS Increment 8 early to need			- 7,100
	Program increase: Cybersecurity			+ 10,000
	Program increase: Mobile sensor integration			+ 93,500
85	Sea Based X-Band Radar [SBX]	149,715	136,715	- 13,000
	Improving funds management: Software upgrades funded in Public Law 115-141			- 13,000
87	Ballistic Missile Defense Test	365,681	518,848	+ 153,167
	Program increase: Cybersecurity			+ 20,000
	Program increase: Facilities, sustainment, restoration and modernization			+ 29,000
	Program increase: HALO			+ 32,267
	Program increase: USFK JEON			+ 71,900
88	Ballistic Missile Defense Targets	517,852	561,352	+ 43,500
	Improving funds management: Boosters with RKV's funded in Public Law 115-141			- 36,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Program increase: Cybersecurity			+ 5,000
	Program increase: Special programs target			+ 70,000
	Program increase: USFK JEON			+ 4,500
91	Department of Defense Corrosion Program	3,477	8,477	+ 5,000
	Program increase			+ 5,000
92	Technology Maturation Initiatives	148,822	316,822	+ 168,000
	Transfer from line 39 for low power laser demonstrator prototypes post-PDR risk reduction through PDR only ..			+ 78,000
	Program increase: Cybersecurity			+ 5,000
	Program increase: Laser scaling for boost phase intercept ..			+ 85,000
93	Missile Defeat Project	58,607	43,607	- 15,000
	Classified Adjustment			- 15,000
94	Counter Improvised-Threat Demonstration, Prototype Develop- ment, and Testing	12,993		- 12,993
	JIDO unjustified base budget request			- 12,993
95	Hypersonic Defense	120,444	130,944	+ 10,500
	Program increase: Hypersonic Defense			+ 10,500
96	Advanced Innovative Technologies	1,431,702	1,496,336	+ 64,634
	Classified Adjustment			- 24,366
	Program increase: Machine learning and advanced manu- facturing			+ 25,000
	Program increase: Rail gun with hypervelocity projectile ..			+ 14,000
	Program increase: Quartermaster Pathfinder			+ 50,000
96A	Joint Artificial Intelligence Center		83,000	+ 83,000
	Program increase: Artificial intelligence			+ 83,000
97	Trusted & Assured Microelectronics	233,142	595,642	+ 362,500
	Program increase: Next generation microelectronics			+ 347,000
	Program increase: Joint federated assurance center			+ 10,000
	Program increase: New trust approach development			+ 5,500
99	Department of Defense (DoD) Unmanned System Common De- velopment	3,781	7,781	+ 4,000
	Program increase: Unmanned traffic management			+ 4,000
100	Pacific Discriminating Radar	95,765	73,147	- 22,618
	Restoring acquisition accountability: MD51 early to need ..			- 22,618
105	Improved Homeland Defense Interceptors	561,220	421,820	- 139,400
	Improving funds management: Boosters with RKVs funded in Public Law 115-141			- 139,400
111	Ballistic Missile Defense Midcourse Segment Test	81,934	72,634	- 9,300
	Improving funds management: Boosters with RKVs funded in Public Law 115-141			- 9,300
112	Multi-Object Kill Vehicle	8,256	3,256	- 5,000
	Restoring acquisition accountability: Program adjustment ..			- 5,000
117	Ballistic Missile Defense System Space Programs	16,484	121,984	+ 105,500
	Program increase: Cybersecurity			+ 5,000
	Program increase: Missile Defense Tracking System			+ 100,500
119	Prompt Global Strike Capability Development	263,414	615,914	+ 352,500
	Program increase: Program acceleration			+ 345,000
	Program increase			+ 7,500
120	Chemical and Biological Defense Program—EMD	388,701	329,909	- 58,792
	Improving Funds Management: Program delays			- 58,792
121	Joint Tactical Information Distribution System [JTIDS]	19,503	29,503	+ 10,000
	Program increase: Integrated kinetic and non-kinetic nodal analysis			+ 10,000
133	Trusted & Assured Microelectronics	56,178	98,678	+ 42,500
	Program increase: Next generation microelectronics			+ 40,000
	Program increase: New trust approach development			+ 2,500
139	Central Test and Evaluation Investment Development (CTEIP) ..	258,796	278,096	+ 19,300
	Program increase: Advanced hypersonic wind tunnel ex- perimentation			+ 10,000
	Program increase: Defense threat center of excellence			+ 9,300
142	Joint Mission Environment Test Capability [JMETC]	84,184	89,184	+ 5,000
	Program Increase: Cyber range capacity and development ..			+ 5,000
145	Classified Program USD(P)		100,000	+ 100,000
	Classified adjustment			+ 100,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
150	General Support to USD (Intelligence)	1,693	5,693	+ 4,000
	Program increase: Academic support			+ 4,000
160	Defense Technology Analysis	24,487	27,487	+ 3,000
	Program increase: Defense lab transfer and transition manufacturing			+ 3,000
163	Development Test and Evaluation	20,179	25,179	+ 5,000
	Program increase: Improve software testing capabilities ..			+ 5,000
171	Defense Operations Security Initiative (DOSI)	3,008	10,008	+ 7,000
	Program increase: Defense operations security initiative ..			+ 7,000
177	Combined Advanced Applications	21,363	16,363	- 5,000
	Improving funds management: Requirement previously funded			- 5,000
180	Intelligence Capabilities and Innovation Investments	109,529	259,529	+ 150,000
	Program increase: Artificial intelligence—Project Maven ..			+ 150,000
192	Industrial Base Analysis and Sustainment Support	10,376	63,876	+ 53,500
	Program increase			+ 3,500
	Program Increase: Expand manufacturing capability for cold rolled aluminum			+ 10,000
	Program increase: National security technology accelerator			+ 15,000
	Program Increase: Large scale classified electron beam welding			+ 15,000
	Program increase: Risk reduction for tungsten defense products			+ 10,000
195	Chemical and Biological Defense (Operational Systems Development)	48,741	42,385	- 6,356
	Improving Funds Management: Program delays			- 6,356
234	Homeland Defense Technology Transfer Program	2,198	1,198	- 1,000
	Improving funds management: Prior year carryover			- 1,000
248	Aviation Systems	184,993	182,862	- 2,131
	Improving Funds Management: TFTA Training System Development early to need			- 3,879
	Insufficient budget justification: EC-130J risk reduction ..			- 1,252
	Program increase: VTOL UAS research			+ 3,000
251	Warrior Systems	46,942	55,642	+ 8,700
	Improving Funds Management: Ordnance Items DTE excess growth			- 4,000
	Improving Funds Management: CUAS Test and Evaluation excess growth			- 3,800
	Program Increase: Rotary wing aviation helmet			+ 1,500
	Program increase: Small glide munition UAS integration ..			+ 15,000
253	Unmanned ISR	27,270	33,270	+ 6,000
	Program increase: UAS anti-icing			+ 6,000
258	Teleport Program	2,323	723	- 1,600
	Improving funds management: Unjustified growth			- 1,600
300	National Security Innovation Activities		75,000	+ 75,000
	Program increase: Capital investment—Section 217 of Senate NDAA			+ 75,000
999	Classified Programs	3,877,898	3,843,141	- 34,757
	Classified adjustment			- 34,757

Trusted Microelectronics.—In the fiscal year 2019 budget submission, the Department requested \$587,320,000 for trusted and assured microelectronics and DARPA’s Electronics Resurgence Initiative. The Committee is pleased to see the Department prioritize programs that will ensure access to trusted microelectronics and develop manufacturing processes for next generation chips. However, the Committee notes that additional funds are needed in fiscal year 2019 for the United States to maintain global microelectronics leadership and added \$447,000,000 above the President’s budget request to accelerate multiple efforts. Therefore, the Com-

mittee directs the Under Secretary of Defense (Research and Engineering) to provide a report to the congressional defense committees not later than 180 days after enactment of this act which details a plan for using increased resources to accelerate the trusted microelectronics strategy and roadmap. The report shall also include a definition of the scope of the microelectronics problem; an update on domestic manufacturing capability and infrastructure needed to provide legacy and future chips for our weapons systems; and testing protocols that the Department is utilizing to ensure current microelectronics have achieved security assurance.

Artificial Intelligence.—The Committee understands the importance of investing in high priority advanced technology areas such as artificial intelligence [AI] and machine learning in order to maintain the United States' military superiority and technological edge over near-peer adversaries. Accordingly, the Committee adds \$308,000,000 in addition to amounts requested in the fiscal year 2019 budget submission to achieve dominant AI capabilities, including an additional \$150,000,000 for the algorithmic warfare cross function team also known as Project Maven and \$83,000,000 to establish a Joint Artificial Intelligence Center. The Committee believes these critical investments will accelerate the pursuit of state of the art AI systems that can be rapidly adapted to the warfighting mission needs of the Department. Therefore, the Committee directs the Under Secretary of Defense (Research and Engineering) to brief the congressional defense committees with a comprehensive plan to execute additional funding provided for AI and machine learning not later than 180 days after enactment of this act and strongly encourages the Department to establish long-term, strategic partnerships with non-traditional defense contractors that operate outside of the traditional defense industrial base.

Short-Wave Infrared Cameras.—The Committee is aware of recent advances in ultra-fast short-wave infrared camera technology that rapidly capture images and detect threats with extreme sensitivity and precision. New advances in machine vision, powered by rapidly growing artificial intelligence and neuromorphic technologies can absorb and process data at much higher rates. The Committee encourages the Secretary of Defense to increase its research investments into these areas with the goal of creating new threat identification systems.

Manufacturing Technology Program.—The Committee understands that metal castings play a significant role in ensuring warfighter preparedness and that investment is needed in castings technology to maintain technological superiority in the advanced manufacturing industry. Therefore, the Committee provides an additional \$5,000,000 for the Manufacturing Technology Program and encourages the Secretary of Defense to invest in metal castings technology.

All Solid-State Battery Technology.—The Committee recognizes that development of all solid-state battery technology could dramatically increase the energy density of current batteries while providing a safer power system by eliminating the need for a flammable electrolyte and reducing the complexity of the battery management system. Batteries with higher energy densities would improve a soldier's warfighting capability by reducing the weight of

multiple batteries required for combat operations. The Committee encourages the Secretary of Defense to continue investments that improve battery densities thereby reducing the weight carried by soldiers in the field.

Strategic and Critical Minerals.—The Committee understands that the United States is reliant on the importation of strategic and critical minerals that are essential to national defense and believes that the Department of Defense should be integrated into the comprehensive Federal strategy as directed by Executive Order 13817. Therefore, the Committee directs the Under Secretary of Defense (Research and Engineering) and the Director of the Defense Logistics Agency to produce a joint report to the congressional defense committees not later than 180 days after enactment of this act which details Department of Defense acquisition programs that require strategic and critical minerals, foreign sources of these minerals, and current supply levels of critical minerals in US stockpiles available for Department usage. In addition, the report should describe Department agencies that are capable of performing topographic, geologic, and geophysical mapping of the United States and a list of strategic and critical minerals that should be prioritized for mapping in order to enhance supply chain security.

Manufacturing Engineering Programs.—The Committee recognizes that the United States must maintain a technically trained workforce to meet the defense industrial base requirements of the Department of Defense. Therefore, the Committee recommends an additional \$5,000,000 above the fiscal year 2019 President’s budget request for manufacturing engineering grants and encourages the Secretary of Defense to prioritize funding under this program to support community colleges and technical schools.

National Defense Education Program.—The Committee understands that the Nation’s global economic competitiveness and national security are dependent on a strong foundation in science, technology, engineering and math and believes that increased investment is needed by the Department in these fields. Therefore, the Committee provides an increase in basic research funds for the National Defense Education Program and encourages the Department to partner with the Goldwater Foundation for additional education scholarships.

OPERATIONAL TEST AND EVALUATION, DEFENSE

Appropriations, 2018	\$210,900,000
Budget estimate, 2019	221,009,000
Committee recommendation	381,009,000

The Committee recommends an appropriation of \$381,009,000. This is \$160,000,000 above the budget estimate.

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Operational Test and Evaluation	85,685	85,685	.....
2	Live Fire Test and Evaluation	64,332	64,332	.....
3	Operational Test Activities and Analyses	70,992	230,992	+ 160,000
	Program increase for T&E infrastructure .....	.....	.....	+ 150,000
	Program increase: Advanced satellite navigation receiver .....	.....	.....	+ 10,000
	Total, Operational Test and Evaluation, Defense	221,009	381,009	+ 160,000

Cyber Red Team Testing.—The Committee recognizes the Department's efforts to enhance and develop cyber threat emulation capabilities through the use of cyber Red Teams. The Committee is concerned with the volume of cyber intrusions that threaten our weapons systems and remains concerned with the inability of the Department of Defense to get ahead of this constant evolving threat. Therefore, the Committee directs the Director, Office of Operational Test and Evaluation, in consultation with the Secretary of Defense, to provide a report to the congressional defense committees not later than 90 days of enactment of this act on the cyber vulnerabilities of the nation's critical weapons systems. The classified report should outline the identified threats along with the resources required to mitigate such threats. Further, in cases where vulnerabilities were determined for a weapons system, the Director shall provide an explanation of what actions have been taken to date to address such deficiencies.

TITLE V
 REVOLVING AND MANAGEMENT FUNDS
 DEFENSE WORKING CAPITAL FUNDS

Appropriations, 2018 \$1,685,596,000
 Budget estimate, 2019 1,542,115,000
 Committee recommendation 1,641,115,000

The Committee recommends an appropriation of \$1,641,115,000. This is \$99,000,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Item	2019 budget estimate	Committee recommendation	Change from budget estimate
Arsenals Initiative	59,002	158,002	+ 99,000
Program increase			+ 99,000
Supply Management	99,763	99,763	
Total, Defense Working Capital Fund, Army	158,765	257,765	+ 99,000
Supplies and Materials	69,054	69,054	
Total, Defense Working Capital Fund, Air Force	69,054	69,054	
Defense Logistics Agency	48,096	48,096	
Total, Defense Working Capital Fund, Defense-wide	48,096	48,096	
Commissary Operations	1,266,200	1,266,200	
Total, Defense Working Capital Fund, Defense-wide, DECA	1,266,200	1,266,200	
Grand Total, Defense Working Capital Funds	1,542,115	1,641,115	+ 99,000

Meals Ready-to-Eat.—The Committee recommends full funding for the Defense Logistics Agency’s request of 2.5 million cases of Meals Ready to Eat and reaffirms its support for the War Reserve stock objective of 5.0 million cases and the minimum sustainment rate for the industrial base.

Defense Commissary Agency.—The Department of Defense recently announced its intention to begin the sale of beer and wine in defense commissaries. The Committee supports this decision as a measure to increase customer convenience and satisfaction. However, the Committee notes that the sale of distilled spirits is not included in the new policy. Since military commissary stores are intended to be similar to commercial grocery stores and roughly half

of States legally sell distilled spirits in grocery stores, the Committee believes that the Department should have explored this option to further improve customer convenience at all military commissaries. The Committee directs the Undersecretary of Defense (Personnel and Readiness) to review the policy for sale of alcohol at military commissaries and submit a report to the House and Senate Appropriations Committees not later than 90 days after the enactment of this act on the decisions which led to the exclusion of distilled spirits and whether the Department will reconsider its decision to restrict the sale of distilled spirits in military commissaries.

TITLE VI
OTHER DEPARTMENT OF DEFENSE PROGRAMS
DEFENSE HEALTH PROGRAM

Appropriations, 2018 \$34,428,167,000
 Budget estimate, 2019 33,729,192,000
 Committee recommendation 34,135,992,000

The Committee recommends an appropriation of \$34,135,992,000.
 This is \$406,800,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	DEFENSE HEALTH PROGRAM			
	OPERATION AND MAINTENANCE			
10	IN-HOUSE CARE	9,738,569	9,499,169	- 239,400
20	PRIVATE SECTOR CARE	15,103,735	14,875,735	- 228,000
30	CONSOLIDATED HEALTH SUPPORT	2,107,961	2,054,961	- 53,000
40	INFORMATION MANAGEMENT	2,039,878	2,029,878	- 10,000
50	MANAGEMENT ACTIVITIES	307,629	307,629	.....
60	EDUCATION AND TRAINING	756,778	737,278	- 19,500
70	BASE OPERATIONS/COMMUNICATIONS	2,090,845	2,084,345	- 6,500
	SUBTOTAL, OPERATION AND MAINTENANCE	32,145,395	31,588,995	- 556,400
	PROCUREMENT			
150	INITIAL OUTFITTING	33,056	33,056	.....
160	REPLACEMENT AND MODERNIZATION	343,424	343,424	.....
180	DOD HEALTH MANAGEMENT SYSTEM MODERNIZATION	496,680	496,680	.....
	SUBTOTAL, PROCUREMENT	873,160	873,160	.....
	RESEARCH DEVELOPMENT TEST AND EVALUATION			
80	RESEARCH	11,386	11,386	.....
90	EXPLORATORY DEVELOPMENT	75,010	75,010	.....
100	ADVANCED DEVELOPMENT	275,258	275,258	.....
110	DEMONSTRATION/VALIDATION	117,529	117,529	.....
120	ENGINEERING DEVELOPMENT	151,985	151,985	.....
130	MANAGEMENT AND SUPPORT	63,755	63,755	.....
140	CAPABILITIES ENHANCEMENT	15,714	15,714	.....
150	UNDISTRIBUTED MEDICAL RESEARCH .....	.....	963,200	+ 963,200
	SUBTOTAL, RESEARCH DEVELOPMENT TEST AND EVALUATION	710,637	1,673,837	+ 963,200
	TOTAL, DEFENSE HEALTH PROGRAM	33,729,192	34,135,992	+ 406,800

COMMITTEE RECOMMENDED ADJUSTMENTS

The following table details the adjustments recommended by the Committee:

[In thousands of dollars]

Item	2019 budget estimate	Committee recommendation	Change from budget estimate
Operation and Maintenance	32,145,395	31,588,995	− 556,400
In-House Care	9,738,569	9,499,169	− 239,400
Improving funds management: Travel excess growth			− 5,300
Improving funds management: Printing and reproduction excess growth			− 4,100
Improving funds management: Pharmaceutical drugs excess growth			− 140,000
Improving funds management: Medical care contracts excess growth			− 90,000
Private Sector Care	15,103,735	14,875,735	− 228,000
Improving funds management: Pharmaceutical drugs excess growth			− 93,000
Improving funds management: Historical underexecution			− 135,000
Consolidated Health Support	2,107,961	2,054,961	− 53,000
Improving funds management: Medical care contracts excess growth			− 53,000
Information Management/IT	2,039,878	2,029,878	− 10,000
Program increase: Med-COI infrastructure			+ 70,000
Improving funds management: GENESIS deployment delay			− 55,000
Improving funds management: TMIP-J funds excess to need			− 20,000
Improving funds management: JOMIS funds excess to need			− 5,000
Management Activities	307,629	307,629	
Education and Training	756,778	737,278	− 19,500
Program increase: Specialized medical pilot program			+ 2,500
Improving funds management: Historical underexecution			− 22,000
Base Operations and Communications	2,090,845	2,084,345	− 6,500
Improving funds management: Visual information systems underexecution			− 3,000
Improving funds management: Defense Health Headquarters protection excess growth			− 3,500
Procurement	873,160	873,160	
Research and Development	710,637	1,673,837	+ 963,200
Restore core funding reduction			+ 201,700
Peer-reviewed ALS research			+ 10,000
Peer-reviewed breast cancer research			+ 120,000
Peer-reviewed cancer research			+ 80,000
Peer-reviewed epilepsy research			+ 7,500
Peer-reviewed medical research			+ 330,000
Peer-reviewed melanoma research			+ 10,000
Peer-reviewed ovarian cancer research			+ 10,000
Peer-reviewed prostate cancer research			+ 64,000
Peer-reviewed traumatic brain injury and psychological health research			+ 60,000
Chronic pain management			+ 10,000
Joint warfighter medical research			+ 50,000
Orthotics and prosthetics outcomes research			+ 10,000
Total	33,729,192	34,135,992	+ 406,800

Defense Health Program Reprogramming Procedures.—The Committee remains concerned regarding the transfer of funds from the In-House Care budget sub-activity to pay for contractor-provided medical care. To limit such transfers and improve oversight within the Defense Health Program operation and maintenance account,

the Committee includes a provision which caps the funds available for Private Sector Care under the TRICARE program subject to prior approval reprogramming procedures. The provision and accompanying report language should not be interpreted by the Department as limiting the amount of funds that may be transferred to the Direct Care System from other budget activities within the Defense Health Program. In addition, funding for the In-House Care and Private Sector Care budget sub-activities are designated as congressional special interest items. Any transfer of funds in excess of \$15,000,000 into or out of these sub-activities requires the Secretary of Defense to follow prior approval reprogramming procedures.

