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HOUSE OF REPRESENTATIVES

REPORT
116–442

WILLIAM M. (MAC) THORNBERRY NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2021

R E P O R T

OF THE

COMMITTEE ON ARMED SERVICES HOUSE OF REPRESENTATIVES

ON

H.R. 6395

together with

ADDITIONAL, SUPPLEMENTAL, AND MINORITY VIEWS

[Including cost estimate of the Congressional Budget Office]

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116TH CONGRESS
2d Session
HOUSE OF REPRESENTATIVES
REPORT
116–442

WILLIAM M. (MAC) THORNBERRY NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2021

JULY 19, 2020.—Committed to the Committee of the Whole House on the State of the Union and ordered to be printed

Mr. SMITH of Washington, from the Committee on Armed Services, submitted the following

R E P O R T

together with

ADDITIONAL, SUPPLEMENTAL, AND MINORITY VIEWS

[To accompany H.R. 6395]

[Including cost estimate of the Congressional Budget Office]

The Committee on Armed Services, to whom was referred the bill (H.R. 6395) to authorize appropriations for fiscal year 2021 for military activities of the Department of Defense and for military construction, to prescribe military personnel strengths for such fiscal year, and for other purposes, having considered the same, reports favorably thereon with amendments and recommends that the bill as amended do pass.

The amendments are as follows:

The amendment strikes all after the enacting clause of the bill and inserts a new text which appears in italic type in the reported bill.

The title of the bill is amended to reflect the amendment to the text of the bill.

PURPOSE OF THE LEGISLATION

The bill would: (1) authorize appropriations for fiscal year 2021 for procurement and for research, development, test, and evaluation (RDT&E); (2) authorize appropriations for fiscal year 2021 for operation and maintenance (O&M) and for working capital funds; (3) authorize for fiscal year 2021 the personnel strength for each Active Duty Component of the military departments, and the per-

sonnel strength for the Selected Reserve for each Reserve Component of the Armed Forces; (4) modify various elements of compensation for military personnel and impose certain requirements and limitations on personnel actions in the defense establishment; (5) authorize appropriations for fiscal year 2021 for military construction and family housing; (6) authorize appropriations for Overseas Contingency Operations; (7) authorize appropriations for fiscal year 2021 for the Department of Energy national security programs; and (8) authorize appropriations for fiscal year 2021 for the Maritime Administration.

RATIONALE FOR THE COMMITTEE BILL

H.R. 6395, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, is the primary vehicle through which Congress fulfills its responsibility as mandated in Article I, Section 8, of the Constitution of the United States, granting Congress the power to provide for the common defense, to raise and support an Army, to provide and maintain a Navy, and to make rules for the government and regulation of the land and naval forces. Rule X of the House of Representatives provides the House Committee on Armed Services with jurisdiction over the Department of Defense generally and over the military application of nuclear energy. The committee bill includes findings and recommendations resulting from its oversight activities, conducted through hearings and briefings with Department of Defense and Department of Energy civilian and military officials, intelligence analysts, outside experts, and industry representatives, and it is informed by institutional experience. H.R. 6395 provides the Department of Defense and the Department of Energy with important policy authorities to speed decision making and improve agility, while improving readiness and increasing capabilities and capacities.

H.R. 6395 addresses our country's greatest military threats by authorizing a defense enterprise that is inclusive, accountable, and responsible in the management of its resources. H.R. 6395 focuses on improving the lives of our men and women in uniform, authorizing a 3 percent pay increase and implementing reforms to improve the quality of military housing. The committee recognizes that our service members confront unique, complex challenges and deserve our support.

H.R. 6395 ensures America's military maintains its competitive edge and increases accountability over how defense resources are allocated and spent. The global security environment requires affordably managing strategic risk by prioritizing the relevant military capabilities and capacities necessary to meet our greatest threats, adequately resource those priorities by accepting some risk with well-considered and agreed upon tradeoffs, and, at the same time, realize cost savings through aggressive oversight and control of mismanagement and unjustified costs.

H.R. 6395 supports an overall authorization of $740.5 billion dollars for our national defense. H.R. 6395 would authorize approximately $662.6 billion in discretionary spending for national defense and approximately $69.0 billion in discretionary spending for Overseas Contingency Operations. This authorization level will allow our military to maintain readiness, expand capabilities, and invest in the new software and technologies required to secure our coun-

try. H.R. 6395 meets the committee's goal to facilitate a strong national defense apparatus that is resourced properly, accountable, and cognizant of the essential, direct oversight role of Congress.

HEARINGS

For the purposes of section 103(i) of H. Res. 6 of the 116th Congress—

(1) the following hearings were used to develop or consider H.R. 6395:

The committee held a hearing "The Fiscal Year 2021 National Defense Authorization Budget Request from the Department of Defense" on February 26, 2020. The committee received testimony from the Honorable Dr. Mark T. Esper, Secretary of Defense, and General Mark A. Milley, Chairman of the Joint Chiefs of Staff.

The committee held a hearing "The Fiscal Year 2021 National Defense Authorization Budget Request for the Department of the Navy on February 27, 2020. The committee received testimony from the Honorable Thomas B. Modly, Acting Secretary of the Navy, Admiral Michael M. Gilday, Chief of Naval Operations, and General David H. Berger, Commandant of the U.S. Marine Corps.

The committee held a hearing "The Fiscal Year 2021 National Defense Authorization Budget Request for the Department of the Army" on March 3, 2020. The committee received testimony from the Honorable Ryan McCarthy, Secretary of the Army and General James McConville, Chief of Staff of the Army.

The committee held a hearing "The Fiscal Year 2021 National Defense Authorization Budget Request for the Department of the Air Force" on March 4, 2020. The committee received testimony from the Honorable Barbara Barrett, Secretary of the Air Force, General David Goldfein, Chief of Staff of the Air Force, and General John Raymond, Chief of Space Operations, U.S. Space Force.

The committee held a hearing "National Security Challenges and U.S. Military Activities in the Greater Middle East and Africa" on March 10, 2020. The committee received testimony from the Honorable Kathryn Wheelbarger, Assistant Secretary of Defense for International Security Affairs, General Kenneth F. McKenzie Jr., USMC, Commander, U.S. Central Command, and General Stephen Townsend, USA, Commander, U.S. Africa Command.

The committee held a hearing on "National Security Challenges and U.S. Military Activity in North and South America" on March 11, 2020. The committee received testimony from the Honorable Kenneth P. Rapuano, Assistant Secretary of Defense for Homeland Defense and Global Security, Admiral Craig S. Faller, USN, Commander, U.S. Southern Command, and General Terrence J. O'Shaughnessy, USAF, Commander, U.S. Northern Command.

The committee held a hearing on "Department of Defense COVID–19 Response to Defense Industrial Base Challenges" on June 10, 2020. The committee received testimony from the Honorable Ellen Lord, Under Secretary of Defense for Acquisition and Sustainment.

In addition, the six subcommittees of the committee conducted 12 hearings and 6 markups to develop and consider H.R. 6395.

COMMITTEE POSITION

On July 1, 2020, the Committee on Armed Services held a mark-up session to consider H.R. 6395. The committee ordered the bill H.R. 6395, as amended, favorably reported to the House of Representatives by a recorded vote of 56–0, a quorum being present.

EXPLANATION OF THE COMMITTEE AMENDMENTS

The committee adopted an amendment in the nature of a substitute during the consideration of H.R. 6395. The title of the bill is amended to reflect the amendment to the text of the bill. The remainder of the report discusses the bill, as amended.

RELATIONSHIP OF AUTHORIZATION TO APPROPRIATIONS

The bill does not provide budget authority. This bill authorizes appropriations; subsequent appropriations acts will provide budget authority. However, the committee strives to adhere to the recommendations as issued by the Committee on the Budget as it relates to the jurisdiction of this committee.

The bill addresses the following categories in the Department of Defense budget: procurement; research, development, test, and evaluation; operation and maintenance; military personnel; working capital funds; and military construction and family housing. The bill also addresses the Armed Forces Retirement Home, Department of Energy National Security Programs, the Naval Petroleum Reserve, and the Maritime Administration.

Active Duty and Reserve personnel strengths authorized in this bill and legislation affecting compensation for military personnel determine the remaining appropriation requirements of the Department of Defense. However, this bill does not provide authorization of specific dollar amounts for military personnel.

SUMMARY OF DISCRETIONARY AUTHORIZATIONS IN THE BILL

The President requested discretionary budget authority of $731.6 billion for programs within the jurisdiction of the committee for fiscal year 2021. Of this amount, $636.3 billion was requested for base Department of Defense programs, $69.0 billion was requested for Overseas Contingency Operations requirements covering the entire fiscal year, $26.0 billion was requested for Department of Energy national security programs and the Defense Nuclear Facilities Safety Board, and $0.31 billion was requested for defense-related activities associated with the Maritime Administration.

The committee recommends an overall discretionary authorization of $731.6 billion in fiscal year 2021. The committee authorization is a $1.67 billion increase above the levels provided for in the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

The table preceding the detailed program adjustments in division D of this report summarizes the committee's recommended discretionary authorizations by appropriation account for fiscal year 2021 and compares these amounts to the President's request.

BUDGET AUTHORITY IMPLICATION

The President's total request for the national defense budget function (050) in fiscal year 2021 is $752.4 billion, as estimated by the Congressional Budget Office. In addition to funding for programs addressed in this bill, the total 050 request includes discretionary funding for national defense programs not in the committee's jurisdiction, discretionary funding for programs that do not require additional authorization in fiscal year 2021, and mandatory programs.

The table preceding the detailed program adjustments in division D of this report details changes to the budget request for all aspects of the national defense budget function.

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

TITLE I—PROCUREMENT

AIRCRAFT PROCUREMENT, ARMY

Items of Special Interest

Army Aviation Radio Modernization

The committee is encouraged by the Army's efforts to modernize radio communication technology and increase interoperability through the Integrated Tactical Network (ITN) for operational rotorcraft platforms and ground systems. The committee supports the Army's use of program of record radios as well as use of a federated integration approach under the Air to Ground Networking Radio (AGNR) program. The committee recognizes the critical need to maintain radio development and production within the industrial base and believes that an open and competitive process will deliver the most cost effective capability to the Army.

As such, the committee directs the Assistant Secretary of the Army for Acquisition, Logistics and Technology to provide a briefing to the House Committee on Armed Services no later than October 1, 2020 on the acquisition strategy for the AGNR program, to include how the Army plans to use full and open competition to ensure best value for radio integration into existing rotorcraft platforms, the current inventory of available radios in existing programs of record, the test and evaluation plan, and the impact of the AGNR program on the tactical radio industrial base.

Army intelligence, surveillance, and reconnaissance programs

The committee recognizes that airborne intelligence, surveillance, and reconnaissance (AISR) capability has become an integral aspect of modern military operations. Each military service has fielded its own AISR, often optimized for service-specific mission requirements. The committee is aware that the Army ISR Task Force is examining AISR requirements and available options for fulfilling these requirements in a cost-efficient manner. Long range precision fires, the Army's highest modernization priority, depends upon deep sensing provided by ISR assets.

Available information from the Army indicates that long-term modernization plans for the Airborne Reconnaissance Low-Enhanced (ARE–L), the Guardrail Common Sensor, and the Enhanced Medium Altitude Reconnaissance and Surveillance System are unclear beyond the Future Years Defense Program. The committee further notes that while the Army's budget briefings depict data link and avionics upgrades to the MQ–1 Gray Eagle unmanned aircraft system, the Army has yet to outline plans for a service life extension program or a follow-on medium-altitude ISR aircraft.

The committee is concerned about the tendency of each military service to construct acquisition plans without accounting for the role of the joint force and capability overlap between military services. Elsewhere in this Act, the committee requires the Department of the Air Force to submit a comprehensive plan on AISR modernization and replacement. The committee is aware of Army ISR Task Force discussions with other military services and encourages the Task Force to continue this collaboration across the military services to ensure the Army invests in the critical and service-specific capabilities it will need to support the joint force.

Therefore, the committee directs the Secretary of the Army, in consultation with the Chief of Staff of the Army, to provide a briefing to the House Committee on Armed Services by November 1, 2020, on plans for modernization of the Army's airborne intelligence, surveillance, and reconnaissance capability. This briefing should cover the entire Army AISR enterprise, demonstrate how the Army intends to meet ISR requirements through fiscal year 2034, and detail which requirements the Army expects other services to provide.

CH–47 Chinook helicopter

The budget request included $229.6 million for CH–47 Chinook helicopter procurement and $15.5 million in Advance Procurement. The committee continues to be concerned about the Army's lack of planning for future heavy lift and notes that the request only included funding for six Block II Chinook helicopters for special operations forces. Further, the committee is aware that, despite Congress having added $28.0 million in fiscal year 2020 for CH–47F Block II Advance Procurement, the Army has yet to put any of this funding on contract and has no current plans to begin procuring long lead items.

The committee expects the Army to provide a realistic acquisition strategy for future heavy lift. Therefore, the committee recommends $365.8 million, an increase of $136.2 million, for the CH–47 Chinook program and recommends $44.5 million, an increase of $29.0 million, for CH–47 Chinook Advance Procurement.

Load Stability Systems

The committee is aware that load stability technology has the potential to offer performance and safety improvements for military utility and medical evacuation helicopters. The committee understands that Army Futures Command and Army Program Directorate Medical Evacuation have expressed interest in additional test and evaluation of litter-attached load stability systems on helicopter hoists. The committee further understands that a litter load

stability system currently in testing is due to receive a limited air worthiness release by the end of fiscal year 2020.

The committee supports completing the testing and certification of this type of safety stabilization technology and allowing units to make use of this capability for life-saving and other missions. The committee directs the Commander, U.S. Army Futures Command, to provide a briefing to the House Committee on Armed Services by March 1, 2021, on the military utility of helicopter load stability systems, to include an assessment of technologies under evaluation, the potential application of these technologies, and estimated costs to procure and field these technologies.

Short Range Reconnaissance Small Unmanned Aircraft System

The committee notes that the Army is conducting a rapid prototyping procurement for a Short Range Reconnaissance (SRR) Small Unmanned Aircraft System (sUAS) and that an acquisition decision for the first tranche of systems is scheduled for the third quarter of fiscal year 2020. The committee acknowledges that the Army could benefit from a platoon-level intelligence, surveillance, and reconnaissance asset and supports the Army's use of a rapid acquisition process focused on available mature systems that could be ready for fielding during fiscal year 2021.

However, the committee is concerned that the Army's expedited process could potentially introduce vulnerabilities into the SRR program. The committee understands that the SRR Tranche I acquisition consisted of several non-traditional vendors and did not necessarily incorporate costs of compliance with Department of Defense cybersecurity policy. The committee commends the Army for seeking innovative solutions but expects the service to consider and fully address security concerns in critical systems intended for operation at the tactical edge.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by December 1, 2020, on the acquisition strategy for all future SRR sUAS tranches. The briefing should include how the Army intends to allow for established domestic sUAS manufacturers with existing full-scale production capability to compete in the prototype phase, SRR compliance with Department of Defense cybersecurity policy and statutory and regulatory bans on Chinese sUAS components in the prototyping phase, and SRR compliance with all applicable Defense Federal Acquisition Regulation Supplement domestic content laws.

UH–60M Army National Guard Fielding Strategy

The committee understands the UH–60M Black Hawk is the most modernized utility helicopter in the Army's inventory. The UH–60M is a digital networked platform that provides greater range and lift in order to support maneuver forces through air assault, general support command and control, and aeromedical evacuations. The committee notes the UH–60M Black Hawk is also a critical dual-use item for Army National Guard forces performing Title 32 missions.

Therefore, the committee directs the Secretary of the Army, in conjunction with the Chief of the National Guard Bureau and the Director of the Army National Guard, to provide a briefing to the

House Committee on Armed Services by March 1, 2021, on the Army's fielding strategy and plans to accelerate fielding of UH–60M helicopters to the Army National Guard.

UH–60V Total Force Fielding Strategy

The committee believes the Army's UH–60V modernization program is critical for ensuring legacy Blackhawk helicopters remain safe and relevant for multi-domain operations. The committee supports the Army's current plan to field the UH–60V across all components in order to maintain fleet and mission parity within the Army. Further, the Committee is aware that the Army's UH–60V acquisition strategy indicates 48 UH–60Vs to be delivered per year once the program enters full rate production. Given the importance of this modernization effort, the committee believes the Army may want to consider options to accelerate production and fielding to include the potential of supplemental industry support or expanding capacity at Corpus Christi Army Depot. Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by March 1, 2021 on the advisability and feasibility of accelerating fielding of UH–60Vs to both the active and reserve components and address potential courses of action that would be required for this acceleration.

UH–72 Lakota helicopter commercial-off-the-shelf modifications

The committee understands the UH–72A Lakota helicopter performs a variety of missions including flight training, medical evacuation, border security, VIP transport, and disaster response. The committee understands there are commercial-off-the-shelf (COTS) technologies that could potentially improve UH–72A communications and health monitoring systems by providing a digital, lightweight, beyond-line-of-sight, push-to-talk radio, with Voice over Internet and real-time fleet health monitoring, recording, and next-generation satellite communications. The committee believes that these same COTS solutions could also potentially improve training on the UH–72A.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by October 30, 2020, on the status of UH–72A health monitoring capabilities and an assessment of existing COTS solutions that could improve the effectiveness and lifecycle sustainment of the UH–72A fleet.

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

Items of Special Interest

Combat and tactical vehicle interior flame resistant materials

The committee is aware that the military services have not established baseline requirements for flame resistant vehicle soft armor, such as spall liners, and other internal materials. The Committee is concerned that the Army and the Marine Corps may not have adequately addressed this issue in its requirements analysis and development processes and, therefore, encourages each to consider including flame resistant standards, like those outlined in the Military Handbook 684, "Design of Ground Combat Vehicles for

Survivability," among the technical requirements for the modernization of combat and tactical vehicles. In this regard, the committee directs the Secretary of the Army, in coordination with the Secretaries of the Navy and the Air Force, not later than December 15, 2020, to provide a briefing to the House Committee on Armed Services, on the availability, feasibility, suitability, and affordability of flame resistant materials and their potential for increasing the survivability and safety of occupants inside combat and tactical vehicles.

M240 medium machine gun modernization and sustainment

The committee remains concerned that the Army has neither planned nor requested sufficient resources to ensure long-term viability of the M240 family of medium machine guns and the associated industrial base. The committee notes that Congress has provided resources to sustain the M240 production line, which the Army has utilized successfully to maintain the program to date. However, the committee requires additional information in response to ongoing concerns related to M240 lifecycle sustainment and management of the associated industrial base. The committee remains concerned over the absence of funding in future years which may result in a shutdown in the M240 production line, which would significantly limit the Army's ability to procure additional weapons as well as lead to reduced capability to maintain existing weapons.

Accordingly, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, that includes, but is not limited to:

(1) the projected service life of the current M240B inventory and the overall readiness of these machine guns both in the field and in inventory;

(2) the Army's plan and schedule to replace the current M240B inventory either with newer M240 models or an entirely new system;

(3) an updated cost and risk analysis for restarting the M240 production line if allowed to shut down;

(4) a coordinated description and assessment of the M240 production industrial base; and

(5) the advisability, feasibility, and cost of transitioning the Army's entire existing inventory of M240B medium machine guns to the lighter weight M240L model.

PROCUREMENT OF AMMUNITION, ARMY

Items of Special Interest

Handgun Ammunition Procurement

The committee understands the Army's budget request for small caliber ammunition includes $328.3 million which includes funding for handgun 9mm, 5.56mm, 7.62mm, .50 caliber, and advanced technology armor piercing rounds. Regarding the handgun 9mm round request, the committee notes a substantial decrease from prior year funding requests. Specifically, the budget request only includes $853 thousand for handgun 9mm rounds, which is a 95 percent decrease compared to fiscal year 2020 funding levels. The

committee understands the Army believes this to be an acceptable risk given current inventories and stockpile requirements. However, the committee remains concerned over the impact this could present to the industrial base in terms of potential production breaks and generating inefficiencies in the handgun 9mm line.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by December 15, 2020 on the long-term acquisition strategy for small caliber ammunition. The briefing should include but not limited to actions being taken to prevent any production breaks for handgun 9mm rounds, planned funding across the future year's defense program, and current inventory levels for small caliber rounds.

Shoulder-launched munitions

The committee understands shoulder-launched munitions are used extensively by all branches of the military services including special operation forces in order to defeat a wide variety of targets such as light vehicles, bunkers, and enemy personnel. The committee also notes this wide array of targets has often required unique munitions and weapon system platforms tailored to specific mission requirements. The committee is aware that special operation forces and the Marine Corps both use a variety of shoulder-launched munitions to deliver the necessary battlefield effects, reduce weight on the soldier, and allow for increased mobility. However, the committee requires additional information regarding the Army's strategy and plans for developing and procuring shoulder-launched munitions for brigade combat teams. The committee expects the Army to leverage and coordinate with the Marine Corps and U.S. Special Operations Command (USSOCOM) regarding the development and procurement of shoulder-launched munitions.

Therefore, the committee directs the Secretary of the Army, in consultation with the Commanding General of Army Futures Command, to provide a briefing to the House Committee on Armed Services by January 31, 2021, on the Army's shoulder-launched munitions acquisition strategy to include how the Army is coordinating jointly with the other military services including USSOCOM.

OTHER PROCUREMENT, ARMY

Items of Special Interest

All-terrain cranes

The budget request contained $70.5 million for all-terrain cranes.

The family of all-terrain cranes (Type I medium and Type II heavy) are critical logistic systems necessary for large-scale combat operations and provide the ability to assemble, disassemble, and maintain bridges for wet or dry gap crossings, as well as provide capabilities to rapidly offload critical supplies such as weapons, ammunition, artillery pieces, fuel, and water. The committee notes these systems are also considered critical dual-use systems supporting both the Active and Reserve Components in title 10 and title 32 operations. The committee supports the budget request; however, the committee does have concerns over the projected

funding levels for these critical logistical systems across the Future Years Defense Program.

The committee directs the Program Executive Officer for Combat Support and Combat Service Support to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, on the long-term acquisition strategy for all-terrain crane systems.

The committee recommends $70.5 million, the full amount requested, for all-terrain cranes.

Assessment of the Army's tactical wheeled vehicle strategy and implementation efforts

The Committee notes that tactical wheeled vehicle fleets throughout the Army appear to be aging without significant technology upgrades or replacement by taking advantage of commercial industry investments in new technologies such as emissions controls, autonomous operation, and electric and hybrid-electric drive. The Committee is concerned about the potential impacts this has for the defense industrial base, the acquisition of commercially available technology, and the broader implications this may have for competition and cost for future wheeled vehicles acquisitions. The committee is interested to learn more about the analysis, decision-making processes, and the frequency with which technological upgrade or replacement of tactical wheeled vehicles could, should, or should not be competed. Therefore, the committee directs the Comptroller General of the United States, not later than March 1, 2021, to provide the House Armed Services Committee a report that assesses the Army's tactical wheeled vehicle strategy and implementation efforts. The assessment should include an analysis of the tactical wheeled vehicle industrial base and potential opportunities, if any, for significant advancements in technology and savings through competition. The assessment should also include the identification of and recommendations for overcoming obstacles to insertion of new technology and competition. The committee further directs the Comptroller General to provide a briefing to the House Armed Services Committee not later than December 11, 2020, on the preliminary findings of its assessment.

Soldier Enhancement Program

The budget request contained no funds for the Soldier Enhancement Program (SEP). The committee is disappointed and concerned by the absence of funds in the budget request, as well as across the Future Years Defense Program.

The committee commends the work accomplished to date by the SEP through the Program Executive Office-Soldier that continues to provide critically needed improvements and upgrades to individual soldier equipment. This program was created by Congress and mandated to evaluate and, where appropriate, type classify existing prototypes or commercially available items that enhance soldiers' ability to execute their combat missions. The committee notes that through soldier-led evaluations, SEP initiatives resulted in the procurement of items that meet current operational needs, close a capability gap, provide real-time operational feedback, inform requirements, generate new requirements or transition a system into a new or existing Program of Record. The committee also notes

that approximately 40 percent of the Program Executive Office-Soldier portfolio was started or initiated within SEP, such as Soldier Borne Sensors, AT 4 Confined Space Warhead, Polymer Magazines, and 50 Cal. Quick Change Barrel.

Therefore, the committee recommends $5.0 million for continuation of the SEP. The committee also directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services, not later than December 1, 2020, on the current and future programs being evaluated by the SEP.

Tactical Wheeled Vehicle Industrial base

The committee is concerned by the strategic risk the Army may be accepting in the defense tactical wheeled vehicle (TWV) industrial base. The committee notes the Army has specifically used tactical wheeled vehicles, such as the Family of Medium Tactical Vehicles (FMTV), Joint Light Tactical Vehicle (JLTV), High Mobility Multi-Purpose Wheeled Vehicle (HMMWV), and Heavy Expanded Mobile Tactical Truck (HEMTT), as bill payers for its higher priority development and modernization programs.

The committee further notes that truncated plans and resources for the development or procurement of upgrades and replacements for these vehicles has resulted in uncertainty and a lack of predictability over time. This ultimately increases cost for the Army as well as creates significant risks in the loss of capacity and capability in the TWV industrial base. As the committee predicted two years ago, the drastic, unexpected decrease in procurement projections for these vehicle programs has negatively affected the medium and heavy tactical wheeled vehicle industrial base. The committee believes the TWV industrial base needs stability and predictability from the Army in its near and longer-term plans and programs that appropriately manages risks through investment in production levels that meet or exceed agreed upon minimum sustaining rates ensuring its availability to support the Army in current operations and into the future.

Accordingly, the committee directs that the Secretary of the Army, not later than December 15, 2020, to provide a briefing to the House Committee on Armed Services on the Army's near and long-term strategy to meet the Army current and future requirements for tactical wheeled vehicles. The briefing should also address how the Army will assess and manage risk in the industrial base to include detailed development and acquisition plans as well as funding profiles through the future years defense program.

AIRCRAFT PROCUREMENT, NAVY

Items of Special Interest

Anti-submarine warfare low frequency sonar capability

The budget request included $131.6 million for MH–60 modifications.

The committee continues to be concerned with the threat that adversary submarines pose to aircraft carriers. With the cancellation of the surface ship torpedo defense program, the aircraft carrier's only organic anti-submarine warfare (ASW) capability is the airborne low frequency system (ALFS) that is embarked aboard the

MH–60 helicopters. The ALFS system has experienced a very high mishap rate over the last 10 years and continues to demonstrate poor reliability. The committee understands that allied partners that also utilize MH–60 variants employ alternate low frequency systems that not only have greater reliability but have also demonstrated superior performance. The Navy has been slow to address the poor reliability of the ALFS system despite repeated calls for improvement by the committee.

The committee recommends $136.6 million, an increase of $5.0 million, for the procurement of one helicopter-mounted low frequency active sonar system for the Littoral Combat Ship ASW mission module to demonstrate other viable alternative technologies currently available for aircraft carrier ASW risk reduction efforts.

Department of the Navy Strike-Fighter management

The budget request contained $2.97 billion for the procurement of 24 F/A–18E/F new aircraft, and ongoing modifications, upgrades, and improvements for the existing fleet of Department of the Navy F/A–18 aircraft. However, the budget request did not include the fiscal year 2020 planned advance procurement funding of $28.1 million for fiscal year 2021 that would support the previously planned procurement of 12 F/A–18E/F new aircraft in fiscal year 2022 for the U.S. Navy. The Navy's budget also eliminated procurement of 24 new aircraft planned in fiscal years 2023 and 2024.

The committee notes that the Navy's decision to eliminate 36 new aircraft from its fiscal year 2022 to 2025 future years defense plan incurs greater risk for combatant commanders and increases the Navy's strike-fighter deficit in fiscal year 2021 from −49 to −58 aircraft. The committee notes this is equivalent to greater than one aircraft carrier air-wing (CVW) quantity of aircraft short of inventory requirements. Additionally, the Navy currently plans its strike-fighter inventory without including traditional margin for attrition reserve aircraft that would supplement forces in cases of training or contingency operational losses of aircraft. The Navy should budget for 54 aircraft per CVW, but instead only budgets for 44 aircraft per CVW. Consequently, the Navy has an actual deficit of −148 strike-fighter aircraft when including attrition reserve planning factors.

The Navy hopes to resolve its strike-fighter deficit in 2035 with initial fielding of its next-generation fighter, FA–XX, which is in the concept development stages of execution. The committee recalls the Navy curtailed F/A–18 procurement approximately 10 years ago with aspirational goals to maintain strike-fighter inventory levels with planned procurement of F–35C. That plan was not realized due to F–35 program execution and subsequently required the Navy to procure additional F/A–18E/F aircraft to reduce operational risk. The committee expects a similar outcome may occur with the Navy's current plan for FA–XX due to affordability and technological challenges, as well as initial results from the F/A–18E/F Service Life Modification (SLM) program. Due to the Navy's non-compliance with field maintenance procedures, practices and tooling recommended by the original equipment manufacturer, compounded by the Navy's inability to consolidate scheduled unit-level maintenance inspections and repairs, the Navy has encountered widespread corrosion in unpredicted areas on F/A–18E/F air-

craft causing a 135 percent increase in costs for the initial two aircraft finishing the SLM program. The Navy subsequently reduced the planned induction quantity of aircraft in fiscal year 2021 from 18 to 10 aircraft.

Therefore, the committee supports and encourages the Navy to procure additional F/A–18E/F new aircraft beyond fiscal year 2021. Additionally, the committee directs the Chairman of the Joint Chiefs of Staff to provide a briefing to the House Committee on Armed Services not later than March 1, 2021, that assesses the operational risk incurred for regional combatant commanders to meet steady-state and contingency requirements as a result of the Navy not budgeting for attrition reserve aircraft in its strike-fighter force planning. Finally, the committee directs the Department of Defense Inspector General to provide a report to the congressional defense committees not later than September 30, 2021, that assesses all Active and Reserve Navy and Marine Corps F/A–18C/D/E/F/G aircraft squadrons regarding adherence to organizational and unit-level maintenance and repair technical orders and procedures prescribed by the original equipment manufacturer, in particular those processes and procedures designed to mitigate damage and degradation to the aircraft and structural components due to corrosion incurred by operations in harsh sand and salt-water environments.

P–8 aircraft

The committee notes that the budget request contained no funds for P–8A Poseidon aircraft. The budget request for fiscal year 2021 did not take into account the increased warfighter requirement of 19 additional P–8A aircraft. This increase is driven by the proliferation of adversarial submarine fleets and their increasingly active operational tempo. The new requirement includes 12 aircraft to recapitalize the 2 maritime patrol and reconnaissance squadrons assigned to the Navy Reserve. These squadrons currently operate legacy P–3C Orion aircraft, and the Chief of Navy Reserve estimates they will decommission by 2023 unless they are recapitalized with new aircraft. The committee is encouraged by the Navy's recognition of the Navy Reserve force and the contribution they can provide to the increased requirement for the P–8A. However, the committee was discouraged that the Navy failed to budget for the additional aircraft to meet the warfighting requirement.

The committee recommends $1.02 billion for P–8A procurement, to procure six additional P–8A aircraft in fiscal year 2021.

VH–92A Executive Helicopter training aircraft

The VH–92A program is the replacement for the current fleet of executive helicopters flown by Marine Helicopter Squadron One (HMX–1) in support of the Presidential world-wide vertical-lift mission. Despite the importance of the VH–92 mission, the program currently has no dedicated training aircraft for pilot or maintainer flight training and aircraft familiarization. The committee is aware the Department of the Navy is reviewing a requirement for five CH–92A training aircraft to supplement the VH–92A fleet. The committee understands that if the requirement change is validated, the CH–92A aircraft would facilitate Fleet Marine Force pilot and

maintainer transition training as well as provide logistic mission support for the executive flight detachment.

Helicopter pilots assigned to HMX–1 go through an extensive pilot conversion training syllabus prior to flying the Presidential missions. The committee recognizes that adding the CH–92A aircraft would enable pilots to maintain monthly and annual flight time minimums without impacting operational Presidential lift assets. The committee also notes that newly assigned aircraft crew chiefs and maintenance personnel could start training on the CH–92A while awaiting their security clearances, a process that can take up to a year to complete.

Accordingly, the committee directs the Secretary of the Navy to provide a report to the House Committee on Armed Services by November 1, 2020, on training requirements for the VH–92A aircraft. This report should encompass flight and maintenance training requirements and should examine the need for dedicated CH–92A trainer aircraft for both training and augmentation of HMX–1 "greenside" operations. The committee expects this report to provide a cost/benefit analysis of acquiring CH–92A aircraft and an assessment of the risk that potential industrial base changes, including a manufacturing facility closure, would pose to the ability to meet a validated trainer aircraft requirement. The National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) directed an assessment of risks to the VH–92A industrial base, but the response received from the Secretary of the Navy provided none of the requested information or analysis.

WEAPONS PROCUREMENT, NAVY

Items of Special Interest

Fleet Proficiency for Ballistic Missile Defense

The committee is concerned about the fleet proficiency of the Navy's ballistic missile defense ships and crews. The Navy's Aerial Targets program provides threat representative aerial targets for test and evaluation and fleet training events. The threat representative targets are used to test and evaluate both ship and crew and are required for fleet proficiency evaluation prior deployment or fielding systems to the fleet. However, the Navy does currently not have an inventory of affordable ballistic missile, threat-representative targets to test and evaluate the proficiency of its ballistic missile defense ships and crews to include new Aegis DDG construction and modernization. The committee believes the inability to test and evaluate its ballistic missile defense ships and crews against threat-representative targets directly impacts the overall proficiency, readiness and combat capability of the fleet.

Therefore, the committee directs the Secretary of the Navy to provide a briefing to the committee by November 30, 2020, that includes a plan to fund the procurement of low-cost, subscale ballistic missile threat-representative targets to maintain the fleet proficiency of the Navy's ballistic missile defense ships and crews. The plan will include, at a minimum, an assessment of current ballistic missile defense fleet proficiency, current use of threat-representative targets for ballistic missile defense testing and evaluation broken down by ship and crew, funding and number of low-cost,

subscale ballistic missile threat-representative targets required to maintain ballistic missile defense fleet proficiency, and direction for Navy Air Systems Command and Surface Warfare Directorate to execute procurement and execution of the ballistic missile defense fleet proficiency plan.

SHIPBUILDING AND CONVERSION, NAVY

Items of Special Interest

Advanced degaussing for DDG–51 destroyers

The committee understands that the DDG–51 destroyers, including the latest Flight III version, incorporate a mine protection degaussing system dating back to the lead ship, DDG–51, commissioned on July 4, 1991. This more than 28-year-old degaussing mine protection system is seriously out of date, significantly outside of the Navy's own magnetic signature specifications, and leaves the Navy's primary large surface combatant, with a crew of 329, vulnerable to the most basic mines available today. The Navy has invested considerable research and development funding to develop advanced degaussing systems, the latest of which will be incorporated into LPD 28/29/30, that will provide greater than five times more effective mine protection than the current system aboard all the DDG–51 destroyers. The newest advanced degaussing systems are a third of the weight, requiring a third of the cable and cable length and typically require less electrical power. The committee believes the Navy should consider a backfit plan for in-service destroyers as well as a plan to incorporate an advanced degaussing system on new-construction destroyers. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by February 1, 2021, on the potential to backfit in-service destroyers with advanced degaussing as well as the potential for incorporating it on new-construction destroyers.

Aegis combatants and 5th Generation aircraft interoperability

The committee directs the Secretary of the Navy to provide a classified report and briefing to the House and Senate defense committees not later than December 1, 2020 on interoperability challenges among combatant ships and between AEGIS combatants and 5th Generation tactical aircraft. This report shall include:

(1) a review of the Fire Control Loop Improvement Program, the Accelerated Mid-Term Interoperability Improvement Project, the Far-Term Interoperability Improvement Project and the introduction of Interrogation Friend or Foe (IFF) Mode 5 into all ship classes and applicable aircraft;

(2) a plan to integrate the Multifunction Advanced Data Link of the F35 with legacy Tactical Data Links, including planned investments, timelines for integration and capabilities and limitations for our legacy platforms and command and control networks;

(3) plans to unify surface combat systems' hardware platforms and software suites with investment plans and timelines;

(4) findings of Strike Force Interoperability Officers since FY12 and the Navy's performance at reducing the identified deficiencies;

(5) reasons for differences within the Common Source Library as fielded and the challenges these differences cause in planning strike group operations and the presumed differences between strike group capabilities in high end conflicts.

Amphibious Shipbuilding

The Committee notes the President's Budget Request for Fiscal Year 2021 includes $1.156 billion for LPD 31, the 2nd ship of the San Antonio-class LPD Flight II, which was authorized in the National Defense Authorization Act for Fiscal Year 2020 (P.L. 116–92). The Committee continues to support the most efficient procurement and construction of these warships and further notes there are only 2 active amphibious vessel production lines within the shipbuilding industrial base. In the absence of a 30 Year Shipbuilding Plan, Future Naval Force Study, and Integrated Naval Force Structure Assessment, the only available shipbuilding forecast available for review is the Future Years' Defense Plan accompanying the fiscal year 2021 request. The Future Years' Defense Plan forecasts construction of 3 additional amphibious warships, including an America-class LHA amphibious assault ship and 2 San Antonio-class LPD Flight II vessels. The Committee is further aware of recent guidance issued by the Commandant of the Marine Corps which envisions new approaches and new platforms for the integrated naval force. The Committee supports developing additional amphibious capabilities to enable these new approaches while maintaining the existing industrial base to produce survivable L-class warships that support the integrated naval force.

The Committee is aware of alternative contracting strategies for the construction of these warships which may reduce the overall cost of acquisition. Therefore, the Committee directs the Secretary of the Navy to provide a report within 180 days which provides options for the most efficient procurement of the 3 forecasted amphibious warships. The report should include a list of any additional necessary legislative authorities and an estimate of cost efficiencies generated by each option.

DDG–51 multiyear procurement

The committee continues to support the 355-ship fleet codified in the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) as an essential part of the National Defense Strategy and its emphasis on near-peer competitors such as Russia and China. DDG–51 destroyers are the backbone of the surface fleet, providing multi-mission flexibility and increasing capability with the introduction of Flight III and the AN/SPY–6 radar. With plans for the future Large Surface Combatant toward the end of this decade, and the current multiyear procurement of DDG–51s running through fiscal year 2022, it is imperative that another 10-ship multiyear contract is awarded for fiscal year 2023 to ensure that Flight III capability will be available to the fleet. Such efforts will further strengthen the defense industrial base, maximize savings, and provide the shipyards a clear projection of work. Therefore, the committee encourages the Secretary of Defense and the Secretary of the Navy to make all necessary steps that will allow for another multiyear contract for DDG–51 Flight IIIs beginning in fiscal year 2023.

National Surface Warship Engineering and Design Capability

The Committee notes the President's Fiscal Year 2021 Budget does not forecast funding for any new surface shipbuilding programs throughout the Future Years' Defense Plan (FYDP). The Committee is aware of testimony from senior naval officials suggesting that the DDG–51 Flight III design is effectively complete and that the ship will continue its procurement throughout the FYDP, with a potential additional multiyear procurement for DDG Flight III beginning in fiscal year 2023. The Committee also recognizes that when the detailed design for FFG(X) is completed in 2022, there will be no active national surface combatant engineering and design efforts underway that will allow for the preservation of this critical and strategic domestic defense capability.

The design and development talent needed to create and sustain surface warship programs, like the DDG–51 and its successors, requires unique and increasingly scarce maritime systems and technological expertise. In the rapidly evolving threat environment, engineers and designers must also support the essential integration of complex next generation technologies such as autonomous and unmanned vehicles, hypersonic missiles, directed energy weapons, larger radars and other vital technologies.

The Committee believes this engineering and design capability must be maintained in order to produce the Large Surface Combatant, Next Generation Amphibious warship, and potential unmanned surface vessels across the shipbuilding industrial base. Moreover, the Committee believes that the challenges confronting future surface ship combatants such as production and operations costs, energy management, and the flexibility to accommodate current and evolving technologies are addressable via a robust and properly sequenced engineering and design activity. The Committee notes similar actions have been successfully taken to ensure the health of the nuclear engineering and design industrial base with positive results that enabled the next generation of nuclear-powered aircraft carriers and submarines to be designed and produced efficiently.

Therefore, not later than 180 days after enactment, the Committee directs the Secretary of the Navy to assess the current and future workloads of the surface ship engineering and design industrial base and provide recommendations for the sustainment of this critical national capability. Such recommendations should be informed by both the current program of record but should also include industry's perspective on how to best fortify and retain the capability and capacity resident in several locations nationwide.

Navy Auxiliary General Ocean Surveillance Ships (T–AGOS) Program

The committee is aware of the Navy's requirement for seven Small Waterplane Area Twin Hull (SWATH) ocean surveillance ships to support the Military Sealift Command's theater anti-submarine warfare mission for the Pacific and Atlantic fleets. The Navy currently operates five ships, but according to the Program of Record, it needs seven ships to meet increasing requirements. The cost per ship and current fiscal year funding level will not support this need.

In order to address the increased requirements and achieve significant cost and schedule savings, the committee directs the Secretary of the Navy to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by January 1, 2021, outlining options to support a fleet of seven SWATH ships, support a T–AGOS (X) competition based on a performance specification for the ship which meets the U.S. Navy's mission requirements, and presents significant cost savings opportunities as well as accelerates the timing of deployment of this capability.

Ship Counting Methodology

In light of expanding maritime threats, the committee strongly supports efforts to grow naval force structure to support section 1025 of the National Defense Authorization Act for Fiscal Year 2018 (P.L. 115–91) entitled "Policy of the United States on Minimum Number of Battle Force Ships". As the Navy continues to develop the Integrated Naval Force Structure and 30 Year Shipbuilding plan, there has been increasing discussion, including from the Department of the Navy, whether unmanned vessels should be included in the Department's ship counting methodology. Recognizing both the growing promise of unmanned vessels and the important roles played by existing battle force inventory ships, the committee believes the Secretary of the Navy should examine the intrinsic warfighting capabilities of vessels when considering its future ship counting methodology. Therefore, the Committee directs the Secretary of the Navy to provide a report to the congressional defense committees, by January 1, 2021 as to Navy's plan to assess the family of unmanned underwater and surface vessels incorporation into the ship counting methodology of section 231(f) of title 10, United States Code. For the purposes of making this determination, for both manned and unmanned vessels, this report shall assess factors such as:

(1) Intended mission, in both competition and conflict;

(2) Capability, either through a platform's weapons, sensors, or embarked personnel to interact with targets beyond visual range;

(3) Ability to perform fleet support functions essential to power projection or sea control in competition or conflict.

Submarine Supplier Development

The committee recognizes that the submarine supply base lost approximately 12,000 suppliers since the end of the Cold War. Material provided by the submarine industrial base is planned to grow by more than 200 percent over the next 5 years, after more than two decades of nurturing a fragile industrial base where 75 percent of funding for supplier material was awarded to single or sole-source suppliers. Congress authorized and appropriated funding in fiscal year 2019 and fiscal year 2020 and provided flexible authorities supporting submarine industrial base expansion and stability initiatives. In fiscal year 2019, the Navy identified 324 suppliers as execution-critical and has been conducting assessments of the health and readiness of those suppliers. In the 2020 assessment, the number of critical suppliers has grown to 350, of which 61 have been identified as challenged to meet future demand. The committee believes that continued investment in supplier development will reduce material lead times and improve the ability of the sub-

marine industrial base to meet challenging construction schedules at higher rates of production. Therefore, the committee encourages the Secretary of the Navy to include supplier development funding in future budget requests until the number of challenged suppliers has been significantly reduced.

Technology Insertion in New Ship Designs

The committee recognizes that ongoing delays on the lead FORD class aircraft carrier may indicate systemic problems with Navy shipbuilding practices with how new technologies are developed and incorporated. It is unfortunate that new technologies such as the advanced weapons elevators were not prototyped before being incorporated on the lead ship, a mistake that has contributed to lengthy delays. The committee is concerned with the Navy's decision to accept a ship that still had major discrepancies. The committee supports expanded prototyping activities for new technologies to ensure required reliability is obtained before ship authorization. Therefore, the committee directs the Secretary of the Navy to submit a report to the congressional defense committees by February 1, 2021 detailing the number of times the Navy has accepted a ship prior to the incorporation and completion of major subsystems over the last twenty years, the circumstances that drove the Navy to accept such ship, and the length of time between acceptance and final incorporation of such subsystems. Additionally, the committee directs the Secretary to specifically assess emerging technologies, their associated technology readiness levels and required prototyping activities that are being incorporated in emerging programs including the following specific programs: Columbia-class ballistic missile submarine; the guided missiles frigate; the next generation attack submarine; large surface combatant; and, the large unmanned surface vessel.

Variable Depth Sonar for DDG–51 destroyers

The committee recognizes and supports the Navy's efforts to leverage mature technologies and systems for the DDG–51 and small surface combatant programs. The committee continues to encourage the Secretary of the Navy to emphasize commonality across Navy platforms, commonality with existing platform equipment, and reduced acquisition and lifecycle and sustainment costs in developing a best value solution for the platform. However, the committee also believes it is critical that the Navy increase technical capabilities, particularly in the area of anti-submarine warfare (ASW). Given ongoing efforts by adversarial nations to increase the capability, lethality, and size of their respective submarine fleets, the committee recognizes the critical role the DDG–51 and small surface combatants will play in performing ASW missions around the globe. As such, it is imperative that the platform be deployed with the most capable ASW technology available.

Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services not later than February 1, 2021, on the feasibility of backfitting the AN/SQS–62 Variable Depth Sonar system on surface combatants. The briefing shall include:

(a) an explanation of the current DDG–51 ASW performance capabilities, including any plans for ensuring the DDG–51s are part

of a broader implementation of low-frequency active capabilities aboard tactical surface ships;

(b) an analysis of commonality with program of record ASW systems, particularly those recently developed as part of the littoral combat ship ASW Mission Package, to include common hardware, spares, training, and logistics;

(c) an acquisition plan, including schedule, for AN/SQS–62 backfit into DDG–51s;

(d) the program schedule to fully incorporate AN/SQS–62 into the ASW mission packages associated with the littoral combat ship; and

(e) an assessment of options to forward fit AN/SQS–62 into frigate.

Virginia-class submarine

The budget request included $2.33 billion for one *Virginia*-class submarine. The committee was discouraged to see that the second submarine that had been previously planned and was reflected in the fiscal year 2020 budget, was no longer included in the budget request despite clear direction from Congress in the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). This not only conflicts with years of testimony from combatant commanders, not only deepens the gap between the projected fleet size versus the requirement, but it also puts the Department of Defense's highest priority procurement program, the *Columbia*-class ballistic missile submarine, at additional risk. Due to the nature of the multiyear procurement contract, the true impact of not funding the second Virginia-class submarine in fiscal year 2021 will not be realized until 2023, at a time when both shipyards are reaching a peak in their hiring in order to support the construction of the first *Columbia*-class submarine. A decline in *Virginia*-class work during that period will likely have a dramatic impact on the Columbia program due to the hiring agreements that were previously negotiated between the labor unions and the two shipyards. The committee believes that all measures should be taken to avoid any disruptions to the *Columbia*-class submarine program, which has consumed all schedule margin and is still at great risk of achieving its required first strategic patrol date.

Therefore, the committee recommends $4.43 billion, an increase of $2.1 billion, for a second *Virginia*-class submarine.

OTHER PROCUREMENT, NAVY

Items of Special Interest

Laser shock peening (LSP) technology

The committee notes there are several ship classes that use aluminum in ship construction. Unfortunately, in the construction of 22 in-service Cruisers (CG) constructed between 1980–1994 with aluminum superstructures, these aluminum structures are experiencing fatigue. The committee notes that there are unique issues associated with the CG superstructure lifecycle maintenance costs.

The committee supports the use of innovative aluminum fatigue interventions to extend the service life of these ships. The committee notes the use of laser shock peening (LSP) technology to

mitigate these challenges with aluminum and understands that LSP has been used in various high-risk, high-quality industries to include the nuclear industry and aviation sectors.

The committee supports the use of innovative maintenance options that provide increased aluminum survivability, resiliency, and battlefield longevity for current and future classes of warships constructed with aluminum. Therefore, the committee directs the Secretary of the Navy to provide a brief to the House Committee on Armed Services by February 1, 2021 that assesses specific applications and tooling, such as LSP and others, that can be used to extend the life of aluminum superstructures.

Long-term charter requirements

The committee notes that the Secretary of the Navy has entered long-term charter agreements for nine transoceanic vessels for the Departments of the Navy and Army. The committee believes that organic transoceanic vessels may be more cost effective than the long-term charter strategy currently employed by the Secretary of the Navy. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by February 1, 2021, on alternative force structure options to support these long-term charter requirements. The briefing shall include an assessment of the current long-term charter requirements and a cost comparison of an organic fleet capability compared with the long-term charters.

Pilot program regarding the viability of electronic actuators

The committee recognizes that a variety of shipboard systems rely on remote valve actuation for system operations for shipboard safety. Fuel, water, ballast/de-ballast, ventilation, and fire main systems all depend on reliable remote valves and actuators to properly align system configurations. When remote valve actuation fails, there are two choices: work around the failed valve by reconfiguring a system or have sailors attempt to manually align the valve. Either choice is a known departure from design standards and manifests as reduced readiness. The committee recognizes that technological advances have been made in shipboard electronic actuators. These actuators appear to be more reliable and provide electronic limit-switching, which eliminates drift. They also have reliable communication with the ship's machinery control system and are much easier for sailors to maintain. These actuators could lead to a much lower sustainment cost for the Navy.

The budget request included $50.5 million for LPD class support equipment. The committee recommends $55.5 million, an increase of $5.0 million, for a pilot program aboard LPD 17 class amphibious ships in order to demonstrate the viability and reliability of shipboard electronic actuators.

Unmanned maritime systems

The Navy is refocusing its maritime strategy to counter an increasing competition among nations in the maritime environment, coupled with a rapid rise in technological creation and adoption of new weapons. To expedite technology development and accelerate fielding initial capabilities, the Navy is using a range of new acquisition authorities that allow the department to bypass traditional

lines of program oversight. In particular, the Navy has added significant resources to its budget to rapidly and aggressively acquire a family of over 200 new unmanned and optionally manned surface and undersea vehicles. While unmanned maritime systems offer promise, past efforts, such as the Remote Minehunting Vehicle, have proven costly and unsuccessful.

Therefore, the committee directs the Comptroller General of the United States to provide a report to the congressional defense committees by March 1, 2021, on a review of the Navy's unmanned surface and undersea vehicles. As part of this review, the Comptroller General shall assess:

(1) the current status of the Navy's efforts to develop and produce unmanned and optionally manned surface and undersea vehicles, including cost and schedule;

(2) the successes and challenges the Navy is experiencing in executing and planning its unmanned surface and undersea vehicles;

(3) the extent to which the Navy is managing requirements to best ensure that the planned capabilities will meet mission needs;

(4) the Navy's plans for replacing manned ships with unmanned ships and also including unmanned systems in its ship counts; and

(5) any other areas that the Comptroller General deems appropriate.

PROCUREMENT, MARINE CORPS

Items of Special Interest

Marine Corps hearing protection program

The committee commends U.S. Marine Corps Systems Command (MARCORSYSCOM) for taking proactive action to provide enhanced hearing protection measures in training and combat for both infantry and artillery personnel. As hearing loss remains the top disability claim for service members transitioning to Veterans Administration health care, the Marine Corps has made active hearing protection integrated with communications systems a top priority. The committee encourages MARCORSYSCOM leadership and program managers to continue this program as it is currently implemented to ensure that all Marine Corps infantry and artillery personnel in combat and training environments are provided the best available and currently specified and fielded hearing protection solution.

Marine Corps vertical lift munitions

The committee is aware that during fiscal year 2019, the Army conducted a successful test of an allied munition system to demonstrate increased standoff and lethality for the AH–64 Apache helicopter. The committee supports the Army's initiative to field an interim long-range precision munition capability for current attack helicopters and believes that this capability could potentially provide greater standoff combat capability to similar military platforms, such as the Marine Corps AH–1W SuperCobra or AH–1Z Viper attack helicopter.

Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by January 15, 2021, on vertical lift munitions capabilities gaps and

potential commercial-off-the-shelf solutions that could serve as an interim solution for meeting future Department of the Navy vertical lift demands. The briefing should include an analysis of requirements and costs to test any relevant domestic or allied commercial-off-the-shelf munitions from an AH–1W SuperCobra or AH–1Z Viper Marine Corps attack helicopter.

Modular Aviator Body Armor Vest Acquisition Strategy

The committee is aware that the current aviation life support equipment flight vests worn by Marine helicopter aircrews have excessive bulk which can impede the operational performance of precision mission tasks. The committee notes that U.S. Marine Corps Aviation has a requirement for a modular aviator body armor vest (ABAV) system that can improve mobility and performance, while enhancing survivability by reducing weight, bulk, and heat stress. The committee notes in fiscal year 2020, $2.2 million was requested to purchase 1,000 vests for UH–1Y and AH–1Z, but a plan has not been established to outfit other airframes such as the V–22 and CH–53. Therefore, the committee directs the Deputy Commandant for Aviation to provide a briefing to the House Committee on Armed Services by March 1, 2021, on its plan to equip CH–53 and V–22 airframes with ABAV systems.

Rapid acquisition of rifle integrated controller

In the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120), the committee encouraged the Marine Corps to complete the phase 2 evaluation of the rifle accessory control unit (RACU) and indicated support for the capability to result in a validated requirement upon successful completion of the phase 2 evaluation. Following development of such a requirement, the committee encouraged the Commandant of the Marine Corps to consider a rapid acquisition strategy to accelerate operational testing, procurement, and fielding of the RACU utilizing existing acquisition reform authorities. The committee remains concerned by the lack of progress and expects the Marine Corps to complete its phased evaluation of the RACU in a timely manner in order to make a decision regarding rapid production and fielding.

AIRCRAFT PROCUREMENT, AIR FORCE

Items of Special Interest

A–10 Synthetic Aperture Radar Improvements

The committee supports continued Air Force efforts to modernize and upgrade the A–10 fleet of aircraft. However, the committee believes the Air Force could take further steps to reduce aircrew risk and enhance the aircraft's capability to perform close air support in adverse weather and low-visibility environmental conditions. The committee understands that a recent Air Force study entitled "A–10C DoDAF View CV–3 Capability Phasing Roadmap, Revision 6.6," dated January 2, 2018, determined that integration of a synthetic aperture radar (SAR) could resolve the capability deficiencies in the areas of locating, identifying, tracking, and engaging targets in the aforementioned types of environmental conditions. Con-

sequently, the committee also notes that the Air Force is currently performing an operational utility evaluation by integrating SAR capability on A–10 aircraft and evaluating workload impacts on A–10 aircrews.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by March 1, 2021, on the status and any known findings from the operational utility evaluation of integrating SAR capability onto A–10 aircraft.

Airlift tactical data link

The committee is concerned with the lack of a resilient and survivable network for airlift aircraft in a highly contested operational environment.

The National Defense Strategy's shift to peer and near-peer threats requires capabilities for operations in all environments. The committee recognizes that a tactical data link provides situational awareness and could also be a future network node for the Joint All Domain Command and Control.

The committee is aware that modifications are in place to provide situational awareness for the C–130J and encourages the Air Force to consider the operational benefits of a tactical data link for other tactical and strategic airlift.

C–130H propeller/engine upgrades

The committee notes again that the C–130H aircraft that are flown primarily by the Air National Guard and Air Force Reserve continue to provide critical tactical airlift capabilities and will continue to support this mission for years to come. The committee is again disappointed with the amount of time it has taken for the Air Force to address a safety of flight issue with the legacy propeller system of the C–130H.

Procurement of new composite propeller blades is the obvious solution to this serious safety of flight and readiness issue. The Air Force has moved slowly in addressing the issue and still refers to the propeller upgrade as a capability improvement and not a safety requirement. A new composite blade would also decrease maintenance time and improve logistics support, which will result in increased readiness. Delays are unacceptable considering the inherent safety of flight and readiness risks surrounding this issue.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by January 31, 2021, updating the acquisition strategy for procuring new blades. This plan should include updated estimated costs, timelines, and a unit upgrade schedule. The briefing should also include the Air Force plan to incorporate C–130H T–56 Series 3.5 Engine Enhancement Packages. Congress has repeatedly added additional funds for these upgrades and the Air Force has yet to budget for them despite the demonstrated performance benefits and fuel efficiencies.

E–8 Joint Surveillance Target Attack Radar System

The budget request included $11.0 million for E–8 Joint Surveillance Target Attack Radar System (JSTARS) aircraft modifications and upgrades.

The committee recognizes the JSTARS platform continues to be a high-demand asset required by the global combatant commands and notes this platform has been a vital contributor, with over 100,000 combat flying hours in every major conflict of the past two decades. Section 147 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) required the Air Force to increase JSTARS aircraft availability. Accordingly, the committee remains concerned by the lack of modernization funding, to include funding for necessary avionics and communications upgrades, planned and programmed for JSTARS across the Future Years Defense Program. The committee believes the JSTARS platform must be kept operationally relevant to meet warfighter needs until a replacement of equal or superior capability is fielded and operational.

The committee recommends $38.0 million, an increase of $27.0 million, for avionics and communication modernization upgrades in order to mitigate diminishing manufacturing sources of supply and maintain compliance with international avionics mandates.

Expanded Carriage for the B–1

The committee notes that the Secretary of the Air Force completed an expanded carriage assessment of the B–1B Lancer bomber that demonstrated the feasibility of increasing the B–1B weapons capacity to integrate future advanced weapons. The two potential programs—external carriage and long bay options—would allow the B–1B to carry weapons externally, significantly increasing its magazine capacity for munitions, as well as adding larger, heavier munitions, such as hypersonic weapons. The demonstration showed that the B–1B is able to move the bulkhead from the forward intermediate bay to the forward location; increasing the intermediate bay capacity from 180 inches to 269 inches. Additionally, the demonstration determined that the bomber can still carry weapons externally on six of the eight hard points, which increases the B–1s overall carriage capacity. The committee further notes that the bomber road map portends to retain the B–1 fleet through the 2030s until their capability is replaced by the B–21 bomber. The committee supports the continued modernization of the B–1 aircraft and urges the Secretary of the Air Force to develop a modernization roadmap that tracks with the anticipated service life of the overall fleet. Therefore, the committee directs the Secretary of the Air Force to provide a brief to the House Committee on Armed Services by February 1, 2021 as to the Secretary's intent to provide the expanded carriage capability and other modernization efforts to the overall B–1 fleet.

KC–46A full rate production

The committee notes that Boeing Defense has not yet delivered 6 of 7 Lot 1 and 6 of 12 Lot 2 KC–46A aircraft. These Lot 1 and 2 aircraft were authorized in fiscal year 2015 and 2016 respectively. Considering the budget request for fiscal year 2021 supported a Lot 7 order of 15 aircraft, the delays associated with Lots 1 and 2 could impact deliveries of Lot 7.

Additionally, the committee notes that the KC–46A has three category one deficiencies: the remote vision system, the boom telescope actuator, and a new excessive fuel system leak. The category

one deficiency in the remote vision system has resulted in the Air Force determination that the KC–46A is not capable of being operationally employed. The Air Force has assessed the remote vision system category one deficiency will take approximately 3 to 4 years to correct. If Boeing can maintain schedule they will have delivered the first 6 lots representing a total of 79 aircraft that are not capable of being operationally employed.

The Air Force has indicated their intent in fiscal year 2021 to conclude the initial operational test and evaluation and proceed to full rate production of an aircraft that is not operationally capable. The committee believes that a decision to enter full rate production before these category one deficiencies are corrected and production challenges are alleviated should be carefully considered by the milestone decision authority. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by September 1, 2020, before the KC–46A program goes into full rate production, as to how the Secretary intends to mitigate the concurrency of development associated with these category one deficiencies with a full rate production decision.

MQ–9 Reaper

The budget request contained $171.8 million for the MQ–9 unmanned aircraft system but included no funding for procurement of additional aircraft.