The Committee directs the Secretary of Defense to provide written notification to the congressional defense committees of cumulative transfers in excess of \$10,000,000 out of the Private Sector Care budget sub-activity not later than fifteen days after such a transfer. The Committee further directs the Assistant Secretary of Defense (Health Affairs) to provide quarterly reports to the congressional defense committees on budget execution data for all of the Defense Health Program budget activities and to adequately reflect changes to the budget activities requested by the Services in future budget submissions.

Carryover.—For fiscal year 2019, the Committee recommends 1 percent carryover authority for the operation and maintenance account of the Defense Health Program. The Committee directs the Assistant Secretary of Defense (Health Affairs) to submit a detailed spend plan for any fiscal year 2018 designated carryover funds to the congressional defense committees not less than 30 days prior to executing the carryover funds.

Resolution of Payments to State Vaccine Programs.—The Department of Defense Appropriations Act, 2018 (Public Law 115–141) directed the Assistant Secretary of Defense (Health Affairs) to prioritize the payment of arrears to state vaccine programs in expediture of fiscal year 2018 carryover funds. The Committee directs the Assistant Secretary of Defense (Health Affairs) to provide a report to the congressional defense committees not later than 45 days after enactment of this act on how the Department plans to make final payment of arrears to state vaccine programs.

Operation and Maintenance Reductions.—The fiscal year 2019 President's budget request includes Department-initiated reductions in most Operation and Maintenance sub-activities to account for the Government Accountability Office's analysis of prior year execution. The Committee commends the Department for taking this step and expects future budget requests to align with recent execution trends. The Committee notes that the budget justification materials for the Defense Health Program do not delineate operation and maintenance funding between the Defense Health Agency, Army, Navy, Air Force, Uniformed Services University of Health Sciences, and National Capital Region Medical Directorate. Given this lack of granular visibility, the Department is expected to implement operation and maintenance reductions among the various components in accordance with their historical underexecution.

Electronic Health Record.—The Committee remains supportive of the goal of the Departments of Defense and Veterans Affairs to develop fully interoperable electronic health records that can exchange data in a meaningful way and be used in a dynamic environment to improve patient care and facilitate smoother transitions for servicemembers from military service to veteran status. After achieving initial operating capability in November 2017 with completion of deployment to four sites in the Pacific Northwest, the Department decided to undertake an eight week Stabilization and Adoption period in order to evaluate the initial deployments. This evaluation included an analysis of roles, workflows, and training activities and further collection of user feedback in order to implement changes prior to continuing the wave deployment schedule to more military treatment facilities, with a decision on further deployments scheduled for January 2019.

Given this delay in the deployment of the Military Health System [MHS] GENESIS program, the Committee recommends a reduction of \$80,000,000 to the fiscal year 2019 President's budget request and a rescission of \$215,000,000 of fiscal year 2018 procurement funds in order to properly realign resources to a revised deployment plan. The Committee also recommends \$70,000,000 above the budget request for the Medical Community of Interest [Med-COI], the IT infrastructure backbone of the new electronic health record, as the Department has acknowledged that Med-COI deployment should precede MHS GENESIS deployment by 6 months at each site. The Committee expects that execution information for these additional funds will be clearly laid out in the fiscal year 2020 budget justification materials. The Committee understands that the next 6 months will be an important time for MHS GENESIS with upcoming program decisions on a plan for expanding Med-COI in July 2018, an updated Life Cycle Cost Estimate in Fall 2018, and a decision on further wave deployments in January 2019. The Committee anticipates timely updates as these program decisions are made.

The Program Executive Officer, Defense Healthcare Management Systems [PEO DHMS], in conjunction with the Director of the Interagency Program Office [IPO], is directed to provide quarterly reports to the congressional defense committees on the cost and schedule of the program, to include milestones, knowledge points, and acquisition timelines, as well as quarterly obligation reports. These reports should also include the following: (1) any changes to the deployment timeline, including benchmarks, for full operating capability; (2) any refinements to the cost estimate for full operating capability and the total life cycle cost of the project; and (3) the progress toward developing, implementing, and fielding the interoperable electronic health record throughout the two Departments' medical facilities. The Committee further directs the PEO DHMS to continue briefing the House and Senate Defense Appropriations Subcommittees on a quarterly basis, coinciding with the report submission.

Finally, the Committee directs the IPO to continue to provide quarterly reports to the House and Senate Subcommittees on Appropriations for Defense and Military Construction, Veterans Af-

fairs, and Related Agencies on the progress of interoperability between the two Departments.

Traumatic Brain Injury [TBI]/ Psychological Health.—The Committee recommends \$60,000,000 above the fiscal year 2019 President's budget request for continued research into treatment, prevention, and detection of TBI and improved psychological health. The Committee directs the Assistant Secretary of Defense (Health Affairs) to submit a report to the congressional defense committees not later than 180 days of enactment of this act on expenditure and obligation data of additional funding added by Congress for psychological health and TBI. This report should include information on agreements made with other government agencies.

Additionally, the Committee is aware of recent medical advances in drug development for neurodegenerative diseases and encourages the Department to further its research into developing drugs that reverse, halt, or slow the neurodegenerative process associated with TBI including opportunities through public-private partnerships, such as the Medical Technology Consortium. The Committee is also aware of efforts to establish a brain donor network to better understand mild traumatic brain injury and identify biomarkers for diagnosis and monitoring. The Committee supports expansion of this network and inclusion of states with high populations of veterans and suicide incidence into this research. Finally, the Committee is encouraged by the advancement of expeditionary, non-invasive medical devices for analyzing the full spectrum of TBI that have received clearance by the U.S. Food and Drug Administration. These devices provide clinicians with a comprehensive and objective clinical picture to help them identify the full spectrum of brain injuries shortly after injury, and the Committee encourages continued test and evaluation of such devices.

Peer-Reviewed Medical Research Program.—The Committee recommends \$330,000,000 for the Peer-Reviewed Medical Research Program. The Committee directs the Secretary of Defense, in conjunction with the Service Surgeons General, to select medical research projects of clear scientific merit and direct relevance to military health. Research areas considered under this funding are restricted to: acute lung injury, antimicrobial resistance, arthritis, autism, burn pit exposure, cardiomyopathy, chronic migraine and post-traumatic headache, congenital heart disease, constrictive bronchiolitis, diabetes, dystonia, eating disorders, emerging infectious diseases, epidermolysis bullosa, focal segmental glomerulosclerosis, frontotemporal degeneration, Guillain-Barre Syndrome, gulf war illness, hearing regeneration and restoration, hemorrhage control, hepatitis B, hereditary angioedema, hydrocephalus, immunomonitoring of intestinal transplants, inflammatory bowel diseases, interstitial cystitis, lung injury, lupus, metals toxicology, mitochondrial disease, multiple sclerosis, musculoskeletal conditions, myotonic dystrophy, nanomaterials for bone regeneration, neurofibromatosis, nutrition optimization, orthopedics, pancreatitis, Parkinson's, pathogen-inactivated blood products, polycystic kidney disease, post-traumatic osteoarthritis, pressure ulcers, pulmonary fibrosis, reconstructive transplantation, resilience training, respiratory health, Rett syndrome, rheumatoid arthritis, scleroderma, sleep disorders, spinal muscular atrophy,

tinnitus, tissue regeneration, tuberculosis, tuberous sclerosis complex, vascular malformations, vision, and women's heart disease. The Committee emphasizes that the additional funding provided under the Peer-Reviewed Medical Research Program shall be devoted only to the purposes listed above.

Joint Warfighter Medical Research Program.—The Committee recommends \$50,000,000 for the Joint Warfighter Medical Research Program. Funds shall be used to augment and accelerate high priority Department of Defense and Service medical requirements and to continue both core and congressionally-directed prior year initiatives that are close to achieving their objectives and yielding a benefit to military medicine. These funds shall not be used for new projects or basic research, and they shall be awarded at the discretion of the Secretary of Defense following a review of medical research and development gaps, as well as unfinanced medical requirements of the Services. Further, the Committee directs the Assistant Secretary of Defense (Health Affairs) to provide a report not later than 180 days after the enactment of this act to the congressional defense committees, which lists the projects that receive funding. The report should include the funding amount awarded to each project, a thorough description of each project's research, and the benefit the research will provide to the Department of Defense.

Peer-Reviewed Cancer Research Programs.—The Committee recommends \$120,000,000 for the peer-reviewed breast cancer research program, \$64,000,000 for the peer-reviewed prostate cancer research program, \$10,000,000 for the peer-reviewed ovarian cancer research program, \$10,000,000 for a peer-reviewed melanoma research program, and \$80,000,000 for the peer-reviewed cancer research program that would research cancers not addressed in the aforementioned programs currently executed by the Department of Defense.

The funds provided in the peer-reviewed cancer research program are directed to be used to conduct research in the following areas: bladder cancer, blood cancers, brain cancer, colorectal cancer, immunotherapy, kidney cancer, liver cancer, mesothelioma, neuroblastoma, pancreatic cancer, pediatric brain tumors, rare cancers, and stomach cancer.

The funds provided under the peer-reviewed cancer research program shall be used only for the purposes listed above. The Committee directs the Assistant Secretary of Defense (Health Affairs) to provide a report not later than 180 days after the enactment of this act to the congressional defense committees on the status of the peer-reviewed cancer research program. For each research area, the report should include the funding amount awarded, the progress of the research, and the relevance of the research to servicemembers.

Orthotics and Prosthetics Outcomes Research.—The Committee recommends \$10,000,000 in support of orthotics and prosthetics outcomes research. The focus of this research should be on outcomes-based best practices through analysis of the merits of clinical options currently available, not on the development or improvement of new and existing technology. The Committee directs the Assistant Secretary of Defense (Health Affairs) to provide a report

not later than 180 days after the enactment of this act to the congressional defense committees on the peer-reviewed projects that receive funding. The report should include the funding amount awarded to each project and the anticipated effect on patient care.

Advanced Orthopedic Surgical Training.—The Committee understands that servicemembers and their families regularly undergo orthopedic procedures and that these types of musculoskeletal injuries account for a significant amount of medical separations or retirements from military service. Delivery of direct training based on best practices related to orthopedic procedures for injuries to the knee, shoulder, and other extremities has become an increasingly important readiness issue. The Committee strongly encourages the Assistant Secretary of Defense (Health Affairs) to provide military orthopedic health professionals advanced surgical training in arthroscopic techniques and do so in partnership with medical professional societies that maintain best practices related to arthroscopic surgery and techniques.

Mental Health Professionals.—The Committee recognizes that servicemembers and their families face unique stresses beyond those of everyday life. After over 15 years of war, the need for mental health professionals in the Department is at an all-time high, and the Committee believes that every beneficiary of the Military Health System should have timely access to mental health services. However, the Committee is concerned with the Department's inability to recruit and retain enough psychiatrists, psychologists, social workers, nurse practitioners, and registered nurses to provide adequate mental healthcare.

The Government Accountability Office review of this issue found that progress is being made regarding the annual reporting of mental health professional staffing needs. However, GAO also noted that the Services need to accurately report any additional measures used to supplement the Psychological Health Risk-Adjusted Model for Staffing [PHRAMS] as well as report their PHRAMS-generated estimates in the requirements fields of the Defense Health Agency's quarterly mental health staffing reports.

The Committee encourages the Assistant Secretary of Defense (Health Affairs), the Director of the Defense Health Agency, and the Service Surgeons General to continue to work together to ensure annual estimates of mental health professionals meet the needs of all beneficiaries in the military health system. In addition, the Assistant Secretary of Defense (Health Affairs) is directed to prepare as part of DHA's fiscal year 2020 budget submission a review of these estimates as well as an outline of current challenges in recruiting and retaining mental health professionals by the Department of Defense.

Chronic Pain Management Research.—The Committee recommends \$10,000,000 for a chronic pain management research program to research opioid-alternative or non-addictive methods to treat and manage chronic pain. Chronic pain is defined as a pain that occurs on at least half the days for 6 months or more, and which can be caused by issues including, but not limited to: combat- and training-related physical or mental stress and trauma, migraines and chronic headaches, traumatic brain injury, arthritis, muscular-skeletal conditions, neurological disease, tick and vector-

borne disease, other insect-transmitted or tropical disease, and cancer. The funds provided in the chronic pain management research program shall be used to conduct research on the effects of using prescription opioids to manage chronic pain and for researching alternatives, namely non-opioid or non-addictive methods to treat and manage chronic pain, with a focus on issues related to military populations. The Committee encourages the Department to collaborate with non-military research institutions, such as the institutions of the National Institutes of Health Pain Consortium, and the institutions represented in the Interagency Pain Research Coordinating Committee, to address the efforts outlined in the 2016 National Pain Strategy.

Warfighter Respiratory Health.—The Committee remains concerned about respiratory ailments among deployed and returning servicemembers and their deleterious effects on combat and personnel readiness. It is estimated that respiratory diseases affect more than 100,000 servicemembers each year and result in almost 27,000 lost workdays per year. The Committee has included respiratory health as part of the Peer-Reviewed Medical Research Program and believes that further development of a comprehensive, broad-based warfighter respiratory research program is necessary to support overall readiness. The Assistant Secretary of Defense (Health Affairs) is directed to provide a report to the congressional defense committees not later than 120 days after the enactment of this act detailing the scope and impact of respiratory illness on military personnel—particularly on deployed troops—dating from the first Gulf War to the present.

Epilepsy Research.—The Committee is concerned about the large number of service men and women returning from combat zones who have sustained traumatic brain injuries [TBI] and the long term consequences of TBI. These wounded warriors are at high risk for developing post-traumatic epilepsy, depression, cognitive difficulties, and post-traumatic stress disorder, which may be interconnected. As current TBI longitudinal studies have not included epilepsy, the Committee encourages the Department to place greater priority and invest more funding in longitudinal epidemiological research, including epilepsy surveillance, to better understand the magnitude of the problem and improve patient care and outcomes. To assist in these efforts, the Committee recommends \$7,500,000 in support of epilepsy research. Additionally, the Committee urges the Department to expand research into the mechanisms by which brain injury produces epilepsy and research directed at the prevention of epilepsy and concomitant comorbidities in those known to be at high risk.

Melanoma Research.—The Committee understands that melanoma diagnoses are increasing among active duty servicemembers and that melanoma is the fifth most common cancer among veterans. Recent research suggests that exposure to high levels of solar radiation in young adulthood is associated with a higher risk of melanoma mortality. Given the extreme and harsh conditions servicemembers face in theater and the rise of this aggressive and frequently deadly form of cancer, the Committee encourages the Department to continue its investments in melanoma research and

recommends \$10,000,000 for a peer-reviewed melanoma research program.

Sleep Disorder Research.—The Committee recognizes that sleep disorders are increasingly prevalent among servicemembers and that such disruptions have been associated with diverse mental and physical disorders, including traumatic brain injury and post-traumatic stress. The Committee applauds the Army for acknowledging the importance of sleep in achieving optimal physical, mental, and emotional health and including sleep as a focus in the Performance Triad. In support of this effort, the Committee urges the Department to support basic, translational, and clinical research on how the disruption of normal sleep and circadian biological rhythms adversely affects the health, safety, performance, and productivity of military and civilian populations.

National Trauma Research Action Plan.—The Committee notes that the U.S. military continues to be a leader in trauma research with its core investments in combat casualty care. A 2016 report by the National Academies of Sciences, Engineering, and Medicine estimated that 25 percent of battlefield deaths and 20 percent of civilian deaths after injury could have been prevented by appropriate and timely medical care. This same report recommended creation of a National Trauma Research Action Plan [NTRAP] in order to coordinate research between the military and civilian sectors and work towards achieving zero preventable trauma deaths. NTRAP may provide the framework for a coordinated research program that would be able to unify and focus research efforts across Federal agencies and identify critical gaps in trauma research. The Committee recommends \$201,700,000 for core Defense Health Program research and encourages the Department to continue its investments in trauma care and creation of NTRAP.

Inclusion of Women and Minorities in the Congressionally-Directed Medical Research Program.—The Committee recognizes that the Congressionally-Directed Medical Research Program supports essential research to respond to the healthcare needs of servicemembers, their dependents, and retirees. In a series of laws, including the 21st Century Cures Act, Congress directed the National Institutes of Health to update relevant policies and implement accountability mechanisms to ensure that research supported by the agency included and conducted the appropriate analysis to identify the differential impact of research interventions on populations that are often underrepresented in clinical research, including women, and racial and ethnic minorities.

To continue improving the inclusion of women and minorities in federally funded research, the Committee directs the Department of Defense to develop a plan to ensure the appropriate representation of women and minorities in its extramural research. Specifically, this plan shall include mechanisms to measure, enforce, assess the adequacy of, and improve the: (1) representation of women and minorities in each clinical trial, as well as the data on the specific challenges researchers face in seeking to include women and minorities in their studies; (2) examination of biological variables, including the appropriate analysis of differential outcomes by sex, in clinical research; (3) practice of making clinical findings, subgroup analyses, and data publicly available, as appropriate and ap-

plicable; and (4) requirements (including, but not limited to, programmatic controls) and updated guidelines to ensure the appropriate representation of women in clinical research. Outcomes should also be analyzed for potential sex differences. This plan should be developed in coordination with the National Institutes of Health and submitted to the congressional defense committees not later than 180 days after the enactment of this act.

Behavioral and Mental Health Care for National Guard and Reserve.—The Committee recognizes that the men and women of the National Guard and Reserve components need greater access to care if they are to maintain a high state of medical readiness to support regularly occurring deployments. It also recognizes that the suicide rate in the reserve components is consistently higher than the suicide rate for both the active duty military and the civilian population. Therefore, the Committee encourages the Department to better ensure that periodic health assessments are followed by medical treatment to address any behavioral or mental health conditions that could impact a servicemember’s ability to deploy, even if such care falls outside of the pre-deployment window. This practice would allow for a more medically ready, deployable force and would expand access to behavioral and mental healthcare for reserve component servicemembers.

Cell-Based Flu Vaccine Research.—Given the negative impacts on servicemember health and military readiness posed by regular seasonal influenza, the Committee is concerned by a potential pandemic and the Department’s capacity and preparedness to address it. The Committee notes that the current flu vaccine may only be 60 percent effective, with some estimates placing this year’s vaccine at 10 percent effective, and believes that the current, antiquated egg-based vaccine production process may contribute to that inefficacy. Therefore, the Committee encourages the Department to emphasize cell-based influenza vaccine research as part of its infectious diseases research.

Armed Forces Institute of Regenerative Medicine.—The Armed Forces Institute of Regenerative Medicine [AFIRM] is a multi-institutional, interdisciplinary network of universities, military laboratories and investigators that is designed to promote a seamless integration of development, from basic science research through translational and clinical research, as the best means of bringing regenerative medicine therapies to practice. It is dedicated to repairing battlefield injuries through the use of regenerative medicine technology and has supported several clinical trials and treated hundreds of patients with novel therapeutic strategies in wound repair and tissue replacement. The Committee understands that fiscal year 2019 is the final year of funding for AFIRM II and strongly encourages the Department to build upon the successes of both AFIRM I and II by renewing the program for another five year period of performance beginning in the fiscal year 2020 budget request.

CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE

Appropriations, 2018	\$961,732,000
Budget estimate, 2019	993,816,000
Committee recommendation	993,816,000

The Committee recommends an appropriation of \$993,816,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[Dollars in thousands]

Line	Item	Qty.	2019 budget estimate	Qty.	Committee recommendation	Change from	
						Qty.	Budget estimate
	CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE						
1	CHEM DEMILITARIZATION—OPERATION AND MAINTENANCE		105,997		105,997		
3	CHEM DEMILITARIZATION—PROCUREMENT		1,091		1,091		
2	CHEM DEMILITARIZATION—RESEARCH, DEVELOPMENT, TEST AND EVALUATION		886,728		886,728		
	TOTAL, CHEMICAL AGENTS AND MUNITIONS DESTRUCTION, DEFENSE		993,816		993,816		

DRUG INTERDICTION AND COUNTER-DRUG ACTIVITIES, DEFENSE

Appropriations, 2018	\$934,814,000
Budget estimate, 2019	787,525,000
Committee recommendation	872,525,000

The Committee recommends an appropriation of \$872,525,000. This is \$85,000,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
010	Drug Interdiction And Counter Drug Activities	547,171	507,171	- 40,000
	Improving funds management: Excess Train and Equip Funding			- 40,000
020	Drug Demand Reduction Program	117,900	117,900	
030	National Guard Counter-Drug Program	117,178	217,178	+ 100,000
	National Guard counter-drug plans			+ 100,000
040	National Guard Counter-Drug Schools	5,276	30,276	+ 25,000
	National Guard counter-drug schools			+ 25,000
	Total, Drug Interdiction and Counter-Drug Activities	787,525	872,525	+ 85,000

OFFICE OF THE INSPECTOR GENERAL

Appropriations, 2018	\$321,887,000
Budget estimate, 2019	329,273,000
Committee recommendation	329,273,000

The Committee recommends an appropriation of \$329,273,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

[In thousands of dollars]

Item	2019 budget estimate	Committee recommendation	Change from budget estimate
Office of the Inspector General, Operation and Maintenance	327,611	325,236	- 2,375
Transfer: Department requested to RDTE for DCATSe and CRIMS ..			- 2,375
Office of the Inspector General, Research and Development	1,602	3,977	+ 2,375
Transfer: Department requested from O&M for DCATSe and CRIMS			+ 2,375
Office of the Inspector General, Procurement	60	60	
TOTAL, OFFICE OF THE INSPECTOR GENERAL	329,273	329,273	

Quarterly End Strength and Execution Reports.—The Department of Defense Inspector General is directed to provide quarterly reports to the congressional defense committees on civilian personnel end strength, full-time equivalents, and budget execution not later than 15 days after the end of each fiscal quarter. The reports should contain quarterly civilian personnel end strength and full-time equivalents as well as an estimate of fiscal year end

strength and fiscal year full-time equivalents. The reports should also include quarterly budget execution data along with revised fiscal year estimated execution data. The Inspector General is directed to provide realistic end of fiscal year estimates based on personnel trends to date.

TITLE VII
RELATED AGENCIES

CENTRAL INTELLIGENCE AGENCY RETIREMENT AND DISABILITY
SYSTEM FUND

Appropriations, 2018	\$514,000,000
Budget estimate, 2019	514,000,000
Committee recommendation	514,000,000

The Committee recommends an appropriation of \$514,000,000.
This is equal to the budget estimate.

INTELLIGENCE COMMUNITY MANAGEMENT ACCOUNT

Appropriations, 2018	\$537,600,000
Budget estimate, 2019	539,124,000
Committee recommendation	529,624,000

The Committee recommends an appropriation of \$529,624,000.
This is \$9,500,000 below the budget estimate.

TITLE VIII

GENERAL PROVISIONS

The following lists general provisions proposed by the Committee. The Committee recommends inclusion of several proposals which have been incorporated in previous appropriations acts, provisions requested for inclusion by the Defense Department, and new provisions. The Committee recommendations are as follows:

SEC. 8001. *Publicity/Propaganda Limitation*.—Retains a provision carried in previous years.

SEC. 8002. *Compensation/Employment of Foreign Nationals*.—Retains a provision carried in previous years.

SEC. 8003. *Obligation Rate of Appropriations*.—Retains a provision carried in previous years.

SEC. 8004. *Obligations in Last 2 Months of Fiscal Year*.—Retains and modifies a provision carried in previous years.

SEC. 8005. *General Transfer Authority*.—Retains and modifies a provision carried in previous years.

SEC. 8006. *Project Level Adjustments*.—Retains and modifies a provision carried in previous years.

SEC. 8007. *Establishment of Reprogramming Baseline*.—Retains and modifies a provision carried in previous years.

SEC. 8008. *Working Capital Funds Cash Disbursements*.—Retains a provision carried in previous years.

SEC. 8009. *Special Access Programs Notification*.—Retains a provision carried in previous years.

SEC. 8010. *Multiyear Procurement Authority*.—Retains and modifies a provision carried in previous years.

SEC. 8011. *Humanitarian and Civic Assistance*.—Retains a provision carried in previous years.

SEC. 8012. *Restriction on Civilian Personnel End-Strength*.—Retains and modifies a provision carried in previous years.

SEC. 8013. *Lobbying*.—Retains a provision carried in previous years.

SEC. 8014. *Educational Benefits and Bonuses*.—Retains a provision carried in previous years.

SEC. 8015. *Mentor-Protégé Program*.—Retains a provision carried in previous years.

SEC. 8016. *Alcoholic Beverages*.—Retains a provision carried in previous years.

SEC. 8017. *Demilitarization of Surplus Firearms*.—Retains a provision carried in previous years.

SEC. 8018. *Relocations into the National Capital Region*.—Retains a provision carried in previous years.

SEC. 8019. *Indian Financing Act*.—Retains and modifies a provision carried in previous years.

SEC. 8020. *Defense Media Activity*.—Retains a provision carried in previous years.

SEC. 8021. *Burden Sharing With Kuwait*.—Retains a provision carried in previous years.

SEC. 8022. *Civil Air Patrol*.—Retains and modifies a provision carried in previous years.

SEC. 8023. *Federally Funded Research and Development Centers*.—Retains and modifies a provision carried in previous years.

SEC. 8024. *Carbon, Alloy, or Armor Steel Plate*.—Retains a provision carried in previous years.

SEC. 8025. *Congressional Defense Committee Definition*.—Retains a provision carried in previous years.

SEC. 8026. *Depot Maintenance Competition*.—Retains a provision carried in previous years.

SEC. 8027. *Reciprocal Trade Agreements*.—Retains and modifies a provision carried in previous years.

SEC. 8028. *Overseas Military Facility Investment*.—Retains a provision carried in previous years.

SEC. 8029. *Walking Shield*.—Retains and modifies a provision carried in previous years.

SEC. 8030. *Investment Item Unit Cost*.—Retains a provision carried in previous years.

SEC. 8031. *Asia-Pacific Regional Initiative*.—Retains and modifies a provision carried in previous years.

SEC. 8032. *Tobacco Use in the Military*.—Retains a provision carried in previous years.

SEC. 8033. *Working Capital Fund Investment Item Restrictions*.—Retains and modifies a provision carried in previous years.

SEC. 8034. *CIA Availability of Funds*.—Retains and modifies a provision carried in previous years.

SEC. 8035. *Tribal Lands Environmental Impact*.—Retains a provision carried in previous years.

SEC. 8036. *Buy American Act Compliance*.—Retains a provision carried in previous years.

SEC. 8037. *Field Operating Agencies*.—Retains a provision carried in previous years.

SEC. 8038. *Contractor Conversion and Performance*.—Retains a provision carried in previous years.

SEC. 8039. *Rescissions*.—The Committee recommends a general provision rescinding funds from prior years as displayed below:

	Amount
2017 Appropriations	
Aircraft Procurement, Army: Utility F/W Aircraft	\$16,000,000
Missile Procurement, Army: Patriot Mods	12,900,000
Other Procurement, Army: Tactical Bridging	7,465,000
Other Procurement, Navy: Ship Missile Support Equipment—NULKA Decoy	32,344,000
Aircraft Procurement, Air Force: KC-46A Tanker	135,640,000
C-130J	8,900,000
UH-1N Replacement	3,037,000
Compass Call	5,352,000

	Amount
VC-25A Mod	21,100,000
Classified adjustment	5,000,000
Space Procurement, Air Force:	
Spacelift Range System Space	15,000,000
Other Procurement, Air Force:	
Personal Safety and Rescue Equipment	12,000,000
Air Traffic Control & Landing Systems (D-RAPCON)	17,600,000
Defense Health Program—Procurement:	
Procurement JOMIS carryover	2,413,000
2018 Appropriations	
Aircraft Procurement, Army:	
Utility F/W Aircraft	4,939,000
Missile Procurement, Army:	
Guided MLRS Rocket (GMLRS)	80,000,000
ATACMS Mods	69,400,000
Procurement of Weapons and Tracked Combat Vehicles, Army:	
Bradley Program (MOD)	190,000,000
Common Remotely Operated Weapons Station	10,000,000
M2 50 Cal Machine Gun Mods	10,506,000
Other Procurement, Army:	
Joint Light Tactical Vehicle	46,389,000
Signal Modernization Program	15,000,000
Persistent Cyber Training Environment	4,000,000
Indirect Fire Protection Family of Systems	50,000,000
Aircraft Procurement, Navy:	
V-22 (Medium Lift)	14,600,000
Other Procurement, Navy:	
Ship Missile Support Equipment—NULKA decoy	22,400,000
Ship Missile Support Equipment—ESSM missile launcher upgrade	14,200,000
Aircraft Procurement, Air Force:	
KC-46A Tanker	9,084,000
MQ-9	72,000,000
B-1B—Integrated Battle Station	28,000,000
F-16—Communication Suite Upgrade	19,916,000
E-3—Electronic Protection	22,139,000
MQ-9 Mods—DAS-4 Upgrades	10,600,000
Initial Spares/Repair Parts—MQ-9 Reaper DAS-4 Spares	14,600,000
RQ-4 Post Production Charges—MS-177A	67,427,000
Classified adjustment	10,400,000
Space Procurement, Air Force:	
FAB-T	20,000,000
WGS	41,000,000
GPS III Space Segment	35,500,000
EELV	45,800,000
SBIR High	50,000,000
Procurement of Ammunition, Air Force:	
General Purpose Bombs	17,100,000
Other Procurement, Air Force:	
Classified adjustments	128,500,000
Research, Development, Test and Evaluation, Army:	
Landmine Warfare and Barrier— Adv Dev	51,380,000
Cyberspace Operations Forces and Force Support	5,676,000
Infantry Support Weapons	18,689,000
Infantry Support Weapons	22,500,000
Army Tactical Command & Control Hardware & Software	4,848,000
Indirect Fire Protection Capability Increment	215,000,000
Joint Light Tactical Vehicle EMD	5,677,000
Combat Vehicle Improvement Programs—Bradley	40,000,000
Information Systems Security Program—COMSEC Equipment	73,614,000
Research, Development, Test and Evaluation, Air Force:	
HC/MC-130 RDT&E	20,300,000
Minuteman Squadrons	7,000,000
MQ-9 UAV	5,400,000
Protected Tactical Service	20,000,000
Protected SATCOM Services	12,000,000

	Amount
Space Fence	8,000,000
GPS III	19,200,000
JSpOC Mission Support	30,000,000
JSTARS Recap	383,400,000
Research, Development, Test and Evaluation ,Defense-Wide:	
Classified adjustment (USD (P))	25,000,000
Defense Health Program—Procurement:	
DHMS Carryover	215,000,000

SEC. 8040. *Civilian Technician Reductions*.—Retains a provision carried in previous years.

SEC. 8041. *North Korea*.—Retains a provision carried in previous years.

SEC. 8042. *Reserve Component Intelligence Reimbursement*.—Retains a provision carried in previous years.

SEC. 8043. *Counter-Drug Activities Transfer*.—Retains a provision carried in previous years.

SEC. 8044. *Funding to Maintain Competitive Rates at Arsenals*.—Retains a provision carried in previous years.

SEC. 8045. *United Service Organizations Grant*.—Retains and modifies a provision carried in previous years.

SEC. 8046. *Buy American Computers*.—Retains a provision carried in previous years.

SEC. 8047. *Small Business Set-Asides*.—Retains a provision carried in previous years.

SEC. 8048. *Contractor Bonuses*.—Retains a provision carried in previous years.

SEC. 8049. *Reserve Peacetime Support*.—Retains a provision carried in previous years.

SEC. 8050. *Unexpended Balances*.—Retains a provision carried in previous years.

SEC. 8051. *National Guard Distance Learning*.—Retains a provision carried in previous years.

SEC. 8052. *Sexual Assault Prevention Programs*.—Retains and modifies a provision carried in previous years.

SEC. 8053. *End-Item Procurement*.—Retains and modifies a provision carried in previous years.

SEC. 8054. *Buy American Waivers*.—Retains a provision carried in previous years.

SEC. 8055. *O&M, Navy Transfer to Stennis Center*.—Retains a provision carried in previous years.

SEC. 8056. *Joint Capability Demonstration Project*.—Retains a provision carried in previous years.

SEC. 8057. *Secretary of Defense Reporting Requirement*.—Retains a provision carried in previous years.

SEC. 8058. *Missile Defense Authorization*.—Retains a provision carried in previous years.

SEC. 8059. *Armor-Piercing Ammo*.—Retains a provision carried in previous years.

SEC. 8060. *Personal Property Lease Payments*.—Retains a provision carried in previous years.

SEC. 8061. *O&M, Army Transfer*.—Retains and modifies a provision carried in previous years.

SEC. 8062. *National Intelligence Program Separation*.—Retains a provision carried in previous years.

SEC. 8063. *Assignment of Forces*.—Retains a provision carried in previous years.

SEC. 8064. *Rapid Acquisition Authority Reporting Requirement*.—Retains a provision carried in previous years.

SEC. 8065. *Israeli Cooperative Programs*.—Retains and modifies a provision carried in previous years.

SEC. 8066. *Prior Year Shipbuilding*.—Retains and modifies a provision carried in previous years.

SEC. 8067. *Intelligence Authorization*.—Retains and modifies a provision carried in previous years.

SEC. 8068. *New Start Authority*.—Retains a provision carried in previous years.

SEC. 8069. *Contingency Operations Budget Justification*.—Retains and modifies a provision carried in previous years.

SEC. 8070. *Nuclear Armed Interceptors*.—Retains a provision carried in previous years.

SEC. 8071. *Blocking Pornography on Computers*.—Retains a provision carried in previous years.

SEC. 8072. *Rapid Acquisition Authority*.—Retains a provision carried in previous years.

SEC. 8073. *53rd Weather Reconnaissance Squadron*.—Retains a provision carried in previous years.

SEC. 8074. *Integration of Foreign Intelligence*.—Retains a provision carried in previous years.

SEC. 8075. *Army Tactical UAVs*.—Retains a provision carried in previous years.

SEC. 8076. *DNI R&D Waiver*.—Retains and modifies a provision carried in previous years.

SEC. 8077. *Shipbuilding Obligations*.—Retains a provision carried in previous years.

SEC. 8078. *DNI Reprogramming Baseline*.—Retains and modifies a provision carried in previous years.

SEC. 8079. *T-AO(X) Oiler Program*.—Retains a provision carried in previous years.

SEC. 8080. *Support to Friendly Foreign Countries*.—Retains a provision carried in previous years.

SEC. 8081. *Defense Acquisition Workforce Development Fund*.—Retains and modifies a provision carried in previous years.

SEC. 8082. *Child Soldiers*.—Retains a provision carried in previous years.

SEC. 8083. *NIP Reprogramming*.—Retains a provision carried in previous years.

SEC. 8084. *Future-Years Intelligence Program*.—Retains a provision carried in previous years.

SEC. 8085. *Congressional Intelligence Committee Definition*.—Retains a provision carried in previous years.

SEC. 8086. *Fisher House Authorization*.—Retains a provision carried in previous years.

SEC. 8087. *Defense Acquisition Workforce Development Fund*.—Retains a provision carried in previous years.

SEC. 8088. *Public Disclosure of Agency Reports*.—Retains a provision carried in previous years.

SEC. 8089. *Contractor Compliance With the Civil Rights Act of 1964.*—Retains a provision carried in previous years.

SEC. 8090. *DOD–VA Medical Facility Demonstration.*—Retains and modifies a provision carried in previous years.

SEC. 8091. *Exchanging Ballistic Missile Defense Information.*—Retains a provision carried in previous years.

SEC. 8092. *Armored Vehicles.*—Retains a provision carried in previous years.

SEC. 8093. *NIP Reprogramming.*—Retains and modifies a provision carried in previous years.

SEC. 8094. *Transfer of Detainees to or Within the United States.*—Retains a provision carried in previous years.

SEC. 8095. *Detainee Facilities.*—Retains a provision carried in previous years.

SEC. 8096. *Detainee Transfer to a Foreign Country or Entity.*—Retains a provision carried in previous years.

SEC. 8097. *War Powers Resolution.*—Retains a provision carried in previous years.

SEC. 8098. *Rosoboronexport.*—Retains a provision carried in previous years.

SEC. 8099. *Crime Databases Reporting Requirement.*—Retains and modifies a provision carried in previous years.

SEC. 8100. *Ex Gratia Payments.*—Retains a provision carried in previous years.

SEC. 8101. *Strategic Delivery Vehicles.*—Retains a provision carried in previous years.

SEC. 8102. *Death Gratuity Payments.*—Includes a provision regarding the availability of working capital funds for death gratuity payments.