The committee recognizes that the MQ–9 Reaper, while an invaluable asset in counterterrorism and current steady-state military operations, is not designed to operate in the contested environment of the future. The committee notes that while the Air Force budget request for fiscal year 2021 did include $0.3 million to begin trade studies for a next-generation medium-altitude intelligence, surveillance, and reconnaissance (ISR) capability, fielding a new capability will likely take several years. Given combatant commanders' consistently high demand for ISR, the committee agrees with Air Force plans to maintain the existing MQ–9 fleet as work begins on a future capability.

However, the committee is concerned about the potential near-term operational risk the Air Force is accepting in making budget-driven decisions across its ISR portfolio rather than focusing on the appropriate mix of capability and capacity to support the combatant commands and manage impacts to the industrial base. The committee believes that the Air Force should have planned a more gradual reduction to MQ–9 production to avoid potential disruption to the industrial base and increased risk in the supply chain needed for sustainment of the MQ–9 fleet. The committee supports continuing procurement in fiscal year 2021 to allow the industrial base to better plan for preservation of the MQ–9 supply chain and production capability for future ISR requirements.

Therefore, the committee recommends $279.8 million, an increase of $108.0 million, for the MQ–9 Reaper program.

PROCUREMENT, DEFENSE-WIDE

Items of Special Interest

Commonality and cost efficiencies in degraded visual environment systems

The committee supports recent efforts by the military services to prioritize acquiring enhanced systems to assist aircraft navigating degraded visual environments (DVE). The committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120) directed the Secretary of Defense to examine available DVE capabilities and brief the committee on efforts to develop and procure systems to improve safety of flight. The committee understands that U.S. Special Operations Command and the Army plan to field a DVE Quick Reaction Capability on 15 medical evacuation and 25 special operations aircraft deploying to U.S. Central Command. Further, the committee understands that the Air Force awarded a contract last year to install a DVE system on the HH–60G Pave Hawk helicopter.

The committee believes that enhanced DVE should remain a priority for rotary aviation communities and encourages the military services to continue collaborating with the goal of developing and acquiring common joint systems where possible. To that end, the committee directs the Secretary of the Army, in coordination with the Secretary of the Navy and the Secretary of the Air Force, to provide a report to the congressional defense committees, not later than December 1, 2020, on DVE development and acquisition, to include systems in procurement or under consideration for procurement, planned fielding schedules for these systems, identify systems being integrated on multiple programs, as well as identify service- or platform-specific needs requiring unique capability solutions.

F–35

The budget request contained $10.3 billion for the procurement of 79 F–35 aircraft, and associated spares, modifications, depot activations, and advanced procurement for fiscal year 2021 aircraft for the Air Force, Navy, and Marine Corps. The budget request contained $1.7 billion for research and development related to deployability and suitability initiatives, Block 4 and Continuous Capability Development and Delivery (C2D2), and Air Force dual-capable aircraft efforts. The committee notes that the unfunded priority lists for the Air Force and Navy contained 12 F–35A and 5 F–35C aircraft, respectively.

The committee continues support for the F–35 program and understands it is a capability needed against potential adversary's advanced integrated air defense systems operating against the United States or its foreign partners and allies during high-end contingencies. However, the committee maintains the same concerns regarding the F–35 program as expressed in the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120), in addition to the issues highlighted in two recent Government Accountability Office reports (GAO–20–151 and GAO–20–316). Furthermore, the committee notes that the Defense Contract Management Agency observed during the July 2019

through December 2019 time period that the quality evaluation metrics for suppliers remained steady at a satisfactory level, but that production shortages had increased for overall suppliers, and overall quality and delivery evaluation metrics had degraded for all 23 suppliers designated as critical suppliers. Finally, the committee is concerned with issues regarding mitigation of F–35 physiological episode occurrences and software testing to ensure capability and compatibility with the F–35 fire-control radar and currently certified weapons.

Consequently, the committee includes three provisions elsewhere in this Act, that would require providing the congressional defense committees information on the F–35 program's progress for resolving physiological episode occurrences, the methodologies for executing operational flight program software testing, and the Department's formal evaluation of the program's preparedness for entering full-rate production.

Ground tactical vehicles for special operations forces

The budget request included $33.1 million for the procurement of ground tactical vehicles and modifications for special operations forces (SOF). The committee recognizes the necessity of agile and innovative technologies to support SOF efforts to counter violent extremism and compete with near-peer competitors.

The Non-Standard Commercial Vehicles (NSCV) and Ground Mobility Vehicles (GMV) capabilities enable SOF to execute an array of critical global missions including counterterrorism, counterproliferation, and unconventional warfare. NSCVs are low-signature vehicles chosen to blend in with the surroundings of the operating environment and can be modified to support a variety of SOF activities. The GMV 1.1 is an inherently mobile capability, transportable by a MH–47 to allow SOF operators a fast roll-on/roll-off capability ideal for a full spectrum of operations.

The committee supports the budget request of $33.1 million for the procurement of ground tactical vehicles for SOF.

Increased research for counter unmanned aircraft systems in austere locations abroad

The budget request contained $293.3 million for Warrior Systems. Of this amount, $12.5 million was requested for the counter unmanned aircraft system (cUAS) program.

The committee notes that there is currently an operational requirement for increased research and development into cUAS capabilities. Recent events in Syria, Iraq, and Djibouti highlight that this is an increasing threat to military personnel engaged in countering violent extremism and great power competition missions which, if left underdeveloped, the committee understands to be an immediate threat challenging U.S. strategic locations abroad.

The committee is aware of the efforts underway by the U.S. Army to evaluate and field alternative cUAS capabilities to meet the force protection needs of the joint force. The committee supports U.S. Army efforts, but appreciates the testing and experimentation of such emergent cUAS capabilities in austere locations facilitated by U.S. Special Operations Command (USSOCOM). Given the rapid pursuit of armed unmanned aircraft systems (UAS) technologies by adversaries of the United States, the committee under-

stands that desirable criteria for any cUAS technologies must be able to autonomously search, identify, and track threats while fusing multiple data sources with the sense-making ability enabled by radar, electro-optical, and infrared collection capabilities to employ an effect against adversary UAS.

While the committee notes that such individual technologies exist today to meet this force protection requirement, work remains to integrate these requirements in more austere environments. Therefore, the committee recommends $17.5 million, an increase of $5.0 million, for further development of an integrated, multi-sensor autonomous cUAS program.

Further, the committee directs the Commander, USSOCOM, to provide a briefing to the House Committee on Armed Services by October 30, 2020, on the efforts to develop and field test autonomous, multi-sensor cUAS capabilities in austere environments. The briefing shall also include details on efforts to share best practices and capability updates with the U.S. Army, as designated lead for cUAS systems and strategies development for the joint force.

Replacement of Special Operations Command DHC–8 aircraft

The budget request contained $5.0 million in Manned ISR for the manned intelligence, surveillance, reconnaissance (ISR) program. The committee recognizes the importance of maintaining dedicated airborne ISR platforms, including the DHC–8, for U.S. military forces operating in austere environments, as ISR provides unique collection, overwatch, and force protection capabilities in dynamic and complex threat environments. On January 5, 2020, the terrorist organization known as al-Shabaab attacked U.S. forces stationed at Camp Simba in Manda Bay, Kenya. The DHC–8 was one of the several aircraft destroyed in that attack.

Therefore, the committee recommends $45.1 million, an increase of $40.1 million, in Manned ISR for the U.S. Special Operations Command manned ISR program to replace the DHC–8 due to combat loss while supporting Operation Enduring Freedom–Horn of Africa missions.

LEGISLATIVE PROVISIONS

SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 101—Authorization of Appropriations

This section would authorize appropriations for procurement at the levels identified in section 4101 of division D of this Act.

SUBTITLE B—NAVY PROGRAMS

Section 111—Independent Cost Estimate of FFG(X) Frigate Program

This section would require the Secretary of Defense to ensure that an independent cost estimate has been completed prior to milestone B.

SUBTITLE C—AIR FORCE PROGRAMS

Section 121—Modification of Force Structure Objectives for B–1 Bomber Aircraft

This provision would amend section 9062(h)(2) of title 10, United States Code, by changing the B–1 combat coded aircraft requirement from 36 to 24. This provision also sets requirements for storage and maintainer billets.

Section 122—Extension of Limitation on Availability of Funds for Retirement of RC–135 Aircraft

This section would prohibit the Air Force from retiring, or preparing to retire, any RC–135 aircraft through fiscal year 2025 until 60 days after the date on which the Secretary of Defense certifies to the congressional defense committees that equivalent RC–135 capacity and capability exists to meet combatant commander requirements for indications and warning, intelligence preparation of the operational environment, and direct support to kinetic and non-kinetic operations.

Section 123—Modification of Limitation on Availability of Funds for Retirement of E–8 JSTARS Aircraft

This section would amend section 147(a) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115 232) to prohibit any use of funds authorized to be appropriated in fiscal year 2021 or any subsequent year for the Air Force to retire, or prepare to retire, any E–8 Joint Surveillance Target Attack Radar System aircraft until the date on which the Secretary of Defense certifies to the congressional defense committees that there is a replacement capability identified that meets or exceeds the current capability and capacity of the 16-aircraft E–8 fleet to meet global combatant command requirements.

Section 124—Limitation on Availability of Funds for the Advanced Battle Management System Pending Certification Relating to RQ–4 Aircraft

This section would limit obligation or expenditure of 50 percent of the funding available for the Advanced Battle Management System until one of three conditions is met: (1) the Secretary of the Air Force certifies that the Air Force will not retire any RQ–4 Global Hawk aircraft during fiscal year 2021; (2) the Under Secretary of Defense for Acquisition and Sustainment certifies that the validated operating and sustainment costs of any capability developed to replace the RQ–4 aircraft are less than the validated operating and sustainment costs for the RQ–4 aircraft on a comparable flight-hour cost basis, and the Chairman of the Joint Requirements Oversight Council certifies that any replacement capability for the RQ–4 aircraft would result in equal or greater capability available to the commanders of the combatant commands and would not result in less capacity available to the commanders of the combatant commands; or (3) the Secretary of Defense certifies that a replacement capability for the RQ–4 aircraft is worth increased operating and sustainment costs.

Section 125—Inventory Requirements for Certain Air Refueling Tanker Aircraft

This section would prohibit the use of funds authorized to be appropriated in fiscal year 2021 to fiscal year 2023 for the retirement of any KC–135 aircraft, or reduce the number of primary mission KC–135 aircraft. This section would also require the Air Force to maintain a minimum of 50 primary mission KC–10A aircraft in fiscal year 2021, 38 primary mission KC–10A aircraft in fiscal year 2022, and 26 primary mission KC–10A aircraft in fiscal year 2023.

Section 126—Limitation on Production of KC–46A Aircraft

This section would prohibit purchasing more than the 12 KC–46A aircraft in fiscal year 2021 until certain category-one deficiencies are fixed. This section would also require the Secretary of the Air Force to provide a report by February 1, 2021, on the schedule for the correction of each category-one deficiency described, a plan to engage an independent test organization to verify the effectiveness of any proposed solutions to such category-one deficiencies; and an acquisition strategy for the aircraft that identifies principal acquisition milestones; and will ensure that there is sufficient competition for the procurement of a nondevelopmental tanker aircraft at the conclusion of the KC–46A production contract.

Section 127—Assessment and Certification Relating to OC–135 Aircraft

This section would prohibit the Air Force from retiring, or preparing to retire, any OC–135 aircraft in fiscal year 2021 until 90 days after the date on which the Secretary of the Air Force provides a report and a certification to the congressional defense committees on the feasibility and cost effectiveness of using the OC–135 aircraft to fulfill other unclassified aerial imagery requirements for alternative missions.

Section 128—Modernization Plan for Airborne Intelligence, Surveillance, and Reconnaissance

This section would require the Secretary of the Air Force to provide a comprehensive strategy for Air Force airborne intelligence, surveillance, and reconnaissance (ISR) to ensure alignment between requirements, future Air Force budget submissions, and authorization of appropriations. The required plan would cover current steady-state, contingency, and future multidomain operations for Air Force ISR. This section would also require the Air Force to submit a classified annex to the report as necessary.

The Air Force fiscal year 2021 budget request included several significant changes to ISR force mix and modernization. The request proposed immediate divestment of all RQ–4 Global Hawk Block 30 multi-intelligence aircraft, as well as an end to the MQ–9 Reaper production line in fiscal year 2020 without any time to allow for adequate supply chain management planning. While these changes may align with long-term Air Force strategy, the absence of such a strategy incorporating both current and future capabilities concerns the committee. The committee expects the directed strategy to address required capabilities and capacities, to

identify anticipated gaps in both areas, and to cover both manned and unmanned ISR capabilities.

Section 129—Minimum Bomber Aircraft Force Level

This section would require a report not later than February 1, 2021, by the Secretary of the Air Force on the bomber aircraft force structure that enables the Air Force to meet the requirements of its long-range strike mission under the National Defense Strategy.

SUBTITLE D—DEFENSE-WIDE, JOINT, AND MULTISERVICE MATTERS

Section 131—Documentation Relating to the F–35 Aircraft Program

This section would require the Secretary of Defense to provide the congressional defense committees with certain information and certifications by the Secretary regarding cost, schedule, risk, program execution and significant deficiency resolution plans in the areas of production, Block 4 hardware and software development, modernization, upgrades and training systems for the F–35 program before entering full-rate production and a Milestone C acquisition award can be granted by the Secretary.

Section 132—Notification on Software Regression Testing for F–35 Aircraft

This section would require the Under Secretary of Defense for Acquisition and Sustainment, in consultation with the Director, Operational Test and Evaluation, to provide the congressional defense committees with a notification not later than 30 days after F–35 air vehicle or mission systems production software is released to units under the F–35 program's continuous capability development and delivery process. The notification would include information regarding:

(1) what type and method of regression testing was completed prior to production release of the software to ensure compatibility and proper functionality with the F–35 fire control radar system and any weapons currently certified for carriage and employment for each variant of F–35 aircraft;

(2) which entities, U.S. Government entities or U.S. Government contractors, performed the production software regression testing;

(3) a list of deficiencies discovered during the production software regression testing and what software modifications were completed to resolve or mitigate any software deficiencies noted; and

(4) a list of deficiencies discovered during the software regression testing that may or may not be corrected in later F–35 production software releases.

Section 133—Notification on Efforts to Replace Inoperable Ejection Seat Aircraft Locator Beacons

This section would require the Under Secretary of Defense for Acquisition and Sustainment to provide the congressional defense committees a semiannual written notification about the efforts being undertaken by the senior acquisition executives of the Department of the Air Force and the Department of the Navy to replace emergency locator seat beacons in ejection-seat equipped air-

craft that have been found to be inoperable in water, and the funding budgeted for such efforts. The Under Secretary would be required to report on the issue until locator beacons are replaced in all affected ejection-seat equipped aircraft, or a period of 5 years has elapsed since the date the initial report is received by the congressional defense committees.

Section 134—Limitation on Use of Funds for the Armed Overwatch Program

This section would prohibit the obligation or expenditure of any funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2021 for procurement for the Armed Overwatch Program of U.S. Special Operations Command until the Secretary of Defense and Commander, U.S. Special Operations Command, review, validate, and certify the Armed Overwatch Program. This section would also require the Secretary of Defense to review the roles and responsibilities of the Air Force and Special Operations Command with respect to close air support and armed intelligence, surveillance, and reconnaissance capabilities, and upon favorable determination, certify Armed Overwatch as a special operations forces-peculiar requirement. This section would require the Commander, U.S. Special Operations Command, to provide a comprehensive requirements plan and roadmap analyzing application of the Armed Overwatch capability against the totality of intelligence, surveillance, and reconnaissance requirements of the various special operations forces units and missions, and the geographic combatant commands.

TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, ARMY

Items of Special Interest

Accelerating Army Aircraft Cleaning and Deicing Systems for rotary-wing aircraft

The committee has long expressed concern about the impact of corrosion on aviation assets and supported efforts to improve aircrew safety, aircraft availability, and aircraft and unit readiness through cost-effective corrosion mitigation. The committee understands that an aircraft cleaning and deicing system (ACDS) capability would help prevent and control corrosion of aviation assets through development and testing of an aircraft washing system. The committee remains concerned by the Army's current plans for ACDS which moves ACDS development and demonstration further into the future years defense program despite a persistent requirement to mitigate corrosion on aircraft. The committee is aware that existing commercial-off-the-shelf aircraft cleaning systems are currently available for test and evaluation and expects the Army to consider these systems as a potential option to rapidly address corrosion mitigation issues for aviation assets.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by December

15, 2020, on the Army's plan to prevent and control the impact of corrosion on rotary- and fixed-wing aircraft. The briefing shall include, but not be limited to a detailed description of policies, programs, funding, and investment strategy to address corrosion prevention and control on Army aircraft, a plan to accelerate ACDS efforts, evaluations of commercial off the shelf systems, and consideration given to creating a program of record for this capability.

Auxiliary power units for armored and tactical vehicles

The committee is aware that armored and tactical vehicles may lack enough electrical power to accommodate the weapons, sensors, and payloads needed for effective operations in current and future combat environments. The committee understands that some of these power generation shortfalls could be addressed using auxiliary power units (APU), however, existing APU's are often impractical for use on Army vehicles due to their large size and weight.

The committee understands that there are research and development efforts to develop innovative small generators and APUs that could provide significant improvements in size, weight, and fuel efficiency. The committee encourages the Army to explore these innovative systems for potential use on current armored and tactical vehicles as well as the next generation combat vehicles, such as the Optionally Manned Fighting Vehicle and Robotic Combat Vehicles.

Accordingly, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by October 30, 2020, on efforts to address power generation requirements for its current and future ground combat and tactical vehicle fleets. The report shall include, but not be limited to:

(1) an overview of current ground combat and tactical vehicles demonstrating significant power generation problems, and the resulting operational impacts;

(2) an analysis of expected power generation requirements for the systems contemplated as part of the Next Generation Combat Vehicle Program; and

(3) any current or planned efforts to explore innovative small form factor auxiliary power units for armored or tactical vehicles.

Briefing on Army's Carbine Magazine Development Strategy

The committee supports the Department of the Army's Next Generation Squad Weapons (NGSW) program and commends the service for continuously assessing new and advanced materials, such as polymer compounds, to provide warfighters with the best equipment necessary for mission success. As the Army proceeds with the NGSW program, the committee believes that the service should seek the highest-performing 6.8mm magazine composed of modern materials to maximize soldier lethality and improve soldier survivability.

The committee notes that the Army has completed several 5.56mm magazine tests, the results of which led the Departments of the Air Force, Marine Corps, Coast Guard, and Special Operations Command to formally adopt a high-performing polymer magazine that the Army has authorized for its own acquisition. The committee views synchronization in magazine selection between the services as a positive development that advances force interoperability and increases military preparedness. The committee be-

lieves that these outcomes should inform the Army's magazine selection process under the NGSW program.

The committee expects the Army to implement lessons learned from previous magazine procurement and testing and require that the highest-performing magazines be used in NGSW rifles. The committee therefore directs the Secretary of the Army to provide a briefing to the congressional defense committees not later than October 30, 2020, on the Army's comprehensive strategy on NGSW magazine procurement. The briefing shall include a description of the Army's expected requirements for the NGSW magazines, such as performance metrics, materials, and visual indicators for rounds remaining.

Carbon composite materials for helicopter wheels and brakes

The budget request included $46.1 million in PE 0607137A for the Chinook Product Improvement program.

The committee has previously supported research efforts to develop lightweight carbon composite materials and notes that such materials could also be used in manufacturing aircraft brake housings, wheels, and associated components. Traditional aluminum aircraft braking components add substantial weight to aircraft, reducing payload capacity and increasing fuel consumption. The committee understands that replacing aluminum with high temperature carbon composites could significantly reduce the weight of a brake or wheel part by up to 30–50 percent, depending on the aircraft. Incorporating carbon composite materials in certain components could potentially improve operational capabilities for the CH–47 Chinook helicopter, the Army's primary heavy-lift aircraft. The committee also notes that development conducted for the CH–47 Chinook helicopter in these materials could be applied to other helicopter programs.

Therefore, the committee recommends $51.1 million, an increase of $5.0 million, in PE 0607137A, for development of lightweight carbon composite materials for CH–47 Chinook helicopter brake housings and wheels.

Carbon fiber and graphite foam for combat and tactical vehicles

The committee notes that the Army's Ground Vehicle Systems Center and U.S. Special Operations Command (USSOCOM) are conducting developmental research on the potential wider application of carbon fiber composite wheels and graphitic carbon foam in support of the Army Next Generation Combat Vehicle (NGCV) cross-functional team's (CFT) lines of effort and the special operations forces tactical vehicle programs. The committee understands that graphite and carbon fiber components could reduce total vehicle weight and fuel consumption, while at the same time increase payload capacity and extend service life for a wide variety of combat and tactical vehicles. The committee recognizes the potential versatility and broad application that graphite and carbon fiber technology could provide for the military services and expects that the NGCV CFT and USSOCOM will continue the development and testing of carbon fiber and graphitic carbon foam components. In this regard, the committee encourages the NGCV CFT and USSOCOM to engage and communicate with the combat and tactical vehicle industrial base to ensure awareness of their interest

in new graphite and carbon fiber technologies as well as to continue to assess their potential application to future combat and tactical vehicles.

Electrification of Army combat and tactical vehicles

The committee understands that electric or hybrid-electric powertrains could increase performance, allow relatively silent operation, generate significant on-board power generation, and reduce the logistical burden associated with transporting and storing fuel. The committee notes the Army has for several years been working on electrification and has experimented with hybrid-electric tactical wheeled vehicles to include successful efforts to integrate on-board vehicle electric power through a Transmission Integral Generator for the Army's Terminal High Altitude Air Defense launcher. The committee is not aware, however, of any plans for the further development or integration of electrification technologies into combat and tactical vehicles and believes the Army should continue to invest and consider the potential military applications of this technology given rapidly advancing commercial industry developments.

Accordingly, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by December 15, 2020, on the status of its electrification research and development strategy for combat and tactical vehicles. The briefing should include, but not be limited to:

(1) current and future requirements and opportunities for electrification of combat and tactical vehicles, including such vehicle capabilities that could be related and necessary based on the 2018 National Defense Strategy, operational plans, or to satisfy concepts for Multi-Domain Operations;

(2) the current and future priorities for electrification of combat and tactical vehicles including plans, if any, to spiral hybrid-electric powertrains into existing combat and tactical vehicles;

(3) a description and assessment of potential Army timelines for initial, partial, and full electrification of existing and future combat and tactical vehicles; and

(4) details of ongoing science and technology initiatives that involve hybrid-electric propulsion and full-electric drive of combat and tactical vehicles to include plans, if any, to further develop integrated electric axle technology, motors and generators, power electronics, inverters, converters, energy storage systems, and transmissions.

Extended Range Cannon Artillery Program

The committee has consistently supported Army modernization of long-range precision fires. However, the committee has recently learned of technical issues effecting the Extended Range Cannon Artillery program with respect to auto-loader technology. The committee understands these technical issues have resulted in excess funds for the program. Accordingly, the committee directs the Secretary of the Army, not later than December 20, 2020, to provide a briefing to the House Armed Services Committee that identifies potential solutions to the technical issues impacting the Extended Range Cannon Artillery program and the steps that the Army has taken or will take to address the technical issues discovered. The committee encourages the Army, in restructuring this program, to

consider directing available resources to other technical solutions that could accomplish this same purpose and to include those considerations in the above directed briefing. Finally, the Secretary of the Army is directed to include in the briefing a description of how the funding for the Extended Range Cannon Artillery has been executed for the past two years, and the Army's plans to properly fund this effort over the next five fiscal years.

Future Vertical Lift sensor payloads

The committee expects the Army's Future Vertical Lift (FVL) program to field advanced sensor payloads capable of detecting, tracking, and countering threats in the future operational environment. The committee notes that the Army has yet to define the acquisition strategy for FVL mission equipment payloads and sensors, despite an accelerated platform development schedule. The committee understands that fielding mission equipment that is as advanced and capable as the platforms themselves will require investment and development in the coming years. The committee is concerned that without a well-defined acquisition strategy and risk reduction effort for mission equipment payloads and sensors, industry will be unable to make the investments necessary to deliver advanced capabilities on time for FVL programs.

Therefore, the committee directs the Secretary of the Army to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2020, on Future Vertical Lift mission equipment payloads and sensors. The report should include:

(1) the acquisition strategy for FVL mission equipment payloads and sensors, including radar, electronic warfare, 360 degree distributed aperture, missile warning, and advanced electro-optical infrared;

(2) planned risk reduction activities for the sensor payloads; and

(3) an estimate of the cost and schedule for the development and production of required sensor payloads.

Instrumental Synthetic Training Environment and Modeling and Simulation Capabilities

The committee is aware of potential adversaries' investments in leap-ahead technologies, including dual-use commercial technologies, to gain an asymmetric advantage over the United States. The committee urges the Department to use its alternative acquisition mechanism authorities provided by Congress to enable prototyping of emerging technologies and engage with the private sector to continue driving vital innovation in these critical areas.

The committee therefore directs the Assistant Secretary of the Army for Acquisition, Logistics and Technology to submit a briefing to the House Committee on Armed Services by January 31, 2021 on the Army's plan to continue to integrate virtual training and simulations into its future force design decisions. The briefing shall include how the Army is partnering with the Navy and Marine Corps to further integrate advanced simulation and virtual training technologies to inform future force design and foster force development through expanded wargaming, live-virtual-constructive training, and scalable realistic simulations.

Modeling and Simulation for Ground Vehicle Development and Sustainment

The Committee recognizes the importance and value of modeling and simulation (M&S) in supporting digital design, experimentation, and developmental and operational test and evaluation for military ground vehicle systems. When used appropriately, modeling and simulation can help save money and time delivering affordable technology to soldiers faster. The Committee notes that the Army's Ground Vehicle Systems Center (GVSC) has been using available funds to improve and expand its M&S capabilities through public-private partnerships and finding M&S tools developed by entities outside the military and brought to the Center's attention through their innovative outreach program. The Committee understands that partnerships with industry, academia, and non-profit science, technology, engineering, and math organizations could increase the likelihood of success for technology development and transfers between GVSC and non-traditional defense industry and organizations. In this regard, the committee directs the Assistant Secretary of the Army for Acquisition, Logistics, and Technology, not later than December 21, 2020, to provide a briefing to the House Armed Services Committee that outlines the Army's plans, if any, to support the improvement and expansion of GVSC's internal and external M&S capabilities and their relationship to the Army's high priority programs for combat and tactical vehicle modernization and sustainment.

Next generation Integrated Visual Augmentation System

The committee is aware that the Integrated Visual Augmentation System (IVAS) is due to begin delivering first units to the Army in the fourth quarter of fiscal year 2021. The committee is further aware that a decision point for second generation of IVAS (IVAS 2.0) development is due to occur early in fiscal year 2023. Following the IVAS 2.0 decision point, development of the next generation of the program is projected to start at the beginning of fiscal year 2024.

However, due to the large quantity of hardware, software, and funds allocated for the program, as well as an aggressive development schedule, the committee expects the Army to utilize this technology in developing any new heads-up displays for air and ground vehicles. Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services not later than December 1, 2020, on how the Army plans to integrate IVAS technology across major Army platforms, including but not limited to air and ground vehicle operators.

Next Generation Squad Weapons and Small Business Innovation Research

The committee recognizes the Department of the Army's ongoing effort to enhance soldier lethality and battlefield connectivity through its Next Generation Squad Weapons (NGSW) and Next Generation Squad Weapon Fire Control (NGSW–FC) programs, as well as its programs to strengthen the battlefield network and support cooperative engagements. The committee encourages the Department of the Army to continue to integrate proven solutions for power, data energy efficiency, increased accuracy, and improved

situational awareness in partnership with small businesses through the Small Business Innovation Research Program (SBIR). Therefore, the committee directs the Secretary of the Army to provide a briefing to the congressional defense committees not later than February 1, 2021, on the SBIR efforts within the NGSW and NGSW–FC programs.

Pragmatic Artificial Intelligence and New Technology (PAINT)

The committee notes that artificial intelligence and machine learning are being leveraged by the Army to help solve complex problems, including designing testing scenarios for missile defense systems. The committee is encouraged by the use of this technology by the Army's Space and Missile Defense Command and believes an opportunity exists to continue leveraging artificial intelligence and machine learning techniques as the Army's Integrated Air and Missile Defense Program continues to integrate current and future air and missile defense sensors and weapons.

Therefore, the committee directs the Secretary of the Army to brief the House Committee on Armed Services not later than January 15, 2021, on the Army's plans to incorporate artificial intelligence techniques in its efforts to continue development of near-term engineering solutions to improve existing missile defense systems to keep pace with current and anticipated missile threats.

Report on the Future Tactical Unmanned Aerial System Program

The committee understands the Army's Future Tactical Unmanned Aircraft System (FTUAS) would serve as a replacement for the RQ–7B Shadow in Army brigade combat teams. Further, the committee notes the FTUAS would be a Group 2/3 unmanned aircraft system (UAS) with a point take-off and landing capability to provide the BCT commander with a joint all-domain operations capable, runway independent, reconnaissance, surveillance, and target acquisition capability. The committee is pleased the Department of Army is taking steps to advance the development and procurement of next generation tactical UAS programs. However, recognizing the need to grow the domestic UAS industry and the rapid pace of technological innovation, the committee expects the Army would fully evaluate and consider all domestic UAS proven technologies already fielded under a Small Business Innovation Research grant phase 2 or 3 contract, before issuing a production award under the Army's FTUAS program.

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by February 15th, 2021, that includes but is not limited to: (1) the FTUAS program's progress to date; (2) the current acquisition strategy and schedule for FTUAS prototyping and development; (3) planned funding and resources required for FTUAS across the future years defense program.

Stryker weapons station commonality

The committee is aware of and supports current Army efforts to modify Stryker infantry carriers to improve anti-armor and air defense capabilities and capacities. These programs include integration of a 30mm cannon in a Medium Caliber Weapon System (MCWS) for anti-armor and Stinger missiles, as well as other

weapons, in an Initial Maneuver Short-Range Air Defense (IM–SHORAD) system for air defense. The committee notes and supports that the Army is currently conducting a full and open competition for the MCWS. The committee also notes both of these systems would be based upon an unmanned but accessible turreted vehicle weapons station. In this regard, the committee is interested to know what advantages, if any, the Army could gain by developing as much commonality as possible between both systems with turret hardware and fire control software. Commonality has the potential to reduce the overall acquisition and life cycle management costs of both weapons systems.

Accordingly, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services not later than February 1, 2021, on the potential and plans, if any, for achieving commonality of the MCWS and IM–SHORAD weapons stations.

Supercavitating ammunition

In the committee reports (H. Rept 115–200 and H. Rept 115–70) to accompany the National Defense Authorizations Acts for Fiscal Years 2018 and 2019 the committee has shared its interest in supercavitating ammunition technologies and supported the Department's efforts to evaluate and field this capability. The committee understands that a solution has been identified and is ready for procurement pending final evaluations.

Therefore, the committee directs the Secretary of the Army to provide to the Committees on Armed Services of the Senate and the House of Representatives, no later than September 30, 2020, an update to the briefing provided pursuant to the committee reports accompanying the National Defense Authorization Act for Fiscal Year 2018 and Fiscal Year 2019. This briefing shall include an overview of the current status of the project and an estimated plan for procurement.

Thermoplastic drive shafts for helicopter tail rotor drive systems

The budget request included $11.2 million in PE 0607136A for the Blackhawk Product Improvement Program.

The committee is aware that helicopter tail rotor drive systems typically require frequent maintenance and often affect aircraft maneuverability due to their significant weight. The committee is also aware that thermoplastic drive shafts could potentially improve helicopter performance while reducing operations and sustainment costs by providing lighter weight components with greater ballistic tolerances. The committee notes that the Army's UH–60 Blackhawk program could potentially benefit from additional development and engineering of thermoplastic drive shafts for a lighter weight, more reliable system.

Accordingly, the committee recommends $16.2 million, an increase of $5.0 million, in PE 0607136A for the Blackhawk Product Improvement Program for thermoplastic drive shaft development and engineering.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, NAVY

Items of Special Interest

Advanced Low Cost Munition Ordnance

The committee continues to support development of the Advanced Low Cost Munition Ordnance, a guided 57mm projectile, with fire-and-forget capability that requires no Littoral Combat Ship fire control system changes, to counter the growing threats posed by small boat swarms, unmanned aerial systems, and other emerging threats.

Advanced Submarine Countermeasures

The committee notes that Navy is proposing a new advanced submarine countermeasures that incorporates sophisticated acoustic decoy capabilities to counter the growing threats of modern acoustic homing torpedoes. These new countermeasures must also incorporate advanced mobility functionality to enhance tactics in littoral waters. The ADC MK 5 incorporates these new acoustic and mobility capabilities at the same physical size as the current ADC MK 2 devices to maintain compatibility with existing submarine launch devices and support systems. The integration of the new ADC MK 5 acoustic and mobility capabilities into the existing device form factor represents a significant technological advancement of the Navy's submarine countermeasures, and this technology can be applied to other countermeasure needs across the fleet. The committee supports the continued development of this advanced submarine countermeasure system and the eventual award of a production MK5 variant. Therefore, the committee directs the Secretary of the Navy to brief the House Committee on Armed Services by February 1, 2021 as to advanced submarine kinetic and non-kinetic countermeasures and the associated acquisition timelines to deploy these capabilities.

Aviation Survivability of Marine Corps, Navy, and Air Force Rotary Wing Aircraft

The committee recognizes the importance of the Distributed Aperture Infrared Countermeasure System (DAIRCM) and the Department of Defense's efforts to integrate an aircraft protection system to protect small to medium rotary wing aircraft from increased threats. These protection systems have been combat deployed by the Air Force. The committee is aware of enhanced capabilities that can provide light and medium rotary aircraft a dual-warning and defeat capability, able to counter surface-to-air missiles, small arms fire, and other anti-aircraft or laser-directed weapons threats confronting our forward-deployed forces. The committee recognizes there is a future gap in this aircraft survivability capability for both the Air Force and Marine Corps in the coming fiscal years and supports the efforts by these services to rapidly transition to a production capability. This transition will ensure all Marine Expeditionary Units and forward deployed Air Force rotary wing aircraft are properly equipped to meet this threat.

Therefore, the committee directs the Secretary of the Navy in coordination with the Commandant of the Marine Corps and Chief of Staff of the Air Force, to provide a briefing to the House Committee

on Armed Services by March 1, 2021, on the effective integration of DAIRCM into additional light and medium rotary wing aircraft and the long-term strategy for aircraft survivability of the Marine Corps and Air Force rotary wing fleet.

Conformal Acoustic Velocity Sonar

The committee notes that the Conformal Acoustic Velocity Sonar project was developed to provide an affordable "smart-skin" acoustic sonar receive array to the *Virginia*-class submarine. Replacing traditional spherical sonar arrays with a conformal bow array would significantly improve submarine structural design and improve the submarine's stealth characteristics. The committee is also aware of the improved sonar performance observed in large vertical arrays which have been tested on various submarines during at-sea operations.

Considering the many benefits of this new technology used in large vertical arrays, the committee remains supportive of an acoustic sonar in a bow conformal array configuration. The committee urges continued Navy's effort to develop this technology in a bow configuration, continued test to prove out this technology and the insertion of the Large Vertical Array and conformal bow array into the submarine fleet. Finally, the committee directs the Secretary of the Navy to prepare a brief to the House Committee on Armed Services by February 15, 2021 as to current programming associated with the continued introduction of the large vertical arrays and conformal bow arrays; operational tests associated with these capabilities; and, industrial base implications associated with continued production.

Expeditionary Fast Transport conversion to an unmanned surface vessel

The committee recognizes that unmanned surface vessels will play an essential role in future fleets of the Navy and supports the development of this capability in a manner that responsibly fields this new capability. The committee continues to believe that the Navy's current acquisition strategy incorporates an excessive amount of concurrency and is overly focused on the hull. The desire to move immediately from development into serial production will only yield similar misfortunes as past shipbuilding programs with similar strategies. The committee believes the Navy should be primarily focused on the autonomy piece of this capability and ensuring that technologies that will need to be developed to support autonomous operations are mature before being incorporated on a purpose built vessel. A strategy that includes prototyping and test-of-ship systems such as propulsion, Command, Control, Communications, Computers and Intelligence, and other major Hull, Mechanical and Engineering systems prior to hull form decisions is a more prudent strategy that may actually field this capability sooner. The committee is also concerned with what level of manning if any will be required for these vessels. In briefings, the Navy has stated that initially these vessels will need to be minimally manned rather than fully unmanned in order to maximize Concept of Operations (CONOPS) development. The committee believes that the Navy should modify existing mature manned ships to support autonomous operations in order to develop CONOPS rather than

procuring new ships that will need to support manned operations, but will eventually be fully unmanned.

Therefore, the committee recommends $45.0 million in PE 0603178N for the conversion of two Expeditionary Fast Transport (EPF) ships to support autonomous operations and accelerate CONOPS development.

Medium Range Interceptor Capability

The committee notes the Marine Corps' effort to take advantage of existing capabilities and components, including, but not limited to, the AN/TPS–80 G/ATOR radar system, the common aviation command and control system, and the Iron Dome battle management and weapons control and Tamir missiles, to rapidly field a Medium Range Interceptor Capability (MRIC) under the Ground Based Air Defense family of systems. The committee understands the MRIC is intended to provide a critically needed capability to defend Marine Air Ground Task Force (MAGTF) sites primarily against cruise missiles and secondarily against manned and unmanned aircraft and other aerial threats. The committee is aware that missile, rocket, mortar threats have become increasingly prevalent with attacks on both U.S. forces and our allies in Iraq.

Therefore, the committee directs the Commanding General of the Marine Corps Combat Development Command to provide a briefing to the House Committee on Armed Services no later than December 21, 2020 on the timeline and funding plan to develop, test, and procure MRIC, including costs, requirements, and any opportunities or challenges associated with accelerating the program to respond to increased threats to deployed U.S. Marine forces.

Medium unmanned undersea vehicles

The committee understands that the new medium unmanned undersea vehicle (MUUV) program will consolidate the MUUVs to a common but open architecture vehicle of between 10 and 21 inches in diameter, which will allow it to perform a wide range of missions, depending on the sensor. This includes being deployed from expeditionary, surface, and submarine platforms. The new MUUV program represents a significant step forward to putting out a new generation of unmanned undersea vehicles (UUVs), which will also include a more modular open software architecture allowing for spiral developments and the deployment of a variety of sensors from this common platform. Existing MK 18 mod 2 UUVs have been very reliable and have exceeded the availability and reliability requirements. The committee understands that they are also heavily used as the fleet's only operational mine countermeasure UUV. The committee encourages the Navy to continue making technology advances utilizing a common architecture with MUUVs.

Report on the Navy's Long-Range Ocular Interrupter Program

The committee is concerned with the ongoing development of the Navy's Long-Range Ocular Interrupter (LROI) Program. The committee understands that the LROI is intended to provide the Navy with the capability to deliver a bright light producing a dazzling or glare effect on a closing target to warn and/or suppress potential threats through increasing levels of visual degradation. According to the Navy, LROI will generate controlled, high-intensity output,

providing warning and suppression effects and will enhance Joint Force operations in assessing the intent of personnel and controlling the potential threat as early as possible.

The committee agrees with the military utility of this capability, and the need for the Navy to move forward to field a materiel solution. However, the committee is troubled by the continued schedule slippage of LROI in the Engineering and Material Development (EMD) acquisition phase. For example, the committee is concerned that the Navy is continuing to develop the LROI system when existing commercial-off-the-shelf capabilities are already being fielding by other military services. The committee is further concerned that there are ongoing disputes over the intellectual property of the LROI system.

Therefore, the committee directs the Secretary of the Navy, not later than February 1, 2021, to provide a report to the congressional defense committees on the LROI acquisition strategy, past development contracts and costs, past test and evaluation strategy and results, market research efforts to identify LROI COTS solutions, and currently fielded ocular interrupter systems used by other military services.

Research opportunities in cloud-aerosol effects and atmospheric sunlight reflection

The United States faces a complex array of threats to our national security, as highlighted in a December 2018 GAO Report (GAO–19–204SP) which identified emerging threats of high consequence that will evolve as adversaries develop militarily, weapons and technology advances, and as environmental changes occur, including threats arising through extreme weather events—such as hurricanes, floods and droughts, that could intensify and affect energy resources, critical infrastructure and military installations.

The Committee is aware of basic research opportunities in cloud-aerosol effects and atmospheric sunlight reflection and believes this research has the potential to benefit the military by providing improvements to short-term prediction of operationally relevant weather behavior and by reducing uncertainty in medium and long-term forecasting of extreme weather and climate conditions affecting military infrastructure, tactical operations and readiness. This research also has the potential to expand the portfolio of options for reducing risks to military infrastructure, operations and readiness and to ensure U.S. leadership in an area of innovation with significant implications for national security. The Committee also understands that other nations have established research programs on the physical, chemical, and optical properties of atmospheric aerosols and to study, among other things, their impact on climate.

Furthermore, temperature data shows that the Arctic is getting warmer faster than any other region of the world, making it a bellwether for future climate damages and a major driver of tipping points with the potential to cause rapid and geopolitically destabilizing environmental changes. It is also a domain of renewed great power competition, as other nations position themselves to exploit the increasing accessibility of the Arctic even as US investment in Artic-ready platforms has lagged. The United States has the world's greatest concentration of military and civilian assets and technology to observe, assess, and predict changing conditions

in the Arctic, but has not adequately invested in maintaining its northernmost scientific and national security infrastructure. The US capability to forecast near and long-term weather and environmental conditions in the Arctic underwrites technical and tactical advantages essential for maintaining strategic security guarantees, and provides crucial intelligence essential to anticipate, prioritize, and counter suspicious patterns of activity in airborne and maritime traffic passing through or within the Arctic. At the same time, decadal projections of Arctic conditions are essential for prioritizing investments into Arctic-capable vessels and exercises to prepare personnel for the unique challenges of operating in the Arctic environment. Improving these forecasts will depend on increasing our scientific understanding of processes driving Arctic changes.

Therefore, to improve the Department's ability to forecast operationally relevant weather behavior, better understand climate risk, and ensure U.S. leadership in this field, the Committee directs the Chief of Naval Research to review research opportunities in cloud-aerosol effects and atmospheric sunlight reflection, and to report back to the Committee not later than 90 days after the enactment of this Act on the capabilities the Office of Naval Research can provide to the Department and the National Laboratories to support this critical research.

RF and EMP defense technology solutions

The committee is concerned that the United States faces an increasing and serious threat from hostile entities and state-sponsored terrorist organizations employing malicious Radio Frequency (RF) energy devices to actively interrogate, interfere, and compromise sensitive United States military assets and operational capabilities. The United States Navy has had no durable repeat-use solution to shield against RF energy that is flexible enough to be draped over sensitive equipment and could be formed into a practical cover. The committee understands through Cooperative Research and Development Agreements, the Naval Surface Warfare Center has developed cost effective and easily deployable RF shielding materials that mitigate or prevent the use of the RF spectrum by adversaries. The material developed through the Navy's efforts is also being researched as a defensive shield against Electro-Magnetic Pulse (EMP) signals from both natural and hostile sources and other tactical solutions. The committee recognizes the significance of technology to defend against RF and EMP threats. Therefore, the committee directs the Assistant Secretary of the Navy for Research, Development and Acquisition to provide a report to the congressional defense committees by February 15th, 2021 on the progress of the research, development, and deployment of cost-effective, easily deployable RF and EMP defense technology solutions. The report shall include recommendations for funding continued research and deployment of RF and EMP shielding cover technology.

Shipboard Information Warfare Exploit

The committee notes that the Spectral program is an incremental acquisition, Government Off-The-Shelf/Commercial Off-The-Shelf program that provides cryptologic signals exploitation capabilities designed to meet the requirements for shipboard cryptologic oper-

ations within the Ship's Signal Exploitation Space (SSES) aboard a variety of ship classes and shore facilities. The Spectral system is programmed to provide a mobile, passive capability to detect, classify, track, and determine the intent of enemy units through exploitation of their command and control emissions. The system will be scalable, reconfigurable to mission, modular, remotable and dynamically reprogrammable in response to new threats and capabilities. The committee believes that the Secretary of the Navy should expedite the development of this critical capability and supports decoupling the hardware from the software so that capability enhancements are delivered by software as soon as they are developed. To achieve maximum competition and to solicit the most current technologies, the committee further believes that the Secretary should continue to prioritize an open architecture approach so that the new system can readily integrate emerging third-party capabilities. Therefore, the committee directs the Secretary of the Navy to prepare a brief to the House Committee on Armed Services by January 30, 2021 as to implementation of the Spectral Program to include both program capabilities and timelines.

SSN(X) future propulsion and power requirements

The committee supports the efforts of the Navy to develop a new class of attack submarine capable of meeting future threats posed by near peer competitors through the end of the century. The Next Generation Attack Submarine, SSN(X), will counter threats posed by peer adversary submarines, future unmanned underwater vehicles, and emerging persistent threats to U.S. undersea supremacy that already utilize the benefits of electric propulsion. Critical to the success of the Next Generation Attack Submarine is the ability to combine stealth and speed while maintaining the power needed to operate future sensors and weapons to prosecute undersea warfare. The Navy's prior investments and advancements achieved in the *Columbia* class program have led to a superior quiet acoustic propulsion system capable of meeting current and future threats while also providing the power architecture and flexibility needed to enable future weapons and sensors. The committee supports efforts by the Navy to seek designs and technologies that will provide the future SSN(X) with greater warfighting capabilities combined with total reduced costs through leveraging prior investments from the *Columbia* class program. The committee encourages the Navy to balance superior technological capability with affordability by evaluating non-developmental electric power and propulsion solutions. These solutions have demonstrated superior quiet operational capabilities and lethality and will ensure the future SSN(X) can meet the essential operational and mission requirements within an accelerated submarine build cycle.

Surface Navy Laser Weapon System Briefing

The Committee commends the Department of the Navy's recent success with the Laser Weapons System Demonstrator (LWSD) from an LPD. In addition, the Committee is encouraged that SNLWS Increment 1, the High Energy Laser with Integrated Optical-Dazzler and Surveillance (HELIOS) is on schedule to begin integration and land-based testing later this year. In addition, the Committee recognizes that both the Navy and industry have in-

vested in this technology and understand the need to take incremental steps since there is no one-size fits all solution. However, the Committee is concerned with both the fragility of the supply base and that the protracted time between development, test and installation for an at-sea trial will cause the Navy to reprogram outyear funding to other needs. Therefore, the committee directs the Secretary of the Navy to brief the committee no later than October 1, 2020 on an updated acquisition timeline that illustrates its path forward on SNLWS Increment 1 and allows for an efficient fielding of SNLWS Increment 2.

Transformational Reliable Acoustic Path System

The Navy's Theatre Anti-Submarine Warfare Offset Strategy responds to an urgent requirement for additional maritime intelligence, surveillance, and reconnaissance capabilities. The Defense Advanced Research Projects Agency Transformational Reliable Acoustic Path System (TRAPS) program was transitioned into a rapid prototyping program to meet this requirement. TRAPS is a passive, long duration, deep-sea anti-submarine warfare (ASW) technology that provides cost effective acoustic surveillance in a rapidly deployable manner. TRAPS was phased into the Theater ASW Initiative, as a means to provide a best in class sensor system deployable in deep ocean waters in areas previously not exploitable. The effort has advanced to a Program of Record with Spiral 1 underway, and anticipated Spiral 2 beginning at the end of fiscal year 2021. The committee encourages the Navy to continue fielding and deploying the TRAPS.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, AIR FORCE

Items of Special Interest

Air Force Advanced Technology Development Report

The committee recognizes that our service members and military leaders face evolving challenges that will require integration of the Air Force's science and technology development efforts in order to reassert the United States' competitive advantage across every warfighting domain. The committee is aware of the consolidation of thirteen Advanced Technology Development (ATD) Program Elements (PE) into five new PE lines within the Air Force's Research Development Test and Evaluation (RDT&E) funding in section 4201. The committee is concerned about losing insight and transparency during the Air Force's transition and implementation phase. Therefore, the committee directs the Secretary of the Air Force to submit an initial report to the congressional defense committees no later than October 30, 2021 on the amount of funding allocated to each Air Force Research Laboratory (AFRL) Directorate from the ATD RDT&E Budget Activity 03 (BA03) lines in Fiscal Year (FY) 2021. For transparency and consistency, the committee directs the Secretary of the Air Force to submit a final report to the congressional defense committees no later than October 30, 2022 on the amount of funding allocated to each AFRL Directorate from the ATD RDT&E BA03 lines in FY 2022.

Air Force Institute of Technology research, development, test, and evaluation

The committee recognizes the valuable contributions of the Air Force Institute of Technology (AFIT) to the professional development and technical expertise of the U.S. Air Force. The committee is aware of the continuing efforts of AFIT to provide cutting edge, specialized education to officer and enlisted U.S. military personnel and civilian employees in technical fields, including Aeronautics and Astronautics, Engineering Physics, and Systems Engineering. Despite the significant academic research that occurs at AFIT, it does not maintain a dedicated research, development, test, and evaluation (RDTE) program line. The committee is interested in understanding how AFIT may benefit from a dedicated RDTE line and what additional flexibility this may provide, including opportunities for expanded partnerships with other institutions of higher education and more influence over research topics that are of interest to the Department of Defense. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, on the benefits and drawbacks of having a dedicated RDTE program line for the Air Force Institute of Technology.

Air Force Small Business Innovation Research (SBIR) Program

The committee is aware of the Air Force's alterations to its Small Business Research Innovation (SBIR) and Small Business Technology Transfer (STTR) program through the Air Force Ventures process, as well as the alignment of the program to the AF technology accelerator, AFWERX. The committee is encouraged by the Department's inclusion of the SBIR/STTR funding in its technology development strategy and budget plans, and looks forward to closer collaboration with Service acquisition executives to harness the innovation opportunities of the SBIR/STTR program.

The committee appreciates the Air Force's continued engagement as it establishes performance metrics and monitors lessons learned from the new approach's challenges and successes. The committee agrees with the Air Force that this new approach should be assessed according to the letter and intent of the SBIR statute as written in Chapter 638 of title 15, United States Code, including:

(1) Tracking commercialization of companies by monitoring growth in Phase II or later funding commitments from private sector or non-SBIR (other Government) sources (15 U.S.C. 638(e)(4)(b)(ii) and (iii));

(2) Expanding SBIR access to more small businesses across the country by tracking the total number of companies that are new to government or to the SBIR program that submit proposals and are awarded contracts (15 U.S.C. 638(a));

(3) Ensuring small businesses are financially secure and able to perform critical research quickly by reducing the time from solicitation to contract award (2019 NDAA Sec 854(b)(2)(A)(ii) and (iii)); and

(4) Expanding SBIR access to diverse businesses across the United States that are women owned and socially and economically disadvantaged (15 U.S.C. 638(j)(2)(F)), as well as diverse geographically and by size (15 U.S.C. 638(jj)(4)(B)(iii)).

The committee therefore directs the Comptroller General to review and assess the Air Force's Ventures Process and SBIR/STTR effort on the above criteria. The reports shall also include trend analysis for no less than five years of:

(1) Funding awarded to Open Topics versus traditional SBIR topics;

(2) Entry and exit Technology Readiness Levels (TRL) for Phase I and II awards;

(3) Process and capability to measure technical merit; and

(4) Which Air Force missions are receiving SBIR funding.

The committee directs the Comptroller General to provide a briefing to the congressional defense committees by March 1, 2021 on preliminary findings and submit a final report to the congressional defense committees at a date agreed to at the time of the briefing.

Airborne Augmented Reality Systems

The committee is concerned with the time and resources required to produce and develop fully qualified pilots and believes that airborne augmented reality systems could mitigate some of the resource constraints. The committee also acknowledges the potential cost savings and environmental benefit of implementing augmented reality systems. Use of synthetic entities reduces fuel consumption; maintenance; airframe degradation; and environmental impact while increasing training repetitions per hour and enabling pilots to fly against synthetic adversaries that mirror the appearance and performance of actual strategic rival aircraft.

Therefore, the committee directs the Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics to submit a report to congressional defense and intelligence committees by January 31, 2021 detailing the potential cost savings; maintenance benefits; environmental benefits; counter-intelligence benefits; pilot readiness improvements; benefits of service life extension through reduced hours on key airframes; and any funding required to enable the use of airborne augmented reality systems by the Combat Air Forces. The report shall include any Air Force Program Executive Office efforts to take existing airborne augmented reality systems that have completed Phase II of the Small Business Innovative Research program by March 31, 2021 and explain how those efforts are resourced over the Fiscal Year Defense Plan to maximize benefit to the warfighters and taxpayers. The report shall be submitted in unclassified form. If necessary, a classified annex shall also be provided.

Assessment of the Air Force Test Center enterprise

The committee recognizes the importance of the Air Force Test Center (AFTC) and the invaluable developmental test and evaluation of air, space, and cyber systems conducted throughout the AFTC enterprise. The committee understands that as threats evolve and the complexity of integrating technology increases, the AFTC faces unique and unprecedented challenges in fulfilling its mission. These challenges include funding for critical sustainment, restoration, and modernization of relevant test capabilities; development and growth of hypersonic infrastructure and sufficient testing capabilities; and, increasing workforce recruitment, retention

and expertise. The committee identified several of these challenges in the committee report accompanying the National Defense Authorization Act for Fiscal Year 2018 (H. Rept. 115–200) and directed an assessment of the AFTC enterprise by the Secretary of the Air Force. Accordingly, the committee acknowledges that given the current growth of requirements and advanced weapon system development capabilities needed, the previous AFTC assessment should be updated to provide relevant information on the challenges confronting the AFTC enterprise.

Therefore, the committee directs the Secretary of the Air Force to provide a report to the congressional defense committees not later than December 1, 2020, that updates the information contained in the report submitted by the Secretary that was required by H. Rept. 115–200.

Briefing on Air Force Vanguard Programs

The committee understands that the Air Force's 2019 "Science and Technology Strategy: Strengthening USAF Science and Technology for 2030 and Beyond" report designated three programs as "Vanguard programs" that are meant to quickly demonstrate the viability of emerging technology. Therefore, the committee directs the Assistant Secretary of the Air Force (Acquisition, Technology and Logistics) to provide a briefing to the House Committee on Armed Services by December 15, 2020 with details on its Vanguard programs and how the Air Force plans to transition these programs to ensure proven technology has the best chance of successfully and expeditiously transitioning into hands of the warfighter.

Flight test air refueling support

The committee recognizes the importance of air refueling to flight test aircraft and the many requirements for tanker aircraft. The committee is concerned with the impact of the Air Force's tanker reductions and with unintended consequences of insufficient tanker support for test programs, such as program delays and increased costs. The committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by February 1, 2021, that explains the plan to support flight test requirements with air refueling. The brief should determine the overall test requirements and consider the effectiveness and efficiency of tanker aircraft assigned to the test community versus augmenting tanker support with aircraft from other bases.

Report on Counter-Radar Electronic Warfare and Signal Processing Capabilities

The committee understands that advances in foreign anti-access and electronic warfare technologies require commensurate advances in technologies designed to ensure the comparative advantage and dominance in U.S. electromagnetic spectrum operations capability. The committee understands there is a potential requirement and need to identify advanced mobile threats within milliseconds, to negate their operational effectiveness and nearly simultaneously provide technical electronic battle damage assessment.

The committee is aware the Department of Defense has demonstrated a high fidelity open-air scene target generator capability. The committee understands this capability would provide a suite of

active operations options for dominance in contested radio frequency spectrum environments. The committee notes this capability has completed initial free-space testing at a government range and understands that this is a unique capability in that it can operate within the adversary system sensor processing cycle and is not readily detectable as an electronic warfare technique.

Therefore, the committee directs the Assistant Secretary of the Air Force for Acquisition, Technology and Logistics, in coordination with the Secretary of the Air Force, to submit to the congressional defense and intelligence committees a report by March 1, 2021 detailing the efforts required to integrate high fidelity open-air scene target generator capability into appropriate platforms and electronic warfare command and control systems and how integration is resourced over the future years defense program. The report shall be submitted in unclassified form, with an accompanying classified annex, if necessary.

University Consortium to Address Research Needs Unique to the Space Force

The committee acknowledges the importance of a strong U.S. presence in the space domain and the foundational role of the newly established U.S. Space Force in providing for our national security. The committee also notes the historical importance of academic support in the research, development, test, and evaluation efforts of the established military services. The committee supports the creation of a university consortium for National Space Research to provide for the unique research and technological needs of the Space Force. The committee encourages the Department to consider for inclusion universities with established expertise and competencies in relevant research and engineering disciplines. The committee therefore directs the Chief of Space Operations to provide a briefing to the committee no later than January 31, 2021 on the Space Force's strategy to establish a consortium of institutions of higher education to lead foundational research in areas that the Chief determines to be critical to the mission of the Space Force.

Wide area motion imagery

The budget request contained $121.5 million in PE 0305206F, Airborne Reconnaissance Systems, but no funding for continued development of Gorgon Stare (GS) wide area motion imagery (WAMI) surveillance capabilities. The committee is aware that the GS WAMI system supports multiple daily orbits in the U.S. Central Command area of operations with critical intelligence, surveillance, and reconnaissance (ISR). Other combatant commands have requested WAMI capability, but the Air Force lacks enough systems to satisfy all combatant command requirements.

The committee is concerned that, despite daily operational tasking, and despite GS WAMI having been designated as a program of record in 2014, there is still no budget request for modernization of this combat-proven ISR system. The committee notes that prior year congressional funding has helped GS develop beyond-line-of-sight communications, near vertical direction finding, and multi-intelligence capabilities. Additional funding is needed to modernize sensor tip and cue, sensor field of view, and to optimize machine learning in support of Project MAVEN.

Therefore, the committee recommends $131.5 million, an increase of $10 million, in PE 0305206F for WAMI enhancements. The committee further directs the Chairman of the Joint Chiefs of Staff to provide a report to the House Committee on Armed Services by March 1, 2021, on the plan for apportionment of Gorgon Stare to meet geographic combatant commanders' requirements worldwide.

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, DEFENSE-WIDE

Items of Special Interest

Alliance innovation partnerships

The committee believes that to keep pace with competitors' investments in emerging technologies, the Department of Defense should develop deeper technology partnerships with key U.S. allies. The committee supports the efforts of the Foreign Comparative Testing program in the Office of the Under Secretary of Defense for Research and Engineering that facilitates the use of foreign allies' developed technologies to solve the Department's challenges and achieve the Secretary of Defense's priorities. The program provides a unified U.S. relationship with allied partner nation government organizations and industrial associations, and helps support the National Defense Strategy through leveraging allied technology investments and innovation to improve lethality; strengthening alliances and partnerships through support of reciprocal defense procurement; and promoting competition to reduce Department costs and deliver performance at the speed of relevance.

Similarly, the committee supports the efforts of the Office of Naval Research Global, which provides worldwide science and technology-based solutions for current and future naval challenges, and reaches out to the global technical community and the operational fleet and force commands to foster cooperation in areas of mutual interest to bring the full range of allied possibilities to the Navy and Marine Corps.

The committee believes the Department should expand existing mechanisms for international partnerships in research, development, test, and evaluation for emerging science and technology projects. The committee urges the Secretary of Defense to consider:

(1) opportunities for increasing international partnerships in research, development, test, and evaluation for emerging science and technology projects;

(2) expanding current development partnerships and technology scouting programs with allied partners;

(3) leveraging U.S. Defense Attaché offices in U.S. embassies in allied countries with robust innovation ecosystems to scout for technology;

(4) internationalizing startup-focused engagements, such as through the Defense Innovation Unit;

(5) improving information sharing with allied governments to promote broad-based awareness of competitor nations' actions;

(6) building ally capacity to protect technology;

(7) any other innovative opportunities the Secretary deems useful; and

(8) what new authorities the Department would need from Congress to increase partnerships with allied countries.