SEC. 8103. *Rapid Prototyping Fund reprogrammings and account reductions.*—Retains a provision carried in previous years.

SEC. 8104. *Restrictions on NSA.*—Retains a provision carried in previous years.

SEC. 8105. *Transfers to Another Federal Agency.*—Retains a provision carried in previous years.

SEC. 8106. *Support to Foreign Countries.*—Retains a provision carried in previous years.

SEC. 8107. *Authority to Transfer O&M, Navy Funds to Ready Reserve Force, Maritime Administration Account.*—Retains and modifies a provision carried in previous years.

SEC. 8108. *Authority to Use Funds for OPM Background Investigations.*—Retains and modifies a provision carried in previous years.

SEC. 8109. *Closure of GTMO.*—Retains a provision carried in previous years.

SEC. 8110. *Global Engagement Center Reprogrammings.*—Retains a provision carried in previous years.

SEC. 8111. *Rapid Prototyping with DAWDF.*—Retains a provision carried in previous years.

SEC. 8112. *Project Designated by the Secretary of Defense.*—Retains a provision carried in previous years.

SEC. 8113. *Prohibition on the Transfer of F–35 Aircraft to Turkey.*—Includes a provision regarding the prohibition on the transfer of F–35 aircraft to Turkey.

TITLE IX
OVERSEAS CONTINGENCY OPERATIONS

DEPARTMENT OF DEFENSE—MILITARY

The Committee recommends an appropriation of \$67,913,976,000 for operations related to Overseas Contingency Operations. In fiscal year 2018 Congress appropriated \$65,166,000,000 for activities funded in this title in Public Law 115–141.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the Committee recommendation:

[In thousands of dollars]

	Fiscal year 2018 enacted	Fiscal year 2019 estimate	Committee recommendation
Military Personnel	4,326,172	4,660,661	4,660,661
Operation and Maintenance	50,317,919	48,782,670	50,405,932
Procurement	10,424,319	12,782,468	12,574,963
Research, development, test and evaluation	926,937	1,307,731	1,175,770
Revolving and management funds	148,956	15,190	15,190
Other Department of Defense Programs	616,797	529,860	519,860
General Provisions (net)	– 1,595,100	.....	– 1,438,400
Total, Overseas Contingency Operations	65,166,000	68,078,580	67,913,976

OVERVIEW

COMMITTEE RECOMMENDATION

The Committee recommends \$67,913,976,000 of additional appropriations for Overseas Contingency Operations in fiscal year 2019. This funding will ensure that resources, equipment, and supplies are available for our servicemembers without interruption, and will enable the Department to avoid absorbing operational costs from within baseline programs that are critical to future readiness and home-station activities.

REPORTING REQUIREMENTS

The Secretary of Defense is directed to submit reports, on a quarterly basis, to the congressional defense committees not later than 30 days after the last day of each quarter of the fiscal year that detail commitment, obligation, and expenditure data by sub-activity group for the Afghanistan Security Forces Fund and the Counter-the Islamic State of Iraq and Syria Fund.

JOINT IMPROVISED-THREAT DEFEAT ORGANIZATION

The fiscal year 2019 President’s budget request includes \$704,701,000 for the Joint Improvised-Threat Defeat Organization

[JIDO] in the appropriations accounts for Operation and Maintenance, Defense-Wide; Procurement, Defense-Wide; and Research, Development, Test and Evaluation, Defense-Wide, reflecting the transition of the activities, functions, and resources of the Joint Improvised-Threat Defeat Agency to the JIDO under the authority, direction and control of the Defense Threat Reduction Agency, as previously directed by Congress. The Committee commends the Under Secretary of Defense (Comptroller) for requesting appropriations for the JIDO in appropriations accounts instead of the previously utilized Joint Improvised-Threat Defeat Fund [JITDF] and its predecessor fund, the Joint Improvised-Explosives Devices Defeat Fund [JIEDDF].

The Committee notes that unobligated and unexpended funds remaining in the JIEDDF and the JITDF will continue to execute, therefore precluding the termination of these Funds at this time. The Under Secretary of Defense (Comptroller) is directed to provide to the congressional defense committees, with submission of the fiscal year 2020 President's budget request, a plan to close out the JITDF and JIEDDF in the near-term.

MILITARY PERSONNEL

The Committee recommends a total of \$4,660,661,000 for pay, allowances, and other personnel costs for Active, Reserve, and Guard troops activated for duty in Afghanistan and other contingency operations. This recommendation includes funding for subsistence, permanent change of station travel, and special pays including imminent danger pay, family separation allowance, and hardship duty pay.

MILITARY PERSONNEL, ARMY

Appropriations, 2018	\$2,683,694,000
Budget estimate, 2019	2,929,154,000
Committee recommendation	2,929,154,000

The Committee recommends an appropriation of \$2,929,154,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BA 1: Pay and Allowances of Officers			
005	Basic Pay	534,241	534,241	.....
010	Retired Pay Accrual	131,957	131,957	.....
025	Basic Allowance for Housing	179,452	179,452	.....
030	Basic Allowance for Subsistence	19,851	19,851	.....
035	Incentive Pays	4,138	4,138	.....
040	Special Pays	21,501	21,501	.....
045	Allowances	16,036	16,036	.....
050	Separation Pay	6,972	6,972	.....
055	Social Security Tax	40,869	40,869	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Total	955,017	955,017	.....
	BA 2: Pay and Allowances of Enlisted			
060	Basic Pay	742,895	742,895	.....
065	Retired Pay Accrual	183,495	183,495	.....
080	Basic Allowance for Housing	361,724	361,724	.....
085	Incentive Pays	2,315	2,315	.....
090	Special Pays	78,317	78,317	.....
095	Allowances	62,898	62,898	.....
100	Separation Pay	13,750	13,750	.....
105	Social Security Tax	56,831	56,831	.....
	Total	1,502,225	1,502,225	.....
	BA 4: Subsistence of Enlisted Personnel			
115	Basic Allowance for Subsistence	88,718	88,718	.....
120	Subsistence-In-Kind	287,470	287,470	.....
	Total	376,188	376,188	.....
	BA 5: Permanent Change of Station Travel			
135	Operational Travel	34,924	34,924	.....
140	Rotational Travel	5,933	5,933	.....
	Total	40,857	40,857	.....
	BA 6: Other Military Personnel Costs			
175	Interest on Uniformed Services Savings	3,112	3,112	.....
180	Death Gratuities	2,000	2,000	.....
185	Unemployment Benefits	39,923	39,923	.....
216	SGLI Extra Hazard Payments	9,832	9,832	.....
	Total	54,867	54,867	.....
	Total, Military Personnel, Army	2,929,154	2,929,154	.....

MILITARY PERSONNEL, NAVY

Appropriations, 2018	\$377,857,000
Budget estimate, 2019	385,461,000
Committee recommendation	385,461,000

The Committee recommends an appropriation of \$385,461,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BA 1: Pay and Allowances of Officers			
005	Basic Pay	74,977	74,977	.....
010	Retired Pay Accrual	18,520	18,520	.....
025	Basic Allowance for Housing	25,660	25,660	.....
030	Basic Allowance for Subsistence	2,623	2,623	.....
035	Incentive Pays	540	540	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
040	Special Pays	3,562	3,562	.....
045	Allowances	8,096	8,096	.....
055	Social Security Tax	5,736	5,736	.....
	Total	139,714	139,714	.....
	BA 2: Pay and Allowances of Enlisted			
060	Basic Pay	86,888	86,888	.....
065	Retired Pay Accrual	21,463	21,463	.....
080	Basic Allowance for Housing	47,583	47,583	.....
085	Incentive Pays	215	215	.....
090	Special Pays	9,302	9,302	.....
095	Allowances	17,872	17,872	.....
105	Social Security Tax	6,647	6,647	.....
	Total	189,970	189,970	.....
	BA 4: Subsistence of Enlisted Personnel			
115	Basic Allowance for Subsistence	9,878	9,878	.....
120	Subsistence—In—Kind	24,054	24,054	.....
	Total	33,932	33,932	.....
	BA 5: Permanent Change of Station Travel			
125	Accession Travel	5,912	5,912	.....
135	Operational Travel	1,119	1,119	.....
140	Rotational Travel	355	355	.....
145	Separation Travel	4,848	4,848	.....
	Total	12,234	12,234	.....
	BA 6: Other Military Personnel Costs			
180	Death Gratuities	300	300	.....
185	Unemployment Benefits	6,066	6,066	.....
212	Reserve Income Replacement Program	9	9	.....
216	SGLI Extra Hazard Payments	3,236	3,236	.....
	Total	9,611	9,611	.....
	Total, Military Personnel, Navy	385,461	385,461	.....

MILITARY PERSONNEL, MARINE CORPS

Appropriations, 2018	\$103,979,000
Budget estimate, 2019	109,232,000
Committee recommendation	109,232,000

The Committee recommends an appropriation of \$109,232,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BA 1: Pay and Allowances of Officers			
005	Basic Pay	27,939	27,939	.....
010	Retired Pay Accrual	6,901	6,901	.....
025	Basic Allowance for Housing	9,815	9,815	.....
030	Basic Allowance for Subsistence	927	927	.....
035	Incentive Pays	253	253	.....
040	Special Pays	1,498	1,498	.....
045	Allowances	1,955	1,955	.....
050	Separation Pay	1,165	1,165	.....
055	Social Security Tax	2,137	2,137	.....
	Total	52,590	52,590	.....
	BA 2: Pay and Allowances of Enlisted			
060	Basic Pay	21,663	21,663	.....
065	Retired Pay Accrual	5,351	5,351	.....
080	Basic Allowance for Housing	12,633	12,633	.....
085	Incentive Pays	28	28	.....
090	Special Pays	6,442	6,442	.....
095	Allowances	5,321	5,321	.....
100	Separation Pay	467	467	.....
105	Social Security Tax	1,657	1,657	.....
	Total	53,562	53,562	.....
	BA 4: Subsistence of Enlisted Personnel			
115	Basic Allowance for Subsistence	2,427	2,427	.....
	Total	2,427	2,427	.....
	BA 6: Other Military Personnel Costs			
175	Interest on Uniformed Services Savings	238	238	.....
216	SGLI Extra Hazard Payments	415	415	.....
	Total	653	653	.....
	Total, Military Personnel, Marine Corps	109,232	109,232	.....

MILITARY PERSONNEL, AIR FORCE

Appropriations, 2018	\$914,119,000
Budget estimate, 2019	964,508,000
Committee recommendation	964,508,000

The Committee recommends an appropriation of \$964,508,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BA 1: Pay and Allowances of Officers			
005	Basic Pay	109,903	109,903	.....
010	Retired Pay Accrual	27,146	27,146	.....
025	Basic Allowance for Housing	34,021	34,021	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
030	Basic Allowance for Subsistence	3,741	3,741	.....
040	Special Pays	8,797	8,797	.....
045	Allowances	5,917	5,917	.....
055	Social Security Tax	8,408	8,408	.....
	Total	197,933	197,933	.....
	BA 2: Pay and Allowances of Enlisted			
060	Basic Pay	307,674	307,674	.....
065	Retired Pay Accrual	75,995	75,995	.....
080	Basic Allowance for Housing	129,809	129,809	.....
090	Special Pays	37,166	37,166	.....
095	Allowances	24,955	24,955	.....
105	Social Security Tax	23,537	23,537	.....
	Total	599,136	599,136	.....
	BA 4: Subsistence of Enlisted Personnel			
115	Basic Allowance for Subsistence	32,575	32,575	.....
120	Subsistence-In-Kind	118,489	118,489	.....
	Total	151,064	151,064	.....
	BA 6: Other Military Personnel Costs			
180	Death Gratuities	1,000	1,000	.....
185	Unemployment Benefits	8,946	8,946	.....
216	SGLI Extra Hazard Payments	6,429	6,429	.....
	Total	16,375	16,375	.....
	Total, Military Personnel, Air Force	964,508	964,508	.....

RESERVE PERSONNEL, ARMY

Appropriations, 2018	\$24,942,000
Budget estimate, 2019	37,007,000
Committee recommendation	37,007,000

The Committee recommends an appropriation of \$37,007,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BA 1: Reserve Component Training and Support			
080	Special Training	37,007	37,007	.....
	Total	37,007	37,007	.....
	Total, Reserve Personnel, Army	37,007	37,007	.....

RESERVE PERSONNEL, NAVY

Appropriations, 2018	\$9,091,000
Budget estimate, 2019	11,100,000
Committee recommendation	11,100,000

The Committee recommends an appropriation of \$11,100,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BA 1: Reserve Component Training and Support			
080	Special Training	11,100	11,100	.....
	Total	11,100	11,100	.....
	Total, Reserve Personnel, Navy	11,100	11,100	.....

RESERVE PERSONNEL, MARINE CORPS

Appropriations, 2018	\$2,328,000
Budget estimate, 2019	2,380,000
Committee recommendation	2,380,000

The Committee recommends an appropriation of \$2,380,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	BA 1: Reserve Component Training and Support			
080	Special Training	2,336	2,336	.....
090	Administration and Support	44	44	.....
	Total	2,380	2,380	.....
	Total, Reserve Personnel, Marine Corps	2,380	2,380	.....

RESERVE PERSONNEL, AIR FORCE

Appropriations, 2018	\$20,569,000
Budget estimate, 2019	21,076,000
Committee recommendation	21,076,000

The Committee recommends an appropriation of \$21,076,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
080	BA 1: Reserve Component Training and Support			
	Special Training	21,076	21,076	.....
	Total	21,076	21,076	.....
	Total, Reserve Personnel, Air Force	21,076	21,076	.....

NATIONAL GUARD PERSONNEL, ARMY

Appropriations, 2018	\$184,589,000
Budget estimate, 2019	195,283,000
Committee recommendation	195,283,000

The Committee recommends an appropriation of \$195,283,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
010 070 080 090	BA 1: Reserve Component Training and Support			
	Pay Group A Training (15 Days & Drills 24/48)	47,114	47,114	.....
	School Training	2,939	2,939	.....
	Special Training	135,655	135,655	.....
	Administration and Support	9,575	9,575	.....
	Total	195,283	195,283	.....
	Total, National Guard Personnel, Army	195,283	195,283	.....

NATIONAL GUARD PERSONNEL, AIR FORCE

Appropriations, 2018	\$5,004,000
Budget estimate, 2019	5,460,000
Committee recommendation	5,460,000

The Committee recommends an appropriation of \$5,460,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
080	BA 1: Reserve Component Training and Support			
	Special Training	5,460	5,460	.....
	Total	5,460	5,460	.....
	Total, National Guard Personnel, Air Force	5,460	5,460	.....

OPERATION AND MAINTENANCE

The Committee recommends \$50,405,932,000 for the operation and maintenance accounts. These funds are available to fund overseas deployments and other activities by the services and Special Operations Forces to include financing flying hours, ship steaming days, ground operations, special airlift missions, increased ship and aircraft maintenance, logistics support, fuel purchases, base support, civilian personnel, personnel support costs, overseas transportation, communications support, facility management, and other operation and maintenance requirements.

OPERATION AND MAINTENANCE, ARMY

Appropriations, 2018	\$17,352,994,000
Budget estimate, 2019	18,210,500,000
Committee recommendation	19,028,500,000

The Committee recommends an appropriation of \$19,028,500,000. This is \$818,000,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
111	Maneuver Units	1,179,339	1,479,339	+ 300,000
	Transfer: From Title II to Title IX for OCO Operations			+ 300,000
113	Echelons Above Brigade	25,983	25,983	.....
114	Theater Level Assets	2,189,916	2,189,916	.....
115	Land Forces Operations Support	188,609	188,609	.....
116	Aviation Assets	120,787	120,787	.....
121	Force Readiness Operations Support	3,867,286	4,230,286	+ 363,000
	Maintain program affordability: Unjustified growth			- 37,000
	Transfer: From Title II to Title IX for OCO Operations			+ 400,000
122	Land Forces Systems Readiness	550,068	475,068	- 75,000
	Maintain program affordability: Unjustified growth			- 75,000
123	Land Forces Depot Maintenance	195,873	495,873	+ 300,000
	Transfer: From Title II to Title IX for OCO Operations			+ 300,000
131	Base Operations Support	109,560	109,560	.....
132	Facilities Sustainment, Restoration, and Modernization	60,807	60,807	.....
135	Additional Activities	5,992,222	5,927,222	- 65,000
	Maintain program affordability: Unjustified growth			- 65,000
136	Commander's Emergency Response Program	10,000	5,000	- 5,000
	Maintain program affordability: Unjustified growth			- 5,000
137	Reset	1,036,454	1,036,454	.....
141	US Africa Command	248,796	248,796	.....
142	US European Command	98,127	98,127	.....
143	US Southern Command	2,550	2,550	.....
212	Army Prepositioned Stocks	158,753	158,753	.....
421	Servicewide Transportation	712,230	712,230	.....
422	Central Supply Activities	44,168	44,168	.....
423	Logistics Support Activities	5,300	5,300	.....
424	Ammunition Management	38,597	38,597	.....
434	Other Personnel Support	109,019	109,019	.....
437	Real Estate Management	191,786	191,786	.....
999	Classified Programs	1,074,270	1,074,270	.....
	Total, Operation and Maintenance, Army	18,210,500	19,028,500	+ 818,000

OPERATION AND MAINTENANCE, NAVY

Appropriations, 2018 \$6,449,404,000
 Budget estimate, 2019 4,757,155,000
 Committee recommendation 5,572,155,000

The Committee recommends an appropriation of \$5,572,155,000.
 This is \$815,000,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1A1A	Mission And Other Flight Operations	435,507	935,507	+ 500,000
	Transfer: From Title II to Title IX for OCO Operations			+ 500,000
1A3A	Aviation Technical Data & Engineering Services	800	800	
1A4A	Air Operations And Safety Support	9,394	9,394	
1A4N	Air Systems Support	193,384	193,384	
1A5A	Aircraft Depot Maintenance	173,053	173,053	
1A6A	Aviation Depot Operations Support	3,524	3,524	
1A9A	Aviation Logistics	60,219	60,219	
1B1B	Mission And Other Ship Operations	942,960	1,422,960	+ 480,000
	Maintain program affordability: Unjustified growth			- 20,000
	Transfer: From Title II to Title IX for OCO Operations			+ 500,000
1B2B	Ship Operations Support & Training	20,236	20,236	
1B4B	Ship Depot Maintenance	1,022,647	1,022,647	
1C1C	Combat Communications and Electronic Warfare	59,553	59,553	
1C4C	Warfare Tactics	16,651	16,651	
1C5C	Operational Meteorology And Oceanography	31,118	31,118	
1C6C	Combat Support Forces	635,560	635,560	
1C7C	Equipment Maintenance and Depot Operations Support	4,334	4,334	
1CCM	Combatant Commanders Direct Mission Support	24,800	24,800	
1CCY	Cyberspace Activities	355	355	
1D4D	Weapons Maintenance	493,033	493,033	
1D7D	Other Weapons Systems Support	12,780	12,780	
BSM1	Facilities Sustainment, Restoration And Modernization	67,321	67,321	
BSS1	Base Operating Support	211,394	211,394	
2C1H	Expeditionary Health Service Systems	12,902	12,902	
2C3H	Coast Guard Support	165,000		- 165,000
	Coast Guard funded in Department of Homeland Security bill			- 165,000
3B1K	Specialized Skill Training	51,138	51,138	
4A1M	Administration	4,145	4,145	
4A4M	Military Manpower And Personnel Management	7,503	7,503	
4B1N	Servicewide Transportation	69,297	69,297	
4B3N	Acquisition, Logistics and Oversight	10,912	10,912	
4C1P	Investigative and Security Services	1,559	1,559	
999	Classified Programs	16,076	16,076	
	Total, Operation and Maintenance, Navy	4,757,155	5,572,155	+ 815,000

OPERATION AND MAINTENANCE, MARINE CORPS

Appropriations, 2018 \$1,401,536,000
 Budget estimate, 2019 1,121,900,000
 Committee recommendation 1,475,800,000

The Committee recommends an appropriation of \$1,475,800,000.
 This is \$353,900,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1A1A	Operational Forces	734,505	934,505	+ 200,000
	Transfer: Title II to Title IX for OCO Operations			+ 200,000
1A2A	Field Logistics	212,691	212,691	
1A3A	Depot Maintenance	53,040	53,040	
BSS1	Base Operating Support	23,047	176,947	+ 153,900
	Transfer: Title II to Title IX for OCO Operations			+ 153,900
3B4D	Training Support	30,459	30,459	
4A3G	Servicewide Transportation	61,400	61,400	
4A4G	Administration	2,108	2,108	
999	Classified Programs	4,650	4,650	
	Total, Operation and Maintenance, Marine Corps	1,121,900	1,475,800	+ 353,900

OPERATION AND MAINTENANCE, AIR FORCE

Appropriations, 2018 \$10,873,895,000
 Budget estimate, 2019 9,285,789,000
 Committee recommendation 10,055,789,000

The Committee recommends an appropriation of \$10,055,789,000. This is \$770,000,000 above the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
011A	Primary Combat Forces	166,274	166,274	
011C	Combat Enhancement Forces	1,492,580	1,492,580	
011D	Air Operations Training	110,237	110,237	
011M	Depot Purchase Equipment Maintenance	209,996	709,996	+ 500,000
	Transfer: Title II to Title IX for OCO Operations			+ 500,000
011R	Facilities Sustainment, Restoration & Modernization	92,412	92,412	
011W	Contractor Logistics Support and System Support	1,289,693	1,289,693	
011Y	Flying Hour Program	2,355,264	2,855,264	+ 500,000
	Transfer: Title II to Title IX for OCO Operations			+ 500,000
011Z	Base Operating Support	1,141,718	1,111,718	- 30,000
	Maintain program affordability: Unjustified growth			- 30,000
012A	Global C3I And Early Warning	13,537	13,537	
012C	Other Combat Ops Spt Programs	224,713	224,713	
012D	Cyberspace Activities	17,353	17,353	
012F	Tactical Intelligence and Special Activities	36,098	36,098	
013A	Launch Facilities	385	385	
013C	Space Control Systems	38,966	38,966	
015C	US NORTHCOM/NORAD	725	725	
015D	US STRATCOM	2,056	2,056	
015E	US CYBERCOM	35,189	35,189	
015F	US CENTCOM	162,691	208,191	+ 45,500
	Transfer: Air Force-requested transfer of CENTCOM OSC-I costs from SAG 42G			+ 45,500
015G	US SOCOM	19,000	19,000	
021A	Airlift Operations	1,287,659	1,087,659	- 200,000
	Maintain program affordability: Unjustified growth			- 200,000
021D	Mobilization Preparedness	107,064	107,064	

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
031A	Officer Acquisition	300	300	.....
031B	Recruit Training	340	340	.....
032A	Specialized Skill Training	25,327	25,327	.....
032B	Flight Training	844	844	.....
032C	Professional Development Education	1,199	1,199	.....
032D	Training Support	1,320	1,320	.....
041A	Logistics Operations	154,485	154,485	.....
041B	Technical Support Activities	13,608	13,608	.....
042A	Administration	4,814	4,814	.....
042B	Service-wide Communications	131,123	131,123	.....
042G	Other Service-wide Activities	97,471	51,971	- 45,500
	Transfer: Air Force—requested transfer of CENTCOM OSC-I costs to SAG 15F .....	.....	.....	- 45,500
043A	Security Programs	51,108	51,108	.....
044A	International Support	240	240	.....
	Total, Operation and Maintenance, Air Force	9,285,789	10,055,789	+ 770,000

OPERATION AND MAINTENANCE, DEFENSE-WIDE

Appropriations, 2018	\$7,575,195,000
Budget estimate, 2019	8,549,908,000
Committee recommendation	8,354,905,000

The Committee recommends an appropriation of \$8,354,905,000. This is \$195,003,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Joint Chiefs of Staff	28,671	28,671	.....
	Special Operations Command/Operating Forces	3,733,161	3,718,508	- 14,653
	Maintain Program Affordability: Travel .....	.....	.....	- 9,653
	Improving Funds Management: CMNS .....	.....	.....	- 5,000
	Defense Contract Audit Agency	1,781	1,781	.....
	Defense Contract Management Agency	21,723	21,723	.....
	Defense Information Systems Agency	111,702	111,702	.....
	Defense Legal Services Agency	127,023	127,023	.....
	Defense Media Activity	14,377	14,377	.....
	Department of Defense Education Activity	31,620	31,620	.....
	Defense Security Cooperation Agency	2,208,442	2,008,442	- 200,000
	Maintain Program Affordability: Maintain level of ef- fort—Security Cooperation .....	.....	.....	- 150,000
	Maintain Program Affordability: Unjustified growth— Lift and Sustain .....	.....	.....	- 50,000
	Defense Threat Reduction Agency	302,250	321,900	+ 19,650
	Program increase: JIDO Assist Situational Under- standing .....	.....	.....	+ 19,650
	Office of the Secretary of Defense	16,579	16,579	.....
	Washington Headquarters Services	7,766	7,766	.....
	Classified Programs	1,944,813	1,944,813	.....
	Total, Operation and Maintenance, Defense-Wide	8,549,908	8,354,905	- 195,003

Pakistan Reimbursements.—In January 2018, President Trump announced that the United States would withhold most security

aid from the government of Pakistan. The Committee understands that the Department of Defense continues to adjudicate the extent to which this policy applies to reimbursements for Pakistan's counterterrorism activities using Operation and Maintenance Defense-wide, Coalition Support Funds [CSF]. In addition, S. 2987 the National Defense Authorization Act for Fiscal Year 2019, proposes elimination of CSF and funding Pakistan's counterterrorism support activities using border security support authorities. While discussions in the Department and in Congress about the appropriate path forward continue, fiscal year 2017 and 2018 CSF for Pakistan remain unobligated. Therefore, the Committee recommends a rescission of \$800,000,000 of fiscal year 2018 two-year CSF funds. Should a decision be made that Pakistan has taken necessary decisive action to counter terrorist threats required for a resumption of CSF reimbursements, the Department may use CSF funds requested for fiscal year 2019 to make such payments, consistent with the authorities in the National Defense Authorization Act for Fiscal Year 2019.

Civilian Casualties Resulting from U.S. Military Operations.—The Committee supports the designation of a senior official responsible for developing, coordinating, and overseeing compliance with the policies of the Department of Defense related to civilian casualties resulting from U.S. military operations, as required by the John S. McCain National Defense Authorization Act for Fiscal Year 2019, as passed by the Senate. The Committee directs the Secretary of Defense and the Chairman of the Joint Chiefs of Staff to consult with the Committee not later than 90 days after the enactment of this act regarding coordination across the Department and among the Global Combatant Commands on the development and application of policies related to civilian casualties, including to ensure that the necessary personnel and resources are available on the Joint Staff to advise the Chairman on strategy and planning regarding compliance with such policies.

Train, Advise, Assist, and Accompany Activities.—The Committee is concerned about issues identified in the Army Regulation 15–6 Investigation, October 4, 2017 Enemy Contact Event in Tongo Tongo, Niger, in particular systemic issues with train, advise, assist, and accompany activities that fail to comply with well-established parameters and guidance. The Committee agrees with the report's findings that the Department should review these activities and the training provided to U.S. forces engaged in them, to ensure that they, and their partner forces, fully understand the advise and assist role and its limitations. In order to more fully understand the extent of these issues, the Committee directs the Secretary of Defense to report to the congressional defense committees on its world-wide counter-terrorism train, advise, assist, and accompany activities and the steps taken to implement the 15–6 Investigation's recommendations related to these missions.

OPERATION AND MAINTENANCE, ARMY RESERVE

Appropriations, 2018	\$24,699,000
Budget estimate, 2019	41,887,000
Committee recommendation	41,887,000

The Committee recommends an appropriation of \$41,887,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
113	Echelons Above Brigade	20,700	20,700	.....
121	Force Readiness Operations Support	700	700	.....
131	Base Operations Support	20,487	20,487	.....
	Total, Operation and Maintenance, Army Reserve	41,887	41,887	.....

OPERATION AND MAINTENANCE, NAVY RESERVE

Appropriations, 2018	\$23,980,000
Budget estimate, 2019	25,637,000
Committee recommendation	25,637,000

The Committee recommends an appropriation of \$25,637,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1A3A	Intermediate Maintenance	500	500	.....
1A5A	Aircraft Depot Maintenance	11,400	11,400	.....
1C6C	Combat Support Forces	13,737	13,737	.....
	Total, Operation and Maintenance, Navy Reserve	25,637	25,637	.....

OPERATION AND MAINTENANCE, MARINE CORPS RESERVE

Appropriations, 2018	\$3,367,000
Budget estimate, 2019	3,345,000
Committee recommendation	3,345,000

The Committee recommends an appropriation of \$3,345,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1A1A	Operational Forces	2,550	2,550	.....
BSS1	Base Operating Support	795	795	.....
	Total, Operation and Maintenance, Marine Corps Reserve	3,345	3,345	.....

OPERATION AND MAINTENANCE, AIR FORCE RESERVE

Appropriations, 2018	\$53,523,000
Budget estimate, 2019	60,500,000
Committee recommendation	60,500,000

The Committee recommends an appropriation of \$60,500,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
011M	Depot Purchase Equipment Maintenance	51,000	51,000	.....
011Z	Base Operating Support	9,500	9,500	.....
	Total, Operation and Maintenance, Air Force Reserve	60,500	60,500	.....

OPERATION AND MAINTENANCE, ARMY NATIONAL GUARD

Appropriations, 2018	\$108,111,000
Budget estimate, 2019	110,729,000
Committee recommendation	110,729,000

The Committee recommends an appropriation of \$110,729,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
111	Maneuver Units	42,519	42,519	.....
112	Modular Support Brigades	778	778	.....
113	Echelons Above Brigade	12,093	12,093	.....
114	Theater Level Assets	708	708	.....
116	Aviation Assets	28,135	28,135	.....
121	Force Readiness Operations Support	5,908	5,908	.....
131	Base Operations Support	18,877	18,877	.....
133	Management and Operational Headquarters	956	956	.....
432	Servicewide Communications	755	755	.....
	Total, Operation and Maintenance, Army National Guard	110,729	110,729	.....

OPERATION AND MAINTENANCE, AIR NATIONAL GUARD

Appropriations, 2018	\$15,400,000
Budget estimate, 2019	15,870,000
Committee recommendation	15,870,000

The Committee recommends an appropriation of \$15,870,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
011G	Mission Support Operations	3,560	3,560	.....
011Z	Base Support	12,310	12,310	.....
	Total, Operation and Maintenance, Air National Guard	15,870	15,870	.....

AFGHANISTAN SECURITY FORCES FUND

Appropriations, 2018	\$4,666,815,000
Budget estimate, 2019	5,199,450,000
Committee recommendation	4,666,815,000

The Committee recommends an appropriation of \$4,666,815,000. This is \$532,635,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Sustainment	1,522,777	1,365,956	- 156,821
	Insufficient budget justification .....	.....	.....	- 156,821
	Infrastructure	137,732	82,540	- 55,192
	Insufficient budget justification .....	.....	.....	- 55,192
	Equipment and Transportation	71,922	61,922	- 10,000
	Insufficient budget justification .....	.....	.....	- 10,000
	Training and Operations	175,846	155,846	- 20,000
	Insufficient budget justification .....	.....	.....	- 20,000
	Subtotal: Afghan National Army	1,908,277	1,666,264	- 242,013
	Sustainment	527,554	487,554	- 40,000
	Insufficient budget justification .....	.....	.....	- 40,000
	Infrastructure	42,984	25,000	- 17,984
	Insufficient budget justification .....	.....	.....	- 17,984
	Equipment and Transportation	14,554	14,554	.....
	Training and Operations	181,922	86,501	- 95,421
	Insufficient budget justification .....	.....	.....	- 95,421
	Subtotal: Afghan National Police	767,014	613,609	- 153,405
	Sustainment	942,279	902,452	- 39,827
	Insufficient budget justification .....	.....	.....	- 39,827
	Infrastructure	30,350	30,350	.....
	Equipment and Transportation	572,310	537,310	- 35,000
	Insufficient budget justification .....	.....	.....	- 35,000
	Training and Operations	277,191	259,801	- 17,390
	Insufficient budget justification .....	.....	.....	- 17,390
	Subtotal: Afghan Air Force	1,822,130	1,729,913	- 92,217
	Sustainment	353,734	353,734	.....
	Infrastructure	43,132	43,132	.....
	Equipment and Transportation	151,790	136,790	- 15,000
	Insufficient budget justification .....	.....	.....	- 15,000
	Training and Operations	153,373	123,373	- 30,000

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Insufficient budget justification .....	.....	.....	– 30,000
	Subtotal: Afghan Special Security Forces	702,029	657,029	– 45,000
	Total, Afghanistan Security Forces Fund	5,199,450	4,666,815	– 532,635

Afghanistan Security Forces Fund Reprogramming and Budget Submission Requirements.—The Committee appreciates the efforts of the Department of Defense to comply with prior year direction to provide detailed execution information concurrent with the budget request and Financial Activity Plan [FAP] submissions for the Afghanistan Security Forces Fund [ASFF] appropriation. However, the Department remains unable to provide an accurate accounting of current and prior year spending at the budget justification request line level. Without such an accounting, the Committee is unable to conduct sufficient budget analysis to determine appropriate funding levels for fiscal year 2019. Therefore, the Committee recommends maintaining the fiscal year 2018 enacted budget level of \$4,666,815,000, a reduction of \$532,635,000 from the fiscal year 2019 request.

Moreover, the Committee is concerned that the budget flexibility allowed within the ASFF appropriation in the past has led to a lack of budget discipline that challenges effective congressional and executive branch oversight and risks wasteful spending. Therefore, the Committee directs that, for the ASFF appropriation, the Secretary of Defense comply with reprogramming procedures required elsewhere in this report for the service and defense wide appropriations.

—The Secretary of Defense shall submit the Base for Reprogramming (DD Form 1414) for ASFF for fiscal year 2019, not later than 60 days after the enactment of this act. The Secretary of Defense is prohibited from executing any reprogramming or transfer of funds for any purpose other than originally appropriated until the aforementioned report is submitted to the House and Senate Appropriations Committees.

—Items for which additional funds have been recommended or items for which funding is specifically reduced as shown in the tables detailing Committee recommended adjustments or in paragraphs using the phrase “only for” or “only to” are congressional special interest items for the purpose of the Base for Reprogramming (DD Form 1414). Each of these items must be carried on the DD Form 1414 at the stated amount, as specifically addressed elsewhere in this report.

—The Secretary of Defense shall use prior approval reprogramming procedures to transfer funds in excess of \$20,000,000 between ASFF sub-activity groups.

The Committee continues direction that the Secretary shall provide budget justification materials that include: the budget request amount, the appropriated amount, and the actual obligation amount by line item, for the prior 2 years. In addition, concurrent with the submission of each FAP, the Secretary of Defense shall

provide the congressional defense committees with line item detail of planned funding movements within each ASFF sub-activity group using line item titles from the appropriate year’s budget justification submission. Any line item that did not appear in the budget justification submission shall be delineated as a new line item in the line item detail accompanying the FAP.

COUNTER-ISIS TRAIN AND EQUIP FUND

Appropriations, 2018	\$1,769,000,000
Budget estimate, 2019	1,400,000,000
Committee recommendation	994,000,000

The Committee recommends an appropriation of \$994,000,000. This is \$406,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Counter-ISIS Train and Equip Fund	1,400,000	994,000	- 406,000
	Insufficient budget documentation: Iraq—Miscellaneous Items .....	.....	.....	- 84,000
	Insufficient budget documentation: Syria—Non-NATO standard weapons .....	.....	.....	- 72,000
	Reduce duplication: Border security .....	.....	.....	- 250,000
	Total, Counter-ISIS Train and Equip Fund	1,400,000	994,000	- 406,000

PROCUREMENT

The Committee recommends \$12,574,963,000 for the procurement accounts. The Overseas Contingency Operations funding supports our forces engaged in Operation Enduring Freedom and other contingency operations. The Committee recommends funding to replace combat losses and equipment left behind in theater, augment and upgrade equipment for deploying units, sustain munitions and other war consumables, and reset the units returning home to an equipment-ready status. Funding adjustments have been made in instances where the requirement was poorly defined, funding was requested ahead of need or program execution has been delayed.

AIRCRAFT PROCUREMENT, ARMY

Appropriations, 2018	\$420,086,000
Budget estimate, 2019	363,363,000
Committee recommendation	363,363,000

The Committee recommends an appropriation of \$363,363,000 below. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
3	MQ-1 UAV	60,000	60,000	.....
11	UH-60 Blackhawk M Model [MYP]	21,246	21,246	.....
14	CH-47 Helicopter	25,000	25,000	.....
17	MQ-1 Payload [MIP]	11,400	11,400	.....
19	Gray Eagle Mods2	32,000	32,000	.....
20	Multi Sensor ABN Recon [MIP]	51,000	51,000	.....
32	RQ-7 UAV MODS	50,868	50,868	.....
33	UAS MODS	3,402	3,402	.....
36	CMWS	84,387	84,387	.....
37	Common Infrared Countermeasures (CIRCM)	24,060	24,060	.....
	Total, Aircraft Procurement, Army	363,363	363,363	.....