Assessment of High-Powered Microwave Systems

The committee recognizes that directed energy technologies such as high-powered microwave (HPM) systems are being developed by the Department in order to provide non-lethal alternatives in combat and to maintain pace with our adversaries. The committee notes that as these technologies transition from the laboratory to an operational environment, it is critical that the Department assess and prepare for the maturation of these capabilities. Therefore, the committee directs the Under Secretary of Defense for Research and Engineering, in consultation with the heads of the military departments, to provide a briefing to the House Committee on Armed Services no later than January 15, 2021 on the development plan for HPM systems including the maturity of current research and development efforts, conformance to electromagnetic environmental effects requirements such as military standard 464 (MIL–STD–464), the status of the test capabilities required for verification and validation for all expected operational environments, the concept of operation of such systems, and potential vulnerabilities of Department systems to a HPM attack.

Bio-engineering roadmap for the Department of Defense

The committee notes that synthetic biology will be a transformative industry, providing significant opportunities across all economic sectors as well as national security benefits and defense-related applications. The committee also understands that large-scale strategic investments in this field by great power competitors, especially China, threaten to erode American leadership in the global bio-economy. These significant investments, both in funding and the development of high-profile national strategies, are in stark contrast to current U.S. efforts. Accordingly, the committee supports the Department of Defense's nascent efforts relating to bio-engineering, but finds them insufficient. The committee is also concerned by our competitors' and adversaries' ability to compromise control over critical foundational technologies, such as DNA sequencing and DNA synthesis, through predatory economic practices. Further, many of the Department's lessons learned related to microelectronics supply-chain vulnerabilities are directly applicable to this new field and should be a proactive component of any bio-engineering related strategies. The committee urges the Department to include in its bio-engineering roadmap plans to resource and expand its bio-engineering efforts and collaboration with the bio-industrial manufacturing base for defense applications.

Classified ready engineering workforce

The committee is aware of the current challenges the Department of Defense experiences when recruiting and retaining a diverse, high-skilled science, technology, engineering, and math workforce. Department hiring is still constrained by security clearance and human resource processing delays. With existing workforce shortfalls and the challenges of recruiting and retaining scientists and engineers, the Department must enhance its relation-

ships with academic institutions to promote and incentivize service at Department of Defense major ranges and test facility bases, science and technology research laboratories, and other related installations, especially those in remote and isolated locations.

Further, the committee recognizes the Department's efforts to invest in science, technology, engineering, and math workforce outreach and education programs, not only for undergraduate and graduate programs but also for those in elementary and secondary education. However, a more systematic, scalable approach is needed, especially for engaging underrepresented populations in rural communities. Hispanic representation in the Department, for example, falls behind the rest of the civilian labor force and the Federal Government.

Therefore, the committee urges the Secretary of Defense to better partner with Hispanic-serving, land-grant institutions to create a talent development program that provides experiential learning through internships and co-ops with Department agencies, while improving access to science, technology, engineering, and math education and careers for underrepresented populations. The committee believes the Department should review possible pathways to shorten security clearance and hiring process timelines to reduce the gap between education and full-time employment. The Department should also review how this partnership can help engage elementary and secondary education students to encourage participation in science, technology, engineering, and math education and prepare students for higher education and national security career opportunities.

Department of Defense chemical and biological emerging threats response efforts

The U.S. Government Accountability Office's December 2018 report on Emerging Threats highlighted a range of potential threats and opportunities that cover a broad spectrum of science and technology. These threats include synthetic biology and bioengineering, artificial intelligence, and natural biological threats. The committee notes that the current coronavirus pandemic is precisely the kind of threat identified in that report that has been of concern to planners throughout the government for years. At a time when the United States is struggling to respond to the spread of a highly infectious new virus, the committee is concerned about the preparedness of the U.S. Armed Forces to respond to significant state-level weapons of mass destruction events.

The committee recognizes the valuable work done by key elements of the defense research enterprise, such as the Defense Advanced Research Projects Agency. However, the committee remains concerned about the Department's capacity and planning for research on science and technology, and conversion to development to capitalize on opportunities, address emerging threats early, and respond in a flexible manner to those threats that materialize rapidly, such as the coronavirus pandemic. Ensuring that the Department's science and technology and research and development enterprises are coordinated is important in building flexibility for the broad range of associated capabilities to respond to emerging threats. Similarly, ensuring that the Department has the structure in place to plan and exercise for potential responses to these poten-

tially catastrophic emerging threats is critical for military and national preparedness.

The committee therefore directs the Comptroller General to assess the Department's strategy and planning for research and development and for emerging threats, and particularly biological threats, and for incorporating those threats into broader planning and exercise mechanisms. The assessment should include:

(1) The Department's strategy and planning for research and development, including plans for prioritizing efforts to address emerging threats;

(2) The Department's visibility and coordination of capabilities and capacity in all elements of the research and development portfolio, including:

(a) DOD science and technology research laboratories;

(b) the Chemical Biological Defense Program;

(c) the Defense Threat Reduction Agency;

(d) DOD-sponsored research in academia;

(e) Manufacturing Innovation Institutes,

(f) small business innovation research and technology transfer; and

(g) other efforts;

(3) The Department's coordination with other federal and nongovernmental organizations to plan and conduct research and development activities;

(4) The Department's plans, capacity, and authorities, for drawing upon the extensive research and development enterprise to respond to the coronavirus pandemic or similar rapidly occurring threats;

(5) Department-wide tabletop exercises and wargames;

(6) Medical countermeasures and stockpile completeness; and

(7) Any other matters the Comptroller General deems appropriate.

The committee directs the Comptroller General to provide a briefing to the congressional defense committees by March 1, 2021, on preliminary findings and submit a final report to the congressional defense committees at a date agreed to at the time of the briefing.

Development of technology to increase the resiliency in mitigating viral pandemics

The committee commends the Department of Defense's response effort to COVID–19 to ensure the safety of military and civilian personnel in the United States and around the world. The committee is aware of maturing sensor capabilities that instantly screen and identify individuals infected with COVID–19 that are both presymptomatic or asymptomatic. As such, the committee encourages the Department of Defense to engage in research and development of detection approaches that are scalable, deployable, and provide detection for pre-symptomatic, symptomatic, and asymptomatic individuals. Furthermore, the committee understands that capabilities developed by the Department, such as infrared laser technology to detect trace explosives, can be applied to viral detection. The Department should consider a variety of technologies that would provide active remote viral detection capabili-

ties and employ all means to fast-track research and development of promising technologies and approaches.

Therefore, the committee directs the Deputy Assistant Secretary of Defense for Chemical and Biological Defense to provide a briefing to the House Committee on Armed Services by March 15, 2021 on the development of technology to increase the resiliency in mitigating viral pandemics, including an assessment of the gaps in the Department's viral pandemic detection and surveillance capabilities, a summary of current viral pandemic research and development response efforts focused on remote or standoff testing of potentially infected individuals, an analysis of existing chemical or biological detection capabilities developed by the Chemical Biological Defense Program and the Defense Threat Reduction Agency to address gaps in viral pandemic detection and surveillance, a description of current advanced development efforts for improved disease detection, and an estimated time to delivery of functional capabilities for such technologies.

Enhancing research into human performance and resilience technologies in support of special operations force personnel

The budget request for fiscal year 2021 contained $42.4 million in PE 1160401BB for special operations forces technology development.

The committee is aware that high operational tempo deployments with little recovery time, combined with increasing operational load requirements affect emotional resilience and physical mobility, which can compound the potential for mental and physical health injuries. The committee notes that in 2009, U.S. Special Operations Command (USSOCOM) implemented a human performance program to enable special operations forces (SOF) to attain and sustain peak cognitive and physical performance by developing technologies that enhance psychological and physical recovery. The committee is encouraged by USSOCOM's use of machine learning and artificial intelligence to facilitate development of neurocognitive mapping capabilities to more accurately capture the psychological data of SOF, with the intention of aligning proper emotional care to the exquisite physical therapy capabilities, broadly designed to rehabilitate and maintain SOF as they maneuver throughout the special operations enterprise.

The committee supports additional emphasis on efforts such as neurocognitive mapping, and recognizes that additional funding would augment development of capabilities to enhance SOF psychological and physical performance. Therefore, the committee recommends $47.4 million, an increase of $5.0 million, in PE 1160401BB for SOF technology development.

Establishing a research consortium of excellence for irregular warfare and advanced analytics

The budget request contained $35.6 million in PE 0601110D8Z for Basic Research Initiatives.

The committee recognizes the importance of basic research and academic engagement as critical to shaping the effectiveness of current and future national security policies and strategy. The committee understands that there is currently a wide range of social science research in the areas of irregular warfare that should be

leveraged, including the better use of, and integration with, existing research by organizations maintaining public repositories of incidents related to acts of terrorism, societal responses, and trends of sympathies towards violent extremist ideologies. The committee believes that it is within the purview of the Department of Defense, and specifically the Under Secretary of Defense for Research and Engineering (USD(R&E)) to foster academically rigorous studies of these strategic challenges facing the Department.

Academic research activities provide a foundational understanding for how to assess the effectiveness of strategic and operational irregular warfare activities and programs as the Department enhances non-kinetic efforts below the level of armed conflict to compete with near-peer adversaries, while balancing existing capabilities and efforts postured to counter violent extremist organizations. The committee therefore believes that the USD(R&E) Basic Research Office should establish a research consortium of excellence for irregular warfare and advanced analytics.

The committee is aware the Department has been investing in the National Consortium for the Study of Terrorism and Responses to Terrorism (START) and is the largest consumer of data from this program. START is a university-based research and education center that provides an effective resource that has informed current counterterrorism policies and strategy.

The committee therefore recommends $40.6 million, an increase of $5.0 million, in PE 0601110D8Z for Basic Research Initiatives to establish and fund the START consortium as a research consortium of excellence for irregular warfare and advanced analytics. Further, the committee directs the Under Secretary of Defense for Research and Engineering to provide a briefing to the House Committee on Armed Services by January 29, 2021, on the processes and procedures to establish and fund the START consortium as a research consortium of excellence for irregular warfare and advanced analytics.

Evaluation of emergent technologies in support of special operations forces in great power competition

The budget request contained $137.2 million in PE 1160408BB for the Operational Enhancements program.

The committee recognizes that continued investment and research in emerging technologies such as Machine Learning/Artificial Intelligence (ML/AI) is critical to securing the competitive advantage of the United States. The committee remains committed to ensuring the Department of Defense continues to prioritize the development of such capabilities, and is aware of a recent Government Accountability Office report on long-range emerging threats facing the United States that highlighted the aggressive pursuit of ML/AI technologies by our adversaries.

The committee appreciates the substantial efforts by the Joint Artificial Intelligence Center to establish standards, manage development, and integrate ML/AI technologies for the benefit of the Joint Force, and the close coordination with U.S. Special Operations Command (USSOCOM). The committee notes the importance of demonstrating the operational use of these capabilities in semi- and non-permissive environments, such as those forces deployed from USSOCOM. The committee is interested in better un-

derstanding the application of such capabilities in strategically dynamic environments with near-peer adversaries.

Therefore, the committee directs the Director of the Joint Artificial Intelligence Center, in coordination with Commander, USSOCOM, to provide a briefing to the House Committee on Armed Services by November 1, 2020, on an assessment of ML/AI technologies to enable operational maneuver, autonomous or otherwise, in highly-contested environments with near-peer adversaries.

The committee recommends $147.2 million, an increase of $10.0 million, in PE 1160408BB for the Operational Enhancements program.

Feasibility assessment of establishing large and open defense based data sets

The committee believes that the Secretary of Defense should work with the Office of Science and Technology Policy (OSTP), the Office of Management and Budget (OMB), and the National Institute of Standards and Technology (NIST) to expand the number of open-source, high-quality data sets within Project Open Data to increase the availability of open data and foster research and innovation in data analytics, artificial intelligence, and machine learning. Therefore, the committee directs the Secretary of the Defense, in coordination with the Under Secretary of Defense for Research and Engineering, to perform an assessment of large data sets maintained by the Department that could be publicly released for improved analytics and training of artificial intelligence and machine learning applications. The assessment shall include:

(1) a survey of the data sets maintained by the Department of Defense, to which artificial intelligence and machine learning is applicable, including but not limited to, health records; employment records; weather data; geospatial data; utilities; and logistics;

(2) necessary actions for the data sets identified in (1) to anonymize, sanitize, or otherwise remove sensitive information to make the data sets suitable for public consumption;

(3) the feasibility of releasing the resulting data sets of (2) through a public facing webpage;

(4) an assessment of the benefits resulting from the public availability of the data sets in (2), to include commercial, research, and government uses;

(5) an assessment of the benefit in developing the national security workforce resulting from the public availability of the data sets in (2) for use by K–12 and university education programs;

(6) a recommendation on the public release of the data sets in (2); and

(7) any other matters the Secretary determines appropriate.

The committee further directs the Secretary to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than January 1, 2022, on the results of the assessment, and what engagement the Department has had with OSTP, OMB, and NIST on increasing the availability of open data.

Forecasting and modeling partnerships for countering infectious diseases

The committee believes that emerging viral threats such as the novel 2019 Coronavirus highlight the need for innovative and real-time forecasting and monitoring techniques to ensure our military and civilians are best positioned to respond to emerging public health and national security threats. The committee encourages the Department of Defense to leverage emerging infectious disease forecasting and monitoring data developed by institutions of higher education and private partners. The committee encourages the Department to prioritize funding and explore partnerships to improve our ability to respond to public health and national security threats through emerging infectious disease modeling and forecasting.

GPS-based precision approach and landing system

The committee is encouraged by the Navy's success in procuring a global positioning system (GPS)-based, all-weather, precision approach and landing system for eventual deployment on all Navy aircraft carriers and amphibious assault ships for its F–35–B, F–35C, and MQ–25 aircraft. The committee understands that the Navy and Marine Corps are currently conducting feasibility studies to determine whether the F/A–18E, F/A–18F, EA–18G, and all variants of the V–22 can also be integrated into its precision approach and landing system.

The committee believes that expanding the sea-based joint precision approach and landing system capability to other U.S. military aircraft that operate in expeditionary environments would permit such aircraft to safely land at remote, forward-deployed airbases, even in situations involving difficult terrain or extremely low visibility. The committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by February 1, 2021, on the feasibility and advisability of integrating a common expeditionary GPS-based, all-weather, precision approach and landing system capability into its aircraft that are most likely to serve in forward-deployed environments, the C–130, F–16 and H–60.

High energy laser endless magazine definition

The committee supports investments across the Department of Defense in directed energy systems capable of countering the full array of incoming threats, from unmanned air systems to cruise missiles. Additionally, the committee understands that magazine depth is but one of the system variables that need to be considered in delivering required mission effectiveness within the size and weight constraints of the platform within which the system is integrated or with which it is otherwise deployed. The committee also supports development of systems with endless, or near endless, magazines to ensure capability to counter salvos or swarms of any size. The committee is concerned that while the Department has included reference to a near endless magazine in its budget justifications for high energy laser systems, it has not defined the term sufficiently to facilitate predictable requirements development and guide investment by industry.

The committee directs the Assistant Director for Directed Energy within the Office of the Under Secretary of Defense for Research and Engineering to submit a report to the House Committee on

Armed Services by December 1, 2020, on the definition of an "endless magazine" to sufficiently facilitate predictable requirements development and guide investment by industry. The Assistant Director for Directed Energy shall assess whether, for high energy laser systems, an "endless magazine" shall be defined as an ability to engage at the rate necessary to counter highly complex, nearly simultaneous incoming threats, of the type for which the system was designed to counter, without temporary cessation of fire for battery recharge or exchange, thermal management, or other predictable technical limitations. The AD for DE shall provide a recommendation as to whether, except in the case of airborne applications, an endless magazine shall be provided as a stand-alone capability within the envelope of the platform, without the need for external devices or trailers.

Hydrogen safety for battery use

The committee recognizes that the Army continues to work on fuel cell advancements through projects at the Ground Vehicle Systems Center and the Navy is continuing to make progress through ongoing programs within the Office of Naval Research. The committee is concerned that misconceptions surrounding hydrogen as a fuel have caused undue delays in the further development of this technology. The commercial industry has developed safe handling processes to advance fuel cell technology in numerous industrial applications. As the Department strives to enable hydrogen fuel cell technology, safety standards and processes must be developed simultaneously. Hydrogen fuel cells promise the benefits of an electric vehicle with the rapid refueling capability of a traditional diesel platform, providing extended silent operations without the need for battery recharging.

The committee therefore urges the Under Secretary of Defense for Research and Engineering to review:

(1) the safety concerns of hydrogen on the battlefield;

(2) the methods to mitigate hydrogen safety concerns regarding generation, distribution, and use;

(3) potential methods to field hydrogen in austere environments;

(4) each military service's use case for hydrogen fuel cells; and

(5) planned timelines to move from research and development initiatives to procurement programs of record.

Implementation of Department of Defense Inspector General recommendations on additive manufacturing

The committee is concerned with the Department of Defense's existing level of coordination of additive manufacturing efforts and encourages the use of additive manufacturing whenever possible to save both the Department and taxpayer valuable cost and time.

In October 2019, the Department of Defense Inspector General produced a report titled, "Audit of the DoD's Use of Additive Manufacturing for Sustainment Parts (DODIG–2020–003)," and provided a set of recommendations. The committee directs the Under Secretary of Defense for Research and Engineering, in coordination with the Under Secretary of Defense for Acquisition and Sustainment and the Service Acquisition Executives, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by February 15, 2021, outlining the De-

partment's plan to address each of the recommendations listed in the Inspector General report. Further, if the Under Secretary of Defense for Research and Engineering decides not to implement any of the Inspector General recommendations, they must include the justification for that decision in the report, as well what actions the Department will take to address the conditions underlying the recommendation.

Infrastructure to support research, development, test, and engineering at China Lake

The committee is aware of the significant research, development, test, and evaluation (RDT&E) infrastructure requirements across the Department of Defense. Section 252 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) requires the Secretary of Defense, in coordination with the Secretaries of the military departments, to complete a master plan of the current infrastructure needs of the Major Range and Test Facility Base not later than January 1, 2021. However, several Major Range and Test Facilities, including Naval Air Weapons Station (NAWS) China Lake, have more immediate requirements. NAWS China Lake performs a critical function for the Department of Defense, but was determined to be not mission capable after a 7.1 magnitude earthquake on July 5, 2019. In light of the importance of the mission and the investments made to date to repair NAWS China Lake, it is prudent that the committee fully understand the complete RDT&E infrastructure requirements before major construction commences. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, on the RDT&E infrastructure master plan for NAWS China Lake.

Investment in research and development for decontamination technology to support civilian applications

The committee recognizes the valuable contribution of the Department of Defense in developing decontamination technologies against biological threats. In response to the COVID–19 pandemic, the Chemical and Biological Defense Program quickly funded the Joint Biological Agent Decontamination System Lite (JBADS Lite), which adapts biothermal decontamination technology from the original JBADS program of record to decontaminate platforms after transport of COVID–19 positive personnel.

The committee believes JBADS Lite is critical for the military to maintain operations during a pandemic while ensuring the safety of passengers and crew; and that this has applications in the civilian sector to support the decontamination of civilian transportation systems (i.e. rail, buses, aircraft). Therefore, the committee directs Office of the Assistant Secretary of Defense for Nuclear, Chemical, and Biological Defense Programs to provide a briefing to the House Committee on Armed Services by February 15, 2021 on how JBADS Lite could aid in the pandemic preparedness of civilian transportation systems in the United States.

Investment in research and development for technology to test treatments for nuclear, chemical, and biological exposure

As biological threats continue to advance, the committee encourages the Department of Defense to prioritize building on existing research and development to detect and model treatments for the potential aerosol dissemination of biological weapons. Areas for increased investment include, but are not limited to, the development of battlefield instrumentation and aerosol capabilities. The committee therefore directs the Deputy Assistant Secretary of Defense for Chemical and Biological Defense to provide a briefing to the House Committee on Armed Services not later than January 15, 2021, on the Department's assessment of organ-on-chips technology as a platform for threat assessment and for rapidly developed treatments (medical countermeasures) for biological, chemical, and radiological threats, and what plans the Department has to use this technology going forward.

Joint vaccine acquisition program

The committee recognizes that botulism or plague have been identified as potential biological weapons against service members or the general public. The committee further recognizes that there are currently no available vaccines to protect against these threats. The committee notes that the Department of Defense has invested $300M in developing a plague vaccine and $375M in developing a botulism vaccine. The committee further notes the impact the current viral pandemic has had on national security, to include economic and military readiness, and that reductions to research and development of vaccines reduces the Department's ability to respond to pandemic outbreaks. The committee believes that the continuation of these existing projects under the Joint Vaccine Acquisition Program is necessary to ensure that a deployable vaccine for these agents is available to protect our warfighters and to provide continuity for capabilities under a scenario in which these agents are utilized in a combat environment. Therefore, the committee encourages the Secretary of Defense to continue the development of botulinum and plague vaccines and directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services no later than November 1, 2020 on the acquisition strategy for the botulinum and plague vaccines, to include the status of the development, the cost to complete the development, and the risks if development is discontinued.

Modular Open Systems common data standards

The committee continues to be encouraged by the development, demonstration, and validation of common data standards and implementation of the Modular Open Systems Approach. However, the committee is concerned that access to these standards by the general academic population and technology industry remains limited. The committee notes that while a subset of the components of these standards are based on sensitive or classified information, that the data standards and interfaces used by the Department are predominantly based on publicly available sources such as foundational science and engineering principles. The committee further notes that restricting public access to the portion of the standards based on public knowledge unnecessarily increases cost

for the conversion of commercial products to defense applications and limits the experimentation and innovation available to the Department of Defense. The committee is concerned that barriers to accessing these standards have an outsized impact in the fields of artificial intelligence, autonomy, and unmanned air vehicles.

Accordingly, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services not later than February 15, 2021, on:

(1) which components of the common data standards used by the Department are based on publicly available knowledge, to include, at a minimum: Open Mission Systems developed by the Air Force; the Future Airborne Capabilities Environment developed by the Navy; and the VICTORY Initiative, developed by the Army;

(2) the applicability of these components to artificial intelligence-based technologies, including autonomous ground vehicles or unmanned air vehicles;

(3) the feasibility of releasing a public subset of the data standards to reduce the barriers to research with, and adoption by, academia and technology companies;

(4) an assessment of the cost savings to the Department attributable to the public release of a subset of the data standards; and

(5) an assessment of the benefit in developing the national security workforce by releasing a public subset of the data standards.

Next generation semiconductor development and manufacturing

The committee believes that the Department of Defense declaration of 5th generation (5G) communications information technology as a modernization priority, as well as the global proliferation of 5G communications technology, provides an opportunity to fully assess the security of all 5G components, to include semiconductors. The committee is aware that the commercial demand for 5G technology is stimulating foreign investment, particularly by China, to develop advanced Gallium Nitride (GaN) and Gallium Arsenide (GaAs) radio frequency integrated circuit (RFIC) technology at a pace faster than the U.S. industrial base can sustain. RFIC technology is a key enabler to high performance military radar, secure communication, electronic warfare platforms and 5G infrastructure, providing a strategic technology advantage for the Department of Defense to maintain national security and warfighter viability. Commercial volumes for next generation RFICs to support a 5G roll-out will far outstrip Department of Defense demand, providing foreign competitors with motivation to fund research and development and effectively establish themselves as global leaders in a mission-critical industry. The committee is concerned that if the commercial economies of scale for these critical technologies are lost to foreign competitors, the United States's ability to maintain technology superiority will be directly compromised. The committee supports the Department of Defense's efforts to prioritize the development and procurement of both GaN and GaAs technology that can deliver next generation RFIC technology supporting both strategic Department of Defense priorities and 5G commercial demands.

Nuclear micro reactors

The budget request included $730.5 million in PE 0604250D8Z for Advanced Innovative Technologies.

The committee believes energy will be a critical enabler of future military operations and is concerned that the intermittent characters of many alternative energy sources are unable to keep pace with the growth of the Department of Defense's energy needs. The committee supports the development of a reliable, abundant, and continuous energy source provided by a mobile nuclear reactor.

The committee is aware that Project Pele is on track to design, build, and demonstrate a prototype mobile nuclear reactor capability by calendar year 2024, and that the Joint Requirements Oversight Council recently agreed to establish requirements for a mobile nuclear reactor capability. The committee is encouraged by this progress and encourages the Director of the Strategic Capabilities Office to refine the program's objectives and work with the Services to provide programmatic and transition planning in advance of the planned 2024 initial operating testing date.

Further, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by January 1, 2021, on the following:

(1) the Department's plans to employ mobile nuclear reactors to meet the Department's priorities in areas such as multi-domain operations, advanced weaponry, and force modernization/electrification initiatives;

(2) the Department's strategy for deploying mobile nuclear reactors at domestic strategic support areas;

(3) the Department's plan to work with the Department of Energy to identify and develop the procurement strategy to acquire feed material for microreactor fuel; and

(4) the status of pilot programs for micro-reactors.

The committee recommends an increase of $50.0 million in PE 0604250D8Z, Advanced Innovative Technologies, for the Strategic Capabilities Office to further develop and prove out its mobile nuclear reactor concept through Project Pele.

Public-Private Partnerships for Product Support on software-intensive government systems

The committee notes the work of the Department of Defense in codifying Public-Private Partnerships for Product Support through Department of Defense Instruction 4151.21. This instruction requires that public-private partnerships (PPP) for depot-level maintenance be employed whenever it is cost-effective in providing improved support to the warfighter. The goal is to maximize the utilization of the government's facilities, equipment, and personnel at Department of Defense depot-level maintenance activities as a way to facilitate innovative and creative thinking.

However, it is evident that maintaining a conventional PPP as it relates to software-intensive systems further complicates the partnership and hinders the goal of a PPP to "ensure effective and timely response to mobilization, national defense contingency situations, and other emergency requirements." This is because risk is induced as software crosses multiple subsystems and can lead to complications for a program. Requiring different groups to perform routine updates on software that may have a commercial origin can

cause system anomalies and duplication of effort. The current requirements from the Department of Defense Instruction 4151.21 appear ill-suited for application to the Department's software usage.

The committee supports the Department's efforts to prioritize partnerships between public and private entities to achieve critical, yet cost-effective support to the warfighter. However, the Department should reevaluate the requirements for the PPP as relates to software systems. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than August 1, 2021, on how the Department of Defense can adjust requirements to make these more applicable to software systems.

Quantum research efforts

The committee is pleased that the Under Secretary of Defense for Research and Engineering has established an Assistant Director for Quantum Sciences with the responsibility of producing a technology road map aligning quantum research and information science across the Department of Defense and each of the military services. The committee urges the Assistant Director for Quantum Sciences to consider the Department's quantum workforce gaps, and what science, technology, engineering, and math related education is required to develop the necessary future quantum workforce in the Quantum Sciences road map for the Department.

Report on Department of Defense university research COVID–19 recovery

The committee is aware that most academic research has been suspended or slowed down due to the pandemic. With these setbacks, the university's workforce is also impacted, especially postdoctoral fellows, graduate students, and technical support staff. Recognizing that many of the technologies the nation uses today were derived from Department of Defense-funded fundamental research, the committee directs the Under Secretary of Defense for Research and Engineering, in collaboration with the research directors of the military services, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by January 1, 2021, addressing research impacts due to COVID–19, including, at a minimum, (1) the total number of grants and cooperative agreements that would need cost extensions to complete their original award scope fully funded; (2) total cost of providing cost extensions for such grants and cooperative agreements; (3) a best estimate taken from information on the number of grants affected of the total number of Department-funded postdoctoral fellows and graduate students unable to reach their desired academic or professional level because of a lack of research funding; and (4) any other negative impacts to the defense science and technology program as determined by the Under Secretary.

Report on employing and strengthening the United States' hypersonics research and development workforce

The committee commends the Department of Defense's increased attention on and strong investment in hypersonic weapons development to rapidly achieve operational capability. However, the com-

mittee is concerned that the Department's investments focus on near-term integration of existing capabilities and may fail to advance next-generation technologies at the pace needed to sustain or extend the nation's hypersonics technological advantage. The committee directs the Under Secretary of Defense for Research and Engineering to brief the congressional defense committees no later than January 31st 2021 on lower technology readiness level (6.1, 6.2, 6.3, and 6.4) investments being made in next generation hypersonic capabilities; the lack of test facilities accessible to the hypersonics industrial base, and specifically the lack of hypersonic wind tunnels; the number and status of hypersonics contracts in place with small businesses; and a comprehensive inventory of U.S. hypersonic test assets, including those owned and/or operated by universities, government laboratories, Federally-Funded Research and Development Centers, and industry.

Report on waterjet demilitarization technology

The committee remains concerned that insufficient attention has been placed on the development of technology to safely demilitarize chemical or biological weapons in situ as today the detonation of these weapons is not always feasible without dispersing the agents. The committee understands high pressure waterjet technology systems have proven their capability to safely demilitarize munitions on land and have demonstrated the ability to demilitarize munitions in shallow water. Despite this, the committee remains concerned that munitions in waters greater than 120 feet pose a threat that has not been addressed. Therefore, the committee directs the Secretary of Defense to provide a report to the congressional defense committees no later than January 31, 2021 outlining a plan to continue the development and implementation of a fully integrated transportable high-pressure waterjet system for the demilitarization of chemical and biological weapons and to further fund waterjet technology systems for the removal of constituents in munitions located in deep water environments.

Report to Congress on High Mach and Hypersonic Aircraft Capabilities

The committee continues to be concerned about the threats posed by hypersonic weapons and the imperative to develop offensive and defensive hypersonic weapons systems. Further, report language accompanying the House Department of Defense Appropriations Act for Fiscal Year 2020 encouraged Air Force research into reusable hypersonic propulsion technologies including high Mach turbines. The committee is aware of ongoing efforts to mature technologies necessary to develop aircraft capable of high Mach and hypersonic flight, and believes these aircraft have the potential to greatly expand operational capability and flexibility in intelligence, surveillance, and reconnaissance, responsive space access, payload delivery, and transport. Therefore, the committee directs the Under Secretary of Defense for Research and Engineering to provide a briefing to the House Committee on Armed Services no later than the February 1, 2021 on current capability gaps that will be filled by high Mach and hypersonic aircraft, the Department's acquisition strategy for these programs, and an updated road map.

Tactical training range instrumentation

The committee understands that existing Air Force and Navy air combat training systems are nearing the end of their service-life. There exists a common requirement to develop and field replacement technologies that ensures combat aircrew training remains uninterrupted for Active, Guard, and Reserve Component aviation forces during the transition to next generation aircraft and data-relay technologies.

The committee notes that air combat training systems and associated technologies provide combat air forces with the opportunity to improve their readiness by providing experience through advanced simulation techniques prior to actual combat. The committee believes the next generation of air combat training systems needs to support Department of Defense and foreign partner air forces with collaborative training for both fourth and fifth generation aircraft representing high fidelity combat environments. Training systems should also integrate capabilities that provide aircrews with real-time, threat-representative training and efficient post-mission debriefing that enables aircrews to reconstruct training events in less time and provides higher fidelity modeling to assess weapons fly-out data for simulated air-to-air and air-to-ground weapons employed during training.

The committee is aware that the Air Force and Navy recently conducted a joint assessment of future training capability requirements and entered into a memorandum of understanding to begin the design and development of a joint training system. As part of this ongoing collaboration, the committee encourages the Air Force and Navy to consider leveraging, fielding, and integrating new training aid systems at land or over-water training ranges utilized by Active, Guard, or Reserve Component forces with an assigned mission to provide friendly or threat representative training capabilities to combat air forces.

Testing of lithium ion batteries

The committee recognizes that the Navy serves as the technology warrant holder for the Department of Defense on lithium-ion battery testing and certification. The Navy's Lithium Battery Safety Program establishes the safety guidelines for the selection, design, testing, evaluation, use, packaging, storage, transportation, and disposal of lithium batteries.

The automotive industry is making rapid advancements in lithium-ion battery technologies and leading battery development in the commercial space. In order to innovate at the pace of commercial industry, the Department must streamline its processes for battery testing and certification. This streamlined approach is crucial to technology demonstration and prototype projects where timeline and budget are limited.

The committee therefore urges the Secretary of the Navy to:

(1) review the current testing of Department of Defense lithium-ion batteries, including the size and scale of test chambers, staffed personnel to run the test chambers, and the physical limitations of the quantity of test chambers;

(2) examine the capacity of the lithium-ion battery testing, to include details on the volume of testing, and any limitations on the

size, weight, power wattage, and voltage able to be tested inside Department of Defense facilities;

(3) evaluate the overall speed of the certification process and note delays or impacts on current battery projects and new, evolving battery technologies entering the certification process; and

(4) identify any commercial facilities that could supplement or replace current Department of Defense processes, and leverage commercial expertise in this field.

Use of artificial intelligence to analyze beneficial ownership of defense contractors

The Committee remains concerned with the threat of peer and near-peer competitors acquiring critical technology developed by American companies via shell corporations that hide their true ownership in order to circumvent review by the Committee on Foreign Investment in the United States. The Committee, therefore, directs the Director of the Defense Innovation Unit to provide a briefing to the House Committee on Armed Services by April 30, 2021 on commercial capabilities, current challenges, and required resources necessary to develop artificial intelligence for analyzing beneficial ownership of defense contractors or corporations seeking Department of Defense contracts. The artificial intelligence and related capabilities reviewed should be capable of identifying organizations or individuals that hide ownership or investments in companies that contract with the Department of Defense for critical technology.

LEGISLATIVE PROVISIONS

SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 201—Authorization of Appropriations

This section would authorize appropriations for research, development, test, and evaluation at the levels identified in section 4201 of division D of this Act.

SUBTITLE B—PROGRAM REQUIREMENTS, RESTRICTIONS, AND LIMITATIONS

Section 211—Modification of Science, Mathematics, and Research for Transformation (SMART) Defense Education Program

This section would amend section 2192a of title 10, United States Code, by establishing a scholarship for service pilot subprogram under the Department's Science, Mathematics, and Research for Transformation (SMART) Defense Education Program for students at minority institutions to diversify and strengthen the national security workforce. This section would require the Secretary of Defense to submit an initial report to the congressional defense committees by December 31, 2022, on the establishment of the pilot subprogram, and a final report by September 30, 2024, on the success of the pilot program in recruiting individuals for scholarships under this section and hiring and retaining those individuals in the public sector workforce.

This section would also require the Secretary to pay participants at a rate that is comparable to the private sector and include a

paid internship requirement with defense industry, and it would require that not less than 20 percent of SMART program scholarship awards go to individuals pursuing degrees in computer science or a related field of study.

Section 212—Enhanced Participation of Department of Defense Contractors in Science, Technology, Engineering, and Mathematics Activities

This section would amend chapter 111 of title 10, United States Code, to establish a new section, 2192c program to enhance contractor participation in science, technology, engineering, and mathematics activities. This section would also direct the Secretary of Defense to carry out a program under which the Secretary shall seek to enter into partnerships with Department of Defense contractors to carry out community service activities to promote interest in careers in science, technology, engineering, and math disciplines, and allow those activities to be considered as allowable costs on a government contract.

Section 213—Modification of Requirements Relating to Certain Cooperative Research and Development Agreements

This section would amend section 2350a of title 10, United States Code, by allowing the Secretary of Defense to delegate his or her authority to make a determination to enter into a cooperative research and development project to only one party. It would also allow for cooperative research and development projects when cost sharing is unequal in cases that provide strategic value to the United States or partner country. This section would also allow the Secretary, or designee, to procure qualified services from the foreign entity with the requirement that written notice must be sent to the congressional defense committees, the Committee on Foreign Affairs of the House of Representatives, and the Committee on Foreign Relations of the Senate no later than 30 days before issuing a waiver.

Section 214—Pilot Program on Talent Optimization

This section would direct the Under Secretary of Defense for Research and Engineering, acting through the Director of the Defense Innovation Unit, to conduct a pilot program to develop a talent optimization marketplace for military personnel in the Reserve and Guard Components.

Section 215—Codification of the National Security Innovation Network

This section would amend chapter 139 of title 10, United States Code, by inserting a new section 2358c, National Security Innovation Network. This new section would establish a program office to be known as the National Security Innovation Network (formerly the MD5 National Security Technology Accelerator) as a permanent office within the Under Secretary of Defense for Research and Engineering or another organization at the discretion of the Secretary of Defense. This section would require the Secretary of Defense to submit a report no later than 180 days after the date of

the enactment of this Act on the Department's plan to establish this office. This section would require the Comptroller General of the United States to submit a review of the report to the congressional defense committees not later than 180 days after the Secretary's implementation report. Finally, this section would require the Comptroller General to review and submit an evaluation of the program to the appropriate congressional committees not later than 3 years after the date of the enactment of this Act.

Additionally, the committee notes that Hacking for Defense (H4D) is authorized as a National Security Innovation and Entrepreneurial Education Program in the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) to enable Department of Defense innovation. H4D is a university course developed by U.S. military combat veterans and private sector entrepreneurs taught at universities across the United States in which students apply cutting-edge problem-solving techniques to real-world national security and defense problems. The committee finds that H4D supports solution development directly for the warfighter, improves U.S. military readiness, and stimulates growth within the National Security Innovation Base, consistent with the 2018 National Defense Strategy. Further, the committee believes H4D fosters the growth of an emerging generation of national security leaders and mission-driven entrepreneurs by improving and expanding the science, technology, engineering, and math skill sets within the U.S. workforce. The committee believes that the Department should fully resource H4D and its growing ecosystem of national security innovators and entrepreneurs through the provision of the annual funding required to enhance existing H4D university courses.

Section 216—Modification of Pilot Program on Enhanced Civics Education

This section would amend section 234 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) to include in the pilot program the improvement of critical thinking and media literacy among students. This section would require the Secretary of Defense to implement the pilot program not later than 90 days after the date of the enactment of this Act. This section would also require the Secretary to submit a report to the congressional defense committees not later than 30 days after the date of the enactment of this Act on the Secretary's efforts to implement the pilot program.

Section 217—Modification of Joint Artificial Intelligence Research, Development, and Transition Activities

This section would amend section 238 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) by assigning responsibility for the Joint Artificial Intelligence Center (JAIC) to the Deputy Secretary of Defense and ensure data access and visibility for the JAIC.

Section 218—Modification of National Security Innovation Activities and Manufacturing Pilot Program

This section would amend section 2358 of title 10, United States Code, by realigning the National Security Innovation Capital (NSIC) program under the Defense Innovation Unit and establishing an advisory board to provide recommendations on defense innovation priority investments once NSIC funding is available. This section would also amend section 2505 of title 10, United States Code, by extending the Defense Manufacturing pilot program.

Section 219—Extension of Pilot Program for the Enhancement of the Research, Development, Test, and Evaluation Centers of the Department of Defense

This section would extend the termination date by 5 years for the pilot program for the enhancement of the research, development, test, and evaluation centers of the Department of Defense established in section 233 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). The new pilot termination date would be September 30, 2027. This section would require the Secretary of Defense to submit a report to the congressional defense committees not later than 1 year after the date of the enactment of this Act on the status of the pilot program, to include: (1) which military departments are not participating in the program; (2) any issues that are preventing their participation; and (3) any offices or elements of the Department that may be responsible for their delay in implementation. This section would also correct the title of the Assistant Secretary of the Army for Acquisition, Logistics, and Technology.

The committee believes in the importance of demonstrating methods for the more effective development of technology and management of functions at the Department's science and technology reinvention laboratories, test and evaluation centers part of the Major Range and Test Facility Base, and at the Defense Advanced Research Projects Agency. The committee urges each of the military services and the Office of the Secretary of Defense to make the most of the extended timeframe for this important pilot program.

Section 220—Digital Data Management and Analytics Capability

This section would direct the Secretary of Defense to develop and implement an advanced digital data and analytics capability to digitally integrate all elements of the Department of Defense's acquisition process; digitally record and track all relevant data generated during the research, development, testing, and evaluation of systems; and maximize the use of such data to inform the further development and improvement of both acquisition systems and the acquisition process for those systems.

The committee is aware that several U.S. Government Accountability Office reports have cited the need for improved data management processes surrounding the Department's overall management framework. While most relevant data is government owned and authorized for Department-wide use, there is no enterprise mechanism facilitating the discovery, access, correlation or integration, and use of acquisition-related data across organizational

boundaries. Each functional organization has established and locally optimized its own data and analytic processes for its own needs, and in many cases even these local practices are highly manual and inefficient.

To this end, this section would direct the Secretary of Defense to conduct a significant review of data content and requirements to support management functions; implement demonstration activities to develop lessons learned and inform the way forward; conduct a comparative analysis that assesses the risks and benefits of the digital management and analytics capability relative to the Department's traditional data collection, reporting, exposing, and analysis approaches; and update the Department's policy and guidance based on the results of the demonstration activities.

This section would also require the Defense Innovation Board, in consultation with the Defense Digital Service, to conduct an independent assessment and submit a report to both the Secretary and the congressional defense committees no later than 180 days from enactment of this Act on recommended approaches for implementation of the capability. This section would then require the Secretary to submit an implementation report to the congressional defense committees not later than 90 days after the Defense Innovation Board's assessment. Finally, it would require the Defense Innovation Board and the Defense Science Board to submit an independent joint assessment on the Department's progress by March 15, 2022.

Section 221—Social Science, Management Science, and Information Science Research Activities

This section would direct the Secretary of Defense to carry out a social, management, and information science research and development program to ensure the Department of Defense has access to innovation and expertise in social, management, and information science necessary for improving the effectiveness and efficiency of executing Department of Defense operational and management activities. This section would require the Secretary to submit a report by December 31, 2022, to the congressional defense committees on the program, in both a classified and unclassified format.

The committee recognizes that all national security challenges facing the United States require an understanding of the causes and consequences of human behavior and has supported the Department's efforts to expand collaboration with the academic social science community through the Minerva Research Initiative since its establishment in 2008. Maintaining the Nation's technological superiority in the face of threats from great powers, state and nonstate actors, and individuals requires not only investing in physical sciences but also the integration of knowledge from cross-disciplinary research that explores the social, cultural, behavioral, political, historic, and religious drivers and impacts of today's increasingly complex global security environment.

At a time when peer and near-peer adversaries are increasingly employing elements of malign influence, disinformation, and predatory economics in concert with technological capabilities, the Department should be increasing its investment in social science research programs, not ending it. Three recent reports from the National Academies assessing social science programs and their im-

pacts on national security and intelligence noted the ongoing contributions of Minerva, and recommended ways to increase outreach and dissemination of results to enhance the success of the program.

The committee urges the Department of Defense to implement the recommendations of the National Academies to strengthen ties between grantees and potential users of their research and increase visibility, tracking, and dissemination of the research results to the broader national security community. All military services should participate in the program and highlight their specific plans and outcomes in annual budget documentation, further increasing visibility of Minerva-funded research to the user community.

Section 222—Measuring and Incentivizing Programming Proficiency

This section would direct the Secretary of Defense to leverage existing civilian software development and software architecture certification programs to implement coding language proficiency and artificial intelligence competency tests within the Department of Defense. This would measure an individual's competency in using machine learning tools, in a manner similar to the way the Defense Language Proficiency Test measures competency in foreign language skills, and enable the identification of members of the Armed Forces and civilian employees of the Department of Defense who have varying levels of quantified coding comprehension and skills and a propensity to learn new programming paradigms, algorithms, and data analytics.

Section 223—Information Technology Modernization and Security Efforts

This section would direct an interagency information technology spectrum modernization effort, led by the Assistant Secretary of Commerce for Communications and Infrastructure and the National Telecommunications and Information Administration, to synchronize development and coordination of standards and Federal spectrum management. This section would also require the Secretary of Defense to establish a program to identify and mitigate vulnerabilities in the telecommunications infrastructure of the Department of Defense.

Section 224—Board of Directors for the Joint Artificial Intelligence Center

This section would direct the Secretary of Defense to create and resource a Board of Directors for the Joint Artificial Intelligence Center (JAIC), comprised of senior Department of Defense officials, as well as civilian directors not employed by the Department of Defense. The objective would be to have a standing body over the JAIC that can bring governmental and non-governmental experts together for the purpose of assisting the Department of Defense in correctly integrating and operationalizing artificial intelligence technologies.

Section 225—Directed Energy Working Group

This section would establish a Directed Energy Working Group inside the Department of Defense to coordinate directed energy efforts across the military services, leverage shared research and development, eliminate redundant efforts, and expedite the operationalization of directed energy programs.

Section 226—Program Executive Officer for Autonomy

This section would create a Program Executive Officer for autonomy within the Navy.

Section 227—Accountability Measures Relating to the Advanced Battle Management System

This section would require the Secretary of the Air Force to provide additional information on the Advanced Battle Management System (ABMS) family of systems. This section would amend section 147(g) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) to include as part of the quarterly briefings a detailed briefing on each on-ramp demonstration conducted during that quarter, to encompass: objectives achieved; the realism of the exercise, including which portions were scripted and which were not, and the technical workarounds or substitute technologies employed; composition of and sustainment plan for leave-behind interim capabilities provided to a combatant commander; and the costs spent on technology solutions, range access and testing resources, personnel, and logistics, including travel costs.

This section would also require the Secretary to report on planned ABMS capabilities, technologies needed to implement and achieve these capabilities, and a timeline for technology maturation and notional fielding schedule across the future years defense program. The committee expects this report to outline how ABMS intends to transition demonstrated capabilities into sustainable Programs of Record. This section would further require reports on ABMS acquisition authorities, coordination between the ABMS Architect Office and the Common Mission Control Center, and the ABMS security plan. Finally, this section would require the Director of Cost Assessment and Program Evaluation to conduct an independent cost estimate of any ABMS cost estimate prepared by the Air Force.

Section 228—Measures to Address Foreign Talent Programs

This section would direct the Secretary of Defense to maintain a list of foreign talent recruitment programs that present a threat to the United States, and publish the list in the Federal Registrar for not less than 60 days.

Section 229—Disclosure of Foreign Funding Sources in Applications for Federal Research Awards

This section would require Federal research agencies to require any principal investigator or co-principal investigator under a grant or cooperative agreement to disclose all current and pending

support and the sources of such support at the time of the application.

Section 230—Limitations Relating to Large Unmanned Surface Vessels and Associated Offensive Weapon Systems

This section would prohibit the procurement of any large unmanned surface vessels in fiscal year 2021 until a certification regarding technology maturity has been submitted to Congress. This section also includes a prohibition on the inclusion of offensive weapons systems until the Secretary of Defense certifies how these systems will comply with the Law of Armed Conflict.

Section 231—Limitation on Availability of Funds Pending Review and Report on Next Generation Air Dominance Capabilities

This section would limit the Secretary of the Air Force and the Secretary of the Navy from obligating more than 85 percent of funding authorized to be appropriated for fiscal year 2021 for the Next Generation Air Dominance capabilities until the Director, Cost Assessment and Program Evaluation performs a non-advocate review and submits a report to the congressional defense committees that assesses the separate efforts of the U.S. Air Force and the U.S. Navy regarding the Next Generation Air Dominance portfolio of capabilities being developed by each Secretary.

SUBTITLE C—EMERGING TECHNOLOGY AND ARTIFICIAL INTELLIGENCE MATTERS

Section 241—Steering Committee on Emerging Technology

This section would establish a steering committee on emerging technology and national security threats.

Section 242—Training for Human Resources Personnel in Artificial Intelligence and Related Topics

This section would direct the Secretary of Defense to develop and implement a program to provide human resources personnel with training in the fields of software development, data science, and artificial intelligence, as such fields relate to the duties of such personnel, not later 1 year after the date of the enactment of this Act.

Section 243—Unclassified Workspaces for Personnel with Pending Security Clearances

This section would direct the Secretary of Defense to issue guidance not later than 180 days after the date of the enactment of this Act to ensure, to the extent practicable, that all Department of Defense facilities have unclassified workspaces for employees who have applied for, but have not yet received, a security clearance.

Section 244—Pilot Program on the Use of Electronic Portfolios to Evaluate Applicants for Certain Technical Positions

This section would direct the Secretary of Defense to carry out a pilot program to evaluate applicants for technical positions within the Department of Defense, in part, on electronic portfolios of the applicant's work.

Section 245—Self-Directed Training in Artificial Intelligence

This section would direct the Secretary of Defense to provide a list of approved online courses relating to artificial intelligence that may be taken by employees and military members on a voluntary basis outside work hours not later than 180 days after the date of the enactment of this Act. The section would also require the Secretary to develop a system to reward those who complete the courses.

Section 246—Part-Time and Term Employment of University Professors and Students in the Defense Science and Technology Enterprise

This section would direct the Secretary of Defense to establish a program under which qualified professors and students may be employed on a part-time or term basis in an organization of the Defense science and technology enterprise for the purpose of conducting a research project. This section would require the Secretary to submit to the congressional defense committees not later than 30 days after the completion of each of the first 3 years of the program a report on the status of the program.

Section 247—Microelectronics and National Security

This section would amend section 231 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) directing a strategy for assured access to trusted microelectronics by extending the report deadline to December 30, 2020, and adding new requirements to the strategy and implementation pan.

This section would also establish an Advisory Panel on Microelectronics Leadership and Competitiveness to develop a national strategy to accelerate the development and deployment of state-of-the-art microelectronics and ensure that the United States is a global leader in the field. This section would direct the Secretary of Defense and the Assistant to the President for National Security Affairs to provide briefings to the congressional defense committees within 90 days after the date of the enactment of this Act on the progress of the Secretary in developing the strategy and implementation plan required, and the progress of the Advisory Panel in developing its strategy, respectively.

Section 248—Acquisition of Ethically and Responsibly Developed Artificial Intelligence Technology

This section would direct the Secretary of Defense, acting through the Board of Directors of the Joint Artificial Intelligence Center, to conduct an assessment to determine whether the Department of Defense has the ability to ensure that any artificial intelligence technology acquired by the Department is ethically and responsibly developed.

Section 249—Enhancement of Public-Private Talent Exchange Programs in the Department of Defense

This section would amend the Public-Private Talent Exchange agreement requirements of section 1599g of title 10, United States Code, and would direct the Secretary of Defense to take steps to

ensure that the authority for the Department of Defense to operate a public-private talent exchange program pursuant to section 1599g of title 10, United States Code, is used to exchange personnel with private sector entities working on artificial intelligence applications. The section would direct the Secretary to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives not later than 180 days after the date of the enactment of this Act, and annually thereafter, on the efforts undertaken to expand existing public-private exchange programs of the Department of Defense.

SUBTITLE D—SUSTAINABLE CHEMISTRY RESEARCH AND DEVELOPMENT

Section 251—Short Title

This section would establish the title of this subtitle as the Sustainable Chemistry Research and Development Act of 2020.

Section 252—Findings

This section would describe the findings of the Act.

Section 253—National Coordinating Entity for Sustainable Chemistry

This section would direct the Director of the Office of Science and Technology Policy to convene an inter-agency entity under the National Science and Technology Council not later than 180 days after the date of the enactment of this Act to coordinate Federal programs and activities in support of sustainable chemistry.

Section 254—Strategic Plan for Sustainable Chemistry

This section would direct the interagency entity to develop a strategic plan in support of sustainable chemistry, and would direct the entity to submit a report to the Committee on Environment and Public Works, the Committee on Commerce, Science, and Transportation, and the Committee on Appropriations of the Senate, and the Committee on Science, Space, and Technology, the Committee on Energy and Commerce, the Committee on Appropriations of the House of Representatives, and to the Government Accountability Office not later than 2 years after enactment and every 3 years thereafter assessing Federal investments in sustainable chemistry.

Section 255—Agency Activities in Support of Sustainable Chemistry

This section would direct participating agencies to carry out activities in support of sustainable chemistry, as appropriate to the specific mission and program of each agency.

Section 256—Partnerships in Sustainable Chemistry

This section would authorize participating agencies to facilitate and support the creation of partnerships that must include one private sector organization to aid in sustainable chemistry research,

development, demonstration, technology transfer, education, and job training.

Section 257—Prioritization

This section would direct the interagency entity to focus on activities that achieve the goals outlined in the Act.

Section 258—Rule of Construction

This section would direct that nothing in this Act shall be construed to alter or amend any State law or action with regard to sustainable chemistry or green chemistry, as defined by the State.

Section 259—Major Multi-User Research Facility Project

This section would amend chapter 16 of title 42, United States Code, to update the definition of the term "Major multi-user research facility project."

SUBTITLE E—PLANS, REPORTS, AND OTHER MATTERS

Section 261—Modification to Annual Report of the Director of Operational Test and Evaluation

This section would amend section 139(h)(2) of title 10, United States Code, by removing the sunset date for the annual report submitted by the Director of Operational Test and Evaluation. This section does not change or alter any authorities of the Director of Operational Test and Evaluation.

Section 262—Repeal of Quarterly Updates on the Optionally Manned Fighting Vehicle Program

This section would repeal section 261 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). The committee notes that the Optionally Manned Fighting Vehicle (OMFV) Program is delayed and the Army's original solicitation has been cancelled making quarterly updates on the program unnecessary.

The committee appreciates the Army's efforts over the last 20 years and current commitment to develop a next generation combat vehicle to replace the M2 Bradley Infantry Fighting Vehicle in armored formations today. Although the committee shares the Army's disappointment with the recent cancellation of the solicitation for the OMFV, the committee is nonetheless encouraged that the Army appears better positioned to take a thoughtful, measured, and realistic approach to development of next generation armored fighting vehicle technology. This is evident in the Army's efforts at this time to learn up-front from industry what new technologies could make a next generation combat vehicle significantly more capable than the M2 Bradley, and at the same time, achievable and affordable.

In this regard, the committee understands the Army's new development concept includes three or more phases, of which the first is solicitation of digital engineering designs from up to five commercial vendors for production design review by a source selection evaluation board, followed by a down-select to three vendors for an engineering and manufacturing development, critical design re-

view, and production prototyping phase, and finally down-select to two offerors or possibly a single awardee for low-rate initial production. The committee is interested to see if this process, while taking somewhat longer, will attract the widest competitive field of offerors with the widest technological diversity, and at the same time achieve the benefits of such competition including enhanced technology, lower cost, and potentially an expanded armored vehicle industrial capacity.

Although this section would repeal the requirement for a quarterly update on the OMFV program, the committee expects that the Secretary of the Army or designee will, upon request, provide the committee with briefings that address the elements of the update as originally enacted in section 261 of Public Law 116–92.

Section 263—Independent Evaluation of Personal Protective and Diagnostic Testing Equipment

This section would direct the Director of Operational Test and Evaluation to independently evaluate any processes used to test the effectiveness of covered personal protective and diagnostic testing equipment and the results of such tests. This section would require the Director to submit to the congressional defense committees a report not later than 30 days after the completion of each evaluation on the results of the evaluation.

Section 264—Reports on F–35 Physiological Episodes and Mitigation Efforts

This section would require the Under Secretary of Defense for Acquisition and Sustainment to conduct a root cause analysis study of all physiological episodes (PEs) that have been reported by F–35 pilots as of the date of the enactment of this Act, and to provide a report to the congressional defense committees not later than 180 days after the date of the enactment of this Act. The report would describe:

(1) all reported instances of F–35 PEs;

(2) all findings and recommendations of the root cause analysis study; and

(3) resources required to resolve issues contributing to F–35 PEs.

Finally, this section would require the Under Secretary to describe in the annual report required by section 224(d) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) what funding and corrective actions are being implemented to mitigate F–35 PEs.

Section 265—Study on Mechanisms for Attracting and Retaining High Quality Talent in the National Security Innovation Base

This section would direct the Secretary of Defense to conduct a study to determine the feasibility of establishing a program to attract and retain covered individuals for employment in the national security innovation base. This section would require the Secretary to submit a report to the congressional defense committees not later than February 1, 2021, on the results of the study.

TITLE III—OPERATION AND MAINTENANCE

ITEMS OF SPECIAL INTEREST

ENERGY AND ENVIRONMENT ISSUES

Application of Geological Survey Information Related to Red Hill Bulk Fuel Storage Facility

The committee notes that since the January 2014 fuel release from the Red Hill Bulk Fuel Storage Facility in Hawaii, there have been significant concerns about the impact of fuel releases on drinking water quality. The committee further notes that the Red Hill Administrative Order on Consent process as administered by the Environmental Protection Agency and Hawaii Department of Health through a negotiated agreement with the Department of the Navy and Defense Logistics Agency is the primary mechanism through which environmental investigation and remediation and tank infrastructure improvements are being managed. The committee understands the considerable work that has been done by the Red Hill Groundwater Modeling Workgroup, made up of State and Federal stakeholders and subject-matter experts, to improve understanding of the fuel release's impact on the aquifer and the manner in which fuel is transported through the basalt layer. Accordingly, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by January 15, 2021, summarizing the work to date on the geological and hydrological mechanisms that impact how a release of fuel from the Red Hill facility would impact the drinking water supply. The briefing shall also include any areas requiring further study and the Navy's plan to ensure subsequent studies fill these knowledge gaps.

Aviation Ground Support Equipment

The committee is concerned that existing Air Force Aviation Ground Support Equipment may be inefficient, expensive to operate, and requires frequent repairs. The committee is aware of alternatives, such as Electrical Ground Power Units, that utilize batteries to power an electronics package and can be integrated onto a self-propelled cart, eliminating the emission of greenhouse gasses and providing nearly silent operation. These technologies may increase overall system efficiency, provide flexible power solutions, reduce the level of required maintenance, and decrease the total ownership costs of the units to the Air Force. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services, not later than December 31, 2020, on the readiness of current Air Force Aviation Ground Support Equipment and the feasibility of utilizing alternatives to current Air Force Aviation Ground Support Equipment. At a minimum, the report shall address the following elements:

(1) the readiness status of current Air Force Aviation Ground Support Equipment;

(2) the overall operations, maintenance, and sustainment costs of current Air Force Aviation Ground Support Equipment;

(3) an assessment of environmental impact of current Air Force Aviation Ground Support Equipment to include noise and air pollution;

(4) a review of alternate sources of Air Force Aviation Ground Support Equipment to provide flight-line power to Air Force aircraft and an overview of any Air Force plans to pursue such alternatives; and

(5) an assessment of total lifecycle cost savings of replacing current diesel-powered flight-line Air Force Aviation Ground Support Equipment with alternate solutions.

Biomass Support of Installation Energy Resiliency

The committee notes that biomass is an attractive option for the production of secure, renewable electricity. Biomass has the attribute of providing reliable electricity independent of atmospheric variability. The committee believes that the energy security and resiliency provided by an on-post biomass facility has value and should serve as a model for other military installations located in parts of the country having a ready supply of biomass material. The committee further believes that the Secretary of Defense should place a monetary value on the value of energy security and include biomass as one of the alternatives when studying energy resiliency on specific installations. Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services by February 1, 2021, as to military installations where biomass will be considered during analysis of alternatives for achieving additional installation energy resiliency.

Defense Energy Resilience Authorities and Programs

The committee commends the Department of Defense for making energy resilience the central tenet of its energy program. The committee recognizes that the Department has a variety of policies, programs, statutory authorities, and tools to implement energy resilience and maintain critical missions and readiness. The committee applauds the efforts of the Department of Defense to strengthen the resilience of energy and utility systems, and to integrate different contracting authorities and sources of funding to deploy energy resilience technologies and projects. In particular, the committee commends the Environmental Security Technology Certification Program (ESTCP) for sponsoring the Military Energy Resilience Catalyst (MERC) program to accelerate the development of military energy resilience professionals, disseminate key best practices and lessons learned, and transition successful energy technologies across the Department of Defense enterprise.

Accordingly, the committee directs the Secretary of Defense to provide a briefing to the committee no later than October 1, 2020, on initiatives that integrate existing utility and energy authorities to support installation resilience projects to upgrade infrastructure, deploy emerging technologies, and strengthen mission assurance. This briefing shall also include potential opportunities to better leverage existing authorities, and improve information sharing by installation managers and contracting officers.

Execution of the Military Munitions Response Program

The committee is concerned about the chronic under-execution of the Military Munitions Response Program (MMRP). The committee notes that beginning in 2016, after the Environmental Protection Agency published Lifetime Health Advisories (LHA) for per- and polyfluoroalkyl substances (PFAS), the Department of Defense has used the MMRP as a bill-payer for environmental response to PFAS. The committee further notes that while this was an appropriate response to the initial PFAS crisis, there has been adequate time to adjust environmental remediation budget requests to ensure that both MMRP and PFAS response are adequately funded, especially given congressional adds for both PFAS and MMRP. Accordingly, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by March 1, 2021, that includes, at a minimum, a plan to increase execution of the MMRP program and a funding plan for addressing both PFAS remediation and MMRP across the Future Years Defense Program.