MISSILE PROCUREMENT, ARMY

Appropriations, 2018	\$709,283,000
Budget estimate, 2019	1,802,351,000
Committee recommendation	1,740,985,000

The Committee recommends an appropriation of \$1,740,985,000. This is \$61,366,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	MSE Missile	260,000	260,000	.....
5	Hellfire Sys Summary	255,040	193,674	- 61,366
	Improving funds management: Munitions funded in Public Law 115-141 .....	.....	.....	- 50,000
	Insufficient budget justification: Reimbursable to direct conversions unaccounted for .....	.....	.....	- 1,366
	Improving funds management: Forward financing support costs .....	.....	.....	- 10,000
8	Javelin (Aaws-M) System Summary	31,120	31,120	.....
11	Guided MLRS Rocket [GMLRS]	624,500	624,500	.....
13	High Mobility Artillery Rocket System [HIMARS]	171,138	171,138	.....
14	LETHAL MINIATURE AERIAL MISSILE SYSTEM [LMAMS]	112,973	112,973	.....
16	ATACMS MODS	225,580	225,580	.....
21	MLRS Mods	122,000	122,000	.....
	Total, Missile Procurement, Army	1,802,351	1,740,985	- 61,366

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

Appropriations, 2018	\$1,191,139,000
Budget estimate, 2019	1,107,183,000
Committee recommendation	1,107,183,000

The Committee recommends an appropriation of \$1,107,183,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Bradley Program	205,000	205,000	.....
2	Armored Multi Purpose Vehicle [AMPV]	230,359	230,359	.....
6	Bradley Program (MOD)	50,000	50,000	.....
8	Paladin Integrated Management [PIM]	67,000	67,000	.....
9	Improved Recovery Vehicle (M88A2 Hercules)	42,354	42,354	.....
14	M1 Abrams Tank (MOD)	34,000	34,000	.....
15	Abrams Upgrade Program	455,000	455,000	.....
18	M240 Medium Machine Gun (7.62MM)	126	126	.....
22	Mortar Systems	11,842	11,842	.....
25	Carbine	1,800	1,800	.....
27	Common Remotely Operated Weapons Station	3,378	3,378	.....
32	M2 50 Cal Machine Gun Mods	4,920	4,920	.....
34	M240 Medium Machine Gun Mods	7	7	.....
39	Items Less Than \$5.0m (WOCV-WTCV)	1,397	1,397	.....
	Total, Procurement of Weapons and Tracked Combat Vehicles, Army	1,107,183	1,107,183	.....

PROCUREMENT OF AMMUNITION, ARMY

Appropriations, 2018	\$191,836,000
Budget estimate, 2019	309,525,000
Committee recommendation	299,075,000

The Committee recommends an appropriation of \$299,075,000. This is \$10,450,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Ctg, 5.56mm, All Types	3,392	3,392	.....
2	CTG, 7.62mm, All Types	40	40	.....
3	CTG, Handgun, All Types	17	17	.....
4	CTG, .50 Cal, All Types	189	189	.....
5	CTG, 20mm, All Types	1,605	1,605	.....
7	CTG, 30mm, All Types	25,000	25,000	.....
9	60MM Mortar, All Types	218	218	.....
10	81MM Mortar, All Types	484	484	.....
14	Artillery Projectile, 155MM, All Types	79,400	79,400	.....
15	Proj 155mm Extended Range M982	72,985	72,985	.....
16	Artillery Propellants, Fuzes and Primers, All	63,900	63,900	.....
18	Shoulder Launched Munitions, All Types	22,242	11,792	- 10,450
	Improving funds management: program delays .....	.....	.....	- 10,450
19	Rocket, Hydra 70, All Types	39,974	39,974	.....
21	Demolition Munitions, All Types	5	5	.....
22	Grenades, All Types	8	8	.....
27	Items Less Than \$5 Million (AMMO)	66	66	.....
	Total, Procurement of Ammunition, Army	309,525	299,075	- 10,450

OTHER PROCUREMENT, ARMY

Appropriations, 2018	\$405,575,000
Budget estimate, 2019	1,382,047,000
Committee recommendation	1,372,487,000

The Committee recommends an appropriation of \$1,372,487,000. This is \$9,560,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	Semitrailers, Flatbed:	8,000	8,000	.....
3	Ambulance, 4 LITTER, 5/4 TON, 4x4	20,770	20,770	.....
10	Family of Heavy Tactical Vehicles [FHTV]	115,400	39,400	- 76,000
	Transfer: Army requested transfer to OPA line 12 .....	.....	.....	- 76,000
11	Pls Esp .....	.....	.....	.....
12	Hvy Expanded Mobile Tactical Truck Ext Serv	6,682	82,682	+ 76,000
	Transfer: Army requested transfer from OPA line 10 .....	.....	.....	+ 76,000
13	Tactical Wheeled Vehicle Protection Kits	50,000	50,000	.....
14	Modification of In Svc Equip	186,377	186,377	.....
15	Mine-Resistant Ambush-Protected [MRAP] Mods .....	.....	.....	.....
20	Signal Modernization Program .....	.....	.....	.....
28	Transportable Tactical Command Communications	7,100	7,100	.....
37	Joint Tactical Radio System	1,560	1,560	.....
42	Tractor Ride	13,190	13,190	.....
45	Tactical Communications and Protective System	9,549	9,549	.....
47	COTS Communications Equipment	22,000	22,000	.....
50	CI Automation Architecture [MIP]	9,800	9,800	.....
55	Communications Security [COMSEC]	3	.....	- 3
	Maintain program affordability: Unjustified request .....	.....	.....	- 3
59	Base Support Communications	690	690	.....
60	Information Systems	8,750	8,750	.....
63	Installation Info Infrastructure Mod Program	60,337	60,337	.....
68	DCGS-A [MIP]	37,806	37,806	.....
70	Trojan [MIP]	6,926	6,926	.....
71	Mod of In-Svc Equip (Intel Spt) [MIP]	2,011	2,011	.....
72	CI HUMINT Auto Reprting & Coll [CHARCS] [MIP] .....	.....	.....	.....
75	Biometric Tactical Collection Devices [MIP]	5,370	5,370	.....
80	Crew	42,651	42,651	.....
81	Family of Persistent Surveillance Cap. [MIP]	20,050	20,050	.....
82	Counterintelligence/Security Countermeasures	12,974	12,974	.....
85	Night Vision Devices	463	463	.....
86	Long Range Advanced Scout Surveillance System	2,861	2,861	.....
87	Small Tactical Optical Rifle Mounted MLRF	60	60	.....
88	Radiation Monitoring Systems	11	.....	- 11
	Maintain program affordability: Unjustified request .....	.....	.....	- 11
90	Indirect Fire Protection Family of Systems	251,062	251,062	.....
91	Family of Weapon Sights (FWS)	525	525	.....
94	Joint Battle Command—Platform [JBC-P]	26,146	18,300	- 7,846
	Maintain program affordability: Unjustified program growth .....	.....	.....	- 7,846
96	Mod of In-Svc Equip [LLDR]	4,050	4,050	.....
97	Computer Ballistics: LHMCB XM32	960	960	.....
98	Mortar Fire Control System	7,660	7,660	.....
99	Counterfire Radars	165,200	165,200	.....
102	AIR & MSL Defense Planning & Control Sys .....	.....	.....	.....
112	Automated Data Processing Equip	28,475	28,475	.....
121	Protective Systems	27	27	.....
122	Family of Non-Lethal Equipment [FNLE]	20,200	20,200	.....
123	Base Defense Systems [BDS]	39,200	39,200	.....
124	CBRN Defense	2,317	2,317	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
129	Grnd Standoff Mine Detectn Systm [GSTAMIDS]	16,000	14,335	- 1,665
	Maintain program affordability: Unjustified program growth			- 1,665
130	Area Mine Detection System [AMDS]	1		- 1
	Maintain program affordability: Unjustified request			- 1
132	Robotic Combat Support System [RCSS]	4,850	4,850	
136	Remote Demolition Systems	1		- 1
	Maintain program affordability: Unjustified request			- 1
139	Heaters and ECU'S	270	270	
141	Personnel Recovery Support System [PRSS]	4,300	4,300	
142	Ground Soldier System	1,725	1,725	
144	Force Provider	55,800	55,800	
145	Field Feeding Equipment	1,035	1,035	
146	Cargo Aerial Del & Personnel Parachute System	1,980	1,980	
151	Combat Support Medical	17,527	17,527	
152	Mobile Maintenance Equipment Systems			
153	Items Less Than \$5.0M (Maint Eq)	268	268	
156	Hydraulic Excavator			
159	High Mobility Engineer Excavator [HMEE]	25,700	25,700	
165	Generators and Associated Equip	569	569	
169	Training Devices, Nonsystem			
174	Integrated Family of Test Equipment [IFTE]	9,495	9,495	
176	M25 Stabilized Binocular	33		- 33
	Maintain program affordability: Unjustified request			- 33
177	Rapid Equipping Soldier Support Equipment	18,000	18,000	
178	Physical Security Systems (OPA3)	6,000	6,000	
179	Base Level Common Equipment	2,080	2,080	
180	Modification of In-Svc Equipment (OPA3)	19,200	19,200	
	Total, Other Procurement, Army	1,382,047	1,372,487	- 9,560

AIRCRAFT PROCUREMENT, NAVY

Appropriations, 2018	\$157,300,000
Budget estimate, 2019	80,119,000
Committee recommendation	80,119,000

The Committee recommends an appropriation of \$80,119,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
25	STUASLO UAV	35,065	35,065	
32	SH-60 Series	4,858	4,858	
34	EP-3 Series	5,380	5,380	
44	Special Project Aircraft	2,165	2,165	
49	Common ECM Equipment	9,820	9,820	
51	Common Defensive Weapon System	3,206	3,206	
61	QRC	2,410	2,410	
63	RQ-21	17,215	17,215	
	Total, Aircraft Procurement, Navy	80,119	80,119	

WEAPONS PROCUREMENT, NAVY

Appropriations, 2018	\$130,994,000
Budget estimate, 2019	14,134,000
Committee recommendation	14,134,000

The Committee recommends an appropriation of \$14,134,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
4	AMRAAM	1,183	1,183	.....
5	Sidewinder	381	381	.....
12	Hellfire	1,530	1,530	.....
15	Aerial Targets	6,500	6,500	.....
35	Small Arms and Weapons	1,540	1,540	.....
38	Gun Mount Mods	3,000	3,000	.....
	Total, Weapons Procurement, Navy	14,134	14,134	.....

PROCUREMENT OF AMMUNITION, NAVY AND MARINE CORPS

Appropriations, 2018	\$233,406,000
Budget estimate, 2019	246,541,000
Committee recommendation	223,312,000

The Committee recommends an appropriation of \$223,312,000. This is \$23,229,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	General Purpose Bombs	62,530	41,530	- 21,000
	Improving funds management: Previously funded requirements			- 21,000
2	JDAM	93,019	93,019	.....
3	Airborne Rockets, All Types	2,163	2,163	.....
4	Machine Gun Ammunition	5,000	5,000	.....
6	Cartridges & Cart Actuated Devices	5,334	5,334	.....
7	Air Expendable Countermeasures	36,580	36,580	.....
8	JATOS	747	747	.....
11	Other Ship Gun Ammunition	2,538	2,538	.....
13	Pyrotechnic and Demolition	1,807	1,807	.....
15	Ammunition Less Than \$5 Million	2,229		- 2,229
	Improving funds management: Prior year carryover			- 2,229
19	Mortars	2,018	2,018	.....
21	Direct Support Munitions	632	632	.....
22	Infantry Weapons Ammunition	779	779	.....
26	Combat Support Munitions	164	164	.....
29	Artillery Munitions	31,001	31,001	.....
	Total, Procurement of Ammunition, Navy and Marine Corps	246,541	223,312	- 23,229

OTHER PROCUREMENT, NAVY

Appropriations, 2018	\$239,359,000
Budget estimate, 2019	187,173,000
Committee recommendation	181,173,000

The Committee recommends an appropriation of \$181,173,000. This is \$6,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
21	Underwater EOD Programs	9,200	9,200	.....
28	Standard Boats	19,060	19,060	.....
43	Fixed Surveillance System	56,950	56,950	.....
77	Satellite Communications Systems	3,200	3,200	.....
82	Cryptologic Communications Equip	2,000	2,000	.....
88	Sonobuoys—All Types	21,156	21,156	.....
104	Explosive Ordnance Disposal Equip	33,580	27,580	- 6,000
	Restoring acquisition accountability: JCREW excess unit cost growth .....	.....	.....	- 6,000
108	Passenger Carrying Vehicles	170	170	.....
109	General Purpose Trucks	400	400	.....
111	Fire Fighting Equipment	770	770	.....
112	Tactical Vehicles	7,298	7,298	.....
118	First Destination Transportation	500	500	.....
123	Medical Support Equipment	6,500	6,500	.....
128	Environmental Support Equipment	2,200	2,200	.....
129	Physical Security Equipment	19,389	19,389	.....
999	Classified Programs	4,800	4,800	.....
	Total, Other Procurement, Navy	187,173	181,173	- 6,000

PROCUREMENT, MARINE CORPS

Appropriations, 2018	\$64,307,000
Budget estimate, 2019	58,023,000
Committee recommendation	58,023,000

The Committee recommends an appropriation of \$58,023,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
22	Fire Support System	5,583	5,583	.....
37	Motor Transport Modifications	44,440	44,440	.....
45	EOD Systems	8,000	8,000	.....
	Total, Procurement, Marine Corps	58,023	58,023	.....

AIRCRAFT PROCUREMENT, AIR FORCE

Appropriations, 2018	\$503,938,000
Budget estimate, 2019	1,018,888,000
Committee recommendation	1,007,888,000

The Committee recommends an appropriation of \$1,007,888,000. This is \$11,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
6	HC-130J	100,000	89,000	- 11,000
	Restoring acquisition accountability: Unit cost growth			- 11,000
17	MQ-9	339,740	339,740	.....
18	RQ-20B Puma	13,500	13,500	.....
20	B-1B	4,000	4,000	.....
22	Large Aircraft Infrared Countermeasures	149,778	149,778	.....
23	A-10	10,350	10,350	.....
45	U-2 Mods	7,900	7,900	.....
54	Compass Call Mods	36,400	36,400	.....
59	E-8	13,000	13,000	.....
63	H-60	40,560	40,560	.....
65	HC/MC-130 Modifications	87,900	87,900	.....
66	Other Aircraft	53,731	53,731	.....
68	MQ-9 UAS Payloads	16,000	16,000	.....
70	Initial Spares/Repair Parts	91,500	91,500	.....
71	Aircraft Replacement Support Equip	32,529	32,529	.....
77	Other Production Charges	22,000	22,000	.....
	Total, Aircraft Procurement, Air Force	1,018,888	1,007,888	- 11,000

MISSILE PROCUREMENT, AIR FORCE

Appropriations, 2018	\$481,700,000
Budget estimate, 2019	493,526,000
Committee recommendation	493,526,000

The Committee recommends an appropriation of \$493,526,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	Joint Air-Surface Standoff Missile	61,600	61,600	.....
5	AMRAAM	2,600	2,600	.....
6	Predator Hellfire Missile	255,000	255,000	.....
7	Small Diameter Bomb	140,724	140,724	.....
13	AGM-65D Maverick	33,602	33,602	.....
	Total, Missile Procurement, Air Force	493,526	493,526	.....

PROCUREMENT OF AMMUNITION, AIR FORCE

Appropriations, 2018	\$551,509,000
Budget estimate, 2019	1,421,516,000
Committee recommendation	1,371,516,000

The Committee recommends an appropriation of \$1,371,516,000. This is \$50,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
2	Cartridges	29,587	29,587	.....
4	General Purpose Bombs	551,862	551,862	.....
6	Joint Direct Attack Munition	738,451	688,451	- 50,000
	Improving funds management: Previously funded requirement .....	.....	.....	- 50,000
15	Flares	12,116	12,116	.....
16	Fuzes	81,000	81,000	.....
17	Small Arms	8,500	8,500	.....
	Total, Procurement of Ammunition, Air Force	1,421,516	1,371,516	- 50,000

OTHER PROCUREMENT, AIR FORCE

Appropriations, 2018	\$3,324,590,000
Budget estimate, 2019	3,725,944,000
Committee recommendation	3,705,044,000

The Committee recommends an appropriation of \$3,705,044,000. This is \$20,900,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Passenger Carrying Vehicles	9,680	9,680	.....
2	Medium Tactical Vehicle	9,680	9,680	.....
4	Cargo and Utility Vehicles	19,680	19,680	.....
6	Security And Tactical Vehicles	24,880	24,880	.....
7	Special Purpose Vehicles	34,680	34,680	.....
8	Fire Fighting/Crash Rescue Vehicles	9,736	9,736	.....
9	Materials Handling Vehicles	24,680	24,680	.....
10	Runway Snow Remov And Cleaning Equ	9,680	9,680	.....
11	Base Maintenance Support Vehicles	9,680	9,680	.....
15	Intelligence Comm Equipment	6,156	6,156	.....
16	Air Traffic Control & Landing Sys	56,884	35,984	- 20,900
	D-RAPCON .....	.....	.....	- 20,900
29	Air Force Physical Security System	46,236	46,236	.....
37	Theater Battle Mgt C2 System	2,500	2,500	.....
45	Tactical C-E Equipment	27,911	27,911	.....
51	Personal Safety and Rescue Equipment	13,600	13,600	.....
53	Base Procured Equipment	28,800	28,800	.....
54	Engineering and EOD Equipment	53,500	53,500	.....
55	Mobility Equipment	78,562	78,562	.....
56	Base Maintenance and Support Equipment	28,055	28,055	.....

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
59	DCGS-AF	2,000	2,000	.....
999	Classified Programs	3,229,364	3,229,364	.....
	Total, Other Procurement, Air Force	3,725,944	3,705,044	- 20,900

PROCUREMENT, DEFENSE-WIDE

Appropriations, 2018	\$517,041,000
Budget estimate, 2019	572,135,000
Committee recommendation	557,135,000

The Committee recommends an appropriation of \$557,135,000. This is \$15,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
8	Teleport Program	3,800	3,800	.....
17	Defense Information Systems Network	12,000	12,000	.....
25	Counter IED & Improvised Threat Technologies	5,534	5,534	.....
47	Manned ISR	5,000	5,000	.....
48	MC-12	5,000	5,000	.....
49	MH-60 Blackhawk	27,600	27,600	.....
51	Unmanned ISR	17,000	17,000	.....
52	Non-Standard Aviation	13,000	13,000	.....
53	U-28	51,722	51,722	.....
54	MH-47 Chinook	36,500	36,500	.....
61	Ordnance Items <\$5M	100,850	85,850	- 15,000
	Restoring acquisition accountability: Unit cost adjustments			- 15,000
62	Intelligence Systems	16,500	16,500	.....
64	Other Items <\$5M	7,700	7,700	.....
67	Tactical Vehicles	59,891	59,891	.....
68	Warrior Systems <\$5M	21,135	21,135	.....
69	Combat Mission Requirements	10,000	10,000	.....
71	Operational Enhancements Intelligence	10,805	10,805	.....
73	Operational Enhancements	126,539	126,539	.....
999	Classified Programs	41,559	41,559	.....
	Total, Procurement, Defense-wide	572,135	557,135	- 15,000

RESEARCH, DEVELOPMENT, TEST AND EVALUATION

The Committee recommends \$1,175,770,000 for research, development, test and evaluation.

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, ARMY

Appropriations, 2018	\$235,368,000
Budget estimate, 2019	325,104,000
Committee recommendation	325,104,000

The Committee recommends an appropriation of \$325,104,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
56	Air and Missile Defense Systems Engineering	1,000	1,000	.....
58	Smoke, Obscurant and Target Defeating Sys-Adv Dev	1,500	1,500	.....
60	Soldier Support and Survivability	3,000	3,000	.....
76	Maneuver—Short Range Air Defense (M—SHORAD)	23,000	23,000	.....
88	TRACTOR CAGE	12,000	12,000	.....
100	Air Defense Command, Control and Intelligence—Eng Dev	119,300	119,300	.....
125	TRACTOR TIRE	66,760	66,760	.....
128	Common Infrared Countermeasures (CIRCM)	2,670	2,670	.....
136	Aircraft Survivability Development	34,933	34,933	.....
147	TROJAN—RH12	1,200	1,200	.....
184	Weapons and Munitions Product Improvement Programs	2,548	2,548	.....
185	TRACTOR SMOKE	7,780	7,780	.....
206	Missile/Air Defense Product Improvement Program	2,000	2,000	.....
209	Integrated Base Defense—Operational System Dev	8,000	8,000	.....
216	Security Intelligence Activities	23,199	23,199	.....
226	Airborne Reconnaissance Systems	14,000	14,000	.....
231	Biometrics Enabled Intelligence	2,214	2,214	.....
	Total, Research, Development, Test and Evaluation, Army	325,104	325,104	.....

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, NAVY

Appropriations, 2018	\$167,565,000
Budget estimate, 2019	167,812,000
Committee recommendation	167,812,000

The Committee recommends an appropriation of \$167,812,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
41	RETRACT LARCH	18,000	18,000	.....
61	Joint Service Explosive Ordnance Development	13,900	13,900	.....
74	Land Attack Technology	1,400	1,400	.....
149	Ship Self Defense (Detect & Control)	1,100	1,100	.....
236	Marine Corps Communications Systems	16,130	16,130	.....
XXX	Classified Programs	117,282	117,282	.....
	Total, Research, Development, Test and Evaluation, Navy	167,812	167,812	.....

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, AIR FORCE

Appropriations, 2018	\$129,608,000
Budget estimate, 2019	314,271,000
Committee recommendation	287,971,000

The Committee recommends an appropriation of \$287,971,000. This is \$26,300,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
65	Space Control Technology	1,100	1,100	.....
70	Operationally Responsive Space	12,395	12,395	.....
186	MQ-9 UAV	4,500	4,500	.....
187	Joint Counter RCIED Electronic Warfare	4,000	4,000	.....
188	A-10 Squadrons	1,000	1,000	.....
217	Battlefield Abn Comm Node (BACN)	42,349	42,349	.....
228	Intel Data Applications	1,200	1,200	.....
254	Weather Service	3,000	3,000	.....
268	Dragon U-2	22,100	22,100	.....
272	Distributed Common Ground/Surface Systems	29,500	29,500	.....
310	AF TENCAP	5,000	5,000	.....
	Classified Programs	188,127	161,827	- 26,300
	Classified adjustment			- 26,300
	Total, Research Development, Test and Evaluation, Air Force	314,271	287,971	- 26,300

RESEARCH, DEVELOPMENT, TEST AND EVALUATION, DEFENSE-WIDE

Appropriations, 2018	\$394,396,000
Budget estimate, 2019	500,544,000
Committee recommendation	394,883,000

The Committee recommends an appropriation of \$394,883,000. This is \$105,661,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
24	Combating Terrorism Technology Support	25,000	.....	- 25,000
	Transfer funding to RDDW Base, Line 24: Anti-Tunneling .....		.....	- 25,000
26	Counter Improvised-Threat Simulation	13,648	13,648	.....
94	Counter Improvised-Threat Demonstration, Prototype Development, and Testing	242,668	162,007	- 80,661
	JIDO program adjustment .....		.....	- 84,161
	Program increase: Hyperspectral IED detection .....		.....	+ 3,500
250	Operational Enhancements	3,632	3,632	.....
251	Warrior Systems	11,040	11,040	.....
253	Unmanned ISR	11,700	11,700	.....
254	SOF Tactical Vehicles	725	725	.....
	Classified Programs	192,131	192,131	.....
	Total, Research, Development, Test and Evaluation, Defense-Wide	500,544	394,883	- 105,661

Joint Improvised-Threat Defeat Organization: Hyperspectral Improvised Explosive Device Detection.—The Committee understands the need for new and emerging stand-off hyperspectral imaging [HSI] technologies for the detection of improvised explosive devices [IEDs] and for the detection of the constituent chemicals and other

materials used in the manufacture of IEDs' such as nitrates, nitrites, phosphates and ammonia. The Committee recommends an additional \$3,500,000 for HSI sensor technology development and deployment.

REVOLVING AND MANAGEMENT FUNDS

DEFENSE WORKING CAPITAL FUNDS

Appropriations, 2018	\$148,956,000
Budget estimate, 2019	15,190,000
Committee recommendation	15,190,000

The Committee recommends an appropriation of \$15,190,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the programs recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Supply Management	6,600	6,600	.....
	Total, Defense Working Capital Fund, Army	6,600	6,600	.....
	Supply Management	8,590	8,590	.....
	Total, Defense Working Capital Fund, Air Force	8,590	8,590	.....
	Grand Total, Defense Working Capital Funds	15,190	15,190	.....

OTHER DEPARTMENT OF DEFENSE PROGRAMS

DEFENSE HEALTH PROGRAM

Appropriations, 2018	\$395,805,000
Budget estimate, 2019	352,068,000
Committee recommendation	352,068,000

The Committee recommends an appropriation of \$352,068,000. This is equal to the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table details the program recommended by the Committee:

[In thousands of dollars]

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
	Operation and Maintenance .....	.....	.....	.....
	In-House Care	72,627	72,627	.....
	Private Sector Care	277,066	277,066	.....
	Consolidated Health Care	2,375	2,375	.....
	Total, Defense Health Program	352,068	352,068	.....

DRUG INTERDICTION AND COUNTER-DRUG ACTIVITIES, DEFENSE

Appropriations, 2018	\$196,300,000
Budget estimate, 2019	153,100,000
Committee recommendation	143,100,000

The Committee recommends an appropriation of \$143,100,000. This is \$10,000,000 below the budget estimate.

COMMITTEE RECOMMENDED PROGRAM

The following table summarizes the budget estimate for this appropriation, the Committee recommendation, and the Committee recommended adjustments to the budget estimate:

(In thousands of dollars)

Line	Item	2019 budget estimate	Committee recommendation	Change from budget estimate
1	Enable Rapid Capability Delivery .....	.....	.....	.....

OFFICE OF THE INSPECTOR GENERAL

Appropriations, 2018	\$24,692,000
Budget estimate, 2019	24,692,000
Committee recommendation	24,692,000

The Committee recommends an appropriation of \$24,692,000. This is equal to the budget estimate.

GENERAL PROVISIONS—THIS TITLE

The following lists general provisions proposed by the Committee. The Committee recommends inclusion of several proposals which have been incorporated in previous appropriations acts, provisions requested for inclusion by the Defense Department, and new provisions. The Committee recommendations are as follows:

SEC. 9001. *Funds in Addition to Base.*—Retains and modifies a provision carried in previous years.

SEC. 9002. *Special Transfer Authority.*—Retains and modifies a provision carried in previous years.

SEC. 9003. *Supervision and Administration Costs.*—Retains a provision carried in previous years.

SEC. 9004. *Vehicle Procurement.*—Retains a provision carried in previous years.

SEC. 9005. *Commanders' Emergency Response Program.*—Retains a provision carried in previous years.

SEC. 9006. *Coalition Lift and Sustainment.*—Retains a provision carried in previous years.

SEC. 9007. *Permanent Military Installations.*—Retains a provision carried in previous years.

SEC. 9008. *U.N. Convention Against Torture.*—Retains a provision carried in previous years.

SEC. 9009. *Afghanistan Resource Oversight Council.*—Retains a provision carried in previous years.

SEC. 9010. *Investment Unit Cost.*—Retains a provision carried in previous years.

SEC. 9011. *Coalition Support Funds.*—Retains a provision carried in previous years.

SEC. 9012. *C-130 Cargo Aircraft Transfers.*—Retains a provision carried in previous years.

SEC. 9013. *Rescissions.*—The Committee recommends a general provision rescinding funds from prior years as displayed below:

	Amount
2018 Appropriations	
Operation and Maintenance, Defense-Wide:	
DSCA: Security Cooperation	\$150,000,000
Coalition Support Funds	800,000,000
Counter-Islamic State of Iraq and Syria Train and Equipment Fund:	
Counter-ISIS Train and Equip	400,000,000
Aircraft Procurement, Air Force:	
HC/MC-130 Modifications	88,400,000

SEC. 9014. *Afghanistan Security Forces Fund Certification.*—Retains a provision carried in previous years.

SEC. 9015. *Counterterrorism Partnerships Fund Excess Equipment.*—Inserts a new provision that provides for the transfer of excess equipment to foreign forces receiving equipment through the Counter-ISIS Train and Equip Fund.

SEC. 9016. *Emergency Designation.*—Retains a provision carried in previous years.

COMPLIANCE WITH PARAGRAPH 7, RULE XVI OF THE
STANDING RULES OF THE SENATE

Paragraph 7 of rule XVI requires that Committee reports on general appropriations bills identify each Committee amendment to the House bill “which proposes an item of appropriation which is not made to carry out the provisions of an existing law, a treaty stipulation, or an act or resolution previously passed by the Senate during that session.”

The Committee recommends funding for the following accounts which currently lack authorization for fiscal year 2019:

Military Personnel, Army
Military Personnel, Navy
Military Personnel, Marine Corps
Military Personnel, Air Force
Reserve Personnel, Air Force
Reserve Personnel, Army
Reserve Personnel, Navy
Reserve Personnel, Marine Corps
Reserve Personnel, Air Force
National Guard Personnel, Army
National Guard Personnel, Air Force
Operation and Maintenance, Army
Operation and Maintenance, Navy
Operation and Maintenance, Marine Corps
Operation and Maintenance, Air Force
Operation and Maintenance, Defense-Wide
Operation and Maintenance, Army Reserve
Operation and Maintenance, Navy Reserve
Operation and Maintenance, Marine Corps Reserve
Operation and Maintenance, Army National Guard
Operation and Maintenance, Air National Guard
United States Court of Appeals for the Armed Forces
Environmental Restoration, Army
Environmental Restoration, Navy
Environmental Restoration, Air Force
Environmental Restoration, Defense-Wide
Environmental Restoration, Formerly Used Defense Sites
Overseas Humanitarian, Disaster, and Civic Aid
Cooperative Threat Reduction Account
Afghanistan Security Forces Fund
Counter-ISIS Train and Equip Fund
Aircraft Procurement, Army
Missile Procurement, Army
Procurement of Weapons and Tracked Combat Vehicles, Army
Procurement of Ammunition, Army
Other Procurement, Army
Aircraft Procurement, Navy

Weapons Procurement, Navy
 Procurement of Ammunition, Navy and Marine Corps
 Shipbuilding and Conversion, Navy
 Ohio Replacement Submarine [AP]
 Carrier Replacement Program [CVN 80]
 Virginia Class Submarine
 Virginia Class Submarine [AP]
 CVN Refueling Overhauls [AP]
 DDG-1000
 DDG-51
 DDG-51 [AP]
 Littoral Combat Ship
 LPD-17
 Expeditionary Seabase
 LHA Replacement [AP]
 Expeditionary Fast Transport (EPF)
 TAO Fleet Oiler
 TAO Fleet Oiler [AP]
 Towing, Salvage, and Rescue Ship
 LCU 1700
 Outfitting, Post Delivery, Conversions and First Destination
 Transportation
 Ship to Shore Connector
 Service Craft
 LCAC Service Life Extension Program
 Completion of Prior Year Shipbuilding Programs
 Cable Ship
 Other Procurement, Navy
 Procurement, Marine Corps
 Aircraft Procurement, Air Force
 Missile Procurement, Air Force
 Space Procurement, Air Force
 Procurement of Ammunition, Air Force
 Other Procurement, Air Force
 Procurement, Defense-Wide
 National Guard and Reserve Equipment
 Research, Development, Test, and Evaluation, Army
 Research, Development, Test, and Evaluation, Navy
 Research, Development, Test, and Evaluation, Air Force
 Research, Development, Test, and Evaluation, Defense-Wide
 Operational Test and Evaluation, Defense
 Defense Working Capital Funds
 Defense Health Program
 Chemical Agents and Munitions Destruction
 Drug Interdiction and Counter-drug Activities
 Office of the Inspector General
 Intelligence Community Management Account (ICMA)

**COMPLIANCE WITH PARAGRAPH 7(c), RULE XXVI OF THE
 STANDING RULES OF THE SENATE**

Pursuant to paragraph 7(c) of rule XXVI, on June 28, 2018, the Committee ordered favorably reported an original bill (S. 3159) making appropriations for the Department of Defense for the fiscal year ending September 30, 2019, and for other purposes, provided

that the bill be subject to amendment and that the bill be consistent with its budget allocation, and provided that the Chairman of the Committee or his designee be authorized to offer the substance of the original bill as a Committee amendment in the nature of a substitute to the House companion measure, by a recorded vote of 30–1, a quorum being present. The vote was as follows:

Yeas	Nays
Chairman Shelby	Mr. Merkley
Mr. McConnell	
Mr. Alexander	
Ms. Collins	
Ms. Murkowski	
Mr. Graham	
Mr. Blunt	
Mr. Moran	
Mr. Hoeven	
Mr. Boozman	
Mrs. Capito	
Mr. Lankford	
Mr. Daines	
Mr. Kennedy	
Mr. Rubio	
Mrs. Hyde-Smith	
Mr. Leahy	
Mrs. Murray	
Mrs. Feinstein	
Mr. Durbin	
Mr. Reed	
Mr. Tester	
Mr. Udall	
Mrs. Shaheen	
Mr. Coons	
Mr. Schatz	
Ms. Baldwin	
Mr. Murphy	
Mr. Manchin	
Mr. Van Hollen	

COMPLIANCE WITH PARAGRAPH 12, RULE XXVI OF THE
STANDING RULES OF THE SENATE

Paragraph 12 of rule XXVI requires that Committee reports on a bill or joint resolution repealing or amending any statute or part of any statute include “(a) the text of the statute or part thereof which is proposed to be repealed; and (b) a comparative print of that part of the bill or joint resolution making the amendment and of the statute or part thereof proposed to be amended, showing by stricken-through type and italics, parallel columns, or other appropriate typographical devices the omissions and insertions which would be made by the bill or joint resolution if enacted in the form recommended by the Committee.”

The Committee bill as recommended contains no such provisions.

BUDGETARY IMPACT OF BILL

PREPARED IN CONSULTATION WITH THE CONGRESSIONAL BUDGET OFFICE PURSUANT TO SEC.
308(a), PUBLIC LAW 93-344, AS AMENDED

[In millions of dollars]

	Budget authority		Outlays	
	Committee allocation	Amount in bill	Committee allocation	Amount in bill
Comparison of amounts in the bill with the subcommittee allocation for 2019: Subcommittee on Defense:				
Mandatory	514	514	514	¹ 514
Discretionary	607,129	675,043	588,788	¹ 626,073
Security	607,000	674,914	NA	NA
Nonsecurity	129	129	NA	NA
Projection of outlays associated with the recommendation:				
2019				² 389,030
2020				158,968
2021				62,553
2022				31,501
2023 and future years				23,002
Financial assistance to State and local governments for 2019	NA		NA	.....²

¹ Includes outlays from prior-year budget authority.

² Excludes outlays from prior-year budget authority.

NA: Not applicable.

NOTE.—Consistent with the funding recommended in the bill for overseas contingency operations and in accordance with subparagraph (A)(ii) of section 251(b)(2) of the BBEDCA of 1985, the Committee anticipates that the Budget Committee will provide a revised 302(a) allocation for the Committee on Appropriations reflecting an upward adjustment of \$67,914,000,000 in budget authority plus the associated outlays.

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2018 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL FOR FISCAL YEAR 2019
 (In thousands of dollars)

Item	2018 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or -)	
				2018 appropriation	Budget estimate
TITLE I					
MILITARY PERSONNEL					
Military Personnel, Army	41,628,855	43,670,542	43,060,042	+ 1,431,187	- 610,500
Military Personnel, Navy	28,772,118	30,426,211	30,305,481	+ 1,533,363	- 120,730
Military Personnel, Marine Corps	13,231,114	13,890,968	13,799,038	+ 567,924	- 91,930
Military Personnel, Air Force	28,790,440	30,526,011	30,173,691	+ 1,383,251	- 352,320
Reserve Personnel, Army	4,715,608	4,955,947	4,870,947	+ 155,339	- 85,000
Reserve Personnel, Navy	1,988,362	2,067,521	2,059,521	+ 71,159	- 8,000
Reserve Personnel, Marine Corps	764,903	788,090	787,090	+ 22,187	- 1,000
Reserve Personnel, Air Force	1,802,554	1,894,286	1,871,286	+ 68,732	- 23,000
National Guard Personnel, Army	8,264,626	8,744,345	8,650,645	+ 386,019	- 93,700
National Guard Personnel, Air Force	3,408,817	3,725,380	3,718,780	+ 309,963	- 6,600
Total, Title I, Military Personnel	133,367,397	140,689,301	139,296,521	+ 5,929,124	- 1,392,780
TITLE II					
OPERATION AND MAINTENANCE					
Operation and Maintenance, Army	38,816,957	42,009,317	40,634,715	+ 1,817,758	- 1,374,602
Operation and Maintenance, Navy	45,384,353	49,003,633	47,296,183	+ 1,911,830	- 1,707,450
Operation and Maintenance, Marine Corps	6,605,546	6,832,510	6,372,000	- 233,546	- 460,510
Operation and Maintenance, Air Force	39,544,193	42,060,568	40,775,374	+ 1,231,181	- 1,285,194
Operation and Maintenance, Defense-Wide	34,059,257	36,352,625	35,662,783	+ 1,603,526	- 689,842
Operation and Maintenance, Army Reserve	2,877,104	2,916,909	2,854,909	- 22,195	- 62,000
Operation and Maintenance, Navy Reserve	1,069,707	1,027,006	1,018,006	- 51,701	- 9,000
Operation and Maintenance, Marine Corps Reserve	284,837	271,570	271,570	- 13,267	.....
Operation and Maintenance, Air Force Reserve	3,202,307	3,260,234	3,247,534	+ 45,227	- 12,700
Operation and Maintenance, Army National Guard	7,284,170	7,399,295	7,261,295	- 22,875	- 138,000
Operation and Maintenance, Air National Guard	6,900,798	6,427,622	6,433,697	- 467,101	+ 6,075