Expanding the Scope of and Partners for DOD PFAS Research and Development

The Committee recognizes the initial investment the Strategic Environmental Research and Development Program (SERDP) and the Environmental Security Technology Certification Program (ESTCP) have made in research and development to identify an alternative to AFFF and safe clean-up and disposal mechanisms for PFAS contaminating groundwater and drinking water. SERDP and ESTCP investments have not yet yielded the results they are seeking. The Committee supports the authorization of additional funding to both of these programs. As DoD works to identify an alternative to AFFF, safe and effective clean-up and disposal mechanisms for PFAS chemicals, and to better understand how to mitigate the health and environmental impacts of PFAS contamination, the Committee directs the Office of the Assistant Secretary of Defense for Sustainment, through ESTCP, SERDP and other relevant programs, to report to the committee by December 1, 2020, on efforts or plans to solicit additional academic partners for PFAS research and development challenges, particularly those with institutional focus and expertise on the health and environmental hazards related to PFAS chemicals.

Federal-State Partnerships and the Readiness Environmental Protection Integration Program

The committee commends the military departments for their extensive use of the Readiness Environmental Protection Integration Program as a tool for limiting encroachment and land-use conflicts, while also promoting key land conservation and environmental restoration goals. The committee encourages the military departments to leverage Federal-State partnerships to collaboratively employ best management practices and to enhance resilience and conserve culturally and ecologically important landscapes and watersheds for the benefit of surrounding military communities and local economies.

Implementation of Operational Energy Cost Savings

The committee notes that considerable operational energy cost savings can be achieved through changes in service member behavior. The committee further notes that these changes can be hard to achieve due to long-standing practices and habits. In the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92), the committee sought to incentivize these changes in behavior through the amendment of section 2912 of title 10, United States Code, allowing one-half of any operational energy cost savings to be used by the commander of the installation at which these savings were achieved. Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services by December 1, 2020, regarding the implementation of this amendment by the military departments. At a minimum, the briefing should include how each military department has informed installation commanders and their tenants about this authority, and what guidance has been provided to aid implementation.

Increased Resiliency and Lethality through Operational Energy Investment

The committee commends the Department of Defense and the military departments for their work to date on initiatives that increase lethality and resiliency through the reduction of the Department's dependence on fossil fuels. Noting that over 70 percent of the casualties in the Iraq and Afghanistan wars resulted from attacks on fuel and resupply convoys, the committee notes that a failure to adequately address this issue will be paid in service member lives and a reduced ability to challenge our adversaries. The committee remains concerned that, while recent joint exercises have begun to bring the problem of overreliance on fossil fuels into focus, the military services have largely failed to address these issues by incorporating technologies that reduce fossil fuel use into their existing equipment inventories. In addition, the committee is concerned that the military departments are not including these technologies as they invest in future platforms. Accordingly, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by August 1, 2021, on how it will increase lethality and reduce casualties by reducing its dependence on fossil fuels. The report shall include at a minimum a plan for the following:

(1) integrating Department of Defense and military department operational energy personnel into planning, posture, and programming entities to ensure fuel consumption, fuel distribution, and logistics are considered across the Department;

(2) how the military departments are prioritizing reductions in fuel consumption by current platforms during planned upgrades and depot maintenance;

(3) options for reducing the Department's consumption of fossil fuels by not less than 10 percent in 10 years and 30 percent in 25 years;

(4) options for reducing the number of resupply convoys and oilers required in contested environments; and

(5) leveraging existing technologies and the Operational Energy Capability Improvement Fund to demonstrate capabilities to achieve the aforementioned goals.

Report on Department of Defense Fuel Contracting

The committee is interested in the Department of Defense's use of lowest price technically acceptable source selection criteria for fuel purchases. The committee recognizes that contingency operations present unique challenges and require specialized skills. Therefore, the committee directs the Department of Defense Inspector General to brief the House Committee on Armed Services by March 1, 2021 on the following:

(1) A list of all solicitations and awards greater than $250,000 for fuel in all areas of contingency operations issued since January 1, 2016, including method of source selection, authorities used, and the estimated value of the awarded contracts;

(2) An assessment of whether the awardees successfully fulfilled the requirements of such contract and corrective actions taken by the Defense Logistics Agency if the contracts were not successfully fulfilled; and

(3) An assessment of whether the Defense Logistics Agency's has an adequate system in place to conduct due diligence to ensure its fuel contractors and subcontractors are meeting contractual obligations and abide by required anticorruption practices.

Water and Sewage Resiliency Gaps at Military Installations

The committee commends the Department of Defense for its efforts in identifying and addressing energy resiliency gaps at its military installations. The committee notes that water and sewage systems share many of the same characteristics as electrical utilities. The committee further notes that there may be opportunities for partnerships that facilitate system improvements for both cost avoidance and to address resiliency gaps that degrade readiness. Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a report to the House Committee on Armed Services by February 1, 2021, on water and sewage resiliency at military installations. The report shall include at a minimum the following:

(1) the degree to which the Department has assessed resiliency of these systems at military installations;

(2) a plan for phasing in these assessments at military installations;

(3) opportunities for public-private partnerships to address any resiliency gaps; and

(4) an assessment of barriers to addressing water and sewage resiliency gaps in both statute and the Department's instructions and policies.

LOGISTICS AND SUSTAINMENT ISSUES

Air Force Undergraduate Pilot Training and T–7A Redhawk Transition Plan

The committee understands that the Air Force plans to eventually transition all undergraduate pilot training from the T–38C to

the T–7A at five locations: Columbus Air Force Base, Mississippi; Laughlin Air Force Base, Texas; Randolph Air Force Base, Texas; Sheppard Air Force Base, Texas; and Vance Air Force Base, Oklahoma. The committee is concerned about potential impacts this transition may have on the Air Force's undergraduate pilot training pipeline, which could further exacerbate its pilot shortage. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services, not later than December 1, 2020, on the plan to transition undergraduate pilot training from the T–38C to the T–7A. At minimum, the briefing shall include the following elements:

(1) a schedule for the delivery of T–7A aircraft and retirement of T–38C aircraft by location;

(2) the plan and schedule for the stand-up of T–7A instructor pilot cadre;

(3) the plan and schedule for the stand-up of simulators, simulator operators, and maintenance personnel;

(4) the plan and schedule for transitioning to the new training syllabus; and

(5) an assessment of Air Force's ability to execute the transition plan without creating impacts in the undergraduate pilot training pipeline.

Army Combat Aviation Sustainment

The committee notes that Army combat aviation formations are in constant high demand. In addition, the Army's helicopter fleet is aging, can be challenging to sustain, and is expensive to operate. Over the next decade, the Army plans to modernize its current helicopter fleet with new engines and, beginning in 2030, plans to field new helicopters to replace legacy platforms. The committee is concerned that the existing UH–60 and AH–64 helicopter fleets face numerous sustainment challenges as the Army continues flying these legacy systems until fielding new helicopters. Therefore, the committee directs the Comptroller General of the United States to review the sustainment plans for the Army's current helicopter fleet. The review should address the following elements:

(1) to what extent the Army has equipped its combat aviation formations with fully mission capable aircraft to meet training requirements and warfighting demands over the past 5 years;

(2) to what extent the Army has identified and addressed challenges in sustaining its helicopter fleet at the depot- and unit-level over the past 5 years;

(3) to what extent the material condition of helicopters in Army combat aviation formations inhibit the ability to meet monthly flight hour standards for Army aviators;

(4) the Army's plans to sustain its helicopter fleet in order to meet expected demands for combat aviation formations over the next 5 years; and (5) any other matter the Comptroller General determines appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2021, on the Comptroller General's preliminary findings and present final results in a format and timeframe agreed to at the time of the briefing.

Department of Defense Warehouse Space Management

The committee is aware that in 2017, the Government Accountability Office (GAO–17–449) found that opportunities exist to reduce the Department of Defense's warehousing and distribution costs by streamlining the infrastructure footprint of the current network. As a result of this study, the Office of the Secretary of Defense, as part of the Defense Reform Initiative, established the Non-Tactical Warehouse Initiative to evaluate those opportunities and provide recommendations. The resulting study found that the Department of Defense maintains excess warehouse network capacity and redundant commercial warehouses. Additionally, the study found warehouse utilization rates well below industry averages and that multiple Department of Defense and military department process owners have poor visibility of billions of dollars in inventory as a result of inconsistent reporting and incomplete data.

Therefore, the committee directs that not later than March 1, 2021, the Undersecretary for Acquisition and Sustainment, in coordination with the military departments and Defense Logistics Agency, shall submit a report to the congressional defense committees discussing its plan to create increased shared awareness of warehouse space across the Department of Defense, and how it plans to institute policies, procedures, and metrics that will increase warehouse utilization rates across the military departments. Additionally, the report should include a discussion of technologies that will provide-real-time information to warehouse users and operators, improve global inventory visibility, and supply chain planning.

Depot Carryover

Department of Defense regulations describe the process for calculating carryover and allowable carryover at the military depots at the end of a fiscal year. These regulations require that carryover be calculated in a way that allows certain workload to be exempted. Even after exemptions, the Army has routinely exceeded allowable carryover ceilings, resulting in decrements to appropriations. While the committee believes there should be limits on the amount of carryover workload held by a depot, the committee is concerned that the current calculation of allowable carryover has indirectly affected military readiness and the ability of the depots to sustain core workload as required by section 2464 of title 10, United States Code.

In 2019, the Comptroller General of the United States reviewed three options that the Department of Defense proposed for calculating and determining allowable carryover and concluded that none fully met all the key attributes required for providing quality information to decision makers. The Comptroller General recommended that the Under Secretary of Defense for Acquisition and Sustainment develop and adopt a depot carryover metric for use by all the military departments that provides reliable, complete, consistent, and appropriate information. In commenting on the Comptroller General's report, the Department of Defense stated that it would promulgate regulations implementing the Government Accountability Office's recommendation and design a new budget exhibit to serve as a plan to establish workload carryover upper and

lower operating ranges to ensure uninterrupted workload necessary to optimize production efficiency.

The committee directs the Under Secretary of Defense for Acquisition and Sustainment, in coordination with the Under Secretary of Defense (Comptroller), to provide a briefing to the House Committee on Armed Services not later than August 30, 2020, on plans to promulgate a new carryover metric to the military departments and establish a carryover budgetary exhibit to coincide with the fiscal year 2022 budget estimate submission.

Domestically Sourced Corrosion Control

The impact of corrosion on the Department of Defense amounts to nearly $20 billion per year. Unfortunately, many of the chemicals typically used to treat corrosion are harmful to the environment. In addition, most phosphates are produced in China, making the United States dependent on foreign producers to maintain vital weapons systems and military equipment. Through advancements in synthetic biology, cleaner alternatives exist and are in use by the oil and gas industry. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by December 1, 2020, on bio-based corrosion control systems. At a minimum, the report shall contain:

(1) historical cost data for the preceding 5 years on corrosion impact to military systems;

(2) an assessment of the impact to military readiness from corrosion;

(3) an assessment of the effectiveness of commercially available bio-based corrosion control solutions compared to solutions currently in use by the military departments;

(4) an assessment of the environmental impact of commercially available bio-based corrosion control solutions compared to solutions currently in use by the military departments; and

(5) a cost assessment of commercially available bio-based corrosion control solutions compared to solutions currently in use by the military departments.

F–35 Sustainment

The committee recognizes the importance of the F–35 Lightning II program to U.S. national defense and its foreign partners. The committee is concerned that the program faces sustainment challenges in areas including repair capability, global spare parts availability and capability, mission capability, and functionality of its Autonomic Logistics Information System. Affordability concerns have led the services to identify a need to reduce total operation and sustainment costs.

Given the significance of the F–35 program to the future of tactical air for the military, the Department's need to operate and deploy the F–35 on a widespread basis in the coming years, the involvement of international partners and foreign military sales customers, and the importance of maintaining affordability, the committee directs the Comptroller General of the United States to review the sustainment efforts related to the F–35. At minimum, the review shall address the following elements:

(1) assess the status of the sustainment support strategy for the F–35, and to what extent is the program facing sustainment-related challenges;

(2) assess efforts to reduce costs and meet affordability targets related to F–35 fleet sustainment;

(3) assess military department efforts to transition to organic repair capability by standing up repair capability in their existing depots;

(4) assess the effects of F–35 engine challenges on sustainment, including engine overhauls for fielded aircraft, engine spare parts reliability, and effects of engine production quality/timeliness on sustainment;

(5) identify and assess issues contributing to higher than expected maintenance rates for the F–35, and options to increase unit-level maintenance capabilities and associated cost/readiness implications;

(6) assess the extent to which the concerns of allied partners inform the Department's decision making related to F–35 sustainment; and

(7) other items the Comptroller General determines appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2021, on the Comptroller General's preliminary findings and to present final results in a format and timeframe agreed to at the time of the briefing.

Navy and Air Force Fixed-Wing Aviation Field-Level Maintenance

The committee notes that a number of recent Government Accountability Office reports have highlighted the military services' challenges with completing field-level maintenance, which includes organizational-level and intermediate-level maintenance performed by an operational unit or at an intermediate maintenance facility. Repairs that are not conducted at the field level must eventually be completed at the depot level, which can result in slower depot maintenance times, increased costs, and reduced readiness of weapon systems.

The ability of the depots to complete fixed-wing aviation maintenance on time directly affects military readiness, as maintenance delays reduce the amount of time during which aircraft are available for training and operations. The amount of work that the depots must perform is a direct result of the condition of equipment entering the depots. Depot officials have stated that they believe the amount and quality of work performed by field-level maintainers has decreased as organizations focus on straightforward repairs while sending more work to the depots, which reduces the depots' overall throughput.

Given these issues, and the critical importance fixed-wing aircraft play in supporting readiness during both peacetime and conflict, the committee directs the Comptroller General of the United States to assess the following:

(1) the extent to which the Department of Defense's sustainment strategy for fixed-wing aviation weapon systems has relied on the use of field-level versus depot-level maintenance;

(2) the extent to which field-level maintenance is completed as required;

(3) the extent to which the tasks, skills, equipment, training, or output of field-level maintainers has changed over the past 10 years;

(4) the extent to which the Department or service policies ensure that field-level maintenance activities are conducted at the field level and not at the depot level;

(5) the extent to which the Department or service policies ensure that depot-level maintenance activities are conducted at the depot level and not transferred back to the field level; and

(6) any other related matters the Comptroller General considers appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on the Comptroller General's preliminary findings and present final results in a format and timeframe agreed to at the time of the briefing.

Navy Deferred Maintenance

The committee notes that completing required maintenance is vital for Navy aircraft carriers, ships, and submarines to reach their expected service lives and to do so economically. Deferring ship maintenance increases the costs and time required to complete maintenance in the future, straining maintenance budgets and stressing public and private shipyard capacity. In December 2019, the Comptroller General of the United States reported that the Navy continues to experience persistent and substantial maintenance delays that reduce ship availability for training and operations, hindering warfighting readiness. Further, Navy reports show that the service continues to defer essential maintenance on some ship classes, which decreases the likelihood that these vessels will reach their full service lives.

Therefore, the committee directs the Comptroller General to review deferred Navy maintenance. The review should address the following elements:

(1) the extent to which the Navy is deferring necessary depot maintenance for aircraft carriers, surface ships, and submarines, and what costs, if any, are associated with these deferrals;

(2) the extent to which the Navy has developed mitigation plans to address challenges relating to deferred maintenance;

(3) the extent, if any, to which deferred maintenance increases the risk that ships and submarines will be unable to meet their expected service lives and the potential effects this would have on future force structure; and

(4) any other matter the Comptroller General determines appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on the Comptroller General's preliminary findings and present final results in a format and timeframe agreed to at the time of the briefing.

Navy Ship Field-Level Maintenance

The committee notes that a number of recent Government Accountability Office reports have found that high operational tempo,

reductions to crew size, and organizational changes have impacted the Navy's ability to complete timely field-level maintenance, which is generally performed either by a ship's crew or at an intermediate maintenance facility. The ability of shipyards to complete maintenance on time is affected by the quality and quantity of maintenance accomplished by field-level maintainers and the amount of maintenance tasks that are deferred to the depot level. Navy officials have stated that the amount of work performed by field-level maintainers has decreased as organizations focus on straightforward repairs while sending more work to the depots, reducing their overall throughput.

The committee is concerned that the ability of ships' crews to perform and assist with maintenance at all levels has not been sufficiently retained among enlisted personnel and that maintenance is not being completed in a timely fashion at intermediate maintenance facilities. These delays directly affect military readiness by reducing the amount of time ships are available for training and operations.

Therefore, the committee directs the Comptroller General of the United States to review Navy ship field-level maintenance. The review should address the following elements:

(1) the extent to which Navy ship maintenance is performed on time and in full at the organizational and intermediate levels;

(2) the factors that contribute to maintenance delays and deferrals at the organizational and intermediate levels;

(3) the extent to which sailor training and skill proficiency is impacting organizational and intermediate-level maintenance;

(4) the extent to which operational demand contributes to the deferment of organizational and intermediate-level maintenance;

(5) the extent to which Navy mitigation plans address challenges to the full and timely performance of organizational and intermediate-level maintenance; and

(6) any other related matters the Comptroller General considers appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2021, on the Comptroller General's preliminary findings and present final results in a format and timeframe agreed to at the time of the briefing.

Pilot Program for Enhancing Ship Readiness Through Digital Techniques

The committee supports the ongoing pilot program that the American Bureau of Shipping and the Military Sealift Command (MSC) have developed to enhance the readiness of MSC vessels through a condition-based approach. This pilot program has already shown positive results in improving the availability and readiness of MSC vessels, with potential long-term cost avoidance in maintenance and repair of such vessels. The committee encourages MSC to further expand the program to other vessels under its control.

The committee also believes that the readiness of our nation's surface naval and auxiliary fleet is a critical issue that deserves enhanced attention. The committee directs the Secretary of the Navy to evaluate the use of a similar condition-based approach to cover

the surface vessel fleet through a partnership with an organization that has experience classing Navy vessels. The committee further directs the Secretary of the Navy to provide a report to the Committees on Armed Services of the Senate and the House of Representatives, not later than February 1, 2021, on the steps being taken to improve the availability and readiness of surface naval and auxiliary vessels using a condition-based approach and commercial best practices for digital methods for ship condition monitoring, vessel readiness, and maintenance planning.

Transparency in Food Ingredient Policies and Standards

The committee notes that in 2017, the Defense Logistics Agency attempted to prohibit certain ingredients from being included in food and beverages served in military food services. This prohibition was attempted without meaningful engagement with industry stakeholders or a public comment period. The committee notes that the Fiscal Year 2018 Consolidated Appropriations Act (Public Law 115–141) prohibited the Defense Logistics Agency from implementing its proposal and also required the Defense Logistics Agency to seek input from a broad group of stakeholders on all future proposed nutrition, food, or ingredient changes.

Therefore, the committee directs the Commander, Defense Logistics Agency to provide a briefing to the House Committee on Armed Services, not later than December 1, 2020, on the process it will use for proposing and enacting limitations or prohibitions on any food or beverage ingredients. At minimum, the briefing shall:

(1) provide details regarding the governing statutes, regulations, and policies governing ingredient prohibition determinations;

(2) provide detail regarding processes for scientific community engagement, to include solicitation of scientifically derived recommendations, prior to making an ingredient prohibition determination; and

(3) provide details on the process and timeline for ingredient prohibition determinations, highlighting key areas where industry stakeholders are provided the opportunity to comment and make recommendations.

United States Air Force Academy Mission Network

The committee is aware of the requirement of the U.S. Air Force Academy to upgrade its legacy information technology (IT) infrastructure. The committee understands that a robust and effective campus enterprise network is vital to the academic and military training missions of the Academy and central to its ability to develop future leaders for the nation's air and space forces. The committee also observes that, unlike other commands in the Department of the Air Force, the Academy has unique IT requirements requiring close collaboration with other accredited colleges, universities, research institutions, the National Collegiate Athletic Association (NCAA), and other public and private organizations. The committee recognizes that the mission of the Academy includes unique requirements not supported by existing Air Force IT enterprise services. However, the committee is concerned that Air Force investment in modernizing the Academy's legacy IT network infrastructure has fallen short of need, resulting in project delays and

mission impacts recently exacerbated by COVID–19 social distance requirements. Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services, no later than December 1, 2020, on the Air Force strategy to complete the modernization of the Academy's IT infrastructure within a reasonable period of time and how it plans to provide for its long term operation and sustainment.

READINESS ISSUES

Air Force T–38C Transition and Formation Landings

The United States Air Force has utilized the T–38 aircraft for almost 60 years in support of undergraduate pilot training. This aircraft has been utilized well beyond its intended service life and is due to be replaced by the T–7 aircraft beginning in 2023. The committee is aware of five T–38 mishaps over the last 3 years, including a recent mishap during an attempted formation landing that resulted in the deaths of both the student pilot and the instructor pilot. Subsequent to this fatal mishap, Air Education Training Command temporarily ceased conducting formation landings in the T–38 aircraft, and ultimately removed T–38 formation landings from the pilot training syllabus. The committee supports the decision to remove T–38 formation landings from the pilot training syllabus, and strongly recommends that the Air Force develops an accelerated plan to transition from the T–38 to the T–7 aircraft. Accordingly, the committee directs the Secretary of the Air Force to provide a report to the House Committee on Armed Services, not later than March 1, 2021, on Air Force's plan to accelerate transition from the T–38 aircraft to the T–7 aircraft. At a minimum, the report should include:

(1) Assessment of potential to accelerate procurement of the T–7 aircraft, including cost and timeline;

(2) Assessment of the supporting pilot training system to absorb additional T–7 aircraft, taking into consideration simulators, manpower, support equipment, and pilot training syllabus development;

(3) Detailed background information on why Air Education Training Command removed T–38 formation landings from the pilot training syllabus, and an assessment as to whether formation landings will be included in the T–7 pilot training syllabus.

Air Support Service Contracts

The committee notes the Department of Defense's increased use of air support contracts to help train service members and improve flexibility in meeting training requirements, while potentially reducing costs. Moreover, recent testimony by the Commander of U.S. Transportation Command and the Vice Chief of Staff of the Air Force highlights an aerial refueling tanker capacity shortfall that is exacerbated by delays with the KC–46A tanker program. The committee believes that aerial refueling tanker and tactical aviation shortfalls could potentially be mitigated through the use of contract air support services toward training missions. Therefore, the committee directs the Comptroller General of the United States to review the Department of Defense's use of contract aerial

refueling and tactical aviation services. The review should address the following elements:

(1) assess to what extent the Air Force and other services currently utilize contract aerial refueling services for training missions; historical costs associated with contract aerial refueling services for training as compared to costs associated with organic support; ability of industry to increase capacity for aerial refueling services for training missions to free up organic aerial refueling capacity that would otherwise be unavailable for operational missions;

(2) assess the total tanker support required for training missions by contract aerial refueling providers based on the Air Force's current assumption for the timeline of fielding a fully operational KC–46A;

(3) assess the extent to which the military departments and U.S. Special Operations Command utilize contracts for air support services for adversary air and close air support, and associated costs compared with other options for providing these services;

(4) assess the extent to which the Department of Defense evaluated the use and effectiveness of air support contracts to meet established training requirements;

(5) assess opportunities to gain greater efficiencies in the use of contracts for air support services across the Department to achieve training requirements; and

(6) any other matter the Comptroller General determines appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on the Comptroller General's preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

Army Briefing on Static-Line Parachuting Proficiency Requirements

The United States Army maintains a robust airborne force structure resident in both the Active Army and Army National Guard. Capable of deploying rapidly in a crisis and conducting forced entry operations by parachute assault, these forces provide the United States with a competitive military advantage in a dynamic national security environment. Soldiers assigned to these units complete a three week Basic Airborne Course at Ft. Benning, Georgia where, in their third and final week, they conduct five successful parachute jumps, are awarded their basic airborne wings, and are then qualified for assignment to airborne units. Since 1950, in order to maintain proficiency and to qualify for Parachute Duty–Hazardous Duty Incentive Pay, soldiers have been required to jump at a minimum once every three months. In 2018, the Department of Defense modified this requirement, enabling commanders in the grade of Lieutenant Colonel or higher to waive one of these four annual proficiency jumps in special circumstances to account for factors such as deployment on extended operations where it might not be possible to get all four jumps in, lack of jump equipment or aircraft, or attendance of military education or training. Even with this new authority, the vast majority of airborne soldiers are still

required to conduct one jump every three months to maintain proficiency and to qualify for monthly jump pay.

With advances in military parachuting equipment, procedures, and methods of training, it only seems appropriate that the Army reevaluate its 70 year-old basic airborne proficiency standards.

The committee directs the Secretary of the Army to brief the Committees on Armed Services of the Senate and the House of Representatives no later than December 1, 2020 on Army Static-Line Parachuting Proficiency Requirements. Elements of the briefing shall include but are not limited to:

(1) How many soldiers are currently on jump status and receiving jump pay?

(2) Of this number, how many soldiers make only four jumps a year to maintain basic proficiency?

(3) For those soldiers making more than the required four annual proficiency jumps, what is the average of annual jumps by military occupational specialty (MOS)?

(4) Recent statistics on the numbers and types of parachute accidents and injuries based on a soldier's military occupational specialty (MOS), unit of assignment, or overall parachute proficiency (i.e., number of jumps or months/years on jump status).

(5) How does the Army review its basic airborne proficiency requirements and when was the last time a comprehensive evaluation was conducted? What were the recommendations from the last evaluation?

(6) What are the basic airborne proficiency requirements for Navy, Marine Corps, and Air Force non-special operations service members assigned to airborne billets?

(7) What are the advantages and disadvantages of conducting proficiency jumps in a shorter time period other than the current quarterly requirement?

(8) What are the cost and resource implications (including aircraft availability and usage) if the Army adopted a shorter timeframe for proficiency jumps or if the number of required proficiency jumps were reduced?

(9) With the advances in simulations, virtual training environments and systems, and the promise of artificial intelligence, how practical would it be to replace some of the required proficiency jumps with some form of simulation or virtual training device?

(10) Are there any plans for the Army to re-evaluate the requirement for five airborne infantry brigade combat teams (IBCTs) and supporting forces? How do parachute assaults fit into the Army's doctrine for fighting in the current strategic environment against near-peer competitors with sophisticated, layered air-defense architectures.

(11) Operationally, how often have static-line airborne operations been used in the last decade.

(12) Have there been any recent studies on the numbers and types of parachute injuries based on a soldier's military occupational specialty (MOS), unit of assignment, or overall parachute proficiency (i.e., number of jumps or months/years on jump status)?

(13) What are the costs and injury rates of West Point and ROTC cadets permitted to attend Airborne School? Over the last 10 years, what is the rate of these cadets that go on to serve in airborne units?

(14) Are there instances where we send officers and soldiers to airborne school who are not on orders assigning them to an airborne unit or position that requires airborne qualification? If so, how many of these officers and soldiers fall into this category on an annual basis?

Army Sustainable Readiness Model

The Sustainable Readiness Model is the Army's force generation concept to build and maintain readiness across the total force while meeting global requirements. Under the Sustainable Readiness Model, the Army's objective is to maintain 66 percent of Active Duty brigade combat teams and 33 percent of Reserve Component brigade combat teams in a combat-ready status to respond to any global contingency. The committee is concerned that training requirements needed to maintain high levels of readiness for a large portion of the Army may not be sustainable and could place an unnecessary strain on the force. Senior Army civilian and military leaders may share this concern and the committee is aware that the Commander of U.S. Army Forces Command is currently conducting a review of the Sustainable Readiness Model and the training requirements associated with this force generation model.

Therefore, the committee directs the Chief of Staff of the Army to provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on changes to the Sustainable Readiness Model. At a minimum, the briefing shall include the following elements:

(1) a summary of the findings and recommendations from the U.S. Army Forces Command review of the Sustainable Readiness Model and training requirements;

(2) an overview of changes being made to the Sustainable Readiness Model, or the training requirements associated with this force generation model, and a timeline for the implementation of these changes;

(3) an assessment for how these changes may impact budget, materiel, and manpower requirements; and

(4) an assessment for how these changes will affect the overall readiness of the Army.

Briefing on Deployment of Next Generation 911 on Military Installations

The committee recognizes the benefits of Next Generation 911 systems that allow Public Safety Answering Points (PSAPs) to accept text messages, images, and videos, as well as voice calls. These additional means of communicating with 911 could help dispatchers to more quickly understand and respond to an emergency situation and would provide important alternatives for emergency reporting by individuals experiencing intimate partner violence. The committee is concerned that none of the 205 PSAPs operated by the military services support Next Generation 911 service.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by January 1, 2021, on plans for updating 911 services at military installations located in the United States, including the feasibility, cost, and benefits of implementing Next Generation 911 services.

Department of Defense Law Enforcement Training and Standards

The committee recognizes the important role that Department of Defense military police, civilian police, and security guards play in maintaining the security of military installations and safety for military and civilian personnel and their families. With the exception of service-unique requirements, the committee believes these Department of Defense law enforcement professionals strongly benefit from developing and maintaining common training courses, certification requirements, and professional standards. The committee recognizes that Department of Defense Instruction (DODI) 5525.15, updated on June 18, 2019, established policy, assigned responsibility, and provided procedures for law enforcement standards and training, physical fitness standards, and certification for investigative analysts. The committee directs the Under Secretary of Defense for Intelligence to provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on the implementation of DODI 5525.15. At minimum, the briefing shall include the following elements:

(1) the status of the Department of Defense Peace Officer Standards and Training (POST) Commission developing and certifying law enforcement training standards to meet proficiency requirements for Department of Defense law enforcement professionals;

(2) how existing military and civilian law enforcement training courses, schools, and programs are being updated to adopt common training standards;

(3) the status of certifying all basic level law enforcement officer training by the Federal Law Enforcement Training Accreditation Organization;

(4) the unique service-specific training requirements and standards that will be maintained beyond the common training standards; and

(5) an assessment of whether the consolidation of law enforcement training courses, schools, and programs would benefit or detract from efforts to implement DODI 5525.15.

Directed Readiness Tables and Readiness Reporting

The committee has appreciated the opportunity to work with the Department of Defense to revise section 482 of title 10, United States Code, to update the statutory requirements for the Readiness Report to Congress. The committee notes that the Readiness Report to Congress is one of the foundational documents that supports congressional oversight of the current state of military readiness, the contributing factors to specific readiness challenges, and the mitigations to these challenges. The committee notes that in recent reports, the Department of Defense has shifted away from reporting readiness based on the C-ratings of major force elements and has started measuring readiness based on the ability of the military services to meet the force requirements of the Directed Readiness Tables.

The committee notes that the Directed Readiness Tables serve as a good force planning construct to manage the steady-state demands of geographic combatant commanders on an annual basis. However, the committee is concerned that readiness reporting based on the Directed Readiness Tables does not allow for meas-

urement of progress towards the readiness recovery goals of the military services, does not align with how the military services track and report readiness, and does not provide a holistic picture of military readiness, especially in the context of preparedness to conduct a major contingency operation. Therefore, the committee encourages the Department of Defense to return to reporting based on C-ratings of major force elements in the Readiness Report to Congress required by section 482 of title 10, United States Code.

Dynamic Force Employment

The 2018 National Defense Strategy states that defeating or deterring long-term strategic competitors is a different challenge than regional adversaries that were the focus of prior strategies. In order to meet this changing environment, the strategy stated that the Department of Defense will adopt a new concept known as Dynamic Force Employment, using scalable options and quick deployments rather than traditional rotational deployments to introduce unpredictability for potential adversaries. However, the committee notes that there is not a common framework by which all of the services describe Dynamic Force Employment, resource Dynamic Force Employment in budget requests, or address Dynamic Force Employment in force generation and sustainment models. Therefore, the committee directs the Comptroller General of the United States to review the Dynamic Force Employment construct. The review should address the following elements:

(1) to what extent Dynamic Force Employment is aligned with the Department of Defense's readiness rebuilding efforts;

(2) to what extent each service defines and considers Dynamic Force Employment in force generation and sustainment models;

(3) to what extent Dynamic Force Employment is utilized in the Global Force Management process and resources Dynamic Force Employment in the budget request;

(4) to what extent the services and combatant commands are prepared to execute Dynamic Force Employment and how this new concept will impact readiness across the services and combatant commands; and

(5) any other matter the Comptroller General determines appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on the Comptroller General's preliminary findings and present final results in a format and timeframe agreed to at the time of the briefing.

Exercise Northern Strike

The committee notes that Northern Strike is an accredited 21-day exercise sponsored by the National Guard Bureau. This Joint Combined Arms Live Fire Exercise brings together nearly 7,000 participants annually from the United States and North Atlantic Treaty Organization partner countries. In the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120), the committee directed the Chief of the National Guard Bureau to provide a report and the cost of Exercise Northern Strike and the anticipated funding programmed for the

exercise over the Future Years Defense Program (FYDP). According to the report provided to the committee on October 2, 2019, anticipated funding for future Northern Strike exercises was $20.7 million per year over the FYDP. Furthermore, the committee notes that the budget request for fiscal year 2021 includes funding for Exercise Northern Strike. The committee is supportive of exercises, such as Northern Strike, that bring together United States and international partners to train together and build readiness and interoperability.

High-Speed Test Track Infrastructure Requirements

The committee recognizes the importance of maintaining high-speed test track capability to facilitate the transition from laboratory developmental work to operational employment. The committee notes the need for highly accurate, realistic testing environments to bring new technologies online. The committee is concerned about the adequacy of existing facilities to ensure continued access to this type of testing. Accordingly, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by February 1, 2021, on the adequacy of its high-speed test track infrastructure both for current requirements and for future testing of next-generation systems. At a minimum the report shall survey current high-speed test track infrastructure and provide an overview of necessary infrastructure and technology investments to ensure viability into the future.

Marine Corps Aviation Readiness and Sustainment

The committee notes the age of several rotary wing airframes in the Marine Corps fleet, which are experiencing long-term downtime and readiness issues. The committee encourages the Marine Corps to embark upon additional reset programs, as necessary, to revitalize and refresh the fleet. The committee notes the success of similar resets, including the ongoing CH–53 reset and resets conducted by the U.S. Army, which have improved reliability and readiness. The committee directs the Commandant of the United States Marine Corps to brief the committee, not later than September 30, 2020, on the status of the Marine Corps rotary wing fleet and all planned reset programs for the fleet. In particular, the briefing shall address:

(1) the state of the UH–1 Iroquois and AH–1 Cobra fleets;

(2) funding needs for reset activities;

(3) strategies to maintain reset throughput in a timely manner; and

(4) an acquisition strategy to maintain cost, schedule, and performance in the reset program.

Personnel Parachute and Cargo Inventory Management

The Committee directs the Secretary of the Army to submit a report to the House Armed Services Committee by December 1, 2020 assessing the system used by U.S. Army Parachute Riggers to record their activities with respect to the use, inspection, inventory, maintenance, and repair of personnel parachutes, cargo parachutes and other airdrop equipment throughout a system's life-cycle. The report shall address the following elements:

(1) The current record keeping, tracking, reporting and information retrieval system employed by Parachute Riggers with regard to personnel parachutes and airdrop equipment;
(2) An assessment of the adequacy of the tracking system and a history of efforts to update the tracking system;
(3) A market assessment of automated programs currently available for parachute system tracking by Parachute Riggers;
(4) A statement of the Army's current plans, if any, to upgrade the tracking system used by Parachute Riggers;
(5) A schedule associated with the activities set forth in (4).

Readiness of Firefighting Infrastructure and Equipment

The committee is concerned that the firefighting infrastructure of the military departments is aging, in poor condition, and may not be properly sized or configured to support firefighting personnel and equipment. To help address this issue, the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) contained a provision authorizing the Secretaries of the military departments to carry out military construction projects, to include the construction of new fire stations, to enhance force protection and safety on military installations. With only three fire stations being constructed through this authority, and the Future Years Defense Program (FYDP) submitted with the budget request only including funding for the construction of four additional fire stations, the committee is concerned that the military departments continue to assume risk in this area. In addition to the age, condition, and configuration of firefighting infrastructure, the committee is concerned that the condition and readiness of firefighting vehicles and equipment may also adversely impact fire, crash, and rescue operations at military installations.

Therefore, the committee directs the Secretaries of the military departments to each submit a report to the House Committee on Armed Services, not later than March 1, 2021, regarding the condition, capacity, and readiness of their firefighting infrastructure, vehicles, and equipment. At minimum, the report shall include the following elements:
(1) an assessment of the current condition, capacity, and configuration of firefighting infrastructure, vehicles, and equipment across the enterprise;
(2) an assessment of the risk to firefighting operations and readiness due to the current state of firefighting infrastructure, vehicles, and equipment across the enterprise;
(3) an overview of planned investments across the FYDP to mitigate identified issues and risks associated with firefighting infrastructure, vehicles, and equipment; and
(4) how the required phase-out by 2024 of firefighting foam containing per- and polyfluoroalkyl substances is impacting the investment strategy, particularly with respect to firefighting vehicles.

Report on the Air Force's Use of Executive Decision Model Analytics

The committee supports the Air Force Education and Training Command's (AETC) use of the Executive Decision Model (EDM) in F–16 Formal Training Units (FTU) for predictive analytics to

achieve improvements in aircrew training production, aircraft readiness, and energy conservation. The committee believes EDM has provided important advantages to help address AETC production challenges and the USAF pilot shortage. Therefore, the committee directs the Secretary of the Air Force provide a briefing to the House Armed Services Committee by January 31, 2021 on the Air Force's strategy to expand EDM predictive analytics for use in other USAF Mission Design Series aircraft to include the F–35.

Surface Navy Seamanship and Skills Assessment

The committee recognizes that the Navy has made some significant improvements to the training curriculum for surface warfare officers. However, the committee continues to have concerns that enlisted training has not seen the same emphasis. In an effort to fully understand the impact of recent changes to officer surface warfare training and the current state of enlisted training, the committee believes a holistic assessment should be conducted. The goal of the assessment would be to conduct a top-to-bottom review of how the surface Navy qualifies its topside watchstanders involved in seamanship and navigation. The assessment should include Personal Qualification Standards, Watch Team Replacement Plans methods of simulator training at various officer and enlisted milestones, as well as at-sea assessments evaluating all Mobility Navigation/Seamanship evolutions as outlined in the current surface force training and readiness manual with attention to special evolutions while restricted maneuvering doctrine is in effect. Of particular interest is an objective assessment of how we qualify/requalify officers of the deck underway, as well as the master shiphandling skills expected of commanding officers and executive officers at sea. The goal of this study is to obtain an accurate, objective outside assessment of the status of seamanship skills in the surface Navy.

Therefore, the committee directs the Secretary of the Navy to contract with a federally funded research and development center to provide a report to the congressional defense committees not later than February 1, 2022, on a top-down assessment of Navy surface warfare training. The assessment should review both officer and enlisted training.

OTHER MATTERS

Civilian Participation in War Games

The committee notes the important role that war games play in testing concepts, identifying capability gaps, and informing strategic and tactical decisions for contingency operations and other scenarios. War games help inform senior leadership of the Department of Defense on investment requirements and policy decisions related to the national security of the United States. However, the committee is concerned that war games organized by the Joint Staff, combatant commands, and military departments do not adequately include senior Department of Defense civilian leadership or representatives from other departments and agencies of the Federal Government that may influence policies or actions in the war game. Therefore, the committee directs the Secretary of Defense to

provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on the involvement of relevant departments and agencies of the Federal Government. At minimum, the briefing shall address:

(1) a list of formal war games conducted by the Joint Staff, combatant commands, and military departments in calendar year 2020;

(2) a list of senior Department of Defense civilians and representatives from other departments and agencies of the Federal Government that participated in each formal war game conducted in calendar year 2020; and

(3) plans for inclusion of senior Department of Defense civilians and representatives from other departments and agencies of the Federal Government in formal war games planned for fiscal year 2021.

Community Integration Programs

The committee encourages the military departments to create and maintain strong community outreach programs at military installations to ensure installations and ranges remain good neighbors through strong relationships. The committee notes that where the installation takes a proactive, collaborative approach to informing the community about its programs and addresses local stakeholder concerns in a timely fashion, positive outcomes that preserve the installation's ability to carry out its missions are more likely. The committee further notes that the more complex the issues, the more early, active engagement is critical to ensuring a positive outcome and avoiding negative readiness impacts. As such, the committee encourages the Department of Defense to make every effort to identify and share best practices such as the Honorary Commanders Program across service lines. These programs promote community involvement with their military installation neighbors and promote effective consultation and collaboration between the installation and the surrounding community.

Counter Drone Center of Excellence

The Committee notes that the threat posed by small drones to our warfighters and civilian population has grown exponentially over the past several years. Current requirements across the military services demonstrate a need for comprehensive counter UAS capabilities. Concurrently, the nation faces a shortage of engineering graduates with the skills, clearances and education necessary in these specialized fields. Each military service is pursuing counter UAS research, development, test and engineering activities that are independent of each other creating a need to coordinate efforts across industry, academia and government agencies.

The Committee directs the Under Secretary of Defense for Research and Engineering to provide a briefing to the House Committee on Armed Services not later than October 1, 2020 on the advisability and feasibility of establishing a Counter Drone Center of Excellence. At minimum, the briefing shall include information on the degree to which the military services are coordinating efforts to rapidly develop and test counter drone capabilities and the ability of the military services to attract a skilled, cleared and trained workforce to develop and test this technology. The briefing shall

also include an evaluation of whether a Counter Drone Center of Excellence would enable better coordination of effort and more efficient use of resources across the services to develop, test and field counter drone technology.

Military Working Dogs

The committee recognizes that the Department of Defense Military Working Dog programs, carried out by the Air Force as executive agent, are in need of a dedicated line of accounting and therefore supports Department of Defense efforts to establish one. A dedicated line of accounting will more accurately capture the facility and resource requirements necessary to successfully and efficiently provide military working dogs to all services.

Mishap Reporting and Data Analysis

The committee notes that the Government Accountability Office (GAO) has identified areas for improvement and made recommendations regarding the Department of Defense's approach for collecting, reporting, and analyzing tactical combat vehicle mishap data. The GAO reported that the mishap data collected by the military departments' safety centers is not standardized, which inhibits the Department from conducting a department-wide analysis of mishap trends. The GAO also reported that the military departments have conducted limited data analysis of the factors that contribute to mishaps, due to issues such as incomplete mishap investigation data, inadequate mishap databases, and limited personnel to examine the mishap data more completely. Further, each of the military departments is responsible for the notification, investigation, and reporting of mishaps. The Office of the Secretary of Defense (OSD) is responsible for collecting and analyzing mishap data from the safety centers, and providing the Secretary of Defense and other Department of Defense leaders with information on risks, recommendations for mitigation strategies, and lessons learned. However, GAO has reported that the military departments' safety centers are not reporting mishap causal factors as required.

Given concerns about the recent instances of training mishaps involving both military aircraft and tactical ground vehicles, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services, not later than December 1, 2020, that includes the following elements:

(1) a detailed description of OSD and military department responsibilities for collecting and analyzing mishap data, including responsibilities for aircraft and tactical vehicle mishap data;

(2) the steps taken to assess whether the data elements collected during mishap investigations are sufficient for conducting analyses to identify mishap trends;

(3) the actions taken to ensure standardized data is collected during the investigations and reported within the Department; and

(4) other steps taken or planned to improve the accuracy and completeness of mishap record-keeping and analysis of any contributing factors, to include any actions taken to address GAO's prior recommendations.

Navy Museum and Historical Exchanges

The committee notes the authority granted to the Department of Defense to conduct historical exchanges under section 2572 of title 10, United States Code. The committee also recognizes that the Secretary of the Navy promulgated the latest set of museum exchange guidelines through Secretary of the Navy Instruction 5755.2B on April 1, 2019. The committee believes proper and effective utilization of this authority can be a tremendous benefit to the Navy's museum system. Furthermore, it gives the American public an opportunity to honor the men and women who sacrificed to protect our freedom. Additionally, the committee recognizes the successful private sector effort to recover, restore, and present artifacts under section 2572 of title 10, United States Code, particularly aircraft, to the American public.

The committee is concerned about the length of time required by the Naval Heritage and History Command to consider historical exchange proposals and that these delays disincentivize potential private sector partners. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services, not later than September 30, 2020, to discuss the issue of historical exchanges under section 2572 of title 10, United States Code. At minimum, the briefing shall address the following:

(1) an overview of the approval and oversight process for private sector historical exchange proposals;

(2) the number of exchanges approved by Navy during the last 5 fiscal years, the number currently under consideration, metrics for the timeliness of processing requests, and the average time from submission to adjudication for the data elements above;

(3) the Secretary's plan to oversee implementation of the guidelines in Secretary of the Navy Instruction 5755.2B as they relate to the authority granted under section 2572 of title 10, United States Code;

(4) the Navy's manpower plan to review and approve historical exchange proposals;

(5) an assessment of the feasibility of providing a public portal for submission of historical exchange proposals;

(6) an assessment of the feasibility of creating a publicly accessible list of available Navy inventory eligible for the historical exchange program; and

(7) an assessment of the feasibility and advisability of returning the responsibility for historical exchanges to Naval Air Systems Command.

United States Coast Guard Defense Readiness Resource Allocation

The committee notes that the United States Coast Guard is not reimbursed by the Department of Defense for its defense readiness mission activities, and that its annual appropriation for non-emergency defense-related activities has not changed since 2001. Given the importance of the Coast Guard to defense operations and global combatant command priorities, the committee notes the importance of understanding the Coast Guard's expenditures to support Department of Defense activities. Therefore, the committee directs the Comptroller General of the United States to review the allocation

of resources by the Coast Guard to support its defense readiness mission. The review should address the following elements:

(1) an estimate of all expenses related to the Coast Guard's coordination, training, and execution of defense readiness mission activities in its capacity as an armed force in support of Department of Defense national security operations and activities;

(2) an assessment of how the Coast Guard's defense readiness mission activities are generated;

(3) funding levels transferred by the Department of Defense or otherwise provided to the Coast Guard in support of the Coast Guard's defense readiness mission for each of the past 10 fiscal years;

(4) the number of Coast Guard detachments assigned in support of the Coast Guard's defense readiness mission for each of the past 10 fiscal years;

(5) an assessment of the extent to which Department of Defense reimbursements for defense readiness enable the Coast Guard to maintain its non-defense mission readiness and operational capabilities; and

(6) an assessment of the extent to which the Coast Guard direction of resources to support the Department of Defense mission impacts its non-defense mission readiness and operational capabilities.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2021, on the Comptroller General's preliminary findings and present final results in a format and timeframe agreed to at the time of the briefing.

LEGISLATIVE PROVISIONS

SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 301—Authorization of Appropriations

This section would authorize appropriations for operation and maintenance activities at the levels identified in section 4301 of division D of this Act.

SUBTITLE B—ENERGY AND ENVIRONMENT

Section 311—Military Aviation and Installation Assurance Clearinghouse for Review of Mission Obstructions

This section would amend the procedures for Department of Defense review of proposed wind energy projects by requiring the Department of Defense to issue a notification to an applicant and the applicable Governor of a finding of no adverse impact when appropriate. This section also strikes references to Massachusetts Institute of Technology's role in determining project offset distances.

Section 312—Military Aviation and Installation Assurance Clearinghouse for Review of Mission Obstructions

This section would amend the procedures for Department of Defense review of proposed wind energy projects by requiring the Department of Defense to issue a notification to an applicant and the

applicable Governor of a finding of no adverse impact when appropriate.

Section 313—Agreements to Limit Encroachments and Other Constraints on Military Training, Testing, and Operations

This section would amend section 2684a of title 10, United States Code, to provide a technical amendment to the Readiness and Environmental Protection Integration Program that clarifies eligible entity participation.

Section 314—Modification of Department of Defense Environmental Restoration Authorities to Include Federal Government Facilities Used by National Guard

This section would amend section 2707(e) of title 10, United States Code, to modify defense environmental restoration authorities to allow them to be used by the National Guard.

Section 315—Increased Transparency through Reporting on Usage and Spills of Aqueous Film-Forming Foam at Military Installations

This section would amend chapter 160 of title 10, United States Code, to require the Department of Defense to provide congressional notification of all releases of PFOS- and PFOA-containing fire-fighting foam.

Section 316—Replacement of Non-Tactical Motor Vehicles at the End of Service Life with Electric or Hybrid Motor Vehicles

This section would amend section 2922g of title 10, United States Code, to require the Department of Defense to maximize to the extent practicable its use of hybrid, plug-in hybrid, and fully electric vehicles for non-combat uses through replacement of vehicles at the end of their lease or service period.

Section 317—Budgeting of Department of Defense Relating to Operational Energy Improvement

This section would create a budget line for operational energy requirements.

Section 318—Assessment of Department of Defense Operational Energy Usage

This section would require the Secretary of Defense to enter into an agreement with a federally funded research and development center to conduct an assessment of Department of Defense operational energy usage.

Section 319—Improvement of the Operational Energy Capability Improvement Fund of the Department of Defense

This section would realign the Operational Energy Capability Improvement Fund under the Under Secretary of Defense for Acquisition and Sustainment.

Section 320—Five-Year Reviews of Containment Technologies Relating to Red Hill Bulk Fuel Storage Facility

This section would require the Department of the Navy to conduct 5-year reviews of the best available technologies for containment at Red Hill Bulk Fuel Storage Facility.

Section 321—Limitation on Use of Funds for Acquisition of Furnished Energy for Rhine Ordnance Barracks Army Medical Center

This section would require the Secretary of Defense to submit a certification that none of the energy used by Rhine Ordnance Barracks Army Medical Center was sourced from the Russian Federation.

Section 322—Requirement to Update Department of Defense Climate Change Roadmap

This section would require the Department of Defense to update the 2014 Department of Defense Climate Change Roadmap by February 1, 2022.

Section 323—Comptroller General Report on Department of Defense Installation Energy

This section would require the Comptroller General of the United States to submit a report to the House Committee on Armed Services on Department of Defense progress toward meeting net zero installation energy goals.

Section 324—Department of Defense Report on Emissions Levels

This section would require the Secretary of Defense to submit a report on its total emissions levels for the last 10 fiscal years.

Section 325—Objectives, Performance Standards, and Criteria for Use of Wildlife Conservation Banking Programs

This section would require the Secretary of the Interior to work through the United States Fish and Wildlife Service to issue regulations related to wildlife conservation banking.

Section 326—Offshore Wind Energy Development, Morro Bay, California

This section would require all interaction on behalf of the Navy with the California Energy Commission, Federal agencies, State and local governments, and potential energy developers regarding proposed offshore wind energy off the Central Coast of California to be performed through the Office of the Under Secretary of Defense for Acquisition and Sustainment. In addition, this section would prohibit the Secretary of Defense from issuing a final offshore wind assessment that proposes wind exclusion areas or objecting to an offshore energy project in the Central Coast of California that has filed for review by the Military Aviation and Installations Assurance Clearinghouse until providing a required briefing.

Section 327—Long-Duration Demonstration Initiative and Joint Program

This section would authorize the Director of the Environmental Security Technology Certification Program of the Department of Defense to establish a demonstration initiative composed of demonstration projects focused on the development of long-duration energy storage technologies.

Section 328—Prizes for Development of Non-PFAS-Containing Fire-Fighting Agent

This section would create a prize program to incentivize innovation in development of a non-PFAS-containing fire-fighting agent.

Section 329—Survey of Technologies for Department of Defense Application in Phasing Out the Use of Fluorinated Aqueous Film-Forming Foam

This section would require the Department of Defense to survey non-firefighting agent technologies that could facilitate execution of the required 2024 phase-out of fluorinated aqueous film-forming foam.

Section 330—Interagency Body on Research Related to Per- and Polyfluoroalkyl Substances

The section would establish an interagency working group to coordinate Federal research and development activities related to per- and polyfluoroalkyl substances.

Section 331—Restriction on Procurement by Defense Logistics Agency of Certain Items Containing Perfluoroalkyl Substances and Polyfluoroalkyl Substances

This section would prohibit the Director of the Defense Logistics Agency from procuring certain items containing perfluoroalkyl and polyfluoroalkyl substances effective one year after the date of the enactment of this Act.

Section 332—Standards for Removal or Remedial Actions with Respect to PFOS or PFOA Contamination

This section would require the Secretary of Defense to meet or exceed the most stringent standards between an enforceable State standard under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA), an enforceable Federal standard under CERCLA, or a health advisory under the Safe Drinking Water Act when performing removal or remediation actions of PFOS or PFOA contamination from Department of Defense or National Guard activities found in drinking water or in groundwater that is not currently used for drinking water.

Section 333—Research and Development of Alternative to Aqueous Film-Forming Foam

This section would require the Secretary of Defense, acting through the National Institute of Standards and Technology and in consultation with other stakeholders and Federal agencies, to

award grants and carry out other activities related to fluorine-free alternatives to aqueous film-forming foam.

Section 334—Notification to Agricultural Operations Located in Areas Exposed to Department of Defense PFAS Use

This section would require the Secretary of Defense, in consultation with the Secretary of Agriculture, to provide notifications to any agricultural operation located within 10 square miles of a location where covered PFAS has been detected in groundwater, hydrologically linked to a local water source, and is suspected to be, or due to a positive test known to be, the result of the use of PFAS at any installation of the Department of Defense located in the United States or any State-owned facility of the National Guard.

Section 335—Public Disclosure of Results of Department of Defense Testing for Perfluoroalkyl or Polyfluoroalkyl Substances

This section would require the Secretary of Defense to publicly disclose the results of any testing for perfluoroalkyl or polyfluoroalkyl substances conducted on military installations or formerly used defense sites.

SUBTITLE C—LOGISTICS AND SUSTAINMENT

Section 351—National Defense Sustainment and Logistics Review

This section would require the Secretary of Defense to conduct a comprehensive examination and submit a report on the sustainment and logistics requirements necessary to support the national military strategy.

Section 352—Extension of Sunset Relating to Charter Air Transportation Services

This section would amend section 9515(k) of title 10, United States Code, to extend the minimum business guarantee for air carriers participating in the Civil Reserve Air Fleet program from December 31, 2020, to December 31, 2025.

Section 353—Additional Elements for Inclusion in Navy Ship Depot Maintenance Budget Report

This section would modify the Navy Ship Depot Maintenance Report required by section 363(b) of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) to include the execution of the planned schedule categorized by class of ship and to require a report on the Secretary's progress implementing the recommendations of GAO Report 20–370.

Section 354—Modification to Limitation on Length of Overseas Forward Deployment of Naval Vessels

This section would make technical changes to limitations on the length of time a ship can be in a forward deployed naval forces status.

Section 355—Independent Advisory Panel on Weapon System Sustainment

This section would require the Secretary of Defense to establish an independent advisory panel to conduct a review and make recommendations related to the weapon system sustainment ecosystem.

Section 356—Biannual Briefings on Status of Shipyard Infrastructure Optimization Plan

This section would direct the Secretary of the Navy to provide a briefing to the congressional defense committees every 6 months on the status of implementation of the Shipyard Infrastructure Optimization Plan.

Section 357—Materiel Readiness Metrics and Objectives for Major Weapon Systems

This section would amend section 118 of title 10, United States Code, to require the Department of Defense to develop materiel readiness metrics and objectives for major weapon systems, to regularly review and update the metrics and objectives, and report on them with the annual budget request.

SUBTITLE D—MUNITIONS SAFETY AND OVERSIGHT

Section 361—Chair of Department of Defense Explosive Safety Board

This section would amend section 172 of title 10, United States Code, to codify the responsibilities of the Department of Defense Explosive Safety Board chairman, executive director, and staff. It also requires the Under Secretary of Defense to certify that the board positions, including the chairman, have been filled by military officers before more than 75 percent of authorized funding may be obligated or expended by the Office of the Under Secretary of Defense for Acquisition and Sustainment.

Section 362—Explosive Ordnance Disposal Defense Program

This section would amend section 2284 of title 10, United States Code, to clarify that the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict shall be responsible for the direction, coordination, and integration of the Explosive Ordnance Disposal Defense Program, and to specify which organizations within the Department of Defense the Assistant Secretary shall coordinate with on specific activities. In addition, this section would require the Secretary of Defense to submit a report on the establishment and organization of the Explosive Ordnance Disposal Defense Program.

Section 363—Assessment of Resilience of Department of Defense Munitions Enterprise

This section would require the Secretary of Defense to enter into an agreement with a federally funded research and development center to conduct an assessment of the resilience of the Department of Defense munitions enterprise.

Section 364—Report on Safety Waivers and Mishaps in Department of Defense Munitions Enterprise

This section would require the Secretary of Defense to include with the President's budget a report on safety waivers and mishaps in the Department of Defense munitions enterprise.

SUBTITLE E—OTHER MATTERS

Section 371—Pilot Program for Temporary Issuance of Maternity-Related Uniform Items

This section would authorize the Defense Logistics Agency to create a pilot program to issue maternity uniforms to pregnant service members at no cost to the service member. The authority to carry out the pilot program would terminate on September 30, 2026.

Section 372—Servicewomen's Commemorative Partnerships

This section would authorize the Secretary of the Army to enter into a contract, partnership, or grant with a non-profit organization for the purpose of providing financial support for the maintenance and sustainment of infrastructure and facilities at military service memorials and museums that highlight the role of women in the military.

Section 373—Biodefense Analysis and Budget Submission

This section would require the Director of the Office of Management and Budget to conduct a comprehensive analysis of Federal biodefense programs and to develop and submit to Congress annually with the President's budget request an integrated biodefense budget submission and its supporting analysis.

TITLE IV—MILITARY PERSONNEL AUTHORIZATIONS

ITEMS OF SPECIAL INTEREST

Impact of U.S. Population Trends on National Guard Force Structure

The committee notes the implementation guidance for the National Guard's National Defense Strategy states, "Demographic and economic trends within the U.S. will challenge our ability to recruit and retain quality Guardsmen over the next several years. Meeting this challenge is fundamental to our long-term success . . . However, we must also be prepared to reposition National Guard force structure to the parts of the nation where we can successfully recruit to fill it." Therefore, the committee directs the Chief of the National Guard Bureau to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than December 1, 2020, to determine if population, demographic, and economic trends are impacting the ability of the National Guard to recruit and retain qualified individuals to fulfill mission requirements as well as support the citizens of States with respect to title 32 National Guard civil support missions. The report shall include recommendations to address these concerns as

well as force structure changes to address these vulnerabilities. The study should include Air and Army National Guard units and historical and projected population growth.

LEGISLATIVE PROVISIONS

SUBTITLE A—ACTIVE FORCES

Section 401—End Strengths for Active Forces

This section would authorize the following end strengths for Active Duty personnel of the Armed Forces as of September 30, 2021:

Sec. 401.

Service	FY 2020 Authorized	FY 2021		Change from	
		Request	Committee Recommendation	FY 2021 Request	FY 2020 Authorized
Army	480,000	485,900	485,900	0	5,900
Navy	340,500	347,800	347,800	0	7,300
USMC	186,200	184,100	184,100	0	−2,100
Air Force	332,800	327,266	327,266	0	−5,534
Space Force	0	6,434	6,434	0	6,434
DOD Total	1,339,500	1,351,500	1,351,500	0	12,000

Section 402—Revisions in Permanent Active Duty End Strength Minimum Levels

This section would establish new minimum Active Duty end strengths for the Army, Navy, Marine Corps, Air Force, and Space Force as of September 30, 2021. The committee recommends 485,900 as the minimum Active Duty end strength for the Army, 347,800 as the minimum Active Duty end strength for the Navy, 184,100 as the minimum Active Duty end strength for the Marine Corps, 327,266 as the minimum Active Duty end strength for the Air Force, and 6,434 as the minimum Active Duty end strength for the Space Force.

Section 403—Modification of the Authorized Number and Accounting Method for Senior Enlisted Personnel

This section would amend section 517 of title 10, United States Code, to change the method of calculating the authorized number of senior enlisted members in the grades of E–8 and E–9 from the daily average to an authorized end strength, and would increase the authorized number of members in the grade of E–8 from 2.5 percent to 3 percent of the total number of enlisted members.

SUBTITLE B—RESERVE FORCES

Section 411—End Strengths for Selected Reserve

This section would authorize the following end strengths for Selected Reserve personnel, including the end strength for Reserves on Active Duty in support of the Reserves, as of September 30, 2021:

Sec. 411.

Service	FY 2020 Authorized	FY 2021		Change from	
		Request	Committee Recommendation	FY 2021 Request	FY 2020 Authorized
Army National Guard	336,000	336,500	336,500	0	500
Army Reserve	189,500	189,800	189,800	0	300
Navy Reserve	59,000	58,800	58,800	0	−200
Marine Corps Reserve	38,500	38,500	38,500	0	0
Air National Guard	107,700	108,100	108,100	0	400
Air Force Reserve	70,100	70,300	70,300	0	200
DOD Total	800,800	802,000	802,000	0	1,200
Coast Guard Reserve	7,000	7,000	7,000	0	0

Section 412—End Strengths for Reserves on Active Duty in Support of the Reserves

This section would authorize the following end strengths for Reserves on Active Duty in support of the Reserves as of September 30, 2021:

Sec. 412.

Service	FY 2020 Authorized	FY 2021		Change from	
		Request	Committee Recommendation	FY 2021 Request	FY 2020 Authorized
Army National Guard	30,595	30,595	30,595	0	0
Army Reserve	16,511	16,511	16,511	0	0
Navy Reserve	10,155	10,215	10,215	0	60
Marine Corps Reserve	2,386	2,386	2,386	0	0
Air National Guard	22,637	25,333	25,333	0	2,696
Air Force Reserve	4,431	5,256	5,256	0	825
DOD Total	86,715	90,296	90,296	0	3,581

Section 413—End Strengths for Military Technicians (Dual Status)

This section would authorize the following end strengths for military technicians (dual status) as of September 30, 2021:

Sec. 413.

Service	FY 2020 Authorized	FY 2021		Change from	
		Request	Committee Recommendation	FY 2021 Request	FY 2020 Authorized
Army National Guard	22,294	22,294	22,294	0	0
Army Reserve	6,492	6,492	6,492	0	0
Air National Guard	13,569	10,994	10,994	0	−2,575
Air Force Reserve	8,938	7,947	7,947	0	−991
DOD Total	51,293	47,727	47,727	0	−3,566

Section 414—Maximum Number of Reserve Personnel Authorized To Be on Active Duty for Operational Support

This section would authorize, as required by section 115(b) of title 10, United States Code, the maximum number of Reserve Component personnel who may be on Active Duty or full-time National Guard duty during fiscal year 2021 to provide operational support. The personnel authorized here do not count against the end strengths authorized by section 401 or section 412 of this Act unless the duration on Active Duty exceeds the limitations in section 115(b)(2) of title 10, United States Code.

Sec. 414.

Service	FY 2020 Authorized	FY 2021		Change from	
		Request	Committee Recommendation	FY 2021 Request	FY 2020 Authorized
Army National Guard	17,000	17,000	17,000	0	0
Army Reserve	13,000	13,000	13,000	0	0
Navy Reserve	6,200	6,200	6,200	0	0
Marine Corps Reserve	3,000	3,000	3,000	0	0
Air National Guard	16,000	16,000	16,000	0	0
Air Force Reserve	14,000	14,000	14,000	0	0
DOD Total	69,200	69,200	69,200	0	0

SUBTITLE C—AUTHORIZATION OF APPROPRIATIONS

Section 421—Military Personnel

This section would authorize appropriations for military personnel at the levels identified in the funding table in section 4401 of division D of this Act.

TITLE V—MILITARY PERSONNEL POLICY

ITEMS OF SPECIAL INTEREST

A Report on the Military Lending Act and the Effects of High Interest Rates on Readiness

The Committee directs the Secretary of Defense, in consultation with the Secretary of the Treasury, to submit a report to the House Committee on Armed Services, no later than February 15th, 2021, on a Military Annual Percentage Rate lower than 30% and its impact on military readiness and servicemember retention.

Air Force Institute of Technology and Space Education Study

For more than a century, the Air Force Institute of Technology (AFIT), has continuously supported the aeronautics and aviation-focused technical education needs of our nation's military. Today AFIT is the Air Force's leader for advanced, multidisciplinary academic education, as well as its institution for technical professional continuing education. As our defense needs have shifted to incorporate space as a contested warfighting domain, AFIT has responded by creating new educational programs and research institutions. For example, AFIT's Department of Aeronautics and Astronautics produces graduates and research to meet the military's needs for future spacecraft. AFIT's Center for Space Research and Assurance delivers highly valued resilient, responsive, and reliable space capabilities to the defense and intelligence community through executing cutting-edge space technology development, science, and space experiments. AFIT's School of Strategic Force

Studies manages execution of space and nuclear continuing education. Space is now integral to AFIT's numerous research and graduate and continuing education programs. With the establishment of the U.S. Space Force within the Department of the Air Force, the committee anticipates the requirements for AFIT to expand to meet the new challenges of a greater department mission.

Therefore, the committee directs the Secretary of the Air Force to submit a report to the congressional defense committees not later than February 1, 2021, on a study of the Air Force Institute of Technology future role in space education. The study shall include each of the following elements at a minimum:

(1) an overview of AFIT's existing space-focused education and research capabilities, programs, products, and outputs;

(2) an identification and evaluation of new space-focused educational requirements that can be met by AFIT resulting from the establishment of the U.S. Space Force and based on future space-related defense needs;

(3) a roadmap for meeting the requirements described in element (2), as well as a description of anticipated additional resources necessary for AFIT to meet the education and research space requirements of the Department of the Air Force in the next 5 fiscal years; and

(4) a recommendation whether to change the name of AFIT to "Air and Space Force Institute of Technology" or other name to reflect its future role in air and space defense-focused education.

Concerns about Uncharacterized Discharges

The committee is concerned by reports of inappropriate use of uncharacterized discharges for tenured military members who have served for more than six months but less than 8 years. The committee directs the Secretary of the Navy, Secretary of the Army, Secretary of the Air Force, and Commandant of the Marine Corps to report to the committees on Armed Services of the Senate and the House of Representatives by February 21, 2021 on how many uncharacterized discharges have been issued to service members in the last ten years, including the breakdown by gender, race/ethnicity, and grade. The report should also explain why an uncharacterized discharge was used instead of any of the other discharge statuses.

Disinformation Training Incorporated into Pre-deployment Training

The committee is aware that U.S. forces deployed overseas are being directly targeted by our adversaries with disinformation through social media, text messages, and other means. The committee supports the goal of ensuring U.S. troops are appropriately trained to think critically to distinguish between legitimate news and unreliable information, including fake URLs and headlines. The committee also expects the Secretaries of the military departments to incorporate into pre-deployment training a new component on media literacy to prepare troops to think critically and identify disinformation.

Effectiveness of Military Justice Reforms

The committee understands the importance of ongoing military justice reforms throughout the Department of Defense. Additionally, successive National Defense Authorization Acts have required a wide range of reforms to the Uniform Code of Military Justice and other military legal matters. The committee wants to ensure it remains abreast of the effectiveness of these military justice reforms. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than January 1, 2021, on the results of the review and assessment conducted under section 946(f)(1) of title 10, United States Code (article 3 146(f)(1) of the Uniform Code of Military Justice). This briefing shall include recommendations for improvements to the Uniform Code of Military Justice based on the results of such review and assessment.

Expanding World Language Program to Offer Strategic Language Training to DODEA Students Earlier

The committee notes that the Host Nation Program provides Department of Defense Education Activity (DODEA) elementary school students with a cross-cultural and language acquisition focus to develop an appreciation and understanding of the culture and language of the country in which they are located. The committee also notes that the World Language Program curriculum is offered at DODEA's schools outside the United States, in middle through high school, and is designed to provide students with an introduction to host nation languages, taught by host nation teachers. The students also participate in activities building appreciation and understanding of the country in which they are located. Considering that earlier exposure to language training generally increases foreign language proficiency, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than March 1, 2021, consisting of the following elements:

(1) the feasibility of beginning strategic language instruction in the kindergarten through 6th grade level where applicable, and

(2) the cost, resources, and, impediments to beginning strategic language instruction per element (1).

Gender Integration at Marine Corps Recruit Depots

The committee commends the United States Marine Corps for working to achieve the requirements in section 565 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) to gender integrate training at Marine Corps Recruit Depots. The committee believes transparency is crucial to ensuring the intent of Congress is met. Therefore, the committee directs the Commandant of the Marine Corps to provide a briefing to the Committee on Armed Services of the House of Representatives not later than March 1, 2021, describing the plan to integrate the Marine Recruit Depots. The briefing should include projected costs for the resiliency of the bases and infrastructure, for construction to modify facilities, any land lease issues, any surplus property identified, any impacts to local infrastructure surrounding the Depots, any

changes for training, and challenges the Commandant believes would prevent the Marine Corps from achieving the requirement.

Improvements to the Special Victims' Counsel Program

The committee acknowledges the benefits of the Special Victims' Counsel Program and supports the military services' consistent efforts to strengthen the program. The committee believes that compliance with recent efforts to expand and improve the Special Victims' Counsel Program is critical to the program's success. Therefore, the committee directs the Judge Advocates General of the Army, the Navy, and the Air Force, and the Staff Judge Advocate to the Commandant of the Marine Corps, to provide a briefing to the House Committee on Armed Services by January 1, 2021, on the Special Victims' Counsel Program. Such briefing shall include the following:

(1) an assessment of whether the service is in compliance with the provisions of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) relating to the Special Victims' Counsel Program and, if not, what steps have been taken to achieve compliance with such provisions. Such provisions include, but are not limited to: the requirement that a military installation provide an alleged victim with access to a Special Victims' Counsel, not later than 72 hours after such request is made, if a Special Victims' Counsel is not available at the military installation; the requirement that Special Victims' Counsel receive appropriate training on criminal laws and policies of the State(s) in which they are located; and the requirement that Special Victims' Counsel provide alleged victims with legal consultation and assistance related to incidents of retaliation.

(2) a description of any staffing constraints on the Special Victims' Counsel program or other programs of the service resulting from the additional responsibilities required of the Special Victims' Counsel Program under Public Law 116–92.

(3) an assessment of the feasibility of providing cross-service Special Victims' Counsel representation in instances where a Special Victims' Counsel from a different service is co-located with a victim at a remote base.

Military Judge Advocate General End Strength

The committee applauds the military services for diligently reviewing the manning requirements for the Judge Advocate General (JAG) Corps to ensure achievement of the requirements of section 541 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). The committee notes these reviews are critical for the success of the military legal community to ensure the appropriate number of JAGs are accessed and trained to sufficiently execute the increasing number of JAG requirements in the military. Therefore, the committee expects each military service will have a programmed increase in the number of JAG billets to meet the requirements of Public Law 116–92.

Military Spouse Licensure Reciprocity

The committee applauds the work done by the Department of Defense to ease licensing burdens for military spouses relocating from

other States or territories. The committee supports comments made by the service secretaries touting the importance of professional licensure reciprocity for military families and the consideration this will be given when evaluating future basing decisions. The committee notes that while some progress has been made, with more than 1,100 various occupational licensing requirements across the United States, such regulations continue to directly impact the welfare and morale of service members and their families, and Department of Defense staffing may not be at the level required to speed the development of State compacts. Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than June 1, 2021, that includes:

(1) an action plan on the status of licensure reciprocity actions being taken in each State to include the use of interstate compacts and exemption status;

(2) the measurement of the average number of days to spousal licensure in each State grouped by occupational specialty;

(3) the development of a framework assessing the status of State spousal licensure reciprocity agreements when considering future basing decisions within the Department of Defense; and

(4) the additional number of Department of Defense Defense-State Liaisons required to further facilitate State compacts.

Morale, Welfare, and Recreation Reservation System Modernization

The committee understands that a robust Morale, Welfare, and Recreation program across the Armed Forces is a critical component of retention. However, most online resources are not available through an online portal and reservations must be made by phone. This sometimes exacerbates a situation with long beneficiary wait times and inconsistent booking practices across Morale, Welfare, and Recreation programs. Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than June 1, 2021, analyzing ongoing challenges with the existing system and providing recommendations that would improve and modernize the Morale, Welfare, and Recreation reservation system.

Officer and Enlisted Qualification Testing

The committee believes that relevant qualification testing is a critical component of accessing quality officers and warrant officers and enlisting exceptional personnel into the military services. However, the committee is concerned that outdated qualification testing requirements may be adversely affecting the recruitment of otherwise qualified applicants and may also be unnecessarily inhibiting their entry into specific occupational specialties. While the unique requirements of the individual services and their numerous specialties are recognized, the lack of uniformity even across the commissioning sources of a single service cause concern for the efficacy of current testing. Presently, there is no single test or instrument used as an aptitude requirement for appointment of officers and warrant officers within the military departments and the Armed Services Vocational Aptitude Battery (ASVAB) test required for en-

listment is antiquated, failing to target the critical aspects of a changing force.

Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than March 1, 2021, on the following:

(1) An analysis of the various forms of qualification testing required for entrance into military service, the officer or warrant officer corps, or a specific occupational specialty, broken out by military service

(2) the frequency with which the Department of Defense reviews the qualification tests of the services to include those tests required for entrance into specific occupations

(3) the number of potential accessions that have been denied entry into the officer or warrant officer corps due to their performance on a service-directed qualification test, broken out by military service

(4) the number of potential enlistments that have been denied entry into the armed services due to their performance on the Armed Services Vocational Battery Aptitude (ASVAB) Test, broken out by military service

(5) the number of service members denied entrance into an aviation specific occupation due to performance on an aviation qualification test, broken out by military service

(6) a plan of action to update current qualification testing standards and requirements to ensure optimal recruitment of prospective applicants.

Parental Leave Parity for Reservists

The Committee believes there should be a consistent policy that allows servicemembers in the Reserve Component flexibility in their drill schedule to be able to take parental leave after the birth or adoption of child. The Committee directs the Under Secretary of Defense for Personnel and Readiness to provide a briefing to the House Armed Services Committee no later than July 1, 2021 regarding the current Reserve Component policies relating to parental leave and the feasibility of establishing a policy that allows for flexible drill for twelve weeks after the birth or adoption of a child, to include maximizing the use of telework if appropriate. This briefing should include an assessment of ways to minimize impact of the servicemember's parental leave on their individual and unit readiness and ensure that no servicemember faces corrective action, including administrative separation or transfer to the individual ready reserve, for failure to meet administrative requirements during their period of parental leave.

Participation in Transition Assistance Programs at Small and Remote Military Installations

The committee remains concerned that all service members are receiving quality transition assistance and access to transitional resources through the Transition Assistance Program, especially access and availability of resources at small and remote bases. The goal is to ensure all service members, even those transitioning out of small or remote bases, are not overlooked and receive the re-

sources required. Therefore, the committee directs the Comptroller General of the United States to submit a report to the Committees on Armed Services of the Senate and the House of Representatives, not later than June 1, 2021, on a review of the participation in formal Transition Assistance Programs of members of the Armed Forces assigned to small military installations and remote military installations in the United States. Small military installations and remote military installations for purposes of this report are defined as follows:

(1) a small military installation is an installation at which are assigned not more than 10,000 members of the Armed Forces.

(2) a remote military installation is an installation that is located more than 50 miles from any city with a population of 50,000 people or more (as determined by the Office of Management and Budget).

Professional Military Education Reform

The committee believes that Professional Military Education remains the foundation of joint integration and the Goldwater-Nichols Act. However, the committee is concerned that Congress is not being consulted on significant changes to the Professional Military Education system now under consideration by the Department of Defense. Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than March 1, 2021, on the following:

(1) the status of the recommendations made to the Department of Defense in Government Accountability Office Report 20–323;

(2) a review of recommended improvements to the Professional Military Education enterprise in support of the National Defense Strategy, to include the cost of implementing these improvements; and

(3) an assessment and value statement of the contributions of each of the senior service colleges as it relates to Joint Professional Military Education, Phase II education.

Report on Feasibility of Implementation of Flexible Spending Account Options for Members of the Uniformed Services and Their Families

The committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by January 1, 2021, on the feasibility of implementing flexible spending account options that allow pre-tax payment of dependent care expenses, health and dental insurance premiums, and out-of-pocket health care expenses for members of the uniformed services and their family members. The report required shall include the following elements:

(1) identification of any legislative or administrative barriers to achieving the implementation of such options;

(2) recommendations on contribution limits; and

(3) an assessment on tax incentives when using flexible spending accounts in conjunction with or instead of other annual tax credits and what financial advantages or disadvantages there may be for servicemembers and their families.

Reserve Component General and Flag Officer Development

The committee believes that the professional development of Reserve Component general and flag officers is imperative to executing national security objectives. The military services are challenged to provide Reserve Component officers with sufficient experience via the assignments process and to work diligently to sustain a wide array of opportunities that ensure an adequate pool of qualified senior leaders. Reductions in general and flag officer requirements or authorizations that disproportionally affect those positions that are viewed as developmentally vital should be avoided in order to achieve optimal performance and total force integration. Further, careful consideration must be given to maintain an appropriate diversity of positions that balance command, staff, and joint opportunities. It is the feeling of the committee that more needs to be done to ensure senior leaders within the Reserve Component are afforded continued professional growth opportunities and a clear path for progression.

Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than March 1, 2021, on the following:

(1) a comprehensive analysis of the current Reserve Component general and flag officer command positions, broken out by service

(2) a general assessment of current joint and staff opportunities available to Reserve Component general and flag officers, to include any areas of opportunity expansion

(3) the impact of limited reserve officer exemptions on career progression for the Reserve Component

(4) an outline of any legislative or policy driven guidance that impedes progression of Reserve Component general and flag officers

(5) ongoing or planned efforts to further integrate the Reserve Component with Active Duty at the general and flag officer level

(6) other information relevant to the enhanced career path for Reserve Component general and flag officers

Reserve Component Record of Service

The committee recognizes the Department of Defense is beginning to implement changes from the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) on the record of service for the Reserves. The Department has been provided great flexibility to fully explore what information should be on the record of service and when the record of service should be issued. The Department should also explore different options for conveying the record of service for the Reserves. Therefore, the Committee encourages the Department of Defense to consider the feasibility of an electronic option that includes a mechanism for validation of cumulative service for the conveyance of benefits.

Review of Medical Accessions Standards for Appointment, Enlistment, or Induction into Military Services

The committee understands the Department of Defense evaluates hundreds of thousands of applicants to determine their eligibility to serve, including their medical fitness. The Department of Defense Instruction 6130.03, "Medical Standards for Appointment,

Enlistment, or Induction into the Military Services," ensures that medical standards are implemented across the Department of Defense for all service member accessions. Additionally, there is a medical waiver process administered by the Secretaries of the military services to allow for individuals with some previous conditions to still access into the military if it is determined the condition does not hinder the ability to deploy worldwide, regardless of military occupation. The committee notes that the frequency with which the Department of Defense Instruction 6130.03 is updated to include information from the civilian community is every 3 to 5 years and based on a variety of medical factors. The committee is concerned as to whether there is actual uniformity in the determination of waivers across the military services and if data on waivers is reviewed on a reoccurring basis as well. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services, not later than February 1, 2021, specifying the following:

(1) the frequency with which the Department of Defense consults with the civilian medical community to determine whether best practices across the medical disciplines referenced in Department of Defense Instruction 6130.03 are considered when promulgating and updating medical standards for potential accessions;

(2) the number of potential accessions across the military services that have been denied entry due to a notation related to mental health conditions like anxiety and depressive disorders that are no longer undergoing treatment and are considered stable;

(3) the number of potential accessions across the military services that have been denied entry due to a notation of attention deficit hyperactivity disorder medication usage (current usage or within the past 24 months); and

(4) the impact of decentralizing the medical waivers process to a lower level within the chain of command.

Review of the Preservation of the Force and Family Program for Special Operations Forces

The committee recognizes the importance of the Preservation of the Force and Family (POTFF) program to support the personnel and dependents of U.S. Special Operations Command (USSOCOM), and is supportive of the command's initiatives to broaden focus across the pillars of POTFF to more comprehensively address the stressors and needs of those special operations forces (SOF) and their families.

While POTFF has historically focused on rehabilitating and maintaining the operator through physical therapy initiatives, the committee maintains interest in ensuring balance of investment throughout POTFF to wholly address the mental, physical, spiritual, and familial needs of SOF. The committee notes the additional investments for the other pillars of POTFF, and is encouraged by the use of emergent technologies such as machine learning/artificial intelligence (ML/AI) to facilitate development of neurocognitive mapping capabilities to more accurately capture the psychological data of SOF, with the intention of aligning proper emotional care as they maneuver throughout the special operations enterprise.

The committee also notes the recent effort to establish Smartabase as the preferred program to virtually track SOF participating in the POTFF program. The committee understands the intent to have Smartabase implemented at each Service Component and Theater Special Operations Command element of USSOCOM. The committee is also aware that Smartabase is intended to manage data associated with USSOCOM's SOF Assessment Baseline and Reassessment System.

However, with these concerns in mind, and to ensure that the command is honoring SOF truth number one, "Humans are more important than hardware," the committee directs the Comptroller General of the United States to provide a report to the House Committee on Armed Services by January 29, 2021, on the history, current use, and future intent for the POTFF program. The report shall include:

(1) observations regarding the balance of emphasis put on the four pillars of the program;

(2) the use of ML/AI to accurately capture and track the neurocognitive data of SOF and virtual connectivity to ensure that data is easily shared as SOF move across the enterprise;

(3) an assessment of the interoperability and scalability of the Smartabase system; and

(4) opportunities to enhance the POTFF program, especially considering transitioning and retired SOF who might still require the specialty care as provided by the POTFF program.

Sexual Assault Information Management System

The committee is aware of the Army Sexual Harassment/Assault Response and Prevention Program Office's use of the Army's Strategic Management System (SMS) performance management tool to report data from the Department of Defense's Sexual Assault Information Database (DSAID). The committee further recognizes that the use of SMS allows Army leaders at all levels of command to create uniform, centrally managed reports that allow for visibility into sexual harassment/assault conditions across the force. However, the committee is concerned that across the other military departments and the Office of the Secretary of Defense, no system of record is used to report data emanating from DSAID. Therefore, the committee encourages the Secretary of Defense to review the Department's and each military service's system for utilizing information from DSAID and how a common operating system may improve commanders' ability to monitor and tailor prevention programs across the Department.

Space Force Personnel

The committee commends the Department of Defense for the establishment of the Space Force within the Department of the Air Force. The mission of the Space Force is critical to ensuring unfettered access to, and freedom to operate in, space, and to providing vital capabilities to joint and coalition forces in peacetime and across the spectrum of conflict. However, the current planning seems to lack some specificity and details that may be needed to help ensure the timely and successful execution of the force structure plan for the Space Force. Therefore, the committee directs the

Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives, not later than February 1, 2021, specifying the following elements:

(1) the number of personnel, grades, and specialties of voluntary transfers that will be transferred into the Space Force from the Department of the Army, Department of the Navy, and Department of the Air Force;

(2) any new civilian personnel authorities and hiring initiatives needed by the Department of the Air Force to ensure the Space Force has the agility to acquire and retain the required civilian workforce;

(3) any changes to the physical and medical standards for appointment, enlistment, or induction into the Space Force, to include any new initiatives that would consider the broadening of waiver authorities to facilitate a holistic approach to the accession and retention of Space Force personnel; and

(4) a plan of action and milestones that highlights force structure actions to be completed, resource allocation, and personnel transfers.

United States Space Force Commissioning Programs

The committee affirms that the recent establishment of the United States Space Force requires the congressional defense committees and the Department of Defense to work closely to identify the policy and resources needed to ensure the U.S. Space Force can effectively fulfill its mission as an independent branch of the armed forces. The committee observes that earlier this year the United States Air Force Academy graduated the first eighty-six officers to be directly commissioned into the U.S. Space Force. The committee also recognizes that, like the other military services, officers commissioned into the Space Force will require pre-commissioning training programs tailored to the unique aspects of the Space Force mission and service culture. The committee is aware that the Department of the Air Force is developing a strategy to address Space Force officer commissioning programs and desires greater understanding of these requirements. Therefore, the committee directs the Secretary of the Air Force to provide the congressional defense committees with a briefing, no later than March 1, 2021, on its strategy to establish Space Force officer commissioning programs and the resources required to implement this strategy. Additionally, the committee urges the Department of the Air Force to complete its review of Space Force officer commissioning programs in time to include its resource requirements in the Department's Fiscal Year 2022 budget request.

LEGISLATIVE PROVISIONS

SUBTITLE A—OFFICER PERSONNEL POLICY

Section 501—Authorized Strength: Exclusion of Certain General and Flag Officers of the Reserve Components on Active Duty

This section would amend section 526a(b) of title 10, United States Code, to reinstate the exclusions of certain reserve officers from limitations of section 526a(b).

Section 502—Diversity in Selection Boards

This section would amend section 612(a)(1), section 573(b), and section 14102(b) of title 10, United States Code, to require that the members of a selection board shall represent the diversity of the Armed Forces to the extent practicable.

Section 503—Redaction of Personally Identifiable Information from Records Furnished to a Promotion Board

This section would require the redaction of personally identifiable information from records furnished to a promotion board.

SUBTITLE B—RESERVE COMPONENT MANAGEMENT

Section 511—Grants to Support STEM Education in the Junior Reserve Officers' Training Corps

This section would authorize the Secretary of Defense to establish a grant program for science, technology, engineering, and mathematics education in Junior Reserve Officers' Training Corps units at the Secretary's discretion.

Section 512—Modification of Education Loan Repayment Program for Members of Selected Reserve

This section would increase the amount which may be paid to members of the Selected Reserve under the education loan repayment program.

Section 513—Requirement of Consent of the Chief Executive Officer for Certain Full-Time National Guard Duty Performed in a State, Territory, or the District of Columbia

This section would amend section 502(f)(2)(A) of title 32, United States Code, to require the consent of the chief executives of both the sending State and the receiving State should the President deploy National Guard members under title 32, United States Code, authority.

Section 514—Constructive Credit for Certain Members of the Reserve Components Who Cannot Complete Minimum Annual Training Requirements as a Result of the COVID–19 Pandemic

This section would authorize the Secretary of Defense to prescribe regulations that grant constructive credit towards retirement for a member of the Reserve Components who cannot complete minimum annual training requirements due to the COVID–19 pandemic.

Section 515—Guidance for Use of Unmanned Aircraft Systems by the National Guard

This section would require the Secretary of Defense to issue new guidance that provides for the expedited review of requests for the use of unmanned aircraft systems by the National Guard for covered activities within the United States.

Section 516—Direct Employment Pilot Program for Certain Members of the Reserve Components

This section would enable the Secretary of Defense to create a pilot program that would allow States to establish or expand job placement programs, and related employment services, for unemployed guardsmen or reservists.

Section 517—Temporary Limitation on Authority to Transfer, Relocate, or Dissolve Elements of the Reserve Components of the Air Force

This section would prohibit the Secretary of the Air Force from transferring or relocating any personnel or asset, or dissolving any unit, of the Air National Guard or Air Force Reserve until 180 days after the Secretary submits the required report.

Section 518—Pilot Programs in Connection with SROTC Units and CSPI Programs at Historically Black Colleges and Universities and Minority Institutions

This section would require the Secretary of Defense to create pilot programs that support ROTC units at historically black colleges, to include creating partnerships between military bases and institutions and providing financial assistance for pilot training.

SUBTITLE C—GENERAL SERVICE AUTHORITIES AND CORRECTION OF MILITARY RECORDS

Section 521—Temporary Authority to Order Retired Members to Active Duty in High-Demand, Low-Density Assignments During War or National Emergency

This section would amend section 688a of title 10, United States Code, to allow the Secretary of a military department to recall more than 1,000 retirees to Active Duty during a war or national emergency.

Section 522—Reenlistment Waivers for Persons Separated from the Armed Forces Who Commit One Misdemeanor Cannabis Offense

This section would require the Secretary of Defense to prescribe regulations that permit any Secretary of a military department to grant a reenlistment waiver to a covered person who has separated from the Armed Forces and has admitted to or been convicted by a court of competent jurisdiction of a single violation relating to the use or possession of cannabis.

Section 523—Review of Seaman to Admiral-21 Program; Credit Towards Retirement

This section would require the Secretary of the Navy to review the records of participants in the Seaman to Admiral-21 program from fiscal year 2010 through fiscal year 2014 as it relates to service credits.

SUBTITLE D—MILITARY JUSTICE AND OTHER LEGAL MATTERS

Section 531—Punitive Article on Violent Extremism

This section would amend chapter 47 of title 10, United States Code, by establishing an article on violent extremism in the Uniform Code of Military Justice.

Section 532—Preservation of Court-Martial Records

This section would amend section 940a of title 10, United States Code (article 140a of the Uniform Code of Military Justice), to require the preservation of special and general court-martial records regardless of outcome for not less than 15 years.

Section 533—Electronic Notarization for Members of the Armed Forces

This section would amend section 1044a of title 10, United States Code, to authorize electronic notarization.

Section 534—Clarifications regarding Scope of Employment and Reemployment Rights of Members of the Uniformed Services

This section would protect service members from forced arbitration in Uniformed Services Employment and Reemployment Act cases.

Section 535—Absentee Ballot Tracking Program

This section would amend section 102(h) of the Uniformed and Overseas Citizens Absentee Voting Act (52 U.S.C. 20302(h)) to require the chief State election official, in coordination with local election jurisdictions, to establish and operate an absentee ballot tracking program.

Section 536—Tracking Mechanism and Reporting Requirements for Supremacist, Extremist, and Criminal Gang Activity in the Armed Forces

This section would require the Secretary of Defense to develop and implement a process to track investigations, criminal and administrative actions, and final determinations with respect to conduct of members of the Armed Forces that is prohibited under Department of Defense Instruction 1325.06, titled Handling Dissident and Protest Activities Among Members of the Armed Forces." This section would also require the Secretary of Defense to submit to the Committees on Armed Services of the Senate and the House of Representatives not later than December 1 of each year, beginning after the date of the enactment of this Act, a report on the process implemented by the Secretary.

Section 537—Military-Civilian Task Force on Domestic Violence and Related Information Collection Activities

This section would require the Secretary of Defense to establish a military-civilian task force on domestic violence with experts from within the Department of Defense, Department of Justice, Department of Health and Human Services, and Centers for Disease

Control and Prevention, as well as civilian experts. This section would also require an initial report from the task force to the Secretary one year after the Secretary establishes the task force, as well as an annual report to Congress until the task force is terminated. This section would also require the Secretary of Defense to collect information on prevalence of domestic violence involving members of the Armed Forces, their intimate partners, and immediate family members. This section would also require an annual report to the congressional defense committees on domestic violence in the Armed Forces.

Section 538—Actions to Address Military-Connected Child Abuse

This section would require the Secretary of Defense to carry out activities to improve the ability of the Department of Defense to effectively prevent, track, and respond to military-connected child abuse.

Section 539—Multidisciplinary Board to Evaluate Suicide Events

This section would require the Secretary of Defense to issue guidance that requires each suicide event involving a member of a covered Armed Force to be reviewed by a multidisciplinary board established at the command or installation level. This section would also require the Secretary to submit a report to the congressional defense committees not later than 180 days after the date of the enactment of this Act on the progress on implementation.

SUBTITLE E—SEXUAL ASSAULT

Section 541—Protection of Attorney-Client Privilege between Victims and Special Victims' Counsel

This section would amend subsection (c) of section 1044e of title 10, United States Code, by defining the relationship between the Special Victims' Counsel and the victim in the provision of legal advice as the relationship between an attorney and a client. During any criminal legal proceeding in which a Special Victims' Counsel is asked to testify or give evidence, the Special Victims' Counsel shall be given the same consideration as counsel for the Government and counsel for the accused. This section would also require, not later than 180 days after the date of the enactment of this Act, Rule 502 of the Military Rules of Evidence to be modified to provide that the privilege between a Special Victims' Counsel and a client shall be the same as lawyer-client privilege.

Section 542—Authority of Military Judges and Military Magistrates to Issue Military Court Protective Orders

This section would authorize military magistrates and military judges to issue Military Court Protective Orders for the purpose of protecting a victim of an alleged sex or domestic violence offense, or a family member or associate of the victim, from a person subject to the Uniform Code of Military Justice.

Section 543—Additional Bases for Provision of Advice by the Defense Advisory Committee for the Prevention of Sexual Misconduct

This section would amend section 550B(c)(2) of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) to add additional bases for the provision of advice from the Defense Advisory Committee for the Prevention of Sexual Misconduct.

Section 544—Modification of Reporting and Data Collection on Victims of Sexual Offenses

This section would amend section 547 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) to modify data collection and reporting on victims of sexual assault.

Section 545—Modification of Annual Report regarding Sexual Assaults Involving Members of the Armed Forces

This section would amend section 1631(d) of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383; 10 U.S.C. 1561 note) to include the Committees on Veterans Affairs of the Senate and the House of Representatives.

Section 546—Coordination of Support for Survivors of Sexual Trauma

This section would require the Secretaries of Defense and Veterans Affairs to jointly develop, implement, and maintain a standard of coordinated care for members of the Armed Forces who are survivors of sexual trauma. Such standard shall include information provided to members of the Armed Forces and coordination between the staff of the Departments. This section would also require the Secretaries of Defense and Veterans Affairs to provide a report to the appropriate committees of Congress not later than 180 days after the date of the enactment of this Act regarding the availability of residential treatment programs for survivors of sexual trauma, including barriers to access for such programs and resources required to reduce such barriers.

Section 547—Policy on Separation of Victim and Accused at Military Service Academies

This section would require the Secretary of Defense, the Secretaries of the military departments, and the Superintendent of each military service academy, to prescribe in regulations a policy that minimizes contact between a cadet or midshipman who is an alleged sexual assault victim and a cadet or midshipman who is an alleged perpetrator of sexual assault, to the extent practicable, while allowing both individuals to complete their course of study with minimal disruption and privacy protections in place. This section would also require the Secretary of Defense ensure that the policy developed under subsection (a) does the following: protects the alleged victim; allows both the victim and accused to complete their course of study with minimal disruption; protects the privacy of the accused and victim; and, minimizes the burden on the alleged victim when separating the victim and accused.

Section 548—Safe-to-Report Policy Applicable across the Armed Forces

This section would require the Secretary of Defense, in consultation with the Secretaries of the military departments, to prescribe regulations for a safe-to-report policy that would allow alleged victims of sexual assault who may have committed minor collateral misconduct to report sexual assault without fear of receipt of discipline for such collateral misconduct, absent aggravating circumstance.

This section would also require the Secretary of Defense to develop and implement a process to track incidents of minor collateral misconduct that are subject to the safe-to-report policy.

Section 549—Question in Workplace and Gender Relations Surveys regarding Prosecutions of Sexual Assault

This section would require the Secretary of Defense to include, not later than 90 days after the date of the enactment of this Act, in the covered surveys a question regarding whether a member of the Armed Forces would be more willing to report a sexual assault if prosecution decisions were made by lawyers and not commanders.

Section 549A—Pilot Program on Prosecution of Special Victim Offenses Committed by Attendees of Military Service Academies

This section would direct the Secretary of Defense to create a pilot program for the prosecution of attendees at the military service academies who are charged with special victim offenses no later than January 1, 2021. The pilot program creates an Office of the Chief Prosecutor located within the Office of the Secretary of Defense, and the Chief Prosecutor will make binding recommendations on the convening authority for all special victim charges preferred against an attendee of the military service academies.

Section 549B—Report on Status of Investigations of Alleged Sex-Related Offenses

This section would require that a report be provided to the congressional defense committees not later than one year after the date of the enactment of this Act on the status of investigations of alleged sex-related offenses.

SUBTITLE F—MEMBER EDUCATION, TRAINING, AND TRANSITION

Section 551—Counseling in the Transition Assistance Program regarding Sexual Assault, Sexual or Gender Harassment, and Intimate Partner Violence

This section would require Transition Assistance Program classes to contain information on care provided by the Department of Veterans Affairs for survivors of sexual assault, sexual or gender harassment, and intimate partner violence.

Section 552—Establishment of Mentoring and Career Counseling Program

This section would amend chapter 107 of title 10, United States Code, by adding a new section that would require the Secretary of Defense to establish a mentoring and career counseling program with evaluation metrics. The section also would require an interim report to be submitted not later than 120 days after the date of the enactment of this Act describing the program, and a report to be submitted on October 1, 2021, and annually thereafter for 3 years, on the evaluation of the program.

Section 553—Defense Language Institute Foreign Language Center

This section would amend section 2168 of title 10, United States Code, to permit the Defense Language Institute to confer Bachelor degrees, in addition to Associate degrees, to graduates that meet the appropriate requirements for that degree.

Section 554—Defense Language Institute Foreign Language Center

This section would authorize the Defense Language Institute Foreign Language Center to confer a Bachelor of Arts degree in foreign language upon any graduate who fulfills the degree requirements.

Section 555—Increase in Number of Permanent Professors at the United States Air Force Academy

This section would increase permanent professors at the United States Air Force Academy from 23 to 25.

Section 556—Information on Nominations and Applications for Military Service Academies

This section would require the Secretary of Defense to standardize, collect, and analyze information on the demographics of applicants to military service academies.

Section 557—Transformation of the Professional Military Education Enterprise

This section would require the Secretary of Defense to provide a comprehensive assessment on the Department's Professional Military Education enterprise with recommendations to ensure alignment with the National Defense Strategy.

Section 558—College of International Security Affairs of the National Defense University

This section would prohibit the Secretary of Defense from eliminating the College of International Security Affairs, nor the Joint Special Operations Master of Arts, without providing Congress an assessment of the impact such action would have on United States interests related to counterterrorism and asymmetric warfare.

Section 559—Public-Private Consortium to Improve Professional Military Education

This section would establish a private-public partnership and collaboration to enhance and expand Professional Military Education.

SUBTITLE G—MILITARY FAMILY READINESS AND DEPENDENTS' EDUCATION

Section 561—Family Readiness: Definitions; Communication Strategy; Report

This section would require the Secretary of Defense, in coordination with the Secretaries of the military departments, to define "military family readiness" and "military family resiliency" as well as implement a communication strategy to communicate with military families. This section would also require a report on implementing:

(1) chapter 3 of the report of the Inspector General of the Department of Defense for fiscal year 2020, "Ensuring Wellness and Wellbeing of Service-Members and their Families"; and

(2) the report, dated July 2019, of the National Academies of Science, Engineering and Medicine, titled "Strengthening the Military Family Readiness System for a Changing American Society."

Section 562—Support Services for Members of Special Operations Forces and Immediate Family Members

This section would modify the care and recipients of the family support services provided by U.S. Special Operations Command's Preservation of the Force and Family program under section 1788a of title 10, United States Code. Eligibility is expanded beyond immediate family members of the special operations forces member receiving support services, as well as extended to members of the Reserve Components of the Armed Forces. Covered family support services will include psychological support and spiritual support services.

Section 563—Authority to Provide Assistance to Certain In-Home Child Care Providers for Members of the Armed Forces and Survivors of Members Who Die in Combat in the Line of Duty

This section would expand the Financial Assistance Program to include in-home child care providers.

Section 564—Expansion of Financial Assistance under My Career Advancement Account Program

This section would amend the My Career Advancement Account Scholarship Program to allow for required continuing education courses to be reimbursable.

Section 565—Child Care

This section would direct the Secretary of Defense to provide child care services to members of the Armed Forces or employees if working on a rotating shift at a military installation.

Section 566—Continuation of Paid Parental Leave upon Death of Child

This section would amend current leave policy for Active Duty service members so that pre-approved parental leave is not terminated in the tragic event of a child's death.

Section 567—Study and Report on the Performance of the Department of Defense Education Activity

This section would require the Secretary of Defense to conduct a study on the performance of the Department of Defense Education Activity, including a review of the curriculum relating to health, resiliency, and nutrition, and the performance of students on the National Assessment of Educational Progress.

Section 568—Comptroller General of the United States Report on the Structural Condition of Department of Defense Education Activity Schools

This section would require the Comptroller General of the United States to conduct a study on the structural condition of Department of Defense Education Activity facilities and virtual infrastructure.

Section 569—Pilot Program to Expand Eligibility for Enrollment at Domestic Dependent Elementary and Secondary Schools

This section would authorize the establishment of a pilot program to expand eligibility for enrollment at domestic dependent elementary and secondary schools.

Section 569A—Continued Assistance to Schools with Significant Numbers of Military Dependent Students

This section would authorize $40.0 million for the purpose of providing assistance to local educational agencies with military dependent students, and $10.0 million for local educational agencies eligible to receive a payment for children with severe disabilities.

Section 569B—Standardization of the Exceptional Family Member Program

This section would direct the Secretary of Defense, in coordination with the Secretaries of the military departments, to standardize the Exceptional Family Program across the military services. It would also require the Comptroller General of the United States to submit a report to the Committees on Armed Services of the Senate and the House of Representatives on whether military families have higher rates of disputes and loss of free and appropriate public education under section 504 of the Rehabilitation Act of 1973 (Public Law 93–112; 29 U.S.C. 794) than civilian counterparts.

SUBTITLE H—DIVERSITY AND INCLUSION

Section 571—Diversity and Inclusion Reporting Requirements

This section would amend section 113 of title 10, United States Code, requiring the Secretary of Defense to establish and maintain a standard set of strategic metrics and benchmarks toward objectives to increase diversity in the Armed Forces. This section also requires the Secretary to include to include as a part of the National Defense Strategy data on demographics.

Section 572—Establishment of Diversity and Inclusion Advisory Council of the Department of Defense

This section would amend chapter 7 of title 10, United States Code, by adding a new section that would require the Secretary of Defense to establish a council to be known as the "Diversity and Inclusion Advisory Council of the Department of Defense."

Section 573—Establishment of Special Inspector General for Racial and Ethnic Disparities in the Armed Forces; Amendments to Inspector General Act

This section would establish a Special Inspector General for Racial and Ethnic Disparities in the Armed Forces to provide for independent and objective conduct and supervision of audits and investigations relating to racial and ethnic disparities in military personnel and military justice, and to make recommendations to the Secretary of Defense and to Congress on actions necessary to eliminate such racial and ethnic disparities. This section would also require the Inspector General to submit an annual report to the Secretary of Defense and the congressional defense committees as well as quarterly reports to the Secretary of Defense and congressional defense committees due 30 days after the end of each fiscal-year quarter.

Section 574—Questions regarding Racism, Anti-Semitism, and Supremacism in Workplace Surveys Administered by the Secretary of Defense

This section would amend section 593 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92), in paragraph (1), by inserting ", racist, anti-Semitic, or supremacist" after "extremist".

Section 575—Report on Demographics of Officers Appointed to Certain Grades

This section would require each Secretary of a military department to submit annually a report summarizing the gender and race of each officer who was recommended on a list for promotion to the United States Senate for the grades of 0–4 and above.

Section 576—Plans to Increase Female and Minority Representation in the Armed Forces

This section would require the Secretary of Defense and each Secretary of a military department to develop plans to increase, with respect to female and minority members of the Armed Forces

under the jurisdiction of that Secretary, the recruitment, retention, and representation in grades above E–7. This section would also require that a copy of each plan developed by each Secretary, not later than 180 days after the date of the enactment of this Act, be submitted to the Committees on Armed Services of the Senate and the House of Representatives.

Section 577—Evaluation of Barriers to Minority Participation in Certain Units of the Armed Forces

This section would require the Under Secretary of Defense for Personnel and Readiness, not later than 30 days after the date of the enactment of this Act, to seek to enter into an agreement with a federally funded research and development center with relevant expertise to conduct an evaluation of the barriers to minority participation in special operations units. This section would also require a report on the results of the study to be submitted to the congressional defense committees not later than January 1, 2022.

SUBTITLE I—DECORATIONS AND AWARDS

Section 581—Establishment of the Atomic Veterans Service Medal

This section would authorize the creation of the Atomic Veterans Service Medal, to be awarded to radiation-exposed veterans.

Section 582—Authorization for Award of the Distinguished-Service Cross for Ramiro F. Olivo for Acts of Valor during the Vietnam War

This section would waive the time limitations in section 7274 of title 10, United States Code, to authorize the President of the United States to award the Distinguished-Service Cross to Ramiro F. Olivo for acts of valor during the Vietnam War.

SUBTITLE J—MISCELLANEOUS REPORTS AND OTHER MATTERS

Section 591—Expansion of Department of Defense STARBASE Program

This section would allow arts and design thinking, for example robotics, to be included in the STARBASE curriculum.

Section 592—Inclusion of Certain Outlying Areas in the Department of Defense STARBASE Program

This section would expand STARBASE funding to the Commonwealth of the Northern Mariana Islands and American Samoa.

Section 593—Prohibition on Charging for or Counting Certain Acronyms on Headstones of Individuals Interred at Arlington National Cemetery

This section would require the Secretary of the Army to prescribe regulations or establish policies that, with regards to the headstone for an individual interred at Arlington National Cemetery, prohibit the charging of a fee for, or counting towards character or line count, KIA, MIA, or POW.

Section 594—Report on Placement of Members of the Armed Forces in Academic Status Who Are Victims of Sexual Assault onto Non-Rated Periods

This section would require a report, not later than 90 days after the date of the enactment of this Act, on the feasibility and advisability, and current practice (if any), of the Department of Defense granting requests by members of the Armed Forces who are in academic status and who are victims of sexual assault to be placed in a Non-Rated Period for their performance report.

Section 595—Sense of Congress regarding Advertising Recruiting Efforts

This section would express the sense of Congress that the Chiefs of the Armed Forces, in coordination with the Recruiting Commands of the Armed Forces, should give all due consideration to the use of local broadcasting and traditional news publishers when advertising.

TITLE VI—COMPENSATION AND OTHER PERSONNEL BENEFITS

ITEMS OF SPECIAL INTEREST

Department of Defense Impact Aid Program Report

The Committee is concerned that the self-reporting system used by the Department of Education Impact Aid Program and relied on by the Department of Defense Impact Aid Program, to count eligible students, leads to the systematic underreporting of military connected students. The underreporting may stem from both a lack of knowledge about the Impact Aid programs administered by each agency as well as various privacy concerns, which may be present in certain military communities like Special Operations. In some instances, underreporting may be causing the funding challenges that certain communities are experiencing.

Therefore, the Committee directs the Secretary of Defense to submit a report to the Congressional Defense Committees by March 1, 2021 on the process the Department of Defense uses to determine student eligibility numbers, the effects of underreporting, the aggregating of student numbers while protecting personally identifiable information, the process used to obtain student eligibility numbers, and recommendations for improvements to the program to include potential changes to legislative authority that would further strengthen the program.

Disabled Service Member Transition Assistance

The committee recognizes the Department of Defense's progress toward implementing reforms to the Transition Assistance Program, but the committee remains concerned that transition assistance information for service-connected disabled service members in the process of being medically retired, separated, or discharged could be improved. To date, the Department of Defense does not provide information on the Americans with Disabilities Act of 1990 (42 U.S.C. 12102), including assessing services and support at

schools and places of employment, or a Social Security Disability Insurance orientation. The committee therefore directs the Under Secretary of Defense for Personnel and Readiness to provide a briefing to the Committee on Armed Services of the House of Representatives not later than December 15, 2020, on the information currently provided to service-connected disabled service members in process to be medically retired, separated, or discharged and the feasibility of providing the following service elements:

(1) processing of Vocational Rehabilitation and Employment benefits;

(2) Americans with Disabilities Act orientation, including accessing services and support at school and place of employment;

(3) Social Security Disability Insurance orientation, including the Social Security Act Wounded Warrior expedited claims process; and

(4) information on national Veteran and Military Service Organizations' employment programs that serve veterans with disabilities.

Military Spouse Employment

The committee remains concerned with the challenges military spouses encounter when seeking employment while supporting a service member's military career. In 2019, the Government Accountability Office Report (GAO–19–320R) "Military Spouse Employment: Participation in and Efforts to Promote the My Career Advancement Account Program" found that the number of military spouses receiving tuition assistance through the My Career Advancement Account (MyCAA) program declined more than 40 percent in recent years, from about 38,000 spouses in fiscal year 2011 to about 21,000 in fiscal year 2017. The committee also understands that many military spouses are in part-time and seasonal work when they would prefer to be fully employed, and that military spouses with degrees face significant challenges finding meaningful work. Therefore, the committee directs the Secretary of Defense to provide a briefing to the Committee on Armed Services of the House of Representatives not later than February 1, 2021, on the following:

(1) the communication strategy the Department of Defense is using to ensure military spouses are receiving information about military spouse employment programs;

(2) the analysis used to determine that the modes of communication with military spouses are effectively meeting the target audience; and

(3) a taxonomy of jobs that military spouses could be employed in and whether there is a central database that tracks and stores this information.

Operation of Commissaries during Period of Expiration of Appropriations

The Committee recognizes that military commissaries provide a reliable source of high-quality food and subsistence for military personnel and their families. The committee further recognizes that disruptions of these operations due to Federal shutdowns prompted by the expiration of appropriations may deprive families of this vital subsistence source at the very time that it is most needed. As substantiated by recent surveys, some military men and women

rely upon food stamps, and, as food insecurity was cited as an increasing concern by the Committee in the Fiscal Year 2020 National Defense Authorization Bill, it is critically important that the commissaries remain open during government shutdowns. Further, the committee recognizes that due to the perishable nature of products sold, there are major logistical and administrative matters that arise when retail operations at the end of the supply chain precipitously cease to include disruption of logistical synergy between major stateside locations and operations at remote and overseas areas.

Due to the unique nature of these operations, the Committee believes that the Department of Defense should consider including these operations as excepted programs during the period of expiration of appropriations. Additionally, the Committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by March 15, 2021, that would examine the feasibility of commissaries being provided excepted status. This report should include the advisability and feasibility of continued operations using excess balances in working capital funds to finance continued operations. The report should also examine the feasibility and advisability of using commissary surcharge trust funds or nonappropriated funds generated from implementation of business practices and procedures and validity of commitments to replenish or reimburse these sources immediately upon restoration of appropriations by Congress. The report should also examine the financial impact on military men and women and their families losing this benefit during any Federal shutdown.

Private Sector Wage Verification Assessment

The committee understands that some service members and families may be experiencing challenges in navigating the Department of Defense internal verification system when applying for a loan. The challenges may be resulting in a more burdensome experience for processing of loan applications for some service members and families. Therefore the Committee directs the Secretary of Defense, to submit to the Committees on Armed Services of the Senate and the House of Representatives a report by March 1, 2021, on the feasibility and advisability of the use of an outside commercial wage verification company by the Defense Finance Accounting Service to provide verifications of the employment status and income of personnel and retirees. The report shall include an assessment of—(i) whether the use of the private sector in the area of verifications would result in potentially faster and better financial outcomes for services members and their families when applying for a mortgage or loan and lead to fewer administrative burdens placed on the service member; — (ii) a review in the manner in which at least three other federal agencies are already using the private sector in the area of verifications of employment and income; and —(iii) whether the use of the private sector would lead to better operational efficiencies, data security and integrity, and cost savings at the Defense Finance Accounting Service.

Report on the Advisability of Permitting Military Personnel to Use Education Benefits for Nontraditional Cyber-Related Education Programs

The committee understands that new and innovative educational opportunities exist for service members through non-traditional forms of schooling such as technology boot camps or massive online open courses (MOOC's). Such courses are particularly useful for service members in geographically remote areas who are hoping to continue their education. While the committee understands and appreciates the need for verification and certification of educational programs prior to approving government funds, such as tuition assistance, to pay for such programs, the committee believes that such standards should be mindful of the rapidly evolving nature of modern educational services.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the Committee on Armed Services of the House of Representatives no later than February 1, 2021, outlining the Department of Defense's procedures for determining the educational institutions and resources eligible for tuition assistance. The report should include:

(1) Standards the educational resource or institution must meet for military personnel to receive assistance from DoD.

(2) A description of the steps taken to ensure a broad variety of STEM-focused programs are eligible for tuition assistance, including non-traditional cyber-related learning alternatives.

(3) Steps that have been taken to account for the changes in modern learning platforms.

(4) Recommendations for expanding the educational opportunities available to military personnel.

Transitional Compensation

The committee notes that when considering the eligibility to receive transitional compensation for abused dependents, the dependent must have been married to the service member at the time the incident of abuse occurred and the service member must have been separated from Active Duty under a court-martial conviction resulting from a dependent-abuse offense, or have been separated from Active Duty for administrative reasons that include a dependent-abuse offense. However, in some cases where the commanding officer decides to wait to initiate administrative separation proceedings until the conclusion of criminal action against the service member in civilian courts, there exists a possibility that the abused spouse will finalize divorce proceedings prior to the conclusion of criminal proceedings related to the incident of spousal abuse, and therefore before any administrative separation action has been taken against the service member. Abused former spouses who fall into this gap are not currently eligible for transitional compensation. Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than December 31, 2020, on the length of time it takes for Incident Determination Committees to make a determination; the number of cases where an abused spouse finalizes divorce proceedings before administrative separation, resulting in the loss of transitional compensation

for a victim; the number and type of final disposition of physical abuse cases of spouses where a service member was the offender; the average length of time from unrestricted report of physical domestic violence of a spouse by a service member to final disposition, by service and by rank, and by type of disposition; and any recommendations on policy changes to the transitional compensation for abused dependents program.

LEGISLATIVE PROVISIONS

SUBTITLE A—PAY AND ALLOWANCES

Section 601—Increase in Basic Pay

This section would increase military basic pay by 3.0 percent.

Section 602—Basic Needs Allowance for Low-Income Regular Members

This section would amend section 402 of title 37, United States Code, to authorize the Secretary of Defense to pay a basic needs allowance to a qualified service member.

Section 603—Reorganization of Certain Allowances Other Than Travel and Transportation Allowances

This section would make two technical amendments to title 37, United States Code, enabling the Department of Defense to transfer these two provisions from chapter 8 of that title back to chapter 7 of title 37.

SUBTITLE B—BONUSES AND SPECIAL INCENTIVE PAYS

Section 611—One-Year Extension of Certain Expiring Bonus and Special Pay Authorities

This section would extend, through December 31, 2021, income replacement payments for Reserve Component members experiencing extended and frequent mobilization for Active Duty service; would extend two critical recruitment and retention incentive programs for Reserve Component healthcare professionals; would extend accession and retention incentives for nuclear-qualified officers; and would extend the consolidated special and incentive pay authorities.

Section 612—Increase in Certain Hazardous Duty Incentive Pay for Members of the Uniformed Services

This section would increase certain hazardous duty pay for members of the uniformed services from $250 to $275.

Section 613—Standardization of Payment of Hazardous Duty Incentive Pay for Members of the Uniformed Services

This section would amend title 37, United States Code, to standardize payment of hazardous duty incentive pay for members of the Guard and Reserve Components of the Armed Forces.

Section 614—Clarification of 30 Days of Continuous Duty on Board a Ship Required for Family Separation Allowance for Members of the Uniformed Services

This section would authorize the extension of Family Separation Allowance eligibility to service members and their families while they are under orders to quarantine onboard a ship prior to deployment.

Section 615—Expansion of Reimbursable State Licensure and Certification Costs for a Military Spouse Arising from Relocation

This section would allow the Department of Defense to reimburse military spouses for expenses incurred for continuing education courses in order to work in the spouse's profession at the next duty station.

SUBTITLE C—FAMILY AND SURVIVOR BENEFITS

Section 621—Expansion of Authority to Provide Financial Assistance to Civilian Providers of Child Care Services or Youth Program Services for Survivors of Members of the Armed Forces Who Die in the Line of Duty

This section would amend section 1798 of title 10, United States Code, to authorize financial assistance to civilian providers of child care services or youth program services to survivors of members of the Armed Forces who die in the line of duty or Active Duty for training.

Section 622—Expansion of Death Gratuity for ROTC Graduates

This section would modify the effective date of Section 623(b) of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

Section 623—Recalculation of Financial Assistance for Providers of Child Care Services and Youth Program Services for Dependents

This section would direct the Secretary of Defense to develop a new calculation for financial assistance in accordance with section 1798 of title 10, United States Code, based on local variations in cost for childcare services.

Section 624—Priority for Certain Military Family Housing to a Member of the Armed Forces Whose Spouse Agrees to Provide Family Home Day Care Services

This section would allow a service secretary to make available an on-base housing preference for military families with a spouse who is a licensed Family Care Coordinator and agrees to provide family home day care services.

Section 625—Study on Feasibility of TSP Contributions by Military Spouses

This section would direct the Secretary of Defense to study the feasibility of authorizing a spouse to contribute to the Thrift Savings Plan account of their service member spouse.

SUBTITLE D—DEFENSE RESALE MATTERS

Section 631—Base Responders Essential Needs and Dining Access

This section would allow civilian Department of Defense emergency and protection workers stationed on a military base access to the commissary and exchanges.

Section 632—First Responder Access to Mobile Exchanges

This section would authorize first responders to access and make purchases at mobile exchange and commissary locations deployed during a declared disaster.

Section 633—Updated Business Case Analysis for Consolidation of the Defense Resale System

This section would require the Secretary of Defense to reassess and re-baseline the defense resale reform business case analysis.

SUBTITLE E—OTHER PERSONNEL BENEFITS

Section 641—Maintenance of Funding for Stars and Stripes

This section would maintain the enacted fiscal year 2020 funding levels for Stars and Stripes, and would require the Secretary of Defense to submit a report to the Committee on Armed Services of the House of Representatives detailing a business case analysis to maintain Stars and Stripes as an information benefit to service members.

TITLE VII—HEALTH CARE PROVISIONS

ITEMS OF SPECIAL INTEREST

Adult Residential Treatment for Eating Disorders

The committee is concerned that eating disorders are a significant problem in society as well as in military beneficiaries. Treatment of eating disorders is challenging and usually requires a multidisciplinary, long-term approach that includes treatment in a variety of settings, like residential treatment for adults with eating disorders, which is currently not covered by TRICARE for beneficiaries over the age of 18. The committee notes there is a growing body of evidence depicting the effectiveness of residential treatment for eating disorders. The inclusion of residential treatment for adults under TRICARE would provide an additional avenue of treatment for this challenging group of mental illnesses. Eating disorders often co-occur with other disorders, both mental health and physical, thus facilitating treatment even if the eating disorder is not the primary disorder is consistent with high-quality health care. Unfortunately, the failure to treat a co-occurring eating disorder can reduce the effectiveness of treatment for the other, primary disorder.

Therefore, the committee directs the Secretary of Defense to submit a letter to the Committees on Armed Services of the Senate and the House of Representatives, not later than December 1, 2020, on the feasibility of including residential treatment for adults

with eating disorders as a TRICARE benefit, similar to the Department of Defense's actions for residential substance abuse treatment for adults, and the projected cost to the Department as well as prohibited authorities precluding the Secretary from including this benefit under TRICARE.

Behavioral Health Requirements of the Department of Defense

The committee recognizes the shortage of behavioral health providers nationwide and continues to be concerned with the impact on the military. The committee believes the ability to address the behavioral health demands of the military has a major impact on readiness, whether it is through the military treatment facility, the TRICARE network, or through telehealth. The committee notes that the ability for the Department of Defense to properly fill its force structure requirements is tied to resources and not necessarily the demand for behavioral health services for all impacted by the rigors of a military lifestyle. Therefore, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives, not later than March 1, 2021, that:

(1) identifies the number and types of military, civilian, direct contract, and managed care support contract behavioral health professionals required to treat members of the Armed Forces and covered beneficiaries (as defined in section 1072 of title 10, United States Code), unconstrained by force structure documents;

(2) contains specific information on the amount of funding needed to hire and retain behavioral health professionals to treat such individuals;

(3) contains a plan to provide behavioral health treatment to such individuals using telehealth services and other technologies, including any recommendations of the Secretary regarding legislation;

(4) includes a plan to inculcate behavioral health treatment as a form of overall service member readiness in the same capacity as an annual periodic health assessment;

(5) includes a strategy to increase the number of behavioral health providers for the Department and to standardize the credentialing requirements across the services;

(6) include a strategy for the use of Chaplain programs to promote spiritual fitness as part of the holistic approach to reducing service member suicide and improving behavioral health care for military service-members and their families;

(7) include a strategy to incorporate nonprofit post-traumatic growth programs as an alternate approach to traditional models of mental healthcare; and

(8) include an analysis of Department's utilization of Eye Movement Desensitization and Reprocessing (EMDR) as a behavioral health treatment. Analysis shall include how many EMDR certified providers are in the direct care system, relative frequency of EMDR application compared to more traditional treatment options and the level of effectiveness EMDR has shown in treating beneficiaries experiencing Depression, Post Traumatic Stress, Traumatic Brain Injury, or Suicidal Ideation; and whether EDMR should be covered as a TRICARE benefit.

Cardiac Arterial Disease Diagnostic Improvements

In response to the Committee's direction in the FY2019 NDAA, (H. Rept. 115–676, p. 137) the Defense Health Agency completed its study of the significant health advantages of new technology for non-invasive diagnosis of cardiac artery disease (CAD) through cardiac CT angiography (CTA) and fractional flow reserve computed tomography (FFRct). On October 2, 2019 the Director of DHA issued his Determination of Medical Benefits. DHA amended its TRICARE Policy Manual dated November 12, 2019 to cover the use of FFRct and is making contract adjustments with Managed Care Support Contractors in light of that DMB. The Committee endorses DHA's efforts to bring the benefits of this new technology to DOD personnel and their beneficiaries. However, the DHA Report did not contain an analysis of the cost savings that would accrue from making CTA followed by FFRct (as indicated) the primary pathway for the diagnosis of CAD.

The Committee directs the Director to provide a report to the House Committee on Armed Services no later than March 1, 2021, analyzing the cost savings (including avoidance of transport from theater for diagnosis) of the new, non-invasive pathway as contrasted with the old, invasive pathway of stress testing followed by invasive cardiac angiogram. The Committee directs that the report outline necessary steps to move to the new, non-invasive pathway and a plan of action for accomplishing that move.

Creative Arts Therapies

The Committee recognizes that the use of creative arts therapies shows potential in treating servicemembers with traumatic brain injuries and psychological health conditions. The Committee supports Department of Defense efforts to include creative arts therapies as part of an interdisciplinary treatment model at the National Intrepid Centers and encourages the Department to continue collaboration with the National Endowment for Arts Creative Forces. The committee believes that expanding this program could be beneficial to servicemembers and families; therefore the committee directs the Secretary of Defense to submit a report to the House and Senate Armed Services Committees not later than 90 days after the enactment of this Act on the feasibility of expanding the creative arts therapies program. The report shall include:

(1) The current funding and investment in creative art therapies at the National Intrepid Centers;

(2) The projected cost to expand creative arts therapies;

(3) The number of locations the program could be expanded to.

Financial Management of U.S. Army Medical Research and Development Command

The committee notes that the U.S. Army Medical Research and Development Command (USAMRDC) receives funding for research from several Department of Defense agencies as well as through direct appropriation for the Congressional Directed Medical Research Program. The committee is aware the USAMRDC funds a certain percentage of the command's operational costs and administrative costs, to include civilian pay, from the research funds. The committee recognizes that although this financial management model

has been in practice for several decades, it is not a fiscally responsible or sustainable model. Therefore, the committee directs the Secretary of the Army to develop a more sustainable financial management model, and further directs the Secretary of the Army to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than December 1, 2020, describing the implementation of the new financial model. The report shall include the full operational and administrative cost of USAMRDC to include civilian pay and facilities sustainment.

Improving Health Care Choices for Severely Injured Service Members

The committee seeks to better serve severely disabled veterans who are entitled to hospital insurance benefits under part A of title XVIII of the Social Security Act. Therefore, the committee directs the Secretary of Defense, in coordination with the Secretary of Human Health Services and the Commissioner of Social Security, to report on regulatory or legislative changes that would equitably address servicemembers who are retired from the Armed Services under chapter 61 of title 10, United States Code; entitled to hospital insurance benefits under part A of title XVIII of the Social Security Act pursuant to receiving benefits for 24 months as described in subparagraph (A) or (C) of section 226(b)(2) of such Act (42 U.S.C. 426(b)(2)); and because of such entitlement, are no longer enrolled in TRICARE Prime or TRICARE Select (as those terms are defined in section 1072 of title 10, United States Code) under chapter 55 of title 10, United States Code. The committee further directs the Secretary to submit the results of the report to the House Committee on Armed Services by December 1, 2020.

Military Medical Surge Capacity Partnerships

The committee is concerned with the preparedness and capacity of the military health system to respond to a complex national medical emergency resulting either from a large-scale conflict overseas, a direct attack on the homeland, or from other causes such as a natural disaster or an infectious disease outbreak. For this reason, Section 740 of the National Defense Authorization Act for Fiscal Year 2020 authorized a pilot program on civilian and military partnerships to enhance interoperability and medical surge capability and capacity of the National Disaster Medical System (NDMS). The committee observes that elsewhere in this bill is a provision directing the Secretary of Defense to accelerate commencement of this pilot program and identification of the initial pilot locations.

The committee directs the Secretary of Defense to work expeditiously and collaboratively with National Disaster Medical System, other federal agencies and private partners to develop a plan to establish interoperable medical surge capacity and to identify the initial candidate locations for the pilot program. The committee believes that subsequent funds provided for implementation of the pilot program should support the work of the agencies in the NDMS and include an allocation to private partners to assure they can move quickly to achieve the determined goals of Section 740.

The committee urges the Department to complete its initial report with recommendations in time to include its resource requirements in the Department's Fiscal Year 2022 budget request.

Rare Cancer Treatment

The committee recognizes the Department of Defense has started to address potential differences between the U.S. population and TRICARE beneficiaries when it comes to the identification of cancer risk factors that may be considered rare. Moreover, the committee is concerned with how care and treatment are provided to service members following diagnosis of cancer. Over 60 cancers disproportionately impact those who have served in the military and most are rare cancers, defined as fewer than 6 new cases per 100,000 Americans per year. Few targeted treatments are being developed and made available for service members. The committee notes that understanding specific molecular drivers for each patient's cancer and sharing data are key to providing the most effective treatments and to advancing research that will lead to new treatments. Therefore, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives not later than December 1, 2020, describing the specific types of molecular diagnostics, such as micro-array, whole exome, and RNA–Seq, that the Department is providing to cancer patients. The report shall include the frequency of use, cost of treatment, recommendations on providing molecular diagnostic testing for all service members with cancer at first diagnosis, and outlining data-sharing practices across the services and with the Department of Veterans Affairs and the National Institute of Health for cancer cell lines and models with the external research community.

Report on Force Plate Technology Utilizing Machine Learning for Improving Combat Readiness

The committee notes the Senate report [S. Rept. 115–262] language accompanying the National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) encouraging the Military Services to develop a tool to validate the physical fitness of warfighters and to aid in the determination of combat readiness. The Committee recognizes that technology using machine learning and force plate measurements to develop personalized, evidence-based training programs to prevent injuries in athletes may be used by the Department of Defense to prevent musculoskeletal injuries in servicemembers.

Furthermore, these technologies could provide accurate, actionable insights regarding the physical condition of each servicemember and customized fitness programs for each servicemember to help minimize injuries during combat; thereby increasing the medical readiness and the military lifecycle of servicemembers. The committee notes that there have been some elements of the military services that have previously used this technology to increase readiness, decrease injuries and avoid a significant amount of expenses related to unnecessary injuries. Therefore, the committee directs the Secretary of Defense, in collaboration with the military service secretaries, to submit a report to the Committees on Armed

Services of the Senate and the House of Representatives by September 1, 2021, assessing how force plate technology and machine learning could be leveraged to improve the medical readiness of individual servicemembers.

This report shall include the following elements: (1) a list of units currently using this technology and the impact it has had on unit readiness, (2) an analysis of how this technology could be leveraged to create a more deployable, resilient and sustainable combat force, (3) a determination of servicemember attrition and injury reduction from using Force Plate Machine Learning Technology, (4) a determination of the appropriate component within each military service that would be the responsible entity for implementing customized training regimens for new recruits, active duty and reserve forces, (5) a determination of the feasibility of a customized fitness program for each warfighter to minimize musculoskeletal injuries during both home station and deployed status, (6) the projected cost of employing this technology versus the cost of lost man days due to injuries or attrition, and (7) the projected potential savings from injury avoidance.

Reporting of Data Related to Accession Standards and Mental Health History

The committee is concerned about the potentially disqualifying nature of a history of mental health care for those seeking accession in the Armed Forces. At a time when the Armed Forces are working to eliminate persistent stigma against those seeking mental health care, it is imperative that accession standards be assessed to ensure they appropriately account for risk and do not adversely impact these efforts. The committee also notes the Secretary's recent public expression of concern regarding military accession standards to include medical criteria that may inappropriately disqualify recruits.

Therefore, the committee directs the Secretary of Defense, to submit a report to the committees on Armed Services of the Senate and the House of Representatives, not later than January 31, 2021, detailing for the preceding five years, and broken out by year and the nature of the condition: the number of recruits disqualified for a medical condition involving mental health; the number of waivers requested and the number provided for a mental health condition; the number of recruits discharged after a history of a medical condition relating to mental health which was not previously disclosed became apparent, and an indication of whether the condition impacted performance during training. The report should also specify the overall number of enlistees who were military dependents and the number of each of the above categories who were military dependents.

Review on the Existing Department of Defense Capabilities to Operate, Maintain, and Transport Sterile Clinical, Surgical, and Resuscitative Capabilities

The committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by December 31, 2020, including a review on the existing Department of Defense capabilities to operate, maintain, and transport sterile clinical, sur-

gical, and resuscitative capability assets. The review should include:

1. An assessment of the Department's assets can be transported by existing land, sea, air capabilities anywhere in the United States or the world;

2. An assessment of whether the Department's assets have an integrated power solution that does not require location-based fuel or sourcing;

3. An assessment on if the Department can provide Geographic Combatant Commands and US Special Operations Command with transportable capabilities to train, equip and support Host Nation and friendly medical forces through regular Medical Exercises and Humanitarian Assistance;

4. An assessment of whether the Department can provide National Guard and Reserve units the capability to respond to domestic Acts of God" or man consistent with the Department's Active, Reserve and/or National Guard authorities; and

5. An assessment of whether the Department's treatment and recovery capabilities can allow multiple patients to be stabilized and transported while providing continuous treatment and recovery in a temperature controlled and noise resistant environment.

Status of Implementation of Guidance for Ensuring Access to Contraception for Service Members

The committee notes that the Director of the Defense Health Agency issued Procedural Instruction 6200.02 on Comprehensive Contraceptive Counseling and Access to the Full Range of Methods of Contraception on May 13, 2019. The Committee recognizes the importance of this guidance for ensuring access to contraception for service members, including while they deploy for long periods of time. Therefore, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by January 1, 2021, on the status of implementation of the Defense Health Agency Procedural Instruction (DHA PI 6200.02). The report should address any barriers to full implementation, and include (1) Data on how many women have obtained contraception sufficient for the duration of their deployments and which methods they accessed; (2) Data on service members' ability to obtain the full range of contraceptive methods during deployment. Data should include any service member complaints received regarding a lack of ability to obtain the preferred method of contraception during deployment and reasons why the preferred method was not able to be obtained; (3) Any identified barriers to implementing the requirement that providers ensure access to prescription contraceptives for the duration of service members' deployments, dispensed prior to the service members' deployment; (4) A description of how each military service is implementing the requirement to provide the information to all members attending initial officer or enlisted training; (5) The status of implementation of the clinical counseling requirements; (6) A description of how service members are being made aware of the policies, including their ability to secure the method they need for the duration of deployment and that they may receive up to 12 months' supply; and (7) A description of how each military service is implementing the responsibilities outlined regarding provider ob-

jections to provide comprehensive contraceptive care and counseling while also still ensuring patients receive counseling and timely access to care in the event that a healthcare provider has moral objections.

Supply Chain Resilience and Critical Supplies Stockpile

The Department of Defense has significant experience and expertise managing complex, expeditionary, and global logistics operations and emergency rapid acquisitions and contract support. This expertise has been central to the whole of government response to COVID–19, and we commend the Department for its support. It will be critical to learn lessons from the experience of COVID–19 and build readiness and preparedness for a next global health crisis, whenever and wherever it may strike. This includes having effective processes in place, stocks on hand, as well as being able to anticipate requirements for even the most extreme scenarios. The Department of Defense is adept at planning for two simultaneous wars in two theaters; working within the Whole of Government framework it must be able to do the same when it comes to global health crises or natural disasters—events we may not be able to prevent from occurring simultaneously. The committee directs the Secretary of Defense to report to the House Armed Services Committee within 120 days of enactment, based on lessons learned from COVID–19 response:

(1) What medical /health supplies do you now deem critical to have in DoD and National Stockpiles?

(2) In what amounts should these supplies be maintained?

(3) What is the process for determining requirements for those items?

(4) What percentage of the production of each of those items is domestic vs foreign based on today's industrial base?

(5) What is the current surge ramp capacity for each of those items? If it is not currently sufficient, what should it be?

(6) What is needed to ensure there is sufficient capability within the surge ramp capacity for the items on the critical list?

(7) Provide recommendations as to whether certain industrial activities should be funded for warm base surge capability.

(8) Are any of these items capable of being additively manufactured? If so, what impact does that have on recommendations for possible industrial activities?

(9) What scenarios do you plan against to ensure preparedness?

(10) In FY2019 and FY2020, with what frequency do you convene DoD components or other agencies for exercises to prepare for global health crises?

(11) Would DoD be capable of sustaining medical/health supplies deemed critical for National stockpiles, in addition to DoD stockpiles? Would DoD be capable of managing stockpiles for a Whole of Government response to a national emergency?

(12) Should DoD have prescripted missions or capabilities to sustain and provide critical items for the Whole of Government response in a national emergency?

Traumatic Brain Injury Preventative Devices

The committee continues to fully support the U.S. Army Medical Research and Development Command's efforts to combat Traumatic Brain Injuries (TBI) within the force. However, the committee remains concerned that the Defense Health Agency and the Army are disproportionately addressing the diagnosis and treatment of TBIs, at the expense of projects focused on TBI prevention. As such, the committee appreciates the Army's recent efforts to explore innovate TBI preventative devices, as outlined in the briefing provided pursuant to the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120). The committee encourages Army MRDC, in coordination with the Defense Health Agency, to continue prioritizing TBI prevention research and development and resource these efforts to the maximum extent practicable.

Therefore, the committee directs the Secretary of the Army, in coordination with the Assistant Secretary of Defense (Health Affairs) and the Director of the Defense Health Agency, to provide a briefing to the House Committee on Armed Services, no later than February 1, 2021, an update to the briefing provided pursuant to the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120) on innovative TBI preventative devices. This briefing shall include an overview of research and development projects for TBI preventative devices, and an assessment of possible fielding paths for such devices.

Ultrasound Technology to Identify Subdermal Injuries in Strangulation Victims

The committee notes that strangulation is a common method of intimate partner and domestic violence and is a significant indicator of future lethal violence. A strangulation victim of intimate partner and domestic violence has a 10 times higher risk of being killed in the future. Physical signs of strangulation may not be immediately visible and without treatment can result in serious bodily injury. The committee is concerned that the Military Health System (MHS) does not have the capability to diagnose strangulation injuries in its emergency rooms, such as ultrasound technology that can detect subdermal injuries in strangulation victims, in order to treat victims properly and produce evidence for military criminal investigators. Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than December 1, 2020, on the number and types of devices available in the MHS to evaluate strangulation victims in emergency rooms, the cost of each device, and the numbers required to provide the capability in each emergency room in the MHS.

Women's Comprehensive Health Clinics

The committee commends Naval Medical Center San Diego for establishing the Comprehensive Women's Healthcare Clinic aimed at serving the unique health needs of Active Duty female sailors and Marines. The committee notes the ability of this clinic to address a wide range of women's health issues including migraines, gender-specific musculoskeletal concerns, contraception and family

planning, that are positively impacting the readiness, retention, and morale of women in the military. The committee believes women's health is a readiness issue and promoting programs and initiatives responding to the unique health needs of women in the military is in the best interest of the Department of Defense. Therefore, the committee encourages the Secretary of Defense to expand and establish comprehensive women's health clinics as the Defense Health Agency assumes ownership of all military treatment facilities.

LEGISLATIVE PROVISIONS

SUBTITLE A—TRICARE AND OTHER HEALTH CARE BENEFITS

Section 701—Expansion of Mental Health Assessments for Members of the Armed Forces

This section would amend section 1074m of title 10, United States Code, by adding a new section that would require the Secretary of Defense to provide a member who participated in warfighting activities that had a direct and immediate impact on a combat operation or other military operation a mental health assessment at a practical frequency that the Secretary determines.

Section 702—Mandatory Referral for Mental Health Evaluation

This section would amend section 1090a of title 10, United States Code, to require regulations to establish a phrase that enables a member of the Armed Forces to trigger a referral of the member by a commanding officer or supervisor for a mental health evaluation. This section would also require a commanding officer or supervisor to make such referral as soon as practicable following disclosure by the member to the commanding officer or supervisor of the phrase established.

Section 703—Assessments and Testing Relating to Exposure to Perfluoroalkyl and Polyfluoroalkyl Substances

This section would require the Secretary of Defense to ensure that any periodic health assessment provided to a member of the Armed Forces includes an evaluation of whether the member has been stationed at an installation or exposed to suspected release of perfluoroalkyl substances or polyfluoroalkyl substances. This section would also amend section 1145(a)(5) of title 10, United States Code, to ensure that each physical examination includes and assessment of whether the member has been stationed at an installation or exposed to suspected release of perfluoroalkyl substances or polyfluoroalkyl substances. This section would also amend section 1074f(b)(2) of title 10, United States Code, adding the above questions to the deployment assessment as well as ensure that a member of the Armed Forces is provided a blood test and it is included in the health records of the individual.

Section 704—Improvement to Breast Cancer Screening

This section would amend sections 1074d(b)(2) of title 10, United States Code, to include the use of digital breast tomosynthesis.

SUBTITLE B—HEALTH CARE ADMINISTRATION

Section 711—Protection of the Armed Forces from Infectious Diseases

This section would amend chapter 55 of title 10, United States Code, by inserting a new section after 1073d that would require the Secretary of Defense to ensure that the Armed Forces have the diagnostic equipment, testing capabilities, and personal protective equipment necessary to protect members of the Armed Forces from the threat of infectious diseases and to treat members who contract infectious diseases. This section would also require the Secretary to include with the defense budget materials for a fiscal year a plan to research and develop vaccines for infectious diseases and to ensure that the medical laboratories of the Department of Defense are equipped with the technology needed to facilitate rapid research in the case of a pandemic.

Section 712—Inclusion of Drugs, Biological Products, and Critical Medical Supplies in National Security Strategy for National Technology and Industrial Base

This section would amend section 2501(a) of title 10, United States Code, by adding a new paragraph to include providing for the provision of drugs, biological products, vaccines, and critical medical supplies (including personal protective equipment, diagnostic and testing capabilities, and lifesaving breathing apparatuses required for the treatment of severe respiratory illness and respiratory distress) required to enable combat readiness and protect the health of the Armed Forces in the national security strategy for the national technology and industrial base. This section would also require the Secretary of Defense to submit a report to the congressional defense committees, not later than 1 year after the date of the enactment of this Act, on the vulnerabilities to the medicine supply chain of the United States.

Section 713—Contract Authority of the Uniformed Services University of the Health Sciences

This section would amend section 2113(g)(1) of title 10, United States Code, to clarify the authority to partner in sole source fashion with the Henry Jackson Foundation or other non-profit organizations to facilitate and implement medical research.

Section 714—Extension of Organization Requirements for Defense Health Agency

This section would amend section 1073c(e) of title 10, United States Code, to extend the date of consolidation of all military research underneath the Defense Health Agency from September 30, 2022, to September 30, 2025.

Section 715—Modification to Limitation on the Realignment or Reduction of Military Medical Manning End Strength

This section would amend section 719 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) to prohibit the realignment or reduction of authorized military medical

end strength for 1 year after the date of the enactment of this Act. The section would also add to the required review of medical manpower requirements scenarios to include homeland defense missions and pandemic influenza.

Section 716—Modifications to Implementation Plan for Restructure or Realignment of Military Medical Treatment Facilities

This section would amend section 703(d) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) by striking subparagraph (D) of paragraph (2) and inserting a new paragraph that specifies requirements for the implementation plan; and by requiring a notice and wait preventing the Secretary from implementing the plan until the plan is submitted to Congress and a 1-year period elapses following the later of the date of such submission or the date of the enactment of this Act.

Section 717—Policy to Address Opioid Prescription Abuse Prevention

This section would require the Secretary of Defense to develop a policy and tracking mechanism for opioids that monitors and prohibits the overprescribing of opioids to ensure compliance with clinical practice guidelines.

Section 718—Addition of Burn Pit Registration to Electronic Health Records of Members of the Armed Forces and Veterans

This section would require, not later than 1 year after the date of the enactment of this Act, the Secretary of Defense to ensure that the electronic health record maintained by such Secretary of a member of the Armed Forces registered with the burn pit registry is updated with any information contained in such registry, and the Secretary of Veterans Affairs shall ensure that the electronic health record maintained by such Secretary of a veteran registered with the burn pit registry is updated with any information contained in such registry.

SUBTITLE C—MATTERS RELATING TO COVID–19

Section 721—COVID–19 Military Health System Review Panel

This section would require the Secretary of Defense to establish a panel to be known as the "COVID–19 Military Health System Review Panel" to review the response of the military health system to the coronavirus disease 2019. The Secretary shall submit a report with the findings of the review panel not later than June 1, 2021.

Section 722—COVID–19 Global War on Pandemics

This section would require the Secretary of Defense to develop a strategy for pandemic preparedness and response. This section would also require the Secretary to conduct a study on the response of the military health system to the coronavirus disease 2019. The Secretary shall submit a report on the strategy and the study by June 1, 2021.

Section 723—Registry of TRICARE Beneficiaries Diagnosed with COVID–19

This section would require the Secretary of Defense to establish and maintain a registry of TRICARE beneficiaries who have been diagnosed with COVID–19 not later than June 1, 2021. This section would also require the Secretary to submit to the Committees on Armed Services of the Senate and the House of Representatives a report on establishing the registry not later than 180 days after the date of the enactment of this Act.

SUBTITLE D—REPORTS AND OTHER MATTERS

Section 731—Modifications to Pilot Program on Civilian and Military Partnerships to Enhance Interoperability and Medical Surge Capability and Capacity of National Disaster Medical System

This section would amend section 740 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) to require the Secretary of Defense, not later than 180 days after the date of the enactment of the National Defense Authorization Act for Fiscal Year 2021, to carry out the pilot program that was authorized. This section would also require the Secretary to collaborate with the Administrator of the Federal Emergency Management Agency.

Section 732—Reports on Suicide among Members of the Armed Forces and Suicide Prevention Programs and Activities of the Department of Defense

This section would amend section 741(a)(2) of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) by including a requirement in the report to determine if a member was deployed within 1 year of the suicide, as well as the number of suicides where the member was prescribed a medication to treat a mental health or behavioral health diagnosis during the 1-year period preceding the death. This section also would add a new requirement to describe programs carried out by the military departments to reduce stigma associated with seeking assistance for mental health or suicidal thoughts.

Section 733—Clarification of Research under Joint Trauma Education and Training Directorate and Inclusion of Military Working Dogs

This section would amend subsection (b) of section 708 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328; 10 U.S.C. 1071 note) to include military working dogs to inform and advise the conduct of research on the leading causes of morbidity and mortality of members of the Armed Forces and military working dogs in combat.

Section 734—Extension of the Joint Department of Defense-Department of Veterans Affairs Medical Facility Demonstration Project

This section would authorize the extension of the Joint Department of Defense-Department of Veterans Affairs Medical Facility Demonstration Fund established by section 1704 of the National

Defense Authorization Act for Fiscal Year 2010 (Public Law 111–84) and most recently amended by section 732 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

Section 735—Information Sharing by Secretary of Defense regarding Prevention of Infant and Maternal Mortality

This section would authorize the Secretary of Defense to enter into memoranda of understanding with State and local health authorities to share the practices of, and lessons learned by, the military health system for the prevention of infant and maternal mortality.

Section 736—Grant Program for Increased Cooperation on Post-Traumatic Stress Disorder Research between United States and Israel

This section would require the Secretary of Defense, in coordination with the Secretary of Veterans Affairs and the Secretary of State, to award grants to eligible entities to carry out collaborative research between the United States and Israel with respect to post-traumatic stress disorders.

Section 737—Pilot Program on Cryopreservation and Storage

This section would require the Secretary of Defense to establish a pilot program to provide not more than 1,000 members of the Armed Forces serving on Active Duty with the opportunity to cryopreserve and store their gametes prior to deployment to a combat zone.

Section 738—Pilot Program on Parents Serving as Certified Nursing Assistants for Children under TRICARE Program

This section would authorize the Director of the Defense Health Agency to carry out a pilot program under which an eligible parent serves as a certified nursing assistant under the TRICARE program with respect to providing personal care services to a covered child.

Section 739—Study on Incidence of Cancer Diagnosis and Mortality among Pilots in the Armed Forces

This section would require the Secretary of Defense to seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine to conduct a study to determine the incidence of cancer diagnosis and mortality among members, and former members, of the Armed Forces who serve as pilots compared to members who do not serve as pilots. This section would also require the Secretary of Defense to submit a report to the Committees on Armed Services and Veterans' Affairs of the Senate and the House of Representatives on the findings of the study not later than 2 years after entering into an agreement.

Section 740—Report on Diet and Nutrition of Members of the Armed Forces

This section would require the Secretary of Defense, not later than 180 days after the date of the enactment of this Act, to submit

to the congressional defense committees a report on the diet and nutrition of members of the Armed Forces.

Section 741—Report on Costs and Benefits of Allowing Retired Members of the Armed Forces to Contribute to Health Savings Accounts

This section would require the Assistant Secretary of Defense for Health Affairs to submit a report to the congressional defense committees not later than 180 days after the date of the enactment of this Act on the costs and benefits of allowing retired members of the Armed Forces to make contributions to a health savings account.

Section 742—Study on Toxic Exposure at Karshi-Khanabad Air Base, Uzbekistan

This section would require the Secretary of Defense to conduct a study on toxic exposure by members of the Armed Forces deployed to Karshi-Khanabad Air Base, Uzbekistan, at any time during the period beginning October 1, 2001, and ending December 31, 2005. The Secretary shall submit a report not later than 180 days after the date of the enactment of this Act to the Committees on Armed Services of the Senate and the House of Representatives.

Section 743—Audit of Medical Conditions of Tenants in Privatized Military Housing

This section would require the Inspector General of the Department of Defense, not later than 90 days after the date of the enactment of this Act, to commence the conduct of an audit of the medical conditions of eligible individuals and the association between adverse exposures of such individuals in unsafe or unhealthy housing units and the health of such individuals. The Inspector General shall submit, one year after commencement of the audit, to the Secretary of Defense and the Committees on Armed Services of the Senate and the House of Representatives a report on the results of the audit.

Section 744—Report on Integrated Disability Evaluation System

This section would require the Secretary of Defense to submit to Congress a report, not later than one year after the date of the enactment of this Act, on the findings of a study conducted by the Secretary on the implementation and application of the Integrated Disability Evaluation System.

Section 745—Review and Report on Prevention of Suicide among Members of the Armed Forces Stationed at Remote Installations outside the Contiguous United States

This section would require the Comptroller General of the United States to conduct a review of efforts by the Department of Defense to prevent suicide among members of the Armed Forces stationed at covered installations. This section would also require a briefing on preliminary observations to the Committees on Armed Services of the Senate and the House of Representatives not later than Oc-

tober 1, 2021, and a final report submitted not later than March 1, 2022.

SUBTITLE E—MENTAL HEALTH SERVICES FROM DEPARTMENT OF VETERANS AFFAIRS FOR MEMBERS OF RESERVE COMPONENTS

Section 751—Short Title

This section would allow for the subtitle to be cited as the "Care and Readiness Enhancement for Reservists Act of 2020" or the "CARE for Reservists Act of 2020."

Section 752—Expansion of Eligibility for Readjustment Counseling and related Outpatient Services from Department of Veterans Affairs to Include Members of Reserve Components of the Armed Forces

This section would amend section 1712A of title 38, United States Code, to authorize the Secretary of Veterans Affairs, in consultation with the Secretary of Defense, to furnish to any member of the Reserve Components of the Armed Forces who has a behavioral health condition or psychological trauma, counseling to a member of the Reserve Components of the Armed Forces.

Section 753—Provision of Mental Health Services from Department of Veterans Affairs to Members of Reserve Components of the Armed Forces

This section would add a new section to subchapter VIII of chapter 17 title 38, United States Code, to authorize the Secretary of Veterans Affairs, in consultation with the Secretary of Defense, to furnish mental health services to members of the Reserve Components of the Armed Forces.

Section 754—Inclusion of Members of Reserve Components in Mental Health Programs of Department of Veterans Affairs

This section would amend section 1720f of title 38, United States Code, to include in the term 'covered individual' a member of the Reserve Components of the Armed Forces. The section would also amend 1720h of title 38, United States Code, to include treatment for individuals who served in classified missions.

Section 755—Report on Mental Health and Related Services Provided by Department of Veterans Affairs to Members of the Armed Forces

This section would require the Secretary of Veterans Affairs, not later than 1 year after the date of the enactment of this Act, to submit to the congressional defense committees and the Committees on Veterans' Affairs of the Senate and the House of Representatives a report on the increase of members of the Armed Forces seen by the Department of Veterans Affairs.

TITLE VIII—ACQUISITION POLICY, ACQUISITION MANAGEMENT, AND RELATED MATTERS

ITEMS OF SPECIAL INTEREST

Assessment of Section 889 of the National Defense Authorization Act for Fiscal Year 2019

The committee directs the Comptroller General of the United States to submit a report to the congressional defense committees not later than August 13, 2026, on an assessment of the implementation of section 889 of the National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232). The assessment shall examine:

(1) the extent to which agencies have assessed applicability of section 889 to their activities to include: identifying whether and how they use the prohibited equipment, components, or services, to include those on Federal property; inventory of active contracts or other agreements with an entity that uses prohibited equipment, components, or services;

(2) the steps agencies have taken to implement section 889, to include: contract actions or changes to agreements; removal of equipment or components from programs and activities; description of waivers agencies have requested, associated rationales, and their dispositions; and

(3) the challenges agencies face in implementing section 889 and recommendations for improvement.

The committee further directs the Comptroller General to submit an interim report to the congressional defense committees not later than August 13, 2021.

Briefing on Section 889 of the National Defense Authorization Act for Fiscal Year 2019

The committee reaffirms its ongoing national security concerns about proliferation of video surveillance or telecommunications equipment in the Federal and commercial space produced by Huawei, ZTE, Hytera, Hikvision, or Dahua, as defined in section 889 of the National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232). Consistent with draft regulation issued in November 2019, and the anticipated August 2020 regulation related to this statute, the committee directs the Secretary of Defense, in coordination with the Secretary of Commerce, to provide a briefing to the House Committee on Armed Services not later than December 1, 2020, on the implementation status of the full requirements in section 889. This briefing should address the following:

(1) whether the final implementing regulation has been issued and, if not, why;

(2) whether the interim rule prohibits "covered" equipment/services only if they are a "substantial or essential component of any system", or as "critical technology as part of any system";

(3) clarify how the Departments interpret "substantial or essential" as well as "critical";

(4) how the Department of Commerce determines which "affiliates and subsidiaries" are on the covered list;

(5) the amount and type of exceptions and waivers that have been granted to date, as allowed in section 889;
(6) whether the Departments plan to seek a delay to the August 2020 mandate, which bans agencies from contracting with a company that uses covered equipment and services;
(7) how the Secretary of Defense, in consultation with the Director of National Intelligence and the Director of the Federal Bureau of Investigation, would designate additional entities believed to be owned or controlled by a foreign government as authorized; and
(8) whether the Departments plan to make funds available for the replacement of the prohibited covered equipment.

Commercial Airlift Review Board Requirements

The committee is interested in the Department of Defense Commercial Airlift Review Board processes and procedures. Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the Committee on House Armed Services no later than January 31, 2021 on the processes and procedures of the Commercial Airlift Review Board as well as historical information from 2015–2020 with the following:
(1) List of currently approved air carriers;
(2) List of the approval or disapproval of air carriers seeking initial approval to provide air transportation service to DOD;
(3) List of the approval or disapproval of air carriers in the program that do not meet DOD quality and safety requirements;
(4) List of the approval or disapproval of air carriers in the program seeking to provide a class of service different from that which they are currently approved;
(5) List of the action taken to suspend, reinstate, or place into temporary nonuse or extended temporary nonuse, DOD-approved carriers;
(6) List of the action taken to review, suspend, reinstate, or place into temporary nonuse or extended temporary nonuse, an air carrier providing operational support services to DOD; and
(7) List of any appeals to the decisions of the Commercial Airlift Review Board and the resulting decision of those appeals.

Commercial Items Group Supporting Procuring Contracting Officers in Making Commercial Item Determinations

Congress established the Commercial Items Group (CIG) under section 831(b)(2) of the National Defense Authorization Act for Fiscal Year 2013, to support procuring contracting officers (PCOs) in making commercial item determinations (CIDs) and under section 873 of the National Defense Authorization Act for Fiscal Year 2017, directed the Department of Defense to centralize the expertise and analysis necessary for the use and development of CIDs. Since then, the CIG has served in this capacity within the Defense Contract Management Agency (DCMA). However, in its Fiscal Year 2021 budget submission, the Department proposed divesting DCMA of the CIG without offering an alternative that would meet its statutory requirement. Further, the Department's long-term strategy for commercial item and price reasonableness analysis remains unclear. Without a clear approach to procuring commercial items, including understanding how commercial item determina-

tions have been made, the Department foregoes an opportunity to streamline and strengthen its acquisition processes.

Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to, not later than October 1, 2020, brief the House Armed Services Committee on their proposed way forward to continue to comply with statutory requirements as well as meet the intent of centralizing the process of commercial item determinations as well as the decisions, and providing expertise and assistance to acquisition staff in commercial item acquisitions.

Commercial Supply Stores

The committee believes the Department of Defense should compete all requirements for the operation of civil engineering and industrial supply stores through fair and open competition not sole-or direct-source, unless allowed under the Small Business Act (Public Law 85–536).

The committee notes that several private companies have operated supply stores on military installations with the purpose of providing commercial off-the-shelf (COTS) parts and supplies to military customers. Because these storefronts serve a function that is not inherently governmental, Congress recognized the private sector's preferred role in managing and operating them in the committee reports accompanying the National Defense Authorization Act for Fiscal Year 1998 (H. Rept. 105–132) and the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120).

The committee urges the Department to reverse a recent trend of entering into agreements with the General Services Administration (GSA) to replace existing competitively awarded supply stores on military bases with stores administered through GSA's fourth-party logistics program. These actions, conducted without the competition that underpins Federal procurement policy, run counter to the Competition in Contracting Act of 1984 (41 U.S.C. 253) and result in less small business participation in government contracting. Therefore, the committee urges the Department to restore competitive acquisition practices and afford small business prime contractor opportunities through the award of contracts to administer these important stores at the nation's military facilities.

Compliance with Contract Services Planning, Programming, and Budgeting Requirements and Statutory Limitations on Outsourcing Government Jobs

The committee notes that contract services spending comprises at least one-quarter of the Department of Defense topline but is not currently subjected to the validation and funding offset drills currently applied to the Department of Defense civilian workforce. Further, according to the Government Accountability Office, spending on service contracts has increased significantly in recent years. It is therefore critical that appropriate and sufficiently detailed data are collected and analyzed to support the validation of requirements for service contracts, avoid duplication with other requirements, and properly inform the planning, programming, budgeting and execution process of the Department of Defense. Further, the committee notes that statutory limitations regarding the privatization and outsourcing of Department of Defense civilian jobs

are not universally applied throughout the Department. As a result, there are insufficient management controls in place to ensure compliance within the Department.

Therefore, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services not later than January 1, 2021, on the Department's current compliance with the contractor inventory requirements in section 2330a of title 10; the specification of amounts required under section 235 of title 10; the data analysis and requirements validation required under section 2329 of title 10; and any guidelines established pursuant to section 852 of the National Defense Authorization Act for Fiscal Year 2018 or any other guidance published by the Department of Defense relating to solicitations for contracts.

Consistency in the Management and Execution of Audits of Contractor Business System Reviews Conducted by the Defense Contract Audit Agency

The committee notes that the Department of Defense is planning to significantly increase the number of audits performed on contractor business systems (CBS) during the next few fiscal years, particularly those audits for which the Defense Contract Audit Agency (DCAA) has primary responsibility. The Defense Contract Management Agency (DCMA) and DCAA generally conduct their respective CBS reviews on a 3-year cycle. However, DCAA has fallen far short of maintaining this schedule during fiscal years 2013 through 2018 and the Government Accountability Office (GAO) recently reported that DCAA completed only 9 of 76 planned CBS audits during fiscal year 2017. In order to "catch up," DCAA plans to significantly increase its annual pace and conduct almost 300 CBS audits between fiscal years 2019 and 2022. In their report, the GAO also noted that DCAA's ability to meet its goal was dependent upon three factors, including:

(1) the ability to shift resources from conducting incurred cost audits to business systems audits;

(2) the use of independent public accounting firms (IPAs) to perform a portion of the incurred cost audits; and

(3) the ability of DCAA auditors to use new audit plans and complete the required business system audits in a timely manner.

Further, the committee is aware of concerns about how DCAA contracted for and oversaw the work of IPAs. The committee believes it is essential that DCAA and DCMA improve their execution, management, and oversight of contractor business systems reviews, including their use of IPAs.

Therefore, the committee directs the Comptroller General of the United States to assess:

(1) whether DCAA and DCMA have improved their visibility into the number of reviews needed to be conducted and the length of time it takes to resolve issues identified during these reviews;

(2) the progress made and challenges encountered, if any, by DCAA toward achieving its goal of becoming current on all of its contractor business systems audits by fiscal year 2022;

(3) the extent to which DCAA has used IPAs to help conduct incurred cost audits; and

(4) the extent to which DCAA is collecting and using the lessons learned from its initial use of IPAs to facilitate their use.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by March 1, 2021, on preliminary observations and submit a report to the congressional defense committees at a date agreed upon at that time.

COVID–19 Uniformed Mask Distribution to Service Members

The committee understands the urgency for the Department of Defense to deliver uniformed masks to service members during the COVID–19 public health emergency. The committee wants to ensure it remains abreast of the effectiveness of uniformed mask distribution of masks to service members. Therefore, the committee directs the Secretary of Defense to provide a report to the Committees on Armed Services of the Senate and the House of Representatives not later than January 1, 2021, that defines:

(1) The requirement for the total number of masks, specifically when and how many are needed for garrison and field use; and

(2) The contracting and procurement plan to meet the requirement.

Department of Defense Proposal for Reports on Acquisition Programs and Activities

The committee notes that the Comptroller General of the United States annual assessment of the Department of Defense's acquisition programs plays an important role in enabling the congressional defense committees' detailed oversight of the Defense Acquisition System.

Section 830(b) of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) required the Secretary of Defense to submit to the congressional defense committees not later than October 15, 2020, a proposal for an alternative methodology for reporting on all acquisition programs that includes, among other things, the reporting requirements for Selected Acquisition Reports. The committee is aware that the Comptroller General's annual assessment of acquisition programs relies extensively on data included in Selected Acquisition Reports. Therefore, the committee directs the Comptroller General to assess the Secretary of Defense's proposal for an alternative methodology. At a minimum, the review shall address:

(1) potential benefits and challenges associated with the Department's proposed methodology as they relate to Comptroller General and congressional oversight of the Defense Acquisition System, including the ability to report on trends in acquisition program performance over time; and

(2) the extent to which the proposal includes reporting on elements of program performance that align with acquisition best practices.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than 120 days after the submission of the Secretary of Defense's report on the Comptroller General's preliminary findings and to submit a final report to the congressional defense committees on a date agreed to at the time of the briefing.

Efforts to Improve the Domestic Nonavailability Waiver Process

The committee notes that there continues to be congressional interest in how the Department of Defense executes its domestic nonavailability waiver process, including how the Department communicates with private industry and determines whether there are new domestic sources available to meet the Department's needs. Therefore, the committee directs the Assistant Secretary of Defense for Sustainment to provide a briefing to the House Committee on Armed Services not later than December 1, 2020, on the Department's domestic nonavailability waiver process. The briefing shall address recent actions taken by the Department, including waivers granted under sections 2533a and 2533b of title 10, United States Code, since the related briefing required by the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92), and new efforts to develop domestic supplies.

Efforts to Streamline the Internal Control Audit Framework Used to Evaluate Contractor Business Systems

The committee recognizes that consistent with a recommendation of the Section 809 Panel Report, streamlining the Department of Defense's 18 government-unique criteria used to assess contractor business systems is anticipated to result in more efficient, effective, objective, and material audits. The committee urges the Department to review the system criteria used to audit contractor systems (Cost Estimating Systems, Earned Value Management Systems, Material Management and Accounting Systems, Purchasing Systems, and Property Management Systems) to determine whether an internal control audit framework consistent with private sector auditing standards would provide a more efficient and effective approach to auditing these systems as compared to the current government-unique system criteria set forth in the Defense Federal Acquisition Regulation Supplement. The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than February 1, 2021, on how the Department plans to improve its audit framework and its timeline for doing so.

Evaluating Possibility of Conflicts of Interest for Federally Funded Research and Development Centers

The committee recognizes the valuable research conducted by Federally Funded Research and Development Centers (FFRDCs). The committee also notes that if an FFRDC conducts market research, they are given keen insights into potentially sensitive and advantageous market information. As a result, care must be taken to ensure that that market research conducted by FFRDCs on behalf of the Department of Defense provides an impartial view of the market.

Therefore, the committee directs the Secretary of Defense to submit a report, no later than December 15, 2020, evaluating the possibility of FFRDCs gaining and utilizing an unfair advantage as a result of conducting market research. At a minimum, this report shall include the number of instances in which an FFRDC won a contract in which it conducted market research on behalf of the Department and the dollar amounts of the contracts.

GAO Report on GSA E-commerce Portal Data Usage

The House Armed Services Committee directs the Comptroller General to submit a report to the committee by January 31st, 2021 on compliance with subsection (h) of section 846 of the National Defense Authorization Act of Fiscal Year 2018 (Public Law 115–91; 41 U.S.C. 1901 note). The report shall describe how platform providers within the General Service Administration's (GSA) e-commerce program are complying with subsection (h) and GSA's ability to monitor providers' activities and data uses for compliance with subsection (h).

GAO Report on Time-and-Materials and Labor-Hour Contracts

The committee is concerned about the Department of Defense's use of time-and-materials and labor-hour contracts and the use of labor category minimums within these contracts. The committee recognizes that a time-and-materials contract is generally a riskier contract type for the government as it provides little incentive for the contractor to control costs. The committee notes that technologies such as artificial intelligence, smart devices, and other innovations are changing the consideration of such contracts in certain sectors, such as information technology, and that the current federal statute and regulations on their use and the associated requirement to use labor category minimums can restrict the ability of industry to offer the best value to the Department.

Therefore, the committee directs the Comptroller General of the United States to provide preliminary observations to the Committees on Armed Services of the Senate and the House of Representatives by February 28, 2021, on trends on the Department of Defense's use of time-and-material and labor-hour contracts, including the types of services acquired and the extent to which these contracts were awarded using procedures authorized under Part 12 of the Federal Acquisition Regulation.

The committee further directs the Comptroller General to submit a more comprehensive report to the congressional defense committees on a date agreed to at the time of the briefing. The report should include:

(1) a description of the federal and defense policies governing the use of time-and-material and labor-hour contracts, including the extent to which labor category minimums are required to be used in such contracts;

(2) an assessment as to whether and under what conditions the private sector uses time-and-material or labor-hour contracts in such areas as information technology services, cybersecurity services, audit or audit readiness services, health care services and records, telecommunications devices and services, or other knowledge-based professional services;

(3) an assessment on the feasibility of substituting private sector experience for educational requirements in Department of Defense contracts and any other improvements that can be made to the minimum requirements in labor categories;

(4) recommendations, as appropriate, on whether changes to Department of Defense policy regarding time-and-materials and labor-hour contracts, including actions to limit or restrict award of such

contracts, especially when utilizing Federal Acquisition Regulation Part 12 procedures, are warranted; and

(5) any other matters determined by the Comptroller General as appropriate.

Incremental Funding of Services Contracts

The committee is concerned about the use of incremental funding in services contracts and its potential impact on contractor performance and outcomes at the Department of Defense. The committee acknowledges that the frequent use of continuing resolutions has forced the Department to operate with less or uncertain funding for longer periods of time and may be incrementally funding contracted work, even when the services under contract are non-severable. However, the committee also recognizes that this may create an administrative burden, particularly on small businesses, and further, could result in suboptimal contractor performance.

Therefore, the committee directs the Comptroller General of the United States to:

(1) assess whether buying activities in the Department of Defense incrementally funded work required under contracts for services awarded during the fiscal years 2017, 2018, 2019;

(2) describe whether the regulations applicable to procurement or fiscal law permits or facilitates such incremental funding;

(3) describe the processes by which the buying activities justify, approve, and monitor the use of incremental funding of services contracts; and

(4) describe whether the use of incremental funding on contracts for services poses administrative burdens, financial risks, or performance challenges to either the Department or its contractors.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by March 1, 2021, on the Comptroller General's preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

Plan To Address Obsolete MIL–PRF–19500 Discrete Parts

The committee recognizes the important role that military specification semiconductor devices perform in a broad array of space, satellite, and strategic defense applications. These components form the backbone of critical defense and space designs by providing power and control to satellite, aircraft, and missiles and must be able to withstand environmental stress such as extreme temperature, radiation, shock, and vibration. The committee is aware of possible disruptions to the supply of over three thousand critical components that meet MIL–PRF–19500 specifications as production ceases or domestic fabrication is relocated outside of the United States. Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a report to the House Committee on Armed Services no later than January 31, 2021 on the status of the domestic supply chain for MIL–PRF–19500 qualified discrete parts and the sustainment plan for maintaining access to these qualified parts. The committee further notes that the report called for with similar Directive Report Lan-

guage in the National Defense Authorization Act for Fiscal Year 2020 has yet to be produced. A single report, as outlined above, will suffice to fulfill both requirements.

Procurement Technical Assistance Program Management and Oversight

The committee remains supportive of the Procurement Technical Assistance Program and its critical role in strengthening the defense industrial base—particularly during the economic disruptions caused by the COVID–19 pandemic.

The committee directs the Undersecretary of Defense for Acquisition and Sustainment and the Deputy Assistant Secretary of Defense for Industrial Policy to submit a report to the House Committee on Armed Services by December 1, 2020 on Department of Defense compliance with the Section 852 of the FY2020 National Defense Authorization Act (P.L. 116–92) requirement to move the management and oversight of the Procurement Technical Assistance Program from the Defense Logistics Agency to the Under Secretary of Defense for Acquisition and Sustainment and to the Office of the Deputy Assistant Secretary of Defense for Industrial Policy in order to:

(1) Better align the Procurement Technical Assistance Program's visibility and mission with Department of Defense efforts, and

(2) To strengthen the defense industrial base.

Report on Cybersecurity Maturity Model Certification

The committee acknowledges that the Department of Defense has taken initial steps to ensure that its contractors are aware of the actions necessary to protect the government's data and networks from cybersecurity threats. However, the committee is concerned that there remain key unanswered questions about how it will implement its cybersecurity framework, especially given the level of collaboration necessary between industry and government for its success.

Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to submit a report to the congressional defense committees by January 15, 2021, regarding the Cybersecurity Maturity Model Certification (CMMC) program. The report shall address the following:

(1) the estimated annual costs to the Department to implement CMMC and the estimated annual costs to the Department for CMMC expenses that will be considered an allowable cost on a government contract for each of fiscal years 2020 through 2024;

(2) the estimated costs for compliance and certification for each category of small, medium-sized, and large businesses, by CMMC tier;

(3) the status of Department efforts to revise regulations, issues related to current contract clauses, the timelines proposed for each step in the regulatory process, and the planned applicability to contracts once a final regulation is implemented;

(4) the efforts of the Department to incorporate CMMC training into the Department's and Defense Acquisition University's training requirements;

(5) the efforts of the Department to address issues surrounding exclusivity of the standard and the certification across the enterprise;

(6) a discussion of the roles, responsibilities, and liabilities for the prime contractors and subcontractors with regard to the assigning of the CMMC tier;

(7) a discussion of the plan for the CMMC Accreditation Board to engage and train the appropriate resources to conduct certifications for the defense industrial base as it pertains to the timelines included in the Department's rollout of CMMC;

(8) a plan for the Department to obtain and retain the CMMC Accreditation Board as the exclusive provider of CMMC certifications; and

(9) a discussion of how the CMMC Accreditation Board will prioritize the requests for CMMC certification and the factors used to determine priority, if any, specifically with regard to company size, sole source contracting, and the timelines included in the Department's rollout of CMMC.

Report on Source Content Supplier for Major Defense Acquisition Programs

The committee believes the Department of Defense's acquisition processes should be in line with the standards of the Buy American Act of 1933 (Public Law 72–428). The committee also believes the Department should set a goal to acquire and procure American-made equipment and products where possible to ensure a strong national industrial base to support warfighters in time of need.

Therefore, the committee directs the Secretary of Defense to submit a report to the congressional defense committees not later than March 1, 2021, assessing the source content of procurement carried out in connection with major defense acquisition programs (as defined in section 2430 of title 10, United States Code). The report shall include the proportion of items procured in connection with a major defense acquisition program that are manufactured in the United States which are substantially all from articles, materials, or supplies mined, produced, or manufactured in the United States.

The report shall also include a detailed description of which components of major defense acquisition programs are sole-sourced from a foreign supplier, including those sourced from a member of the North Atlantic Treaty Organization or a country that otherwise qualifies for a waiver under the Buy American Act. The report should be organized by major defense acquisition program and may contain a classified annex, but should be unclassified to the extent practicable.

Secure Supply Chain for Niobium

Niobium oxides are important for defense and commercial applications. Recognizing this, the Department of Interior deemed niobium as one of 35 critical minerals vulnerable to supply chain disruption, the "absence of which would have significant consequences for our economy or our national security." The U.S. imports niobium from nations subject to political pressures and instability, which creates risk for supply chain disruption.

Accordingly, the committee directs the Secretary of Defense to brief the House Committee on Armed Services by February 15, 2021 detailing the actions necessary in order to establish a domestic processing capability for niobium oxides. The Secretary should consider leveraging established critical mineral supply chains, including niobium's twin element tantalum, to provide needed supply chain security.

Sensor Open Systems Architecture and C4ISR Modular Open Suite of Standards Military Standards Initiative

The committee is encouraged by the military services supporting Modular Open Systems Architectures (MOSA) on all future programs and platform modernization efforts. For example, the Army's C4ISR Modular Open Suite of Standards (CMOSS), and the Air Force's Sensor Open Systems Architecture (SOSA) standards are significant advances.

The committee appreciates the efforts to increase capabilities, speed development, speed technology refresh, lower costs for the Government, and increase competition in the industry. The committee is aware of marked progress made by the Army's PEO (Program Executive Office) C3T (Command, Control, and Communications-Tactical), PEO IEW&S (Intelligence, Electronic Warfare and Sensors), and Network-CFT (Cross-Functional Team). The committee commends such forward thinking and movement to unify around these standards.

Furthermore, the committee recommends that CMOSS and SOSA military electronics standards be more tightly connected to use the same hardware pinout standards and, more importantly, the same software data transport protocols, such as the Modular Open RF Architecture (MORA), to further solidify a common Department of Defense-wide technical approach to create an open systems architecture standard by which small businesses and large primes can compete. To achieve a more effective economy of scale, the CMOSS and SOSA standards must both be a unified hardware and software ecosystem. The committee believes CMOSS is more established at this time and should lead.

Finally, the committee believes the military services should begin to combine missions to enable CMOSS and SOSA for multi-mission tactical communications, EW (electronic warfare), SIGINT (signals intelligence), and battlefield computing in one system. Such an effort will reduce the SWaP (size, weight, and power) on various platforms for the military electronics, and unify the industry around common military hardware, as well as software, standards.

The committee looks forward to further efforts by the Department of Defense to standardize procurement of modular cards and software according to the CMOSS and/or SOSA standards, for all future modernization and new weapons systems. These efforts will increase competition rather than have the classical single vendors drive their proprietary solutions which will cost the Government much higher modernization costs and decrease innovation.

Status of Implementing Regulations Related to Procurement Administrative Lead Times

The committee notes that section 886 of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) and section 878 of the National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) required the Department of Defense and Administrator of the Office of Federal Procurement Policy, respectively, to define, track, and publicly report on Procurement Administrative Lead Times (PALT) within 180 days of the date of the enactment of the Acts. The committee understands that the Department and the Administrator have taken positive steps to implement requirements to define, track, and report on PALT but, to date, have not met the statutorily imposed deadlines for implementation. Therefore, the committee directs the Secretary of Defense and the Administrator to increase the priority of these regulations and to each provide a briefing to the House Committee on Armed Services by November 1, 2020, on progress in finalizing the implementation of these regulations.

Strategic and Critical Materials in Department of Defense Industrial Base

The committee supports the Department of Defense's recent investments in upgrading domestic manufacturing through the Industrial Base Analysis and Sustainment (IBAS) program. The committee is encouraged by the Department's latest effort to mitigate supply chain vulnerabilities and address strategic material gaps. The IBAS program is an effective tool to support the domestic defense industrial base and can be further utilized to strengthen the critical materials industry, often metals such as tungsten, neodymium iron boron magnets, niobium, indium, gallium, germanium, and tin. The committee notes these materials are economically important, enabling emerging technologies as a result of their unique properties. These metals are essential in United States military applications as well as medical, electronics, 5G, automobile, aerospace, and solar industries, supporting both national security and sustainable living. Rare earth minerals and elements are necessary components of technology and defense tools, including smartphones, computer chips, radar sensors, and other electronics.

The Strategic and Critical Materials Stockpiling Act of 1939 provides for the acquisition and retention of certain strategic and critical materials. It is in the Defense Logistics Agency's (DLA) mission to foster the conservation and development of domestic sources within the United States thereby abating dangerous and costly dependence on foreign sources and single points of failure. Despite the act, the United States import of these metals amounted to 392 thousand metric tons (mt) between 2014 and 2018 whereby the consumption amounted to 89 percent. Additionally, the United States has no stockpile for these critical metals except 4mt of 95 percent contaminated tin. Per World Mine Productions and Reserves (2017 Estimates), the United States is one of the five countries that does not produce rare earth metals and has only 1.17 percent of the world's total.

Therefore, the committee directs the Secretary of Defense to include in the submission of the Annual Industrial Capabilities Re-

port to Congress not later than March 1, 2021, as required by section 2504 of title 10, United States Code, a report on the state of the domestic supply chain, economic importance, risks associated, and availability of rare earth metals, including tungsten, neodymium iron boron magnets, niobium, indium, gallium, germanium, and tin. The assessment shall evaluate the need to stockpile these elements along with others the Department identifies due to their critical role for national security and sourcing from foreign entities.

LEGISLATIVE PROVISIONS

SUBTITLE A—ACQUISITION POLICY AND MANAGEMENT

Section 801—Congressional Notification of Termination of a Middle Tier Acquisition Program

This section would modify section 804 of the National Defense Authorization Act for Fiscal Year 2016 (2302 note of title 10, United States Code) to direct the Secretary of Defense to provide notification to the congressional defense committees 30 days after a program is terminated that used the "middle tier" of acquisition authority.

Section 802—Modification to the Definition of Nontraditional Defense Contractor

This section would amend section 2302(9) of title 10, United States Code, by adding to the term "nontraditional defense contractor" under the Other Transaction Authority an entity that is owned entirely by an employee stock ownership plan.

Section 803—Major Weapon Systems: Life-Cycle Sustainment Plan

This section would require the submission of a life-cycle sustainment plan for a major weapon system prior to granting Milestone C approval. The plan, which shall be reviewed 5 years after the receipt of Milestone C approval and every 10 years thereafter, shall include metrics to measure the readiness and availability of the major weapon system, a schedule for maintenance and overhaul activities, and a baseline cost estimate for the life-cycle sustainment of a major weapon system. In the case of a significant and critical breach of a baseline cost estimate, this section would require the Secretary of Defense to notify the congressional defense committees of such breach and certify a remediation plan or endorsement that the cost growth is justified.

Section 804—Contractor Business Systems

This section would amend section 893 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111–383; note 2302 of title 10, United States Code) by replacing "significant deficiency" with the term "material weakness." The committee notes that the proposed revised definition will better align review and approval of contractor business systems with generally accepted commercial and government auditing standards.

Section 805—Acquisition Authority of the Director of the Joint Artificial Intelligence Center

This section would authorize the Director of the Joint Artificial Intelligence Center with responsibility for the development, acquisition, and sustainment of artificial intelligence technologies, services, and capabilities through fiscal year 2025.

Section 806—Reforming the Department of Defense

This section would require the Secretary of Defense and the Secretaries of the military departments to put in place and report on defense reform initiatives intended to provide more effective, efficient, and economical administration and operations of the Department, while also eliminating duplication. The National Defense Strategy, Defense Planning Guidance, and annual budget request are required to provide additional details on such reform efforts. The section would also require the combatant commanders to provide the Secretary of Defense reform recommendations for the same purposes.

Section 807—Alternative Space Acquisition System for the United States Space Force

This section would authorize the Secretary of Defense to take actions to develop an acquisition pathway within the Department of Defense that is tailored for space systems and programs and would require a report on an "Alternative Space Acquisition System." This section would also authorize the Secretary of the Air Force to assign an appropriate program executive as the milestone decision authority for major defense acquisition programs of the United States Space Force.

SUBTITLE B—AMENDMENTS TO GENERAL CONTRACTING AUTHORITIES, PROCEDURES, AND LIMITATIONS

Section 811—Sustainment Reform for the Department of Defense

This section would amend section 113 of title 10, United States Code, to add a requirement to develop a strategic framework for prioritizing and integrating activities relating to sustainment of major defense acquisition programs. This section would also clarify additional responsibilities of the Under Secretary of Defense for Acquisition and Sustainment.

Section 812—Modifications to Comptroller General Assessment of Acquisition Programs and Related Initiatives

This section would amend section 2229b(b)(2) of title 10, United States Code, to allow the Comptroller General of the United States to include key analysis of organizational, policy, and legislative changes at the Department of Defense that predate its most recent annual assessment.

Section 813—Contractor Whistleblower Protections Relating to Nondisclosure Agreements

This section would amend section 2409 of title 10, United States Code, and section 4712 of title 41, United States Code, to clarify

that contractors, subcontractors, or grantees are protected from reprisal for disclosure of certain information, including gross mismanagement of a Federal contract or grant or an abuse of authority relating to a Federal contract or grant.

Section 814—Competition Requirements for Purchases from Federal Prison Industries

This section would amend section 2410n of title 10, United States Code, and eliminate the federal marketshare determination requirement for the purchase of products from Federal Prison Industries.

Section 815—Disclosure of Beneficial Owners in Database for Federal Agency Contract and Grant Officers

This section would amend section 2313 of title 41, United States Code, and require the database used by Federal agency contract and grant officers for contractor responsibility determinations to reflect information about contractors' beneficial owners.

Section 816—Inclusion of Optical Transmission Components in the Analytical Framework for Supply Chain Risks

This section would amend section 2509(b)(2)(A)(ii) of title 10, United States Code, by striking the phrase "(other than optical transmission components)".

Section 817—Amendment to Definition of Qualified Apprentice

This section would strike paragraph three (3) of section 2870(d) of title 10, United States Code, as added by section 865 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

Section 818—Contract Closeout Authority for Services Contracts

This section would amend section 836 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) by reducing the contract closeout period from the current 17 years to 7 years for service contracts, but no less than the Federal Acquisition Regulation's record retention requirements. This section would also direct the Secretary of Defense, acting through the Director of the Defense Contract Management Agency, to establish and maintain a centralized capability with necessary expertise and resources to provide oversight of the closeout of a contract or group of contracts covered by this section.

Section 819—Plan to Improve Department-wide Management of Investments in Weapon Systems

This section would require the Under Secretary of Defense for Acquisition and Sustainment, in coordination with the Chairman of the Joint Chiefs of Staff, and the Director of Cost Assessment and Program Evaluation, to develop a plan to identify, develop, and acquire databases, analytical and financial tools, and workforce skills to improve the Department of Defense-wide assessment, management, and optimization of the investments in weapon systems of

the Department, including through consolidation of duplicate or similar weapon system programs.

SUBTITLE C—INDUSTRIAL BASE MATTERS

Section 821—Quarterly National Technology and Industrial Base Briefings

This section would amend section 2504 of title 10, United States Code, to require quarterly briefings to monitor progress toward eliminating gaps or vulnerabilities in the industrial base as identified in the Annual Industrial Capabilities Report to Congress, as required by section 2504 of title 10, United States Code.

Section 822—Expansion on the Prohibition on Acquiring Certain Metal Products

This section would amend section 2533c of title 10, United States Code, by striking "material melted" and inserting "material mined, refined, separated, melted," in subsection (a)(1) and striking "tungsten" and inserting "covered material" in subsection (c)(3)(A)(i) with an effective date 3 years after the date of the enactment of this Act.

Section 823—Requirement that Certain Ship Components Be Manufactured in the National Technology and Industrial Base

This section would require that certain shipboard components be manufactured in the National Technology and Industrial Base.

Section 824—Preference for Sourcing Rare Earth Materials from the National Technology and Industrial Base

This section would require the Secretary of Defense, to the maximum extent possible, to acquire materials that are determined to be strategic and critical materials required to meet the defense industrial, and essential civilian needs of the United States first from sources located within the United States and then from sources located in the national technology and industrial base, as defined in section 2500 of title 10, United States Code.

Section 825—Enhanced Domestic Content Requirement for Major Defense Acquisition Programs

This section would require the interpretation of "substantially all" under the Buy American Act, as defined by chapter 83 of title 41, United States Code, related to the percentage of components of a defense end item required to be of materials mined, produced, or manufactured in the United States to be considered domestic to be increased from 50 percent to 100 percent.

Section 826—Additional Requirements Pertaining to Printed Circuit Boards

This section would require the Secretary of Defense to mandate that contractors and subcontractors that provide printed circuit boards to the Department of Defense must certify that set percentages of the boards were manufactured and assembled within approved countries. The Secretary may waive the requirement if the Secretary determines there are no significant national security con-

cerns, and the contractor is otherwise in compliance with relevant cybersecurity provisions including section 224 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

Section 827—Report on Use of Domestic Nonavailability Determinations

This section would require a report describing the use of any waiver or exception by the Department of Defense to the requirements of chapter 83 of title 41, United States Code, or section 2533a of title 10, United States Code, relating to domestic nonavailability determinations. The committee notes that a similar briefing on domestic nonavailability determinations was required in the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120) and has yet to be produced by the Department. The report, as outlined above, will suffice to fulfill both requirements.

Section 828—Sense of Congress on the Prohibition on Certain Telecommunications and Video Surveillance Services or Equipment

This section would express the sense of Congress regarding implementation of section 889 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232; 41 U.S.C. note prec. 3901).

SUBTITLE D—SMALL BUSINESS MATTERS

Section 831—Transfer of Verification of Small Business Concerns Owned and Controlled by Veterans or Service-Disabled Veterans to the Small Business Administration

This section would amend section 8127 of title 38, United States Code, and transfer the verification of small business concerns owned and controlled by veterans or service-disabled veterans from the Department of Veterans Affairs to the Small Business Administration.

Section 832—Equitable Adjustments to Certain Construction Contracts

This section would amend the Small Business Act (15 U.S.C. 631) to allow a small business performing a construction contract to submit a request for equitable adjustment to an agency if the contracting officer directs a change in the work within the general scope of the contract without the agreement of the small business.

Section 833—Exemption of Certain Contracts Awarded to Small Business Concerns from Category Management Requirements

This section would amend the Small Business Act to exempt contracts awarded to certain small business from the Category Management (CM) program. This section would also require the Director of the Office of Management and Budget to develop a plan to ensure small businesses can compete for contracts under CM.

Section 834—Report on Accelerated Payments to Certain Small Business Concerns

This section would require the head of each Federal agency (as defined by section 551(a) of title 5, United States Code) to submit to Congress a report on the timeliness of accelerated payments made to certain small business concerns.

SUBTITLE E—OTHER MATTERS

Section 841—Modifications to Supervision and Award of Certain Contracts

This section would amend section 2851 of title 10, United States Code, to direct the Department of Defense to publicly post identifying information on military construction contracts once awarded in the Federal Register and require prime contractors for military construction projects to publicly post all available subcontracting work of $250,000 or more on relevant websites of the Small Business Administration and General Services Administration. This section would also amend section 644 of title 15, United States Code, to allow Federal agencies to award additional small business credit toward meeting subcontracting goals for awarding a contract to a local business.

Section 842—Amendments to Submissions to Congress Relating to Certain Foreign Military Sales

This section would amend section 887(b)(1) and section 887(b)(2) of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) to revise the reporting requirements and to extend the sunsets of the quarterly and annual reports to December 31, 2024.

Section 843—Revisions to Requirement to Use Firm Fixed-Price Contracts for Foreign Military Sales

This section would amend section 830 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) by applying the requirement for firm, fixed-price type contract vehicles exclusively to production contracts for foreign military sales cases whether on a stand-alone contract, on a mixed contract for both domestic and foreign military sales production, or on a mixed contract for both international cooperative program and foreign military sales production.

Section 844—Small Business Industrial Base Resiliency Program

This section would establish the Small Business Industrial Base Resiliency Program and would authorize the Assistant Secretary of Defense Industrial Base Policy to enter into transactions to purchase or make a commitment to purchase goods or services from small business concerns in response to the COVID–19 pandemic. These transactions are intended to support the monitoring and assessment of small businesses in the defense industrial base by addressing critical issues in the small business industrial base relating to urgent operational needs in response to the pandemic, supporting efforts to expand the small business industrial base in re-

sponse to the pandemic, and addressing supply chain vulnerabilities related to the pandemic for small businesses.

Section 845—Requirements Relating to Reports and Limitations on the Availability of Funds

This section would require the Secretary of Defense, the Under Secretary of Defense for Personnel and Readiness, the Under Secretary of Defense for Research and Engineering, and the Under Secretary of Defense for Acquisition and Sustainment to provide reports related to defense reform initiatives required by the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). If the required reports are not provided on time, the section places limitations on the obligation or expenditure of some of the fiscal year 2021 funding authorized to be appropriated for the offices of the specified officials.

Section 846—Assessment of the Requirements Processes of the Military Departments

This section would require the Secretary of each military department to conduct an assessment of the requirements process and to each submit a report by March 31, 2021, with recommendations to improve the agility and timeliness of such requirements process for acquisition programs of the military department.

The committee notes that recent reforms to shift authority for acquisition and requirements decisions to the military departments have placed increasing importance on the efficiency and effectiveness of the military departments' requirements processes. However, the committee is concerned that the military departments' requirements processes, including the extent to which they are aligned with the acquisition system and the budget process, continue to hinder the development of timely, realistic, and achievable requirements. Moreover, the committee believes that recent efforts of the Department of Defense to implement its adaptive acquisition framework call for a new look at how requirements are generated within each of the acquisition pathways in this framework (including major capability acquisition, middle tier of acquisition, software acquisition, and the acquisition of services, among others) to the benefit of the defense acquisition system.

Section 847—Report on Transfer and Consolidation of Certain Defense Acquisition Statutes

This section would require the Secretary of Defense to submit a report to the congressional defense committees with a proposal for the transfer and consolidation of certain defense acquisition statutes within the framework of part V of subtitle A of title 10, United States Code (as enacted by section 801 of the National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232)) by February 21, 2021.

TITLE IX—DEPARTMENT OF DEFENSE ORGANIZATION AND MANAGEMENT

ITEMS OF SPECIAL INTEREST

Assistant Secretary of Defense for Space and Strategic Deterrence

The committee notes the benefit and importance of establishing an Assistant Secretary of Defense for policy with responsibility for space, nuclear deterrence and missile defense policy in order to realign policy on strategic deterrence. The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by October 30, 2020, on realigning nuclear deterrence, missile defense, and space policy under one assistant secretary in order to streamline deterrence policy development and to adequately inform acquisition of capabilities to support strategic deterrence.

Implementation of the Directed Roles and Responsibilities of the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict

The committee acknowledges the Department of Defense's recent efforts to accelerate implementation of the roles and responsibilities of the office of the Assistant Secretary of Defense for Special Operations and Low-Intensity Conflict (ASD SO/LIC) pursuant to section 922 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). The committee appreciates the Secretary of Defense's commitment to establishing measures to augment the office of ASD SO/LIC, including the consolidation of ASD SO/LIC personnel at the Pentagon.

The committee is aware that the Secretary of Defense intends to issue a memo to the Department reaffirming the overall responsibilities of ASD SO/LIC for special operations administrative matters and reinforcing the administrative chain of command as delineated in sections 138 and 167 of title 10, United States Code, and is aware of efforts by the office of ASD SO/LIC to revise and to publish the SO/LIC charter (Department of Defense Directive (DODD) 5111.10). The committee supports the investment by the Secretary of Defense in the Office of ASD SO/LIC to ensure comprehensive civilian oversight for the planning, resourcing, and employment of special operations forces (SOF).

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by October 30, 2020, on the implementation of those roles and responsibilities as directed by section 922. The briefing shall include:

(1) a timeline and milestones for moving SO/LIC staff back into the Pentagon from the Mark Center;

(2) a timeline and milestones for revising and publishing the SO/LIC charter (DODD 5111.10); and

(3) an assessment of the Department's efforts to enhance objective civilian oversight of SOF.

U.S. Special Operations Command Force Structure and Organization

The committee recognizes that the threat environment continues to evolve, driving strategic and operational force posture deliberations across the Department of Defense. The 2018 National Defense Strategy highlighted the need for the Department to reconsider whether and to what extent the forces historically applied against the countering violent extremist (CVE) mission, such as those from U.S. Special Operations Command (USSOCOM), should be utilized to confront great power competition (GPC).

The committee understands that USSOCOM has seen record growth with investments in information operations and cyber, with end strength now in excess of 73,000. While the committee is aware of ongoing efforts by USSOCOM to optimize special operations forces (SOF) resourcing and investments to meet demand of the CVE and GPC missions, the committee is concerned with the command's expanding force structure, to include the size and influence of the theater special operations commands (TSOCs).

Therefore, the committee directs the Comptroller General of the United States to conduct a review of USSOCOM's structure and organization of those forces aligned or assigned to the command. The review shall evaluate:

(1) the extent to which the Department or USSOCOM established guidance regarding how and when joint task forces (JTFs), including special operations joint task forces, should be established;

(2) the extent to which the Department or USSOCOM defined roles and responsibilities of TSOCs versus JTFs with regard to planning for and conducting operations;

(3) the extent to which the Department or USSOCOM established guidance regarding the size, structure, composition, and resourcing of JTFs;

(4) the extent to which USSOCOM or its components established a JTF in support of a global combatant command (GCC) requirement, and what command, control, or communication challenges, if any, those efforts created; and

(5) any other issues the Comptroller General deems appropriate with respect to the establishment and resourcing of JTFs as they relate to USSOCOM or SOF applied against GCC requirements.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by November 27, 2020, on the preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

LEGISLATIVE PROVISIONS

SUBTITLE A—OFFICE OF THE SECRETARY OF DEFENSE AND RELATED MATTERS

Section 901—Repeal of Position of Chief Management Officer

This section would repeal, effective 30 days after the date of the enactment of this Act, section 132a of title 10, United States Code, which has the effect of eliminating the position of the Chief Management Officer of the Department of Defense. The section would also require the Secretary of Defense to reassign the position's re-

sponsibilities and provide a legislative proposal within 180 days of enactment necessary to make any conforming changes in law required by the elimination of the position.

Section 902—Assistant Secretary of Defense for Industrial Base Policy

This section would amend section 138 of title 10, United States Code, to require one of the Assistant Secretaries to be the Assistant Secretary of Defense for Industrial Base Policy, whose principal duty would be the overall supervision of policy of the Department of Defense for developing and maintaining the defense industrial base of the United States and ensuring a secure supply of materials critical to national security. This section would also make conforming changes.

SUBTITLE B—OTHER DEPARTMENT OF DEFENSE ORGANIZATION AND MANAGEMENT MATTERS

Section 911—Limitation on Reduction of Civilian Workforce

This section would prohibit the Secretary of Defense from reducing the civilian workforce unless the Department assesses the impact of such a reduction on workload, military force structure, lethality, readiness, operational effectiveness, stress on the military force, and costs.

Section 912—Chief Diversity Officers

This section would amend chapter 4 of title 10, United States Code, to create a Chief Diversity Officer of the Department of Defense; chapter 703 of title 10, United States Code, to create a Chief Diversity Officer of the Department of the Army; chapter 803 of title 10, United States Code, to create a Chief Diversity Officer of the Department of the Navy; chapter 903 of title 10, United States Code, to create a Chief Diversity Officer of the Air Force; and chapter 3 of title 14, United States Code, to create a Chief Diversity Officer of the Coast Guard.

Section 913—Establishment of Deputy Assistant Secretaries for Sustainment

This section would require the military departments to each establish a position of a Deputy Assistant Secretary for Sustainment and would outline the responsibilities of each position.

Section 914—Office of Defense Community Cooperation and Economic Adjustment

This section would codify the existing Department of Defense Office of Economic Adjustment and emphasize its current primary mission of community cooperation through management of programs such as the Defense Critical Infrastructure Program, Defense Access Roads Program, and Joint Land Use Studies to address encroachment around military installations and compatible land use, and support of military families through schools and manufacturing programs.

Section 915—Input from Chief of National Guard Bureau to the Joint Requirements Oversight Council

This section would amend section 181 of title 10, United States Code, to require the Joint Requirements Oversight Council to seek the views of the Chief of the National Guard Bureau regarding non-Federalized National Guard capabilities in support of homeland defense and civil support missions.

Section 916—Redesignation of the Joint Forces Staff College

This section would rename the Joint Forces Staff College to the Joint Forces War College.

SUBTITLE C—SPACE MATTERS

Section 921—Assistant Secretary of Defense for Space and Strategic Deterrence Policy

This section would amend paragraph (5) of section 138(b) of title 10, United States Code, to require one of the Assistant Secretaries to be the Assistant Secretary of Defense for Space and Strategic Deterrence Policy, whose principal duty would be the overall supervision of policy of the Department of Defense for space, nuclear deterrence, and missile defense. This section would also make conforming changes.

Section 922—Office of the Chief of Space Operations

This section would establish the Office of the Chief of Space Operations and assign certain general duties to that office.

Section 923—Space Force Medal

This section would allow the President to award a decoration to any person who, while serving in any capacity with the Space Force, distinguishes himself or herself by heroism not involving actual conflict with an enemy.

Section 924—Clarification of Procurement of Commercial Satellite Communications Services

This section would amend chapter 963 of title 10, United States Code, by inserting a section requiring that the Chief of Space Operations shall be responsible for the procurement of commercial satellite communications services for the Department of Defense.

Section 925—Temporary Exemption from Authorized Daily Average of Members in Pay Grade E–8 and E–9

This section would exempt the Space Force from section 517 of title 10, United States Code, until October 1, 2023.

Section 926—One-Time Uniform Allowance for Members Transferred to the Space Force

This section would authorize a one-time uniform allowance for service members transferred to the United States Space Force.

TITLE X—GENERAL PROVISIONS

ITEMS OF SPECIAL INTEREST

OTHER MATTERS

Airfield Capabilities in GPS Denied Environments

The committee supports the ongoing efforts by the Department of Defense to ensure military forces are trained and equipped to conduct combat operations across the range of potential threat environments identified in the National Defense Strategy. As the Department works to prepare military forces to conduct operations in non-permissive and denied threat environments, the committee seeks to ensure that the Department can conduct all-weather, day-night airfield flight operations in scenarios where the global positioning system (GPS) signal is denied or degraded. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than February 1, 2021 containing an assessment of the Department's ability to conduct all-weather, day-night flight operations in GPS-denied environments at military airfields overseas. This assessment will include: (1) a description of air traffic control and landing systems that utilize GPS at existing Department of Defense airfields and contingency airfields in the U.S. Indo-Pacific Command and U.S. European Command areas of operation; (2) an assessment of the Department's ability to conduct all-weather, day and night flight operations, including aircraft tracking and precision landing, at such airfields in a scenario where GPS is degraded or denied; and (3) a description of the Department's actions to improve aircrew training and other measures to mitigate risk at such airfields.

Audit Accountability

The Department of Defense has made large strides in increasing accountability and ownership of audit processes and the committee wants to encourage the Department to continue this and ensure this practice is adopted across the Department, agencies, and military services. The committee has long maintained that a central factor of the Department's audit progress has been clear leadership and accountability across the Department. The committee is encouraged by the steps taken by the Department to ensure that senior leaders are responsible for leading the business process and system transformation of the financial processes required to support the goal of auditable financial statements. The committee continues to encourage the Department of Defense to pursue this policy across the Department, agencies, and military services.

Audit Innovation

The committee continues to be interested in the Department of Defense's efforts to incorporate commercial digital technologies, such as robotic process automation, cognitive and artificial intelligence to improve the quality and richness of financial data, and eliminate manual process and complex financial reconciliations, and accelerate the Department's goal of auditable financial statements. Furthermore, the committee is interested in the Depart-

ment's leveraging of data gleaned from these systems and utilized beyond the financial statement audit to derive meaningful insights and inform strategic and operational decisions.

Therefore, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by January 31, 2021, on the adoption of advanced analytics in the execution of the Financial Improvement and Audit Remediation Plan and how they may be used to improve mission analytics, measuring and improving audit performance, identifying inefficiencies, redundancies and news risks, and preventing fraud, waste, and abuse. In addition, the report should include an understanding of the Department's efforts to standardize and improve data fidelity across the enterprise. Finally, an understanding on how the Department is implementing key initiatives to address future financial management workforce needs in data and technology skill sets.

Close Combat Lethality Task Force

The committee understands the Secretary of Defense established the Close Combat Lethality Task Force (CCLTF) in order to improve the readiness of combat capabilities of infantry and squad formations. The committee notes the CCLTF has focused its efforts on reforming manpower policy, improving training and overall military wellness, human performance initiatives, as well as ensuring the fielding of advanced equipment and weapons systems for these formations. These efforts are particularly noteworthy as technology proliferation has eroded the comparative advantage of these forces, and, with renewed great power competition, the committee believes the Department of Defense should continue to focus on investments that support improving the lethality of close combat formations that historically account for the majority of U.S. casualties. The committee is aware the Secretary of Defense has recently designated the Secretary of the Army as the lead for the CCLTF and that the CCLTF would transition to the Department of the Army.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by December 1, 2020 on the transition plan for the CCLTF to include organizational and governance changes that may occur, planned resources across of the future years defense program for the CCLTF, and overall coordination efforts with the United States Marine Corps and United States Special Operations Command.

Implementation of Findings and Recommendations of the 2020 U.S. Special Operations Command Comprehensive Review

The committee appreciates the substantial efforts undertaken by the Commander, U.S. Special Operations Command (USSOCOM) in recent years to address the concerns regarding the ethics and professionalism of the special operations forces (SOF). The committee is aware of multiple incidents across USSOCOM in 2018 and 2019, and appreciates the Command's ongoing focus to address congressional concerns related to alleged incidents of unethical and unprofessional behavior by SOF.

The Command's most recent effort to review and report on the culture and ethics of SOF is a welcome development in better understanding the Command's challenges and intended mitigation ef-

forts to re-calibrate the force to SOF core values. The release of USSOCOM's Comprehensive Review indicated that the Command had established conditions for the normalization of an organizational culture overly focused on SOF employment and mission accomplishment, which created the contexts or situations allowing for misconduct and unethical behavior to develop within the SOF enterprise, not just at individual and team level, but also throughout the chain of command.

The committee notes that the Comprehensive Review Team posited a number of findings and recommendations for action to mitigate such challenges, ranging from an internal review of Theater Special Operations Command elements to self-validate SOF requirements to re-calibrating the incentives and promotion criteria for SOF officers and enlisted personnel. As with prior reviews, the committee understands that implementation of sustainable change is often more difficult than identifying problems, and is encouraged by the establishment of a Comprehensive Review Implementation Team to action the recommendations from the Comprehensive Review (CR).

Therefore, the committee directs the Commander, USSOCOM, to provide a briefing to the House Committee on Armed Services by October 30, 2020, on the implementation strategy of the CR findings. The briefing shall include:

(1) prioritization of implementation of proposed actions;

(2) status of implementation of proposed actions;

(3) any challenges to implementing the proposed actions; and

(4) funding or resource impacts resulting from implementation of proposed actions.

Presentation of Defense Budget Materials

The committee believes that a clear and accurate presentation of service budget proposals is essential to assisting the Secretary of Defense in analyzing the requests prepared by each military department and each proposal's relevance to meeting the objectives of the National Defense Strategy. However, the committee notes that current budget practices may obscure how requested funds are executed. To facilitate the extent to which the Office of the Secretary of Defense ensures clarity and accuracy in the presentation of defense budget materials, the committee requires that the Secretary of Defense include in any budget overview documents provided to Congress a description of the amounts and shares of the defense budget recommended to each of the military services or departments, the defense-wide accounts, and any other or miscellaneous recipients of Department of Defense budget requests. The committee additionally believes that the amounts and shares for each military service or department reported pursuant to this direction should reflect the budget requirements of such service or department, and funding for general defense-wide needs or for other national security purposes be should reflected in defense wide accounts. The committee directs the Secretary of Defense to provide a briefing on options to implement more accurate budget overview documents that reflect these changes to the congressional defense committees. This briefing should be delivered no later than December 1, 2020.

Prioritizing Material Weaknesses

While the committee is encouraged by the continued progress the Department has made in moving towards a clean, unmodified audit opinion, there are concerns that the current approach in closure of Notice of Findings and Recommendations (NFR) does not fully prioritize addressing material weaknesses. The committee believes that by prioritizing material weaknesses will more effectively move the Department towards the goal of a clean audit opinion.

Therefore, the committee directs the Secretary of Defense to submit a report to the House Armed Services Committee by January 31, 2021 on the Department's strategy to identify and prioritize NFRs that would have a direct tie to downgrading or remediating material weaknesses and move the Department towards the goal of an unmodified audit opinion. Included in this report the Department should explore options to modify the online dashboard to better illustrate the prioritization of material weaknesses.

Report on Audit Expertise in Remediation Services

As the Department continues to make strides in its audit readiness efforts, the committee seeks to ensure that appropriate staffing ratios for the audit remediation services used by the department are reflected in 10 U.S. Code § 240b. Currently, the statute recommends that the Department have at least half of such services performed by individuals possessing certain expertise and qualifications. The committee is interested in examining whether this staffing ratio provides the Department with adequate ability to minimize risks to sustained audit progress while maintaining needed flexibility.

Therefore, the committee directs the Secretary of Defense to submit a report to the congressional defense committees not later than February 1, 2021 evaluating the effectiveness of the staffing ratios recommended for audit remediation services under 10 U.S. Code § 240b. This report should include an assessment of current staffing ratios across the all services and agencies in the department, and should indicate whether such ratios pose advantages or risks to sustained progress on the audit. Furthermore, the report should indicate any potential advantages or risks to audit progress and sustainability created by eliminating or altering existing statutory ratios.

Report on Service Consolidation of General Ledger Financial Management Systems

The committee recognizes the progress made by the Department of Defense towards an unmodified audit opinion, but remains aware that audit readiness and remediation efforts must lead to and be aligned with further efficiencies and process improvements if the investment of time and effort into the audit is to be fully leveraged. In particular, the committee recognizes the significant efforts made to date by the military services to consolidate enterprise software and general ledger financial management systems in their business operations, and encourages the military services to continue to reduce the number of such systems. The committee directs the Secretaries of the Army, Air Force, and Navy each to provide a report to the House Committee on Armed Services not later than

January 31, 2021, specifying the date by which each military service will achieve consolidation to a single general ledger financial management system, detailing efforts and funding critical to achieving consolidation, possible ways to accelerate consolidation, and such additional information as each Secretary deems appropriate.

Reserve Components and National Guard Units Supporting Special Operations Command Operational and Training Requirements

The committee notes U.S. Special Operations Command (USSOCOM) continues to make strides in identifying causes of and establishing mitigation strategies for high operational tempo, impacts on air and ground platforms, and the resulting readiness challenges affecting special operations forces (SOF). The January 2020 release of USSOCOM's Comprehensive Review of SOF Culture and Ethics indicated that USSOCOM has established conditions for a culture focused on SOF employment and mission accomplishment, which in some instances occurs at the expense of disciplined, predictable, and reliable SOF force generation. The committee is concerned that the heavy emphasis on SOF employment in support of geographic combatant command and joint force requirements places excessive burden on Active Duty military personnel and capabilities assigned to USSOCOM.

The committee is aware the Services' Reserve Components and Air and Army National Guard units provide support to the operational and training requirements of USSOCOM. The committee believes that as processes and procedures are implemented to improve readiness and increase dwell time for Active Duty SOF personnel, regular and transparent dialog with the chiefs of the armed services, the National Guard Bureau, and service components of USSOCOM is critical to ensure that all associated elements of the Reserve Components and National Guard are considered for relevant operational and training opportunities.

Therefore, the committee directs the Commander, USSOCOM, to submit a report to the House Committee on Armed Services by December 1, 2020, on the current utilization strategy of the Services' Reserve Component and Air and Army National Guard units in support of USSOCOM. The report shall include:

(1) for units, the type and associated component, including numbers of personnel and associated occupational specialties;

(2) for individual personnel, the occupational specialty, parent organization, and associated component;

(3) associated air or ground platforms, capabilities, and maintenance status;

(4) dates of utilization for operational or training requirements in the past 5 years;

(5) location where each unit or individual supported USSOCOM;

(6) training to validate the operational capability and readiness of the supporting unit or individual; and

(7) intent for future utilization of each unit.

United Service Organizations and Identification Cards

The committee recognizes the unique and invaluable role that the United Service Organizations (USO) plays in supporting the

morale and welfare of service members and families around the world. During the past several years, USO employees have encountered numerous logistical challenges stemming from a credentialing issue. This is particularly problematic for USO employees who live and work alongside U.S. military personnel in remote regions such as the CENTCOM and AFRICOM areas of responsibility and require assured access to military installations in order to provide vital support to service members. The committee is concerned that Department of Defense implementation of Homeland Security Presidential Directive 12, which created a policy for common identification standard for federal employees and contractors, may be creating access issues, particularly at overseas installations, for employees of the USO and other non-federal entities who provide essential support to service members and their families.

Therefore, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by not later than February 1, 2021 regarding the following:

(1) the Department's implementation plan and timeline for the Next Generation Uniformed Services Identification Card;

(2) the Department's plan to ensure that policies governing non-federal entities requiring recurring access to military facilities and amenities are applied consistently for all organizations within the Department; and

(3) the Department's plan to comply with federal credentialing policy in fielding the Next Generation Uniform Services Identification Card.

LEGISLATIVE PROVISIONS

SUBTITLE A—FINANCIAL MATTERS

Section 1001—General Transfer Authority

This section would allow the Secretary of Defense, with certain limitations, to make transfers between amounts authorized for fiscal year 2020 in division A of this Act. This section would limit the total amount transferred under this authority to $4.00 billion.

Section 1002—Determination of Budgetary Effects

This section would state the budgetary effects of this Act for the purpose of complying with the Statutory Pay-As-You-Go Act of 2010.

Section 1003—Pandemic Preparedness and Resilience National Security Fund

This section would provide limitations and additional authorities for the amounts authorized to be appropriated for Research and Development, Defense-Wide, Pandemic Preparedness and Resilience National Security Fund. It would also establish a notice requirement for transfers from the Fund, and would exempt transfers under this section from counting towards the dollar amount limitation under section 1001.

Section 1004—Budget Materials for Special Operations Forces

This section would modify section 226 of title 10, United States Code, by expanding the budgetary information required for special operations forces to include detail by appropriation and line item, as well as identifying any changes to the amount or type of budgetary support provided and an assessment of any effects on the military services due to adjustments in special operations forces manpower or force structure for fiscal year covered by the display and future fiscal years.

SUBTITLE B—COUNTERDRUG ACTIVITIES

Section 1011—Support for Counterdrug Activities and Activities to Counter Transnational Organized Crime Affecting Flow of Drugs into the United States

This section would modify the authority to provide support to other agencies for counterdrug activities and activities to counter transnational organized crime.

Section 1012—Congressional Notification with Respect to Department of Defense Support Provided to Other United States Agencies for Counterdrug Activities and Activities to Counter Transnational Organized Crime

This section would clarify notification requirements for subsection (b) of the authority to provide support to other agencies for counterdrug activities and activities to counter transnational organized crime.

SUBTITLE C—NAVAL VESSELS

Section 1021—Limitation on Availability of Certain Funds without Naval Vessels Plan and Certification

This section would amend section 231(e) of title 10, United States Code, by restricting 75 percent of the operation and maintenance funds for the Secretary of Defense until the 30-year shipbuilding plan of the Navy has been delivered to Congress.

Section 1022—Limitations on Use of Funds in the National Defense Sealift Fund for Purchase of Foreign Constructed Vessels

This section would amend section 2218 of title 10, United States Code, by authorizing the purchase of a total of nine used foreign-built ships and four used foreign-built ships prior to the Navy initiating an acquisition strategy for a sealift recapitalization plan.

Section 1023—Use of National Sea-Based Deterrence Fund for Incrementally Funded Contracts to Provide Full Funding for Columbia Class Submarines

This section would amend section 2218a(h)(1) of title 10, United States Code, by authorizing the use of incremental funding for the full funding of the first two Columbia class submarines.

Section 1024—Preference for United States Vessels in Transporting Supplies by Sea

This section would amend section 2631 of title 10, United States Code, to increase compliance with military cargo preference requirements.

Section 1025—Restrictions on Overhaul, Repair, etc. of Naval Vessels in Foreign Shipyards

This section would provide limited exceptions for the repair of Navy vessels in shipyards outside the United States when damage occurred by hostile actions. This section would also provide limited authority for maintenance work to be performed by foreign workers if U.S. personnel cannot perform the work for health or safety reasons.

Section 1026—Biannual Report on Shipbuilder Training and the Defense Industrial Base

This section would amend chapter 863 of title 10, United States Code, to require the Secretary of Defense, in coordination with the Secretary of Labor, to submit a report to Congress on the state of defense industrial base training, hiring, and the ability to meet the requirements of the 30-year shipbuilding plan.

Section 1027—Prohibition on Use of Funds for Retirement of Certain Littoral Combat Ships

This section would prohibit the Secretary of the Navy from retiring LCS–3 and LCS–4 until the Secretary has submitted a certification that all operational tests have been completed on all mission modules.

Section 1028—Report on Implementation of Commandant's Planning Guidance

This section would require the Secretary of Defense to submit a report regarding the implementation of the Commandant of the Marine Corps's planning guidance.

Section 1029—Limitation on Naval Force Structure Changes

This section would prohibit the retirement of any Navy ship in fiscal year 2021 until 30 days after the Secretary of Defense has delivered the Integrated Navy Force Structure Assessment to the congressional defense committees.

SUBTITLE D—COUNTERTERRORISM

Section 1031—Prohibition on Use of Funds for Transfer or Release of Individuals Detained at United States Naval Station, Guantanamo Bay, Cuba, to Certain Countries

This section would prohibit the use of funding authorized to be appropriated or otherwise made available for the Department of Defense during the period beginning on the date of the enactment of this Act and ending on December 31, 2021, to transfer, release, or assist in the transfer or release of any individual detained at

U.S. Naval Station, Guantanamo Bay, Cuba, to Libya, Somalia, Syria, and Yemen.

SUBTITLE E—MISCELLANEOUS AUTHORITIES AND LIMITATIONS

Section 1041—Support of Special Operations to Combat Terrorism

This section would modify section 127e of title 10, United States Code, by establishing procedural requirements for the planning, development, and cessation of activities under such authority, and clarifying notification requirements for both the modification of and termination of extant activities under such authority.

Section 1042—Prohibition on Retirement of Nuclear Powered Aircraft Carriers before First Refueling

This section would amend section 8062 of title 10, United States Code, by prohibiting the retirement of any aircraft carrier prior to its first reactor refueling.

Section 1043—Required Minimum Inventory of Tactical Airlift Aircraft

This section would amend section 9062 of title 10, United States Code, by setting a minimum number of tactical airlift in the tactical airlift inventory.

Section 1044—Modification and Technical Correction to Department of Defense Authority to Provide Assistance along the Southern Land Border of the United States

This section would modify the authority under section 1059 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92) to require the Secretary of Defense to fully consider readiness, mission, and task alignment to requested support from Custom and Border Protection, when determining the Department of Defense's ability to provide assistance to secure the United States southern land border. Additionally, this section would add reporting requirements.

Section 1045—Battlefield Airborne Communications Node Certification Requirement

This section would prohibit the Secretary of the Air Force from divesting the EQ–4 aircraft until the Chairman of the Joint Requirements Oversight Council and the Commander, U.S. Central Command, certify in writing to the congressional defense committees that the replacement capability to be fielded in place of the EQ–4 would result in equal or greater capability available to the combatant commanders of the combatant commands and would not result in less airborne capacity or on-station time. This section would also require the Under Secretary of Defense for Acquisition and Sustainment to certify to the congressional defense committees that the validated operating and sustainment costs of the capability developed or fielded to replace an equivalent capacity the EQ–4 aircraft currently provides is less than the validated operating and sustainment costs for the EQ–4 aircraft on a comparable flight-hour cost basis.

Section 1046—Requirements Relating to Newest Generations of Personal Protective Equipment

This section would require the Secretaries of the military departments to each submit a report on the fielding of the newest generations of personal protective equipment to the Armed Forces, to include: the numbers (aggregated by total number and by sex) of Modular Scaleable Vests and Marine Corps Plate Carrier Generation III; and a description and assessment of the barriers, if any, to the development and fielding of such generations of equipment, including cost overruns, contractor delays, and other challenges. This section would also require the Director of the Defense Health Agency to develop and maintain a system for tracking data on injuries among service members and for the Periodic Health Assessment of members of the Armed Forces to include one or more questions on whether members incurred an injury in connection with ill-fitting or malfunctioning personal protective equipment.

Section 1047—Mandatory Criteria for Strategic Basing Decisions

This section would require the Secretary of the Air Force to modify Air Force Instruction 10–503 to include comparative analyses of community support, joint training, and all-domain training capabilities as part of the strategic basing process for an aircraft.

Section 1047—Prohibition on Use of Funds for Retirement of A–10 Aircraft

This section would prohibit the Secretary of the Air Force from implementing any actions during fiscal year 2021 that would retire, prepare to retire, or place into storage or back-up aircraft inventory any A–10 aircraft unless the Secretary determines on a case-by-case basis an aircraft is no longer mission capable due to a mishap or damage that is uneconomical to repair.

Section 1048—Limitation on Use of Funds Pending Public Availability of Top-Line Numbers of Deployed Members of the Armed Forces

This section would prohibit the Department of Defense from obligating or expending more than 75 percent of travel funds for the Office of the Secretary of Defense until the Secretary of Defense has made available the top-line numbers of deployed troops, as described in Section 595 of the John S. McCain National Defense Authorization Act of Fiscal Year 2019 (Public Law 115–232).

Section 1049—Limitation on Physical Move, Integration, Reassignment, or Shift in Responsibility of Marine Forces Northern Command

This section would prohibit any action execute to the physical move, integration, reassignment, or shift in responsibility of Marine Forces Northern Command until 60 days after a report is submitted to Congress.

Section 1050—Conditions for Permanently Basing United States Equipment or Additional Forces in Host Countries with At-Risk Vendors in 5G or 6G Networks

This section would require the Secretary of Defense, prior to basing a major weapons system or additional permanently assigned forces to a host country with at-risk 5th generation (5G) or sixth generation (6G) wireless network equipment, software, and services, to notify the congressional defense committees of steps being taken by the host country to mitigate potential risks, steps being taken by the U.S. Government to mitigate potential risks, and any defense mutual agreements between the host country and the United States intended to allay the costs of risk mitigation. It would also require the Secretary of Defense to provide the congressional defense committees an assessment of the risks posed by the current or intended 5G or 6G telecommunications architecture in host countries and measures required to mitigate such risks.

TITLE XI—CIVILIAN PERSONNEL MATTERS

ITEMS OF SPECIAL INTEREST

Defense Finance and Accounting Service

The committee notes that the Defense Finance and Accounting Service (DFAS) was established in 1991 to consolidate and improve the Department of Defense's various finance and accounting functions distributed across nearly 3,500 posts, camps, and stations. After capitalizing 19,608 personnel and activities costing $1.83 billion annually by 1998, DFAS proceeded to reduce its workforce to 12,000 employees while accounting for significantly larger obligation authority during a period of budget uncertainty and high operational tempo.

The committee notes that section 926 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) required the Chief Management Officer and Under Secretary of Defense (Comptroller) to conduct a joint review of DFAS activities, to include a validation of its missions and functions and an assessment of potential changes to its workforce and functions. That review concluded that major finance and accounting products and services performed by DFAS are effective within the current business environment. In addition, the Department found that the economics of contracting additional commercial sources for finance and accounting services was not a significant value proposition. Based on the review's findings, the Department stated that it is not considering or recommending any combinations of functions involving DFAS or other defense agencies, nor any use of commercial providers for DFAS services.

Considering the importance of the DFAS mission, the committee encourages the Department to adhere to the findings of this report. In addition, the committee requests close communication and collaboration with Congress should the Department consider reducing the DFAS workforce. The committee encourages Department leadership to ensure that any such change be rigorously evaluated to demonstrate that it would yield significant cost savings and not result in degraded capability.

General Schedule Locality Pay Program

The committee is aware that section 5304 of title 5, United States Code, authorizes locality pay for General Schedule employees with duty stations in the United States and its territories and possessions. Section 5304(f) of title 5, United States Code, authorizes the President's Pay Agent (the Secretary of Labor, the Director of the Office of Management and Budget (OMB), and the Director of the Office of Personnel Management) to determine locality pay areas. Locality areas have traditionally been based on the OMB-defined Metropolitan Statistical Areas (MSAs) and Combined Statistical Areas (CSAs). OMB recently revised the definitions of MSAs and CSAs, but these new definitions are not currently being used for locality pay. In May 2019, the Federal Salary Council recommended to the President's Pay Agent not to adopt these revised MSAs and CSAs until the Council could study them further. The President's Pay Agent agreed in its December 2019 report to the President and stated that it would wait for the Council's recommendation before taking any action with respect to the updated MSA and CSA delineations. According to the Federal Salary Council 2018 Report to the President's Pay Agent, setting forth recommendations to the Pay Agent for calendar year 2020, and other matters, there appears to be considerable opportunity for both process and legislative improvements to the administration and implementation of the locality pay program.

Therefore, the committee directs the Comptroller General of the United States to review the process for administering the locality pay program, including the process for establishing or modifying boundaries for locality pay areas and the time required for such changes. The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by March 1, 2021, on the Comptroller General's preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

Report on Denial of Security Clearances

The Committee is aware that vetting applicants for access or a security clearance is an important safeguard that reduces risks and mitigates harm to United States national security. Related to this process, the Committee requires a greater understanding of decisions to not grant applicants or employees access or a security clearance based on the Adjudicative Guideline "concern" in either Security Executive Agent Directive 4 for guideline "H" (Drug Involvement and Substance Misuse) or "I" (Psychological Conditions), or Intelligence Community Policy Guidance 704.2 for guideline "H" (Drug Involvement) or "I" (Psychological Conditions). The Committee directs the Undersecretary of Defense for Intelligence and Security, in coordination with the Director of National Intelligence, to submit a report to the House Committee on Armed Services by December 1, 2020 with data and information for the previous five fiscal years on the denial or revocation by any Department of Defense component or intelligence community element of access or a security clearance under guidelines "H" or "I" of either Security Executive Agent Directive 4 or Intelligence Community Policy Guidance 704.2. The report shall show the number of access or security

clearance denials or revocations broken down by the Defense component or intelligence element, type of access or level of security clearance denied or revoked, and the age, sex and race of each applicant or employee.

Report on Improving Equal Employment Opportunity Processes in the Department of Defense

The committee is concerned about the effectiveness and efficiency of the Department of Defense's Equal Employment Opportunity (EEO) complaint resolution processes for civilian employees. EEO investigations are typically required to be completed within 180 days of the date on which the complaint was filed. Yet, from Fiscal Year (FY) 2014 through FY 2018, the average number of days in investigation for EEO complaints in the Army, Air Force, and Navy exceeded 180 days. During FY 2018, the average number of days in investigation was 212 days for the Army and 256 days for the Air Force. During the first 9 months of FY 2018, the average number of days in investigation was 211 days for the Navy.

The committee acknowledges the Department of Defense's intention to improve the EEO process by convening the Defense Equal Opportunity Reform Group (DEORG). Therefore, the committee directs the Under Secretary of Defense for Personnel & Readiness, in consultation with the DEORG, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by January 1, 2021, with recommendations to improve the informal and formal EEO processes, including ways to improve the timeliness of investigations and other EEO process, maintain a high standard of quality for investigations whether conducted by Department of Defense employees or contractors, ensure that sufficient disciplinary action is taken when complaints are founded, and inform complainants of all available options to resolve EEO complaints.

LEGISLATIVE PROVISIONS

Subtitle A—General Provisions

Section 1101—Family and Medical Leave Amendments

This section would make technical corrections relating to parental leave for Federal employees.

Section 1102—Limitation on Authority to Exclude Employees from Chapter 71 of Title 5

This section would prohibit the use of funds to exclude the Department of Defense or any agency thereof from collective bargaining rights in fiscal year 2021.

Section 1103—Authority to Provide Travel and Transportation Allowances in Connection with Transfer Ceremonies of Department of Defense and Coast Guard Civilian Employees Who Die Overseas

This section would allow the Secretary of the military department concerned, the agency head of a Defense Agency or Department of Defense Field Activity, or the Secretary of Homeland Secu-

rity to provide round-trip travel and transportation allowances and accompaniment services in connection with ceremonies for the transfer of a Department of Defense or Coast Guard civilian employee who dies while located or serving overseas.

Section 1104—One-Year Extension of Authority to Waive Annual Limitation on Premium Pay and Aggregate Limitation on Pay for Federal Civilian Employees Working Overseas

This section would amend section 1101 of the Duncan Hunter National Defense Authorization Act for Fiscal Year 2009 (Public Law 110–417) by extending premium pay for Federal civilian employees working overseas until the end of 2021.

Section 1105—One-Year Extension of Temporary Authority to Grant Allowances, Benefits, and Gratuities to Civilian Personnel on Official Duty in a Combat Zone

This section would amend section 1115 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) by extending the temporary authority granting allowances, benefits, and gratuities to civilian personnel on official duty in a combat zone by 1 year.

Section 1106—Limiting the Number of Local Wage Areas Defined within a Pay Locality

This section would amend section 5343 of title 5, United States Code, to prohibit the Office of Personnel Management from including more than one local wage area within a General Schedule pay locality in order to align Federal Wage System Areas with General Schedule locality pay areas.

Section 1107—Civilian Faculty at the Defense Security Cooperation University and Institute of Security Governance

This section would amend section 1595(c) of title 10, United States Code, to add the Defense Security Cooperation University and the Defense Institute for Security Governance to the list of covered institutions for which the Secretary of Defense may employ and compensate civilian faculty as the Secretary considers necessary.

Section 1108—Expansion of Authority for Appointment of Recently-Retired Members of the Armed Forces to Positions at Certain Industrial Base Facilities

This section would reinstate the waiver to allow retiring or separating servicemembers to accept an appointment at any industrial base facility within 180 days of retirement if this position is certified by the Secretary concerned as lacking sufficient numbers of qualified applicants.

Section 1109—Fire Fighters Alternative Work Schedule Demonstration Project

This section would create a 5-year demonstration project for an alternative work schedule for firefighters across Navy Region Mid-Atlantic.

Section 1110—Special Rules for Certain Monthly Workers' Compensation Payments and Other Payments for Federal Government Personnel under Chief of Mission Authority

This section would provide long-term benefits to U.S. Government employees who suffer brain injuries from their service in Cuba or China.

SUBTITLE B—ELIJAH E. CUMMINGS FEDERAL EMPLOYEE ANTIDISCRIMINATION ACT OF 2020

Section 1121—Short Title

This section would establish that this subtitle may be cited as the "Elijah E. Cummings Federal Employee Antidiscrimination Act of 2020."

Section 1122—Sense of Congress

This section would establish the sense of Congress that accountability in the enforcement of the rights of Federal employees is furthered when Federal agencies agree to take appropriate disciplinary action against Federal employees who are found to have committed discriminatory acts.

Section 1123—Notification of Violation

This section would amend the Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002 to require agencies to publish notices of final agency actions or Equal Employment Opportunity Commission findings.

Section 1124—Reporting Requirements

This section would amend the Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002 to require that each agency report certain data with respect to specified equal opportunity complaints.

Section 1125—Data To Be Posted by Employing Federal Agencies

This section would amend the Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002 to specify the types of data that agencies must post with respect to specified equal opportunity complaints.

Section 1126—Data To Be Posted by the Equal Employment Opportunity Commission

This section would make a conforming change to the Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002.

Section 1127—Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002 Amendments

This section would amend the Notification and Federal Employee Antidiscrimination and Retaliation Act of 2002 by adding sections relating to discrimination complaint tracking, personnel records,

processing and resolution of complaints, referrals to the Office of Special Counsel, and other matters.

Section 1128—Nondisclosure Agreement Limitation

This section would amend section 2302(b)(13) of title 5, United States Code, to establish that an employee who has authority to take, recommend, or approve any personnel action shall not implement or enforce a nondisclosure policy that prohibits or restricts an employee from disclosing information relating to (1) a violation of any law, rule, or regulation; (2) mismanagement, gross waste of funds, or abuse of authority; (3) a substantial and specific danger to public health or safety; or (4) any other whistle-blower protection.

TITLE XII—MATTERS RELATING TO FOREIGN NATIONS

ITEMS OF SPECIAL INTEREST

Assessment on Acceding to United Nations Convention on Law of the Seas

The committee is concerned that revisionist states seek to undermine and reshape the rules-based international order. The United States efforts to counter and deter such activities may be impacted by the U.S.' status as a non-party to the United Nations Convention on Law of the Seas (UNCLOS). Though the United States abides by the rules of UNCLOS, the United States currently relies on customary international law and U.S. military presence to assert the principles of UNCLOS. Therefore, the committee directs the Secretary of Defense, in coordination with the Secretary of State, to submit an assessment on the impact of U.S. accession to UNCLOS to the congressional defense committees, the House Committee on Foreign Affairs, and the Senate Committee on Foreign Relations by February 1, 2021. The report shall be unclassified but may contain a classified annex. At a minimum, the report shall include:

(1) U.S. national security interests that would be affected by U.S. accession to UNCLOS;

(2) an assessment on the impact U.S. accession to UNCLOS would have on the ability of the U.S. military to peacefully deter conflict;

(3) an assessment on the impact U.S. accession to UNCLOS would have on U.S. military posture and operations in the maritime domain;

(4) the impact U.S. accession to UNCLOS would have in maintaining freedom of navigation in international seas and securing navigational freedoms and global access for military and commercial ships, aircraft, and undersea fiber optic cables;

(5) the impact U.S. accession to UNCLOS would have in buttressing a rules-based international order;

(6) an assessment of the impact U.S. accession to UNCLOS would have on the U.S. to counter efforts by nations seeking to reshape internationally accepted rules;

(7) an assessment of the impact U.S. accession to UNCLOS would have on U.S. leadership in the maritime domain, the credibility of U.S. support for a rules-based approach, and U.S. influence on maritime disputes;

(8) the impact U.S. accession to UNCLOS would have on the United States ability to work with allies and partners on maritime security issues; and

(9) any other relevant matters that the Secretary determines should be included.

Authorities for U.S. Military Personnel in Syria

The committee remains concerned that the United States Strategy for Syria expresses objectives that cannot be achieved with the means identified. Furthermore, the committee is concerned about the stated purpose of U.S. military forces serving in Syria and tasks assigned to those forces. The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, on the applicable domestic and international legal authorities that would authorize the U.S. military presence in oilfields in northeast Syria and to deny the Government of Syria access to them.

Briefing from the United States-China Economic and Security Review Commission on Cooperation with Similar Organizations among U.S. Allies and Partners

The committee recognizes the importance and value of the United States-China Economic and Security Review Commission—created in the FY2001 National Defense Authorization Act to monitor, investigate, and report to Congress on the national security implications of the bilateral trade and economic relationship between the United States and the People's Republic of China—and the policy and legislative recommendations it provides to the Congress. The committee believes the global nature of competition with China requires the United States to work with partners and allies, and that the advice the Commission provides to the Congress would be enhanced if the Commission were to engage and cooperate with similar entities and policymakers from allied and partner nations.

Accordingly, the committee encourages the United States-China Economic and Security Review Commission to cooperate, coordinate, and converse with similar organizations and legislative bodies in allied and partner nations, such as the Security Experts at the European Commission of the European Union, on economic and security challenges posed by China and to jointly study and make coordinated suggestions, as appropriate, to their respective governments on how to respond to such challenges . The committee believes that constructive engagement with allies and partners sends a positive message of cooperation on these national security issues. Therefore, the committee directs the Commission to provide a briefing to the House Committee on Armed Services, not later than November 30, 2020, on any plans, opportunities, and challenges the Commission has for sharing its expertise and cooperation with similar organizations and legislative bodies in allied and partner nations.

Briefing on Nation-State Election Interference Efforts

The committee notes that the administration has yet to deliver the interim reports that were directed as report language in the FY2020 National Defense Authorization Act on Russian and Chinese influence operations and active measures campaigns targeting democratic elections and military alliances and partnerships of which the United States is a member. The Secretary of Defense was directed to provide interim reports not later than November 5, 2019, and final reports not later than September 30, 2020, which shall be unclassified and appropriate for release to the public but may include a classified annex. Such information is vitally important to the Congress' ability to provide resources for and conduct oversight of election security efforts and to inform the general public of such influence operations and campaigns by adversaries.

The committee directs the Secretary of Defense to provide the reports as directed. The committee also directs the Secretary of Defense, in coordination with the Director of National Intelligence, the Secretary of State, and the Secretary of Homeland Security, to provide a briefing to the House Armed Services Committee, no later than October 9, 2020, on nation-state election interference efforts, influence operations and campaigns targeting democratic elections, and campaigns targeting military alliances and partnerships that may impact U.S. defense and security equities.

The briefing shall include:

(1) an overview of nation-states that are employing influence operations and campaigns targeting United States elections, and how such campaigns relate to the strategic objective of each such nation-state.

(2) an identification of the tactics, techniques, and procedures employed.

(3) the United States' strategy and capabilities for detecting, deterring, countering, and disrupting such influence operations and campaigns.

(4) a summary of United States support requested by and provided to state, local, and nongovernmental stakeholders to assist in their ability to detect, deter, counter, and disrupt such influence operations and campaigns.

(5) an assessment of impediments to providing support requested by state, local, and nongovernmental stakeholders.

(6) any other matters the Secretary deems appropriate.

Briefing on the Consequences of Capping the Number of U.S. Service Members Stationed in Germany at 25,000

The committee is gravely concerned that the President has stated he intends to significantly reduce U.S. troops in Europe and cap the number of permanently stationed U.S. military personnel in Germany at 25,000, but has provided no notification, assessment, or explanation of this decision directly to Congress. The committee strongly supports U.S. efforts to deter Russian aggression alongside NATO allies and European partners, and believes a cap on U.S. forces in Germany would have major implications for U.S. force posture, training and readiness, and deterrent capabilities.

Therefore, the committee directs the Secretary of Defense to provide the congressional defense committees with a briefing, no later

than September 1, 2020, on the impact that a cap of 25,000 on the total number of members of the Armed Forces serving on active duty who are deployed to or stationed in Germany, would have on U.S. national security, to include:

1. Whether such a cap is being implemented, along with the details, rationale, and circumstances of its implementation.
2. Whether the cap and reduction of forces envisions further reductions of forces in Europe, and the terms, rationale, and national security implications of any further envisioned reductions.
3. A determination of whether such a cap would be in the national security interest of the United States and whether it would significantly undermine the security of United States' allies in the region.
4. Whether the Secretary has appropriately consulted with allies and partners of the United States, including all members of NATO, regarding such a cap,
5. A detailed analysis of the impact such a cap would have on the security of U.S. allies and partners in Europe and on interoperability and joint activities with U.S. allies and partners in Europe.
6. A detailed analysis of where the forces will be moved and stationed as a consequence of the cap.
7. A detailed plan for how a cap would be implemented.
8. A detailed analysis of the cost implications of such a cap.
9. A detailed analysis of the impact the cap would have on servicemembers and their families stationed in Europe.
10. A detailed analysis of the impact the cap would have on Joint Force Planning.
11. A detailed explanation of the impact the cap would have on implementation of the National Defense Strategy and a certification that the cap would not negatively affect implementation of the National Defense Strategy.

Briefing on the New START Treaty

The Committee is concerned that the Secretary of Defense and Secretary of State have not completed the briefings required by the National Defense Authorization Act for Fiscal Year 2020, Section 1237, regarding arms control negotiations and the New START Treaty. The Committee emphasizes the importance of legally binding, verifiable limits on Russian strategic nuclear forces on the United States' national security, and strongly urges the both the Secretary of Defense and the Secretary of State to comply with the timeline laid out by Section 1237. The Committee further notes the importance of keeping Congress informed with regard to the Administration's nuclear arms control policies. Therefore, the Committee directs the Secretary of Defense, in coordination with the Secretary of State, to provide a briefing to the House Committee on Armed Services, not later than September 1, 2020 on the status of nuclear arms control negotiations with Russia.

Co-Development of Next Generation Ground-Based Anti-Ship Missile

The committee supports the successful U.S.-Japanese co-development of the SM–3 Block IIA ballistic missile interceptor as well as the need for ground-based anti-ship cruise missiles to defend

United States and allied forces in the Indo- Pacific against growing threats in the region. The committee continues to strongly support efforts to expand defense industrial cooperation with the Government of Japan. Therefore, the committee directs the Secretary of Defense to submit to the congressional defense committees a report by January 1, 2021, on the desirability and feasibility of: (a) co-developing a next generation ground-based anti-ship missile with the Government of Japan; and (b) technology transfer options to enhance joint missile development.

Department of Defense Involvement in Embassy China Working Groups

The committee recognizes the global and regional challenges posed by activities of the People's Republic of China (PRC), including under the Belt and Road Initiative (BRI). The PRC utilizes its officials, diplomats, and State-owned and State-directed companies to maintain strong ties in countries with BRI projects. PRC officials use this influence to undermine United States military, diplomatic, and economic objectives, including through coercion and corruption. The committee directs the Secretary of Defense to submit a report to the congressional defense committees by February 15, 2021, on the Department of Defense's involvement in the Department of State working groups on China, including at the regional and Embassy level.

Efforts to Implement the Foreign Investment Risk Review Modernization Act

The committee recognizes the United States' status as the world's largest recipient of foreign direct investment. The committee understands the importance of balancing the many benefits of foreign direct investment to the U.S. economy with the associated risks to U.S. national security. The committee supports the Department of Defense's collaborative efforts and innovative measures to protect the defense industrial base and the U.S. critical infrastructure and critical technology sectors from such national security risks. The committee recognizes the Department of Defense's essential role, as a frequent co-lead agency and voting member of the Committee on Foreign Investment in the United States (CFIUS), in preventing and mitigating national security threats related to foreign direct investment. The committee is aware that the Foreign Investment Risk Review Modernization Act of 2018 (FIRRMA), which was signed into law as part of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232), significantly strengthened and expanded CFIUS' jurisdiction to address emerging threats to U.S. national security.

To better understand the initial impacts of FIRRMA implementation on the Department of Defense, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services, not later than January 1, 2021. Such briefing shall include an assessment of the following:

(1) the Department's ability to monitor and enforce compliance with mitigation agreements;

(2) the Department's efforts to incorporate findings and recommendations from the "Protecting Critical Technology Task Force" in its review and mitigation processes;

(3) the Department's efforts to assist allies and partners with establishing foreign direct investment screening processes that are similar to CFIUS;

(4) the impact on the Department's ability to attract and work with startup companies producing emerging technologies that receive funding from venture capital companies; and

(5) any other impacts to the Department associated with FIRRMA implementation.

Indo-Pacific Reassurance Initiative

The Department of Defense has identified the Indo-Pacific region as a priority theater. Like the European theater, the committee believes assuring partners and allies in the Indo-Pacific region demonstrates the United States' enduring commitment and believes the Department must better identify efforts to accomplish this objective. The committee notes that section 1251 of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91), as amended by section 1253 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232), authorized the Indo-Pacific Stability Initiative to enhance the security and stability of the Indo-Pacific region and required the Department of Defense to provide a future years plan for the activities, capabilities, and resources necessary enhance U.S. presence, improve military infrastructure, logistics, and prepositioning of equipment, and increase bilateral and multilateral military training and exercises but the Department of Defense did not align resources to meet the objectives of the initiative.

Therefore, the committee has identified and authorized not less than $3.58 billion in steady-state activities to serve as the basis for the Indo-Pacific Reassurance Initiative described in a provision elsewhere in this Act, intended to serve a similar construct to the European Deterrence Initiative. These activities include: (1) $1.39 billion towards optimizing the presence of U.S. Armed Forces in the region, including $403.9 million for Operation & Maintenance, Navy, $106.0 million for Operation & Maintenance, Marine Corps, $388.7 million for Operation & Maintenance, Army, $5.8 million for Operation & Maintenance, Air Force, $87.3 million for Operation & Maintenance, Defense Wide, $388.5 million for Research, Development, Test & Evaluation, Defense Wide, and $13.7 million for Procurement, Marine Corps for combatant command core operations, direct mission support, military information support operations, cyber activities, theater special operations commands, intelligence programs, missile defense programs, rotational units, ground and flying hour programs, transportation costs, and other activities; (2) $573.7 million towards strengthening and maintaining bilateral and multilateral military exercises and training with United States allies and partner countries in the region, including $302.0 million for Operation & Maintenance, Navy, $50.3 million for Operation & Maintenance, Marine Corps, $62.6 million for Operation & Maintenance, Army, $30.4 million for Operation & Maintenance, Air Force, and $128.2 million for Operation & Maintenance, Defense Wide, for support to service component training and exercise pro-

grams, and the Joint Staff's Combatant Commander Exercise Engagement and Training Transformation Program (CE2T2), and other activities; (3) $750.2 million towards improving infrastructure in the region to enhance the responsiveness of U.S. Armed Forces, including $600.2 million of Military Construction, Navy, $89.0 million of Military Construction, Army, and $61.0 million of Military Construction, Air Force, for military construction projects that directly support U.S. Indo-Pacific Command priorities, and planning and design for U.S. Indo-Pacific Command posture initiatives; (4) $654.7 million towards enhancing the prepositioning of equipment and materiel of the U.S. Armed Forces in the region, including $553.9 million of Operation & Maintenance, Navy, $87.2 million of Operation & Maintenance, Marine Corps, $10.0 million of Operation & Maintenance, Army, and $3.6 million of Operation & Maintenance, Air Force for prepositioning of forces and capabilities, and other activities; and (5) $205.8 million towards building the defense and security capabilities, capacity, and cooperation of allies and partner nations in the region, including $193.8 million of Operation & Maintenance, Defense Wide, for security cooperation, $5.8 million of Operation & Maintenance, Navy, for Pacific Partnership, and $6.1 million for the State Partnership Program.

While the committee considers these activities as the basis of the Indo-Pacific Reassurance Initiative, the committee expects the Department of Defense to review and further identify activities to meet the Initiative's objectives, as appropriate. The committee also expects the Department's efforts to be guided by a whole-of-government strategy that informs resource requirements. To ensure continued transparency, the committee will require regularized reports and briefings to allow the committee to conduct oversight of the Department's progress in expanding the Indo-Pacific Reassurance Initiative and ensure the Department is meeting the Initiative's objectives.

Military Exchanges between Senior Officers and Officials of the United States and Taiwan

The committee endeavors to fully understand the extent of the exchange of officials between the United States and Taiwan at all levels and the impact of the exchanges on military-to-military relations and Taiwan's self-defense capabilities. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than December 1, 2020, on exchanges between senior military officers and senior officials of the United States and Taiwan. At a minimum, the briefing shall cover:

(1) the objectives of military exchanges between senior officers and officials of the United States and Taiwan;

(2) the number of exchanges in the two previous calendar years;

(3) the primary focus of each such exchange;

(4) a summary of exchanges that were focused on threat analysis, military doctrine, force planning, logistical support, intelligence collection and analysis, operational tactics, techniques, and procedures, and humanitarian and disaster relief;

(5) the number and primary focus of exchanges planned for the following calendar year; and

(6) any other relevant matters the Secretary of Defense determines should be included.

Modernized Operational Concepts and the Indo-Pacific

The committee recognizes the importance of modernizing operational concepts, which the 2018 National Defense Strategy describes as the manner in which the United States organizes and employs forces to address new technologies and challenges anticipated in future conflict to ensure effective deterrence, defeat adversary's theories of victory, and, if necessary, prevail in conflict. As the National Defense Strategy notes, operational concepts are often best developed when the Joint Force is able to identify key problems and work to resolve them.

The committee recognizes that the services, U.S. Indo-Pacific Command, and the Joint Chiefs of Staff are developing operational concepts to address challenges in the Indo-Pacific, and that the Department is working to provide the committee with a report on joint operational concepts and National Defense Strategy implementation, as required by Sec. 1708 of the FY2020 National Defense Authorization Act. Considering the People Liberation Army's extensive military modernization and increasingly aggressive behavior, the committee believes the Department should ensure that the committee remains apprised of the Department's progress in developing joint operational concepts for the Indo-Pacific and the application of these concepts in specific, critical warfighting scenarios.

The committee therefore directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by December 15, 2020, that assesses the Joint Force's performance against strategic competitors and adversaries in a conflict in the Western Pacific. This briefing shall address: (1) metrics the Department would use to measure success in such a contingency, (2) the specific adversary operational concepts and capabilities that the Joint Force anticipates are likely to create a future military challenge, (3) how these operational concepts and capabilities were coordinated and deconflicted between the services, (4) current and future capability gaps that emerged during the Department's assessments, including counter-satellite capabilities, offensive cyber operations, undersea warfare capabilities, tiered and layered air defenses, intermediate-range missile capabilities, and long-range strike capabilities, (5) Department efforts to redress those shortfalls, including the development and validation of new joint operational concepts, and (6) the anticipated impact validated joint operational concepts will have on the measures of success discussed in (1) above.

North Korea's Chemical and Biological Weapons Capabilities

The committee notes that the Department of Defense has acknowledged the threat North Korea poses to national security. The committee believes the Department of Defense should work to ensure adequate attention is given to North Korea's chemical and biological weapons capabilities and assess readiness of the United States to combat these emerging threats.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, on North Korea's chemical and biological weapons capabilities and an assessment of the Department's readiness to combat these emerging threats. The briefing shall include:

(1) an assessment of relationships North Korea has, and may have, that would aid in their procurement or development of chemical and biological weapons;

(2) an assessment of North Korean investments or projects likely, or with significant potential, to be converted into military assets;

(3) an assessment of North Korean investments or projects of greatest concern with respect to United States national security interests;

(4) a description of any North Korean investments or projects located in another country that is linked to military cooperation with such country;

(5) a summary of the North Korean chemical and biological weapons program, including research, development, production, weaponization, and delivery capabilities; and

(6) an assessment of the Department's current readiness, or deficiencies thereof, to counter a North Korean chemical or biological attack on the Korean Peninsula.

Report on Activities and Resources Necessary to Achieve the Objectives of the Indo-Pacific Reassurance Initiative

The committee believes that the Department of Defense's resource requirements should be forward-looking and driven by strategy. Additionally, the committee requires a detailed summary of those requirements in order to meet its oversight responsibilities. Therefore, the committee is including a complimentary requirement, similar to a requirement appearing elsewhere in this Act, to inform the committee's deliberations in fiscal year 2022.

The committee directs the Secretary of Defense, in consultation with the Commander of U.S. Indo-Pacific Command, to submit a report to the congressional defense committees not later than February 1, 2021, on the activities and resources necessary to achieve the objectives of the Indo-Pacific Reassurance Initiative. The report shall be unclassified but may contain a classified annex. At a minimum, the report shall include:

(1) a summary of progress made towards meeting the objectives of the Indo-Pacific Reassurance Initiative.

(2) an assessment of resource requirements to achieve the objectives of the Indo-Pacific Reassurance Initiative.

(3) an assessment of capabilities requirements to achieve the objectives of the Indo-Pacific Reassurance Initiative.

(4) an assessment of logistics requirements, including force enablers, equipment, supplies, storage, and maintenance requirements, to achieve the objectives of the initiative.

(5) the intended force structure and posture of the assigned and allocated forces within the area of responsibility of the U.S. Indo-Pacific Command for the last fiscal year of the plan and the manner in which such force structure and posture support the objectives of the Initiative.

(6) an assessment of logistics requirements, including force enablers, equipment, supplies, storage, fuel storage and distribution, and maintenance requirements, to achieve the objectives of the Indo-Pacific Reassurance Initiative.

(7) an analysis of the challenges to the ability of the United States to deploy necessary forces from the continental United States to the Indo-Pacific theater in the event of a major contingency, and a description of the plans of the Department of Defense, including military exercises, to address such challenges.

(8) an assessment and plan for security cooperation investments to enhance the objectives of the Indo-Pacific Reassurance Initiative.

(9) a plan to resource U.S. force posture and capabilities, including: (a) the infrastructure capacity of existing locations and their ability to accommodate additional U.S. forces in the Indo-Pacific; (b) the potential new locations for additional U.S. forces in the Indo-Pacific, including an assessment of infrastructure and military construction resources necessary to accommodate additional U.S. forces in the Indo-Pacific; (c) a detailed timeline to achieve desired posture requirements; (d) a detailed assessment of the resources necessary to achieve the requirements of the plan, including specific cost estimates for each project under the Indo-Pacific Reassurance Initiative to support optimized presence, exercises and training, enhanced prepositioning, improved infrastructure, and building partnership capacity; and (e) a detailed timeline to achieve the force posture and capabilities, including force requirements.

(10) any other matters the Secretary of Defense determines should be included.

Report on Department of Defense Strategy for Competition below the Threshold of Armed Conflict

The committee notes that the 2018 National Defense Strategy concludes strategic competition with revisionist states is now the primary concern in U.S. national security. The committee recognizes that these states employ tactics deliberately calibrated to advance their strategic objectives while falling below the threshold of armed conflict. For example, China employs so-called "gray zone" tactics to coerce regional actors, undermine the rules-based international order, and change the status quo while avoiding conflict.

The committee also recognizes that responding to such tactics is neither solely nor primarily the responsibility of the Department of Defense. Rather, the Department's strategy should be nested within a broader, unified whole-of government strategy to deter such behavior. However, the committee expects that a significant proportion of strategic competition with revisionist states will occur below the threshold for armed conflict.

Therefore, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by December 1, 2020, on the Department's strategy for competition below the threshold of armed conflict. The report shall be unclassified without any designation relating to dissemination control but may contain a classified annex. At a minimum, the report shall include:

1. The objectives of such strategy;

2. A summary of any guidance that the Department has produced or received concerning whole-of-government efforts to imple-

ment such strategy in accordance with the National Defense Strategy and the National Security Strategy, as applicable;

3. The Department's primary lines of effort in support of such strategy, the methodology used to define such lines of effort, and a description of how the Department aligns priorities with delegation of tasks;

4. Skillsets, capabilities, and resources required to achieve the objectives of such strategy

5. Assistance provided to other Departments and Agencies in support of a unified, whole-of-government strategy for competition below the threshold of armed conflict;

6. A summary of obstacles identified that hinder the Department's ability to achieve the objectives of such strategy;

7. A summary of organizational reforms the Department has implemented or considered to achieve the objectives of such strategy;

8. A summary of efforts to integrate the Department's activities with partners and allies, international organizations, and other non-government entities;

9. A summary of the Department's efforts to track progress on meeting the objectives of such strategy.

Report on the Use of Unmanned Platforms to Improve Taiwan's Self-Defense Capability

The committee believes that the unique and close relationship between the United States and Taiwan has provided significant advantages to both nations' economic and strategic well-being for over 50 years. The vital security and strategic interests of the United States in the Taiwan Strait and the Taiwan Relations Act, which states that it is the policy of the United States to provide Taiwan with arms of a defensive character, has been a bedrock of this relationship. The committee commends the Department of Defense's efforts at strengthening this key relationship by working with other U.S. departments and agencies, and Taiwan, to enhance Taiwan's self-defense capability.

The committee understands that Taiwan is acquiring asymmetric capabilities to continue to improve its self-defense capabilities. Unmanned systems could create unique dilemmas for the People's Liberation Army should the People's Republic of China consider resorting to the use of force.

The committee encourages the Secretary of Defense, in coordination with the Secretary of State, to consider options to provide affordable, multi-role, medium altitude and persistent unmanned air vehicles for its defense. Further, the committee directs the Secretary of Defense to provide a briefing to the congressional defense committees by February 1, 2021, to include the following:

(1) A discussion of how the transfer of defense articles, such as unmanned platforms that can provide persistent ISR and maritime domain awareness, would enhance Taiwan's Overall Defense Concept;

(2) A summary of the Department's efforts to assist Taiwan in effectively integrating ISR capabilities into its military forces; and

(3) An assessment of how unmanned systems could improve Taiwan's self-defense capabilities, including to threats presented by the People's Republic of China.

Report on Ties between Russia and China

The Department of Defense has acknowledged that China and Russia are increasingly working in cooperation on a wide range of matters, including economically, politically, and militarily; and that the Department believes the growing ties between Russia and China are challenging the rules-based order and present a threat to U.S. national security interests. The committee notes that the National Defense Strategy highlights the joint force's eroding competitive edge against China and Russia. The committee endeavors to fully understand the extent of the ties between Russia and China. Therefore, the committee directs the Director of National Intelligence, in consultation with the Secretary of Defense, to submit a report to the congressional defense committees and the congressional intelligence committees by March 1, 2021, on the relationship between China and Russia. The report shall include:

(1) an assessment of the military relationship between Russia and China, including military exercises, arms sales, security agreements, and joint military educational exchanges;

(2) an assessment of the strength and impacts of increased defense cooperation, coordination, interoperability, and increased proficiencies between Russia and China, including defense industrial cooperation on dual-use technologies; bilateral training and exercises; cyberspace and electronic warfare capabilities; gray zone activities; coordination and capability-sharing; and strategic goals of conventional and non-conventional arms and arms control agreements;

(3) an assessment of the locations where Russia and China are enhancing their respective military and strategic presence and access around the world and the tools and mechanisms Russia and China are using to increase such presence and access;

(4) an assessment of the potential implications to United States military and security operations of increased defense cooperation, coordination, and interoperability between Russia and China as described in paragraphs (2) and (3);

(5) an assessment of the economic ties between Russia and China, including collaboration or cooperation on China's One Belt One Road initiative;

(6) an assessment of cultural exchanges between Russia and China;

(7) an assessment of the educational and professional exchanges between Russia and China, to include scientists, engineers, academics, and other technical professionals;

(8) an assessment of competing interests between Russia and China that limit collaboration and cooperation between the two countries; and

(9) an assessment of whether, and if so, to what degree cooperation between Russia and China is eroding the United States competitive edge or its influence around the world.

The report required shall be submitted in unclassified form, but may include a classified annex.

Security Sector Assistance Training for Foreign Students

The committee is aware that the United States has trained foreign partner forces for decades and the Department of Defense con-

ducts security sector assistance related training for international military students from around the world. The committee supports the goal that training international military students advances U.S. national security interests by building defense partnerships and facilitating interoperability with our foreign partners. The committee is aware that the Secretary of Defense directed a review of vetting procedures for all international military students who train in the United States. The committee supports such a review. The committee is aware that the Department already implemented certain modifications to vetting procedures, and that additional modifications may be forthcoming, which may impact the population of international military students training in the United States.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services not later than December 30, 2020, on foreign partner force training in the United States. Such briefing shall, at a minimum, include results of the Secretary's review of vetting procedures for international military students, any changes to policies and procedures as a result of such review, the current locations for international military student training (including flight training), the number of international military students being trained at each location, the type of training, the potential impact of modified vetting procedures to the international military student population at all locations, and measures being taken to ensure that the goals of training international military students in the United States are achieved.

Taiwan Defense Relations

The committee affirms the Taiwan Relations Act and the "Six Assurances" as the foundation of United States-Taiwan relations and acknowledges the need to maintain a strong and vibrant defense relationship with the government of Taiwan. The committee notes with concern the increasingly aggressive actions by the People's Republic of China towards Taiwan and believes this behavior is inconsistent with China's past commitments to ensure peace and stability in the Indo-Pacific region. The committee continues to support Taiwan's development of a capable and modern defense force to resist external coercion and preserve its security and economic prosperity.

The committee strongly supports the efforts of the Department of Defense in facilitating the provision of defense articles, and other forms of exchange and cooperation, that enhance the capabilities and readiness necessary for Taiwan's self-defense. The committee further encourages the Department to deepen and expand its defense cooperation with Taiwan through practical military training and exercises, air and naval engagements, professional military education, and exchanges between senior defense officials and general officers for the purposes of enhancing cooperation, defense planning, and interoperability for the military forces of the United States and Taiwan.

Therefore, the committee directs the Secretary of Defense to provide the House Committee on Armed Services a briefing, no later than December 1, 2020, on the Department's policies with respect to commencing bilateral military exercises with Taiwan, including naval and air exercises that would seek to enhance cross-strait de-

terrence, and utilizing ship visits, as appropriate. The briefing should also include an update on military engagements planned for the next year, as well as any other matters that the Secretary of Defense deems appropriate to deepen and expand defense cooperation with Taiwan.

United States Strategy on China

The committee believes that China is, and will remain, a strategic competitor for the foreseeable future. The committee also believes all elements of United States national power are required to address concerns raised by China's comprehensive strategy exercising its diplomatic, informational, military, and economic power. To that end, the committee is concerned that the U.S. Government's current efforts to compete with China are often disjointed, and should be congruent and sufficiently coordinated.

The committee believes that the report provided to Congress on the United States' strategic approach to the People's Republic of China, required by section 1261 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232), while late, is a first step in articulating a whole of government approach to competition with China. However, the committee notes that the report did not identify resources necessary to implement the strategy and the annual budget submission to Congress did not highlight new programs and projects proposed to be funded that relate to the strategy. The committee believes there needs to be continued attention and focus on implementing a whole-of-government strategy, U.S. Government's efforts to compete with China should be coordinated and appropriately resourced across departments and agencies, and the Administration should continue to keep the U.S. Congress informed on the implementation of the strategy.

Utilization of Smaller Vessels in Indo-Pacific Area of Operations

The committee remains concerned that the Navy has yet to provide an updated shipbuilding plan as required by section 231 of title 10, United States Code, or a briefing on the updated Integrated Force Structure Assessment. Without the requisite information, the committee is unable to properly assess whether vessels smaller than 200 meters in length may have a forward deployed mission set, such as supporting Expeditionary Advanced Base Operations. Therefore, the committee directs the Chief of Naval Operations to provide a briefing to the House Committee on Armed Services not later than February 1, 2021, on the feasibility of utilizing smaller vessels in the Indo-Pacific to patrol coastal areas and enhance presence in a contested environment.

West African Airlift Support

The committee notes the importance of maintaining presence in West Africa for counterterrorism efforts and partner capacity building and further recognizes the need to provide U.S. forces on the ground with vital resources for mission accomplishment and life support, especially for quick evacuation of wounded personnel. The committee encourages the Department to evaluate the operational resources needed to support these missions while also providing

adequate assurance for the safety of U.S. servicemembers and partner nation forces. Any reduced force levels in Africa could have an impact on the ability of troops on the ground to receive needed airlift support, especially casualty and medical evacuation (CASEVAC and MEDEVAC) support, and would increase risk to American lives. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services, not later than December 15, 2020, on the Department's plan to ensure airlift support for deployed servicemembers and partner nation forces in West Africa, including—(1) the number of remaining aircraft, both fixed-wing and rotary-wing, to support CASEVAC and MEDEVAC needs in theater; (2) a risk analysis to support the reduction of CASEVAC services from the levels provided in fiscal year 2019; (3) courses of action to maintain the safety and airlift support needs of remaining U.S. servicemembers; and (4) any other matters the Secretary considers relevant.

LEGISLATIVE PROVISIONS

SUBTITLE A—ASSISTANCE AND TRAINING

Section 1201—Modification and Extension of Support of Special Operations for Irregular Warfare

This section modifies section 1202 of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91), as most recently amended by section 1207 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92), by striking "$10,000,000" and inserting "$15,000,000"; and by striking "2023" and inserting "2025". This section also expands notification elements to require reporting on steps taken to ensure that the recipients of the support have not and will not engage in human rights violations or violations of the Geneva Conventions of 1949.

Section 1202—Department of Defense Participation in European Program on Multilateral Exchange of Surface Transportation Services

This section would authorize the Secretary of Defense to participate in the Surface Exchange of Services Program of the Movement Coordination Centre Europe.

Section 1203—Extension of Authority to Transfer Excess High Mobility Multipurpose Wheeled Vehicles to Foreign Countries

This section would extend and modify section 1276 of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91).

Section 1204—Modification and Extension of Update of Department of Defense Freedom of Navigation Report

This section would amend section 1275 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) to require such report on a biannual basis, require additional elements to such report, and extend the reporting requirement to December 31, 2025.

Section 1205—Extension of Report on Workforce Development

This section would extend a report on Department of Defense security cooperation workforce development, as required by section 1250 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), by 5 years.

SUBTITLE B—MATTERS RELATING TO AFGHANISTAN AND PAKISTAN

Section 1211—Extension and Modification of Authority for Reimbursement of Certain Coalition Nations for Support Provided to United States Military Operations

This section would extend through December 31, 2021, the authority to make Coalition Support Fund payments under section 1233 of the National Defense Authorization Act for Fiscal Year 2008 (Public Law 110–181) as most recently amended by section 1217 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92).

Section 1212—Extension of the Afghan Special Immigrant Visa Program

This section would extend the Afghan Allies Protection Act of 2009 (Public Law 111–8) as well as extend an expiring report.

The committee notes the critical importance of the Special Immigrant Visa Program for U.S. Government operations in Afghanistan. Last year's modification and extension reinforce the importance of this program by authorizing 4,000 additional visas and returning applicant eligibility requirements to the original criteria set forth in the Afghan Allies Protection Act of 2009. This year, the committee extended Department of Defense and Department of State reporting requirements to ensure the program is executed efficiently. The committee remains committed to Afghan citizens who, at great personal risk, support United States operations in Afghanistan.

Section 1213—Limitation on Use of Funds to Reduce Deployment to Afghanistan

This section would require the Administration to submit a comprehensive, interagency report and certification prior to a drawdown of U.S. military personnel in Afghanistan below troop levels of 8,000 and 4,000. The Secretary of Defense may waive the reporting requirement in this provision if it is vital to the national security interests of the United States or necessary due to an imminent and extraordinary threat to members of the United States Armed Forces.

Section 1214—Report on Operation Freedom Sentinel

This section would direct the Secretary of Defense to provide a report on Operation Freedom Sentinel activities to the House Committee on Armed Services and the Senate Committee on Armed Services not later than 90 days after the date of the enactment of this Act and with each Presidential budget request for the following 2 fiscal years. The report would include specific direct war requests, costs that occur inside and outside the geographical

boundaries of Afghanistan, activities that fund the services, as well as transportation and logistical support.

SUBTITLE C—MATTERS RELATING TO SYRIA, IRAQ, AND IRAN

Section 1221—Extension and Modification of Authority to Provide Assistance to Counter the Islamic State of Iraq and Syria

This section would modify section 1236 of the Carl Levin and Howard P. Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291) to provide assistance to the security forces of the Government of Iraq to counter the Islamic State of Iraq and Syria and extend the authority through December 31, 2021. This section would also require the Secretary of Defense to submit an annual report detailing the weapons and equipment purchased using the Counter-ISIS Train and Equip Fund, as well as the incremental costs for operations and maintenance for Operation Inherent Resolve (OIR) in the previous fiscal year. This section would also require the Department to submit annual budget justifications for OIR for fiscal years 2022 and 2023.

Section 1222—Extension of Authority to Provide Assistance to the Vetted Syrian Opposition

This section would extend and modify section 1209 of the Carl Levin and Howard P. Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291), by extending the authority to support vetted Syrian groups and individuals through December 30, 2021, and the required notice before the provision of assistance. This section would also direct the Secretary of Defense to certify to the House Committee on Armed Services, the Senate Committee on Armed Services, the House Committee on Foreign Affairs, and the Senate Committee on Foreign Relations within 30 days of the date of the enactment of this Act that no U.S. military forces are being used or have been used for the extraction, transport, transfer, or sale of oil from Syria.

Section 1223—Extension of Authority to Support Operations and Activities of the Office of Security Cooperation in Iraq

This section would extend section 1215 of the National Defense Authorization Act for Fiscal Year 2012 (10 U.S.C. 113), the Office of Security Cooperation-Iraq authority, as most recently amended by section 1223 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92), through fiscal year 2021. It would limit the expenditure of funds pending the submission of the certification required by section 1223 of Public Law 116–92.

Section 1224—Prohibition on Provision of Weapons and Other Forms of Support to Certain Organizations

This section would prohibit the use of funds authorized to be appropriated by this Act to the Department of Defense for fiscal year 2021 to provide weapons or any form of support to al-Qaeda, the Islamic State of Iraq and Syria, Jabhat Fateh al Sham, Hamas, Hizballah, Palestinian Islamic Jihad, al-Shabaab, Islamic Revolutionary Guard Corps, or any individual or group associated with these organization.

Section 1225—Consolidated Budget Display and Report on Operation Spartan Shield

This section would require the Secretary of Defense to provide a report to the House Committee on Armed Services not later than 180 days after the date of the enactment of this Act, and annually thereafter in fiscal years 2022 and 2023, on Operation Spartan Shield. This section would also require the Department to submit annual budget justifications for Operation Spartan Shield for fiscal years 2022 and 2023.

Section 1226—Sense of Congress on Peshmerga Forces as a Partner in Operation Inherent Resolve

This section would express the sense of Congress regarding Peshmerga forces of the Kurdistan Region of Iraq.

SUBTITLE D—MATTERS RELATING TO RUSSIA

Section 1231—Prohibition on Availability of Funds Relating to Sovereignty of the Russian Federation over Crimea

This section would extend by 1 year the prohibition imposed by section 1245 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), as amended by section 1232 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). This section would prohibit the use of fiscal year 2021 funds to implement any activity that recognizes the sovereignty of Russia over Crimea. This section would also allow the Secretary of Defense, with the concurrence of the Secretary of State, to waive the prohibition if the Secretary of Defense determines that doing so would be in the national security interest of the United States and submits a notification to the House Committee on Armed Services, the Senate Committee on Armed Services, the Senate Committee on Foreign Relations, and the House Committee on Foreign Affairs.

Section 1232—Extension of Limitation on Military Cooperation between the United States and the Russian Federation

This section would extend for 1 year section 1232(a) of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328), as most recently amended by section 1231 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). This section would limit the use of fiscal year 2021 funds for bilateral military-to-military cooperation between the Government of the United States and Russia until the Secretary of Defense, in coordination with the Secretary of State, provides a certification to appropriate congressional committees relating to certain actions by Russia. This extension includes a rule of construction that nothing in the provision shall be construed to limit bilateral military-to-military dialogue for the purpose of reducing the risk of conflict.

Section 1233—Modification and Extension of Ukraine Security Assistance Initiative

This section would extend by one year section 1250 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), most recently amended by section 1244 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92), to authorize the Secretary of Defense to provide security assistance and intelligence support to the Government of Ukraine, with the concurrence of the Secretary of State. This section would also authorize $250.0 million to carry out this authority in fiscal year 2021.

This section would extend for 2 years the reports on military assistance to Ukraine required in section 1275(e) of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291).

Section 1234—United States Participation in the Open Skies Treaty

This section would require that in the event of withdrawal by the United States from the Open Skies Treaty, the Secretary of Defense and Secretary of State jointly shall submit to the appropriate defense committees either:

(1) a notification that agreements are in place with other state parties that host U.S. military forces and assets to ensure that after such withdrawal the U.S. will be provided sufficient notice of observation flights over the territory of those state parties under the Treaty; or,

(2) if agreements are not in place, a description of how the U.S. will consistently and reliably be provided sufficient warning of observation flights described above, including a description of assets, personnel, and policy implications of using such other means.

This section would also require the Secretary of Defense and Secretary of State, in coordination with the Director of National Intelligence, to jointly submit a report of the impacts of potential future U.S. withdrawal on:

(1) collaboration with allies, U.S. leadership in the North Atlantic Treaty Organization, and continued dialogue with Russia that the Treaty offers,

(2) how imagery captured under the Treaty will be replaced,

(3) how intelligence gained under the Treaty will be replaced, and

(4) the ability of the U.S. to influence future decisions on certification of new sensors within the Treaty that could pose a threat to deployed U.S. military personnel and assets.

The report would also include unedited correspondence between the U.S. and Treaty state parties with respect to potential U.S. withdrawal.

SUBTITLE E—MATTERS RELATING TO EUROPE AND NATO

Section 1241—Limitations on Use of Funds to Reduce the Total Number of Members of the Armed Forces Serving on Active Duty Who Are Stationed in Germany, to Reduce the Total Number of Members of the Armed Forces Stationed in Europe, and to Divest Military Infrastructure in Europe

This section would prohibit the use of funds authorized to be appropriated or otherwise made available to the Department of Defense to reduce the total number of members of the Armed Forces serving on active duty stationed in Germany, or to reduce the total number of members of the Armed Forces serving on active duty stationed in Europe, below the levels present on June 10, 2020, until 180 days after the date on which the Secretary of Defense and the Chairman of the Joint Chiefs of Staff have separately certified and submitted to the congressional defense committees certain requirements and assessments.

This section would also prohibit the Secretary of Defense from taking action to divest infrastructure or real property in Europe under the operational control of the Department of Defense unless the Secretary certifies that no military requirement for the future use of the infrastructure or real property is foreseeable. The limitation on divestment would sunset 5 years after the date of enactment.

Section 1242—Sense of Congress on Support for Coordinated Action to Ensure the Security of Baltic Allies

This section would express the sense of Congress regarding defense and security activities in Estonia, Latvia, and Lithuania.

Section 1243—Sense of Congress on Support for Estonia, Latvia, and Lithuania

This section would express the sense of Congress regarding the United States support for Estonia, Latvia, and Lithuania.

Section 1244—Sense of Congress on Support for Georgia

This section would express the sense of Congress regarding the United States support for Georgia.

Section 1245—Sense of Congress on Burden Sharing by Partners and Allies

This section would express the sense of Congress regarding burden sharing by United States partners and allies.

Section 1246—Sense of Congress on NATO's Response to the COVID–19 Pandemic

This section would express the sense of Congress regarding NATO's response to the COVID–19 pandemic.

SUBTITLE F—MATTERS RELATING TO THE INDO-PACIFIC REGION

Section 1251—Indo-Pacific Reassurance Initiative

This section would direct the Secretary of Defense to carry out a program of prioritized activities to reassure United States allies and partners, appropriately prioritize activities and resources to implement the National Defense Strategy, and enhance the ability of Congress to provide oversight of and support to Department of Defense efforts. It would define five objectives for an Indo-Pacific Reassurance Initiative: (1) optimizing the presence of U.S. Armed Forces in the Indo-Pacific; (2) strengthening and maintaining bilateral and multilateral military exercises and training with partners and allies in the Indo-Pacific; (3) improving infrastructure in the Indo-Pacific to enhance the responsiveness of U.S. Armed Forces; (4) enhancing the prepositioning of equipment and materiel in the Indo-Pacific; and (5) building the defense and security capabilities, capacity, and cooperation of partners and allies in the Indo-Pacific. This section would also require a future years plan on activities and resources of the Initiative, a budget justification for the Initiative, an end of fiscal year report, and a briefing on funds obligated for the Initiative.

Section 1252—Limitation on Use of Funds to Reduce the Total Number of Members of the Armed Forces Serving on Active Duty Who Are Deployed to South Korea

This section would prohibit the use of funds authorized to be appropriated by this Act to reduce the number of members of the Armed Forces serving on Active Duty in the Republic of Korea below 28,500 until 180 days after the date that the Secretary of Defense certifies to the congressional defense committees that such a reduction is in the national security interest of the United States, will not significantly undermine the security of the United States' allies in the region, is commensurate with a reduction in the threat posed by North Korea, that South Korea is capable of deterring a conflict, and the Secretary has appropriately consulted with allies of the United States regarding such a reduction.

Section 1253—Implementation of GAO Recommendations on Preparedness of United States Forces to Counter North Korean Chemical and Biological Weapons

This section would direct the Secretary of Defense to submit a plan not later than 1 year after the date of the enactment of this Act to the congressional defense committees to address the recommendations in the U.S. Government Accountability Office's (GAO) report on Preparedness of U.S. Forces to Counter North Korean Chemical and Biological Weapons (GAO–20–79C). This section would also require the Secretary to begin implementation of the plan not later than 18 months after the date of the enactment of this Act. The Secretary may decide not to implement one of the recommendations in the report, but must submit justification for why not, and what else the Department of Defense will do to address the conditions underlying the recommendation.

The committee is concerned by many issues highlighted by GAO, and believes the Department's preparedness for a significant state-

level weapons of mass destruction event is wholly inadequate. The Department's men and women in uniform must be trained and equipped to successfully operate and perform in a contaminated environment.

Section 1254—Public Reporting of Chinese Military Companies Operating in the United States

This section would require a list of each entity determined to be directly or indirectly owned, controlled, or beneficially owned by the People's Liberation Army, or identified as a military-civil fusion contributor to the Chinese defense industrial base, engaged in providing commercial services, manufacturing, producing, or exporting, and operating directly or indirectly in the United States. It would also require the Secretary to publish such list in the Federal Register.

Section 1255—Independent Study on the Defense Industrial Base of the People's Republic of China

This section would require the Secretary of Defense to enter into a contract with a federally funded research and development center to conduct a study on the defense industrial base of the People's Republic of China.

Section 1256—Report on China's One Belt, One Road Initiative in Africa

This section would direct the Secretary of Defense to provide a report not later than 1 year after the date of the enactment of this Act on China's One Belt, One Road Initiative in Africa. Such report shall include a strategy to address impacts on United States military and defense interests in Africa.

Section 1257—Sense of Congress on Enhancement of the United States-Taiwan Defense Relationship

This section would express the sense of the Congress that Taiwan is a vital partner of the United States and, consistent with the Taiwan Relations Act (22 U.S.C. 3301), the United States should continue to strengthen defense and security cooperation in support of Taiwan maintaining a sufficient self-defense capability.

Section 1258—Report on Supply Chain Security Cooperation with Taiwan

This section would require a report on the feasibility of establishing a United States-Taiwan working group for supply chain security, the Department's current and future plans to engage with Taiwan on activities ensuring supply chain security, and obstacles for conducting such activities.

Section 1259—Report on United States-Taiwan Medical Security Partnership

This section would direct the Secretary of Defense to conduct an assessment of the feasibility of developing a U.S.-Taiwan medical security partnership on issues related to pandemic preparedness.

SUBTITLE G—OTHER MATTERS

Section 1261—Provision of Goods and Services to Kwajalein Atoll

This section would authorize the Secretary of the Army, subject to the concurrence of the Secretary of State, to provide goods and services to the Government of the Republic of the Marshall Islands and to other eligible patrons at Kwajalein Atoll. It would also authorize the Secretary of the Army to collect reimbursement from the Government of the Republic of the Marshall Island or eligible patrons for such goods and services in an amount that does not exceed the costs to the United States for providing such goods or services and does not exceed $7,000,000 annually.

Section 1262—Annual Briefings on Certain Foreign Military Bases of Adversaries

This section directs the Chairman of the Joint Chiefs of Staff and the Secretary of Defense to provide an annual assessment of covered foreign military bases, including such bases of China, Russia, and Iran, identifying the activities and capabilities at such base and the impact on U.S. national security interests.

Section 1263—Report on Progress of the Department of Defense with Respect to Denying a Fait Accompli by a Strategic Competitor Against a Covered Defense Partner

This section would require a report not later than April 30, 2021, and annually thereafter until 2026, on improving the ability of the United States Armed Forces to conduct combined joint operations to deny the ability of a strategic competitor to execute a fait accompli against a covered defense partner.

Section 1264—Modification to Requirements of the Initiative to Support Protection of National Security Academic Researchers from Undue Influence and Other Security Threats

This section would modify section 1286(d)(1) of the John S. McCain National Defense Authorization Act (Public Law 115–292) to include basic research in the defense research and development activities for which the Secretary of Defense must establish streamlined procedures to collect appropriate information relating to individuals, including United States citizens and foreign nationals, for the purpose of maintaining appropriate security controls over research activities, technical information, and intellectual property. This section would also require the Secretary to submit to the congressional defense committees by January 1, 2021, the required list of Chinese and Russian academic institutions with a history of improper technology transfer and other malign behavior, and to make the unclassified portion publicly available and searchable.

Section 1265—Report on Directed Use of Fishing Fleets

This section would direct the Office of Naval Intelligence to conduct an assessment of fishing fleets as the so-called “third arm” of foreign navies, the geopolitical challenge posed by China’s hybrid warfare activities, and the national security threat to U.S. interests

and those of our partners in the region posed by IUU fishing and other illegal activity at sea.

Section 1266—Expanding the State Partnership Program in Africa

This section would require the Secretary of Defense, in coordination with the Chief of the National Guard Bureau, to seek to build partner capacity and interoperability in the United States Africa Command area of responsibility through increased partnerships with countries on the African continent, military-to-military engagements, and traditional activities of the combatant commands.

Section 1267—Report Relating to Reduction in the Total Number of United States Armed Forces Deployed to United States Africa Command Area of Responsibility

This section would require a report to Congress 60 days after enactment of this Act on the average total number of United States Armed Forces under the direct authority of the Commander of United States Africa Command and deployed to the United States Africa Command area of responsibility and a follow up report not later than 90 days after enactment of this Act should the Department reduce the total number of United States Armed Forces under the direct authority of the Commander of United States Africa Command and deployed to the United States Africa Command area of responsibility.

Section 1268—Report on Enhancing Partnerships between the United States and African Countries

This section would require a report on the activities and resources required to enhance security and economic partnerships between the United States and African countries.

Section 1269—Sense of Congress with Respect to Qatar

This section would express the sense of Congress regarding Qatar.

Section 1270—Sense of Congress on United States Military Support for and Participation in the Multinational Force and Observers

This section would express the sense of Congress regarding United States military support for and participation in the Multinational Force and Observers.

Section 1271—Prohibition on Support for Military Participation against the Houthis

This section would prohibit funds to provide logistical support for Saudi-led coalition strikes against the Houthis in Yemen. This section would also prohibit funds for any Department of Defense civilian, military, or contractor personnel to command, coordinate, participate in the movement of, or accompany the regular or irregular military forces of the Saudi and Emirati-led coalition forces engaged in hostilities or in situations where there exists an imminent threat of engagement in hostilities with the Houthis in Yemen, unless the President has obtained the authority to do so in accordance

with Section 8(a) of the War Powers Resolution (50 U.S.C 1547(a)). This prohibitions does not apply to United States Armed Forces engaged in operations against al-Qaeda and associated forces.

Section 1272—Rule of Construction Relating to Use of Military Force

This section would establish that nothing in this Act or any amendment made by this Act may be construed to authorize the use of military force.

TITLE XIII—COOPERATIVE THREAT REDUCTION

ITEMS OF SPECIAL INTEREST

Importance of the Cooperative Threat Reduction Program

The budget request included $238.5 million in Operation and Maintenance, Defense-Wide, for the Cooperative Threat Reduction Account. The committee is concerned with the Department of Defense's reduction to the Cooperative Threat Reduction Program by 30 percent from the fiscal year 2020 budget request. Last year, the committee supported a 10 percent increase to the program due to its critical mission of ensuring our national security by preventing the proliferation of weapons of mass destruction, including chemical, biological, radiological, and nuclear threats. At a time when the United States is struggling to respond to the spread of a highly infectious new virus, the committee is alarmed by the Department's significant reduction in the budget request for a mission of detecting and confronting biological threats to the United States. The committee urges the Department to re-calibrate its focus on this vital mission. The committee therefore recommends $373.7 million, an increase of $135.2 million, in Operation and Maintenance, Defense-Wide for the Cooperative Threat Reduction Account, to restore funding back to the fiscal year 2020 enacted amount.

LEGISLATIVE PROVISIONS

Section 1301—Funding Allocations; Specification of Cooperative Threat Reduction Funds

This section would allocate specific funding amounts for each program under the Department of Defense Cooperative Threat Reduction (CTR) Program from within the overall $373.7 million that the committee would authorize for the Cooperative Threat Reduction Program. The allocation under this section reflects the amount of the budget request for fiscal year 2021.

This section would specify that funds authorized to be appropriated to the Department of Defense for the Cooperative Threat Reduction Program, established under the Department of Defense Cooperative Threat Reduction Act (50 U.S.C. 3711), would be available for obligation for fiscal years 2021, 2022, and 2023.

TITLE XIV—OTHER AUTHORIZATIONS

LEGISLATIVE PROVISIONS

SUBTITLE A—MILITARY PROGRAMS

Section 1401—Working Capital Funds

This section would authorize appropriations for Defense Working Capital Funds at the levels identified in section 4501 of division D of this Act.

Section 1402—Chemical Agents and Munitions Destruction, Defense

This section would authorize appropriations for Chemical Agents and Munitions Destruction, Defense at the levels identified in section 4501 of division D of this Act.

Section 1403—Drug Interdiction and Counter-Drug Activities, Defense-Wide

This section would authorize appropriations for Drug Interdiction and Counter-Drug Activities, Defense-wide at the levels identified in section 4501 of division D of this Act.

Section 1404—Defense Inspector General

This section would authorize appropriations for the Office of the Inspector General at the levels identified in section 4501 of division D of this Act.

Section 1405—Defense Health Program

This section would authorize appropriations for the Defense Health Program at the levels identified in section 4501 of division D of this Act.

Section 1406—National Defense Sealift Fund

This section would authorize appropriations for the National Defense Sealift Fund at the levels identified in section 4501 of division D of this Act.

SUBTITLE B—OTHER MATTERS

Section 1411—Authority for Transfer of Funds to Joint Department of Defense-Department of Veterans Affairs Medical Facility Demonstration Fund for Captain James A. Lovell Health Care Center, Illinois

This section would authorize the Department of Defense to transfer funds from the Defense Health Program into Joint Department of Defense–Department of Veterans Affairs Medical Facility Demonstration Fund for the Captain James A. Lovell Federal Health Care Center.

Section 1412—Authorization of Appropriations for Armed Forces Retirement Home

This section would authorize appropriations for fiscal year 2021 from the Armed Forces Retirement Home Trust Fund in the amount of $70.3 million for the operation of the Armed Forces Retirement Home.

TITLE XV—AUTHORIZATION OF ADDITIONAL APPROPRIATIONS FOR OVERSEAS CONTINGENCY OPERATIONS

ITEMS OF SPECIAL INTEREST

National Guard and Reserve Equipment Account

The budget request contained no funding for a National Guard and Reserve Component equipment account. The committee has long been concerned about the availability of modern equipment needed to ensure the relevance and readiness of the National Guard and Reserve Components as an operational reserve and for their domestic support missions. The committee notes that the annual National Guard and Reserve Equipment Reports over the last several years identify continuing shortages in modernized equipment and challenges associated with efficiently fulfilling combat readiness training requirements.

The committee believes additional funds would help manage strategic risk and eliminate identified critical dual-use equipment shortfalls. The committee expects these funds to be used for the purposes of, but not limited to, the procurement and modernization of High Mobility Multipurpose Wheeled Vehicles; Family of Medium Tactical Vehicles trucks; fighter pilot helmet mounted display modernization; F–16 Active Electronically Scanned Array radar; C–130J and C–130 Air National Guard recapitalization; C–130 propeller upgrades; C–130 firefighting system upgrades; radar warning receivers for F/A–18 aircraft; UH–60 conversions and UH–60M Black Hawk helicopters; UH–72 Lakota helicopters; and other critical dual-use, unfunded procurement items for the National Guard and Reserve Components.

The committee recommends $150.0 million for National Guard and Reserve equipment.

LEGISLATIVE PROVISIONS

SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 1501—Purpose

This section would establish the purpose of this title and make authorization of appropriations available upon enactment of this Act for the Department of Defense, in addition to amounts otherwise authorized in this Act, to provide for additional authorization of funds due to overseas contingency operations and other additional funding requirements.

Section 1502—Procurement

This section would authorize additional appropriations for procurement at the levels identified in section 4102 of division D of this Act.

Section 1503—Research, Development, Test, and Evaluation

This section would authorize additional appropriations for research, development, test, and evaluation at the levels identified in section 4202 of division D of this Act.

Section 1504—Operation and Maintenance

This section would authorize additional appropriations for operation and maintenance programs at the levels identified in section 4302 of division D of this Act.

Section 1505—Military Personnel

This section would authorize additional appropriations for military personnel at the levels identified in section 4402 of division D of this Act.

Section 1506—Working Capital Funds

This section would authorize additional appropriations for Defense Working Capital Funds at the levels identified in section 4502 of division D of this Act.

Section 1507—Drug Interdiction and Counter-Drug Activities, Defense-Wide

This section would authorize additional appropriations for Drug Interdiction and Counter-Drug Activities, Defense-Wide, at the levels identified in section 4502 of division D of this Act.

Section 1508—Defense Inspector General

This section would authorize additional appropriations for the Office of the Inspector General at the levels identified in section 4502 of division D of this Act.

Section 1509—Defense Health Program

This section would authorize additional appropriations for the Defense Health Program at the levels identified in section 4502 of division D of this Act.

SUBTITLE B—FINANCIAL MATTERS

Section 1511—Treatment as Additional Authorizations

This section would state that amounts authorized to be appropriated by this title are in addition to amounts otherwise authorized to be appropriated by this Act.

Section 1512—Special Transfer Authority

This section would authorize the transfer of up to $2.50 billion of additional war-related funding authorizations in this title among the accounts in this title.

SUBTITLE C—OTHER MATTERS

Section 1521—Afghanistan Security Forces Fund

This section would extend the Afghanistan Security Forces Fund through fiscal year 2021. This section would also set a goal of using $29.1 million to support, to the extent practicable, the efforts of the Government of Afghanistan to promote the recruitment, training, integration, and retention of Afghan women into the Afghan National Defense and Security Forces.

This section would also continue to require the Secretary of Defense, in consultation with the Secretary of State, to submit an assessment of the Government of Afghanistan's ability to meet shared security objectives and manage, employ, and sustain equipment divested under the Afghanistan Security Forces Fund. If the results of said assessment were unfavorable, the Secretary of Defense would be required to withhold assistance under the Afghanistan Security Forces Fund.

TITLE XVI—STRATEGIC PROGRAMS, CYBER, AND INTELLIGENCE MATTERS

ITEMS OF SPECIAL INTEREST

SPACE ACTIVITIES

Army GEOINT

The committee believes the Department of Defense requires the strongest possible integration with the intelligence community. The United States Army, in particular, will be dependent upon the interagency for intelligence capabilities to enable long-range precision fires. Therefore, the Committee directs the Undersecretary of Defense for Intelligence and Security and the Army's Deputy Chief of Staff for Intelligence to provide the committee with a briefing not later than December 31, 2020, on plans to ensure the Army has direct access, including collection tasking, to the intelligence capabilities required to enable the Army's long range precision fires capabilities under development. The briefing should include information on the Army's efforts to build an information architecture that will support direct access touch intelligence capabilities.

Cislunar Space Capabilities

The committee is aware that the Department of Defense has begun to assess capabilities and requirements for the cislunar region of space, including space domain awareness, space weather, and space control. The committee notes U.S. commercial capabilities could be used and expanded with new entrants to address emerging defense missions and requirements in the cislunar region in a cost-effective manner using novel approaches.

Therefore, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2020, on deep space mission requirements for national security. The report should include;

(1) the Department's policy related to conducting missions like space domain awareness, tracking, relay, space weather, positioning/navigation/timing, space control, and rendezvous and proximity operations in the cislunar region of space;

(2) the Department's plans to establish requirements for the cislunar region, as necessary, in any of these mission areas;

(3) costs and funding requirements and plans across the Future Years Defense Program for technology or system development, commercial services, or operational missions in the cislunar region; and

(4) plans to address national security cislunar mission requirements using competitive procurement of commercial services and modular satellite material solutions from U.S. companies for each of the mission area requirements related to space domain awareness, space weather, and space control.

Commercial Space-Based Radio Frequency Mapping

In the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120), the committee directed the Director of the National Reconnaissance Office to submit a report on commercial space-based radio frequency mapping and associated operations and services for space-based electromagnetic collections. The committee continues to note the potential use of such services and data to meet combatant command requirements, and therefore directs the Chief of Operations of the Space Force, in coordination with the Commander of the U.S. Space Command, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2020, that includes an assessment of how U.S. commercial space-based radio frequency capabilities could support joint and allied warfighting activities, and a plan to test, evaluate, and use U.S. commercial space-based radio-frequency geo-intelligence capabilities and data, and associated costs.

Digital Ground Satellite Communications Architecture

The committee supports the Department of Defense's prior demonstrations to leverage innovations in commercially available technologies to utilize wideband satellite communication (SATCOM) ground capabilities across an integrated, responsive, flexible, and secure enterprise. The committee understands that key attributes and capabilities of a warfighter-focused SATCOM enterprise should include common digital ground infrastructure elements to ensure warfighter situational awareness, access to a common operating picture, and automated resource allocation functionality. While the committee commends the current "Fighting SATCOM Enterprise" initiative, the committee favors an accelerated and fully defined acquisition strategy related to the ground digitization efforts that will enable full-spectrum, seamless, and resilient communications across our national security space enterprise.

Therefore, the committee directs the Secretary of Defense to submit a plan to the congressional defense committees by March 1, 2021, on integrating a digital ground architecture that will utilize commercial innovations and solutions to enable wideband SATCOM roaming and multi-domain command and control capabilities without unnecessary additional investment in terminal hardware.

Intelligence Community and Space Situational Awareness

The committee notes that space situational awareness requirements are currently being filled by Department of Defense, intelligence community, other intergovernmental agencies, and, increasingly, commercial providers. While mission partners in the intelligence community can contribute to the decision calculus about the impact of actions resulting from a maneuver necessitated by a conjunction assessment, various mission partners make different contributions to this decision.

The committee directs the Directors of National Geospatial-Intelligence Agency, the Director of the National Reconnaissance Office, the Commander of U.S. Space Command, and the Chief of Operations of the Space Force to provide a briefing to the House Committee on Armed Services by November 1, 2020, on the current contributions the National Geospatial-Intelligence Agency and the National Reconnaissance Office make to operational decisions regarding the necessity to maneuver national technical means given a potential conjunction assessment, and the coordination among the agencies, Space Command and Space Force, in peacetime, in crisis, and during a conflict.

Military Application of LiDAR Satellites

The committee recognizes that support to long-range precision fires and future Intelligence, Surveillance and Reconnaissance operations will be degraded based on the Anti-Access/Anti-Denial environment of adversaries possessing advanced air defense capabilities. The committee understands there may be innovative new technologies which could provide tactically-relevant, high resolution targeting information from low earth orbit satellites, such as 3–D LiDAR. Space-based LiDAR with the ability to provide triple-canopy deep foliage in support of counter Denial and Deception. The committee further understands that such capability has proved effective for National Aeronautics and Space Administration objectives and the feasibility of converting this to military applications should be studied, including as a hosted payload on a National Reconnaissance Office or Army satellite.

Therefore, the committee directs the Secretary of the Army to provide a report to the congressional defense committees not later than February 1, 2021, on the feasibility of commercializing a multi-aperture single photon LiDAR satellite to support Army long-range precision fires and Army Special Operations Command elements.

Mission Assurance in Launch

The committee notes that the high levels of mission assurance required by the Department of Defense for the National Security Space Launch program has ensured unprecedented levels of mis-

sion success. The committee supports the Department of the Air Force's commitment to safety, security, and mission delivery. However, the committee also notes that the mission assurance requirements of the Air Force drive significant costs for current and potential future bidders in National Security Launch program and in small launch; have not adequately accounted for reusability within the context of mission assurance; have not innovated in the areas of artificial intelligence, modelling, and computational advancements; and lastly, have not been motivated to be more cost-efficient.

The committee directs the Chief of Space Operations of the Space Force to provide a briefing and report to the House Committee on Armed Services by December 1, 2020, on innovation in mission assurance requirements for the National Security Space Launch program and for small launch, to include considering cost considerations, considering past launch performance and identifying levels of risk-tolerance for each payload. The briefing and report should also include proposed pathways to reconsider the current construct for design and implementation of mission assurance requirements to allow competition in the design and implementation of a mission assurance regime for the program, including considering having the Space Force either bring this expertise in-house, or having different outside entities be responsible for design of requirements versus mission assurance compliance verification. The briefing and report should also address how reusability should be included in mission assurance requirements, and how cost and risk should be balanced.

National Reconnaissance Office Future Commercial Sources of Satellite Imagery

As the National Reconnaissance Office (NRO) moves forward with its strategy for acquiring commercial satellite imagery following the EnhancedView contract, which is set to end at the end of fiscal year 2020, the committee expects the Director to continue a program of open competition likely leading to contracts to multiple awardees, and to be responsive to the requirements of the National Geospatial-Intelligence Agency and the broader Department of Defense GEOINT user community, including Combatant Commands, Functional Commands, and other key elements of the armed forces. The committee expects the NRO to fulfill the GEOINT requirements of the user community to the greatest extent, and believes Office should be working proactively with industry to apply commercial solutions to known Intelligence, Surveillance, and Reconnaissance gaps as much as possible. The Committee expects the NRO to not only support the continuation of commercial data acquisitions consistent with the needs met by the EnhancedView contract, but to further enable on-ramps for new capabilities responsive to additional needs. The committee directs the Director of the NRO to submit a report to the congressional defense and intelligence committees by December 15, 2020, on its plans to lead the GEOINT community in identifying and working with new commercial providers or new commercial data sets and solutions, transitioning them from pilot programs to operational contracts, and doing so even as formal requirements are still in development.

Non-Traditional Space Companies

The committee notes that one of the motivations for the establishment of a Space Force was the challenges in traditional space requirements and acquisition processes that are being outpaced by innovative commercial space companies. The committee supports the idea that innovation, competition, and on-ramping, non-traditional space companies will augment the capacity and capability derived from traditional space architectures. The committee recognizes that non-traditional space companies often note their inability to do business and compete on an equal playing field with traditional defense prime contractors.

The committee directs the Chief of Space Operations of the Space Force, in coordination with the Under Secretary of Defense for Acquisition and Sustainment, the Commander of U.S. Space Command, and the Chair of the Defense Innovation Board, to provide a report and briefing to the House Committee on Armed Services by December 1, 2020, on the challenges commonly encountered by non-traditional space new entrants and pathways to resolving those challenges. The report should address areas of future space innovation to include algorithm development, artificial intelligence, architecture development, high computing power developments, and additive manufacturing. The report should also address innovative acquisition approaches that should be considered for high technology readiness level components that can be competitively tested to meet current and planned requirements.

Nuclear Command, Control and Communications Enterprise Modernization

The committee acknowledges the importance of the Department of Defense's efforts to modernize the nuclear command, control, and communications (NC3) enterprise as a critical element of the nation's nuclear deterrent capability. The recent establishment of the Nuclear Command, Control and Communications Enterprise Center (NEC) within U. S. Strategic Command (USSTRATCOM) is a significant advancement that will help inform and enable the modernization of the Department's situational awareness, decision-making, force direction, force management and planning for resilient NC3. The committee believes strong and sustained attention to NC3 will be required as the Department continues to implement a comprehensive nuclear deterrent modernization program. The committee also observes that robust partnerships with industry will be required in order to develop, field and affordably sustain a modernized NC3 enterprise and believes the NEC can play an important role in developing these relationships.

The committee also recognizes the importance of maintaining a responsive and resilient airborne NC3 capability. The committee is aware of the ongoing analysis to determine options to replace E–4B and E–6B aircraft that currently perform this mission. However, as the deliberate planning process to replace these aircraft proceeds forward, the committee is aware of the age of the legacy airborne NC3 fleet and its capacity to maintain a sustained airborne presence if directed. To better understand the capabilities and limitations of the current airborne NC3 fleet, the committee directs the Secretary of Defense to provide a briefing to the congres-

sional defense committees by November 30, 2020, on the ability of USSTRATCOM to conduct sustained airborne NC3 operations. This briefing will include an overview of the Department's airborne NC3 operational employment concept, an evaluation of current Air Force and Navy airborne NC3 capabilities and limitation related to manpower, training, maintenance, logistics support, basing, and aerial refueling requirements, and an assessment of how long contingency airborne NC3 operations can be sustained.

Policy and Technology Review on Minimizing Orbital Debris Threats

National security depends on reliable access to, and safe operations in, space. Critical Department of Defense (DoD) missions operating in space and providing multi-domain support depend on minimizing orbital threats, including the threat posed by orbital debris. Both satellites and rocket bodies are major sources of space debris, particularly in low-Earth orbit. There have also been several notable close calls between active satellites and active and defunct craft. Our nation and global economy cannot afford actual collisions, much less the additional debris that would be created as a result.

The Committee is aware of the routinely updated U.S. government's Orbital Debris Mitigation Standard Practices (ODMSP) and the Air Force's Unified Data Library (UDL). However, notwithstanding the growing risk from orbital debris to our national defense assets, the Department does not appear to have changed its standard operating practices—for its own warfighting satellites, or for the commercial satellite operators on which it relies—in any substantive way since first publishing the ODMSP report in 2001.

Therefore, the committee directs the Secretary of Defense to review the Department's current policies for orbital debris mitigation, including compliance with ODMSP, and provide to the congressional defense committees a plan for full compliance with the ODMSP in all orbits and particularly low earth orbit through the establishment of Department-wide orbital debris mitigation practices no later than January 31, 2021. Compliance should include both nominal end-of-mission operations and off-nominal operations. For example, if a Department of or contracted commercial space service experiences an anomaly in orbit, the operator should continue to be subject to the ODMSP.

Program to Improve Launch Support and Infrastructure at Federal Ranges

The committee notes section 1609 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) authorized a program to enhance and improve launch support and infrastructure at Federal ranges, to support small and medium launches. The committee is aware of the age and importance of the infrastructure at the Eastern and Western Ranges to sustain a broad array of national security launches, including medium and heavy launches for national security. Therefore, the committee directs the Chief of Space Operations for the Space Force to submit a report to the congressional defense committees by October 30, 2020, that includes the requirements for sustaining and improving

the physical infrastructure for the ranges at Vandenberg Air Force Base and Cape Canaveral and associated funding requirements over the fiscal year defense plan.

The committee further directs the Secretary of Defense to submit a report to the congressional defense committees by March 1, 2021, on any additional space testing and training range requirements that may be necessary to ensure the Department is ready and able to protect and defend vital national interests in space.

Satellite Solar Power Technology Sourcing

The committee is aware that high efficiency solar cells and panels are essential for powering civil and national security satellites. US technological leadership and secure and reliable sources of solar cells and panels are critical aspects of satellite operations. A 2019 report by Air Force Research Laboratory and the Defense Innovation Unit on the state of the space industrial base recommended that the United States "include reforms in government contracting and direct government investment as needed to compensate for U.S. adversaries' anticompetitive behavior, and establish the long-term technological and logistical space infrastructure needed to ensure long-term, U.S. dominance in space." The committee understands that a whole-of-government approach is needed to enable a stable domestic industrial base for solar cell and panel manufacturing. The committee is also aware of the challenges stemming from foreign competition within the solar cell industry that benefit from government subsidies, which can undercut price competitiveness for U.S. domestic suppliers.

The committee therefore directs the Secretary of Defense to submit a report to the defense committees by December 31, 2020 outlining the benefits, vulnerabilities and risks associated with foreign sources of satellite solar power technology. The report shall include recommended investments, any necessary policy changes, or other steps deemed appropriate to support this segment of the national security space industrial base.

Sensor-to-Shooter Tactical Satellite Targeting Support to Deep Strike Weapons

The committee notes that near-peer adversaries are fielding systems designed to outrange or overmatch Department of Defense weapons systems and simultaneously deny our forces access to intelligence in the deep battlefield and thus, an ability to see and strike critical targets. The committee is concerned that, as the Department of Defense develops next-generation, deep-strike weapon systems, it lacks persistent deep sensing capabilities to find targets for these weapons to strike. The committee strongly encourages the Department of Defense to leverage advances in technology that now allow for not only a precise view of the deep battlefield, but an ability to quickly deliver precision targeting data to support deep-strike weapons systems.

Therefore, the committee directs the Secretary of Defense to brief the House Committee on Armed Services not later than February 15, 2021, on the Department of Defense's plans to accelerate needed improvements on existing Synthetic Aperture Radar (SAR) sensors; advance and further refine processing of SAR data; support

the development of a tactical ground architecture for the delivery of targeting data; and fund integration with ongoing experiments and live exercises to develop concepts of operations, as well as tactics, techniques, and procedures, that can transition to, and be adopted as joint doctrine, leading to a significant reduction in the delivery time of precision targeting data.

Space Acquisition

The committee notes that 1601(b) of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) and the report accompanying the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) directed the Secretary of the Air Force to submit to the congressional defense committees a report on whether and, if so, how to implement an alternative acquisition system. In addition, the committee continues to support the development of a space acquisition cadre. The committee is aware that the Secretary of the Air Force briefed committee members on recommendations included in its report on Alternative Acquisition System for the United States Space Force in May 2020 but to date has not submitted a final copy of the report. Further, the committee notes that the draft report raised questions about the risk of undermining congressional oversight of major space acquisition programs and the lack of accountability. In addition, the committee continues to support and recommend measures to improve and ensure the retention of a robust and experienced space acquisition cadre.

Therefore, the committee directs the Comptroller General of the United States to review the draft report on an Alternative Acquisition System for the United States Space Force submitted by the Secretary of the Air Force and provide its analysis to the House and Senate Armed Services committees by December 15, 2020.

The committee also directs the Director of the National Reconnaissance Office, the Director of Navy Space Systems Program and the Director of Naval Reactors at the National Nuclear Security Administration to each brief the House Armed Services Committee no later than December 1, 2020 on program management and personnel practices they use to ensure a high level of expertise and effective management of their acquisition programs. The briefings shall include whether and how the Directors rely on small and collaborative teams, employ strong systems engineering and program management, draw from the latest advances in technology and concepts of operation, establish a short chain of command and avoid bureaucracy, and any other element that each Director recommends related to creating and sustaining effective acquisition culture and program management.

Space Development Agency

The committee notes that the Space Development Agency (SDA) has an important mission but that the establishment of this agency has been rocky, with the initial SDA Director replaced early in the establishment of the agency, only a few weeks after briefing the committee, and with no further notification to the committee on how its plans had shifted. The committee supported the mission and the initial plans for the SDA. However, the committee is con-

cerned that the SDA is not positioned to execute its mission in an effective manner and is neither equipped to focus on the many priorities it has set, nor has it adequately budgeted across the Future Years Defense Program, with several programs left unfunded. The committee encourages the SDA to focus on top priorities, including the planned transport layer and the missile warning layer in low-Earth orbit using commercial architectures, which would increase space resilience. The committee expects the SDA Director to more regularly brief the committee on its plans and progress.

Furthermore, the committee is aware that the core mission of the SDA initially included plans to procure commercial space services, for example broadband communications capabilities, and is concerned that these plans were dropped, with its focus shifting instead to solely a payload and software development and procurement model. The committee therefore directs the SDA Director, in consultation with the Chief of Space Operations of the Space Force, to submit a report to the congressional defense committees by December 1, 2020, containing a detailed plan to procure commercial services, including funding requirements.

Space-Based Broadband and Cellular Technologies

The committee continues to be encouraged by U.S. private sector development of low-Earth orbit satellite technologies and constellations that enhance civil and national security capabilities