United States Court of Appeals for the Armed Forces	14,538	14,662	14,662	14,662	+ 124	.....
Environmental Restoration, Army	235,809	203,449	228,449	228,449	- 7,360	+ 25,000
Environmental Restoration, Navy	365,883	329,253	329,253	329,253	- 36,630	.....
Environmental Restoration, Air Force	352,549	296,808	365,808	365,808	+ 13,259	+ 69,000
Environmental Restoration, Defense-Wide	19,002	8,926	8,926	8,926	- 10,076	.....
Environmental Restoration, Formerly Used Defense Sites	248,673	212,346	212,346	212,346	- 36,327	.....
Overseas Humanitarian, Disaster, and Civic Aid	129,900	107,663	107,663	107,663	- 22,237	.....
Cooperative Threat Reduction Account	350,000	335,240	335,240	335,240	- 14,760	.....
Department of Defense Acquisition Workforce Development Fund	500,000	400,000	552,000	552,000	+ 52,000	+ 152,000
Total, Title II, Operation and maintenance	188,245,583	199,469,636	193,982,413	193,982,413	+ 5,736,830	- 5,487,223
TITLE III PROCUREMENT						
Aircraft Procurement, Army	5,535,794	3,782,558	4,890,658	4,890,658	- 645,136	+ 1,108,100
Missile Procurement, Army	3,196,910	3,355,777	3,160,597	3,160,597	- 36,313	- 195,180
Procurement of Weapons and Tracked Combat Vehicles, Army	4,391,573	4,489,118	4,515,290	4,515,290	+ 123,717	+ 26,172
Procurement of Ammunition, Army	2,548,740	2,234,761	2,283,369	2,283,369	- 265,371	+ 48,608
Other Procurement, Army	8,298,418	7,999,529	7,709,078	7,709,078	- 589,340	- 290,451
Aircraft Procurement, Navy	19,957,380	19,041,799	20,083,169	20,083,169	+ 125,789	+ 1,041,370
Weapons Procurement, Navy	3,510,590	3,702,393	3,780,572	3,780,572	+ 269,982	+ 78,179
Procurement of Ammunition, Navy and Marine Corps	804,335	1,006,209	970,454	970,454	+ 166,119	- 35,755
Shipbuilding and Conversion, Navy	23,824,738	21,871,437	23,992,937	23,992,937	+ 168,199	+ 2,121,500
Other Procurement, Navy	7,941,018	9,414,355	10,393,562	10,393,562	+ 2,452,544	+ 979,207
Procurement, Marine Corps	1,942,737	2,860,410	2,800,997	2,800,997	+ 858,260	- 59,413
Aircraft Procurement, Air Force	18,504,556	16,206,937	15,772,473	15,772,473	- 2,732,083	- 434,464
Missile Procurement, Air Force	2,207,747	2,669,454	2,614,954	2,614,954	+ 407,207	- 54,500
Space Procurement, Air Force	3,552,175	2,527,542	2,224,142	2,224,142	- 1,328,033	- 303,400
Procurement of Ammunition, Air Force	1,651,977	1,587,304	1,564,880	1,564,880	- 87,097	- 22,424
Other Procurement, Air Force	20,503,273	20,890,164	20,839,366	20,839,366	+ 336,093	- 50,798
Procurement, Defense-Wide	5,429,270	6,786,271	6,663,821	6,663,821	+ 1,234,551	- 122,450
Defense Production Act Purchases	67,401	38,578	38,578	38,578	- 28,823	.....
Joint Urgent Operational Needs Fund .....	.....	100,025	.....	.....	.....	- 100,025
National Guard and Reserve Equipment .....	.....	.....	900,000	.....	+ 900,000	+ 900,000
Total, Title III, Procurement	133,868,632	130,564,621	135,198,897	135,198,897	+ 1,330,265	+ 4,634,276

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2018 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL
 FOR FISCAL YEAR 2019—Continued
 (In thousands of dollars)

Item	2018 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or -)	
				2018 appropriation	Budget estimate
TITLE IV					
RESEARCH, DEVELOPMENT, TEST AND EVALUATION					
Research, Development, Test and Evaluation, Army	10,647,426	10,159,379	10,812,458	+ 165,032	+ 653,079
Research, Development, Test and Evaluation, Navy	18,010,754	18,481,666	18,992,064	+ 981,310	+ 510,398
Research, Development, Test and Evaluation, Air Force	37,428,078	40,178,343	40,896,667	+ 3,468,589	+ 718,324
Research, Development, Test and Evaluation, Defense-Wide	22,016,553	22,010,975	24,049,621	+ 2,038,646	+ 2,033,068
Operational Test and Evaluation, Defense	210,900	221,009	381,009	+ 170,109	+ 160,000
Total, Title IV, Research, Development, Test and Evaluation	88,308,133	91,056,950	95,131,819	+ 6,823,686	+ 4,074,869
TITLE V					
REVOLVING AND MANAGEMENT FUNDS					
Defense Working Capital Funds	1,685,596	1,542,115	1,641,115	- 44,481	+ 99,000
Total, Title V, Revolving and Management Funds	1,685,596	1,542,115	1,641,115	- 44,481	+ 99,000
TITLE VI					
OTHER DEPARTMENT OF DEFENSE PROGRAMS					
Defense Health Program Operation and maintenance	31,521,850	32,145,395	31,588,995	+ 67,145	- 556,400
Procurement	867,002	873,160	873,160	+ 6,158	.....
Research, development, test and evaluation	2,039,315	710,637	1,673,837	- 365,478	+ 963,200
Total, Defense Health Program 1	34,428,167	33,729,192	34,135,992	- 292,175	+ 406,800
Chemical Agents and Munitions Destruction, Defense: Operation and maintenance	104,237	105,997	105,997	+ 1,760	.....
Procurement	18,081	1,091	1,091	- 16,990	.....

Research, development, test and evaluation	839,414	886,728	886,728	+ 47,314	.....
Total, Chemical Agents ²	961,732	993,816	993,816	+ 32,084	.....
Drug Interdiction and Counter-Drug Activities, Defense ¹	934,814	787,525	872,525	- 62,289	+ 85,000
Office of the Inspector General ¹	321,887	329,273	329,273	+ 7,386	.....
Total, Title VI, Other Department of Defense Programs	36,646,600	35,839,806	36,331,606	- 314,994	+ 491,800
TITLE VII					
RELATED AGENCIES					
Central Intelligence Agency Retirement and Disability System Fund	514,000	514,000	514,000	.....	.....
Intelligence Community Management Account (ICMA)	537,600	539,124	529,624	- 7,976	- 9,500
Total, Title VII, Related agencies	1,051,600	1,053,124	1,043,624	- 7,976	- 9,500
TITLE VIII					
GENERAL PROVISIONS					
Additional transfer authority (Sec.8005)	(4,250,000)	(5,000,000)	(4,000,000)	(- 250,000)	(- 1,000,000)
FFRDC (Sec.8023)	- 131,000	.....	- 179,000	- 48,000	- 179,000
Rescissions (Sec.8039)	- 942,242	.....	- 2,400,935	- 1,458,693	- 2,400,935
National grants (Sec.8045)	44,000	.....	20,000	- 24,000	+ 20,000
Shipbuilding and conversion, Navy Judgment Fund .....	.....	5,000	.....	.....	- 5,000
O&M, Defense-wide transfer authority (Sec.8049)	(30,000)	(30,000)	(30,000)	.....	.....
John C. Stennis Center for Public Service Development Trust Fund (O&M, Navy transfer authority) (Sec. 8055)	(1,000)	.....	.....	(- 1,000)	.....
Fisher House Foundation	10,000	.....	.....	- 10,000	.....
Revised economic assumptions	- 4,000	.....	.....	+ 4,000	.....
Fisher House O&M Army Navy Air Force transfer authority (Sec.8086)	(11,000)	(11,000)	(11,000)	.....	.....
Defense Health O&M transfer authority (Sec.8090)	(115,519)	(113,000)	(113,000)	(- 2,519)	.....
Revised fuel costs	- 110,780	.....	.....	+ 110,780	.....
Operation and Maintenance, Defense-Wide (Department of the Interior Compact Review Agreement) .....	.....	110,800	.....	.....	- 110,800
Public Schools on Military Installations	235,000	.....	.....	- 235,000	.....
Total, Title VIII, General Provisions	- 899,022	115,800	- 2,559,935	- 1,660,913	- 2,675,735

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2018 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL
FOR FISCAL YEAR 2019—Continued
(In thousands of dollars)

Item	2018 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or -)	
				2018 appropriation	Budget estimate
TITLE IX					
OVERSEAS CONTINGENCY OPERATIONS/GLOBAL WAR ON TERRORISM (GWOT)					
Military Personnel					
Military Personnel, Army (GWOT)	2,683,694	2,929,154	2,929,154	+245,460	.....
Military Personnel, Navy (GWOT)	377,857	385,461	385,461	+7,604	.....
Military Personnel, Marine Corps (GWOT)	103,979	109,232	109,232	+5,253	.....
Military Personnel, Air Force (GWOT)	914,119	964,508	964,508	+50,389	.....
Reserve Personnel, Army (GWOT)	24,942	37,007	37,007	+12,065	.....
Reserve Personnel, Navy (GWOT)	9,091	11,100	11,100	+2,009	.....
Reserve Personnel, Marine Corps (GWOT)	2,328	2,380	2,380	+52	.....
Reserve Personnel, Air Force (GWOT)	20,569	21,076	21,076	+507	.....
National Guard Personnel, Army (GWOT)	184,589	195,283	195,283	+10,694	.....
National Guard Personnel, Air Force (GWOT)	5,004	5,460	5,460	+456	.....
Total, Military Personnel (OCO/GWOT)	4,326,172	4,660,661	4,660,661	+334,489	.....
Operation and Maintenance					
Operation & Maintenance, Army (GWOT)	17,352,994	18,210,500	19,028,500	+1,675,506	+818,000
Operation & Maintenance, Navy (GWOT)	6,449,404	4,757,155	5,572,155	-877,249	+815,000
(Coast Guard) (by transfer) (GWOT) .....	.....	(165,000)	.....	.....	(-165,000)
Operation & Maintenance, Marine Corps (GWOT)	1,401,536	1,121,900	1,475,800	+74,264	+353,900
Operation & Maintenance, Air Force (GWOT)	10,873,895	9,285,789	10,055,789	-818,106	+770,000
Operation & Maintenance, Defense-Wide (GWOT)	7,575,195	8,549,908	8,354,905	+779,710	-195,003
(Coalition support funds) (GWOT) .....	.....	.....	.....	.....	.....
Operation & Maintenance, Army Reserve (GWOT)	24,699	41,887	41,887	+17,188	.....
Operation & Maintenance, Navy Reserve (GWOT)	23,980	25,637	25,637	+1,657	.....
Operation & Maintenance, Marine Corps Reserve (GWOT)	3,367	3,345	3,345	-22	.....
Operation & Maintenance, Air Force Reserve (GWOT)	53,523	60,500	60,500	+6,977	.....

Operation & Maintenance, Army National Guard (GWOT)	108,111	110,729	110,729	110,729	+2,618	.....
Operation & Maintenance, Air National Guard (GWOT)	15,400	15,870	15,870	15,870	+470	.....
Subtotal, Operation and Maintenance	43,882,104	42,183,220	44,745,117	44,745,117	+863,013	+2,561,897
Afghanistan Security Forces Fund (GWOT)	4,666,815	5,199,450	4,666,815	4,666,815	-532,635	-532,635
Counter-ISIL Train and Equip Fund (GWOT)	1,769,000	1,400,000	994,000	994,000	-775,000	-406,000
Total, Operation and Maintenance (OCO/GWOT)	50,317,919	48,782,670	50,405,932	50,405,932	+88,013	+1,623,262
Procurement						
Aircraft Procurement, Army (GWOT)	420,086	363,363	363,363	363,363	-56,723	.....
Missile Procurement, Army (GWOT)	709,283	1,802,351	1,740,985	1,740,985	+1,031,702	-61,366
Procurement of Weapons and Tracked Combat Vehicles, Army (GWOT)	1,191,139	1,107,183	1,107,183	1,107,183	-83,956	.....
Procurement of Ammunition, Army (GWOT)	191,836	309,525	299,075	299,075	+107,239	-10,450
Other Procurement, Army (GWOT)	405,575	1,382,047	1,372,487	1,372,487	+966,912	-9,560
Aircraft Procurement, Navy (GWOT)	157,300	80,119	80,119	80,119	-77,181	.....
Weapons Procurement, Navy (GWOT)	130,994	14,134	14,134	14,134	-116,860	.....
Procurement of Ammunition, Navy and Marine Corps (GWOT)	233,406	246,541	223,312	223,312	-10,094	-23,229
Other Procurement, Navy (GWOT)	239,359	187,173	181,173	181,173	-58,186	-6,000
Procurement, Marine Corps (GWOT)	64,307	58,023	58,023	58,023	-6,284	.....
Aircraft Procurement, Air Force (GWOT)	503,938	1,018,888	1,007,888	1,007,888	+503,950	-11,000
Missile Procurement, Air Force (GWOT)	481,700	493,526	493,526	493,526	+11,826	.....
Space Procurement, Air Force (GWOT)	2,256	.....	.....	.....	-2,256	.....
Procurement of Ammunition, Air Force (GWOT)	551,509	1,421,516	1,371,516	1,371,516	+820,007	-50,000
Other Procurement, Air Force (GWOT)	3,324,590	3,725,944	3,705,044	3,705,044	+380,454	-20,900
Procurement, Defense-Wide (GWOT)	517,041	572,135	557,135	557,135	+40,094	-15,000
National Guard and Reserve Equipment (GWOT)	1,300,000	.....	.....	.....	-1,300,000	.....
Total, Procurement (OCO/GWOT)	10,424,319	12,782,468	12,574,963	12,574,963	+2,150,644	-207,505
Research, Development, Test and Evaluation						
Research, Development, Test & Evaluation, Army (GWOT)	235,368	325,104	325,104	325,104	+89,736	.....
Research, Development, Test & Evaluation, Navy (GWOT)	167,565	167,812	167,812	167,812	+247	.....
Research, Development, Test & Evaluation, Air Force (GWOT)	129,608	314,271	287,971	287,971	+158,363	-26,300
Research, Development, Test and Evaluation, Defense-Wide (GWOT)	394,396	500,544	394,883	394,883	+487	-105,661
Total, Research, Development, Test and Evaluation (OCO/GWOT)	926,937	1,307,731	1,175,770	1,175,770	+248,833	-131,961

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2018 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL
 FOR FISCAL YEAR 2019—Continued
 (In thousands of dollars)

Item	2018 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or -)	
				2018 appropriation	Budget estimate
Revolving and Management Funds					
Defense Working Capital Funds (GWOT)	148,956	15,190	15,190	-133,766	
Other Department of Defense Programs					
Defense Health Program:					
Operation & Maintenance (GWOT)	395,805	352,068	352,068	-43,737	
Drug Interdiction and Counter-Drug Activities, Defense (GWOT)	196,300	153,100	143,100	-53,200	-10,000
Office of the Inspector General (GWOT)	24,692	24,692	24,692		
Total, Other Department of Defense Programs (OCO/GWOT)	616,797	529,860	519,860	-96,937	-10,000
TITLE IX General Provisions					
Additional transfer authority (GWOT) (Sec.9002)	(2,250,000)	(4,500,000)	(2,000,000)	(-250,000)	(-2,500,000)
Ukraine Security Assistance Initiative (GWOT)	200,000			-200,000	
Intelligence, Surveillance, and Reconnaissance (GWOT)	770,000			-770,000	
Rescissions (GWOT) (Sec. 9013)	-2,565,100		-1,438,400	+1,126,700	-1,438,400
Total, General Provisions	-1,595,100		-1,438,400	+156,700	-1,438,400
Total, Title IX (OCO/GWOT)	65,166,000	68,078,580	67,913,976	+2,747,976	-164,604
OTHER APPROPRIATIONS					
Operation and Maintenance					
Operation and Maintenance, Navy (emergency)	673,500			-673,500	
Operation and Maintenance, Air Force (emergency)	18,750			-18,750	
Operation and Maintenance, Defense-Wide (emergency)	23,735			-23,735	

Total, Title II, Operation and maintenance (emergency)	715,985				-715,985
Procurement					
Missile Procurement, Army (emergency)	884,000				-884,000
Missile Procurement, Air Force (emergency)	12,000				-12,000
Other Procurement, Air Force (emergency)	288,055				-288,055
Procurement, Defense-Wide (emergency)	1,239,140				-1,239,140
Total, Title III, Procurement (emergency)	2,423,195				-2,423,195
Research, Development, Test and Evaluation					
Research, Development, Test and Evaluation, Army (emergency)	20,700				-20,700
Research, Development, Test and Evaluation, Navy (emergency)	60,000				-60,000
Research, Development, Test and Evaluation, Air Force (emergency)	255,744				-255,744
Research, Development, Test and Evaluation, Defense-Wide (emergency)	1,010,220				-1,010,220
Total, Title IV, Research, Development, Test and Evaluation (emergency)	1,346,664				-1,346,664
FURTHER ADDITIONAL SUPPLEMENTAL APPROPRIATIONS FOR DISASTER RELIEF REQUIREMENTS ACT, 2018					
DEPARTMENT OF DEFENSE--MILITARY PROGRAMS					
OPERATION AND MAINTENANCE					
Operation and Maintenance, Army (emergency)	20,110				-20,110
Operation and Maintenance, Navy (emergency)	267,796				-267,796
Operation and Maintenance, Marine Corps (emergency)	17,920				-17,920
Operation and Maintenance, Air Force (emergency)	20,916				-20,916
Operation and Maintenance, Defense-Wide (emergency)	2,650				-2,650
Operation and Maintenance, Army Reserve (emergency)	12,500				-12,500
Operation and Maintenance, Navy Reserve (emergency)	2,922				-2,922
Operation and Maintenance, Air Force Reserve (emergency)	5,770				-5,770
Operation and Maintenance, Army National Guard (emergency)	55,471				-55,471
Total, Operation and Maintenance (emergency)	406,055				-406,055
PROCUREMENT					
Other Procurement, Navy (emergency)	18,000				-18,000

COMPARATIVE STATEMENT OF NEW BUDGET (OBLIGATIONAL) AUTHORITY FOR FISCAL YEAR 2018 AND BUDGET ESTIMATES AND AMOUNTS RECOMMENDED IN THE BILL
FOR FISCAL YEAR 2019—Continued
[In thousands of dollars]

Item	2018 appropriation	Budget estimate	Committee recommendation	Senate Committee recommendation compared with (+ or -)	
				2018 appropriation	Budget estimate
REVOLVING AND MANAGEMENT FUNDS					
Defense Working Capital Funds (emergency)	9,486	.....	.....	-9,486	.....
OTHER DEPARTMENT OF DEFENSE PROGRAMS					
Defense Health Program: Operation & Maintenance (emergency)	704	.....	.....	-704	.....
Total, Fiscal Year 2018 Department of Defense (emergency) (P.L. 115-123, DivB, Subdivision1, Title III)	434,245	.....	.....	-434,245	.....
Total, Other Appropriations	4,920,089	.....	.....	-4,920,089	.....
Grand Total Bill	652,360,608	668,409,933	667,980,036	+15,619,428	-429,897
Appropriations	(583,216,761)	(600,331,353)	(602,466,995)	(+19,250,234)	(+2,135,642)
Emergency appropriations	(4,920,089)	.....	.....	(-4,920,089)	.....
Global War on Terrorism (GWOT)	(67,731,100)	(68,078,580)	(69,352,376)	(+1,621,276)	(+1,273,796)
Rescissions	(-942,242)	.....	(-2,400,935)	(-1,458,693)	(-2,400,935)
Rescissions (GWOT)	(-2,565,100)	.....	(-1,438,400)	(+1,126,700)	(-1,438,400)

¹ Excludes GWOT New and Advance appropriations. Includes Prior GWOT Outlays.

² Includes GWOT and emergency (except permanent appropriations).

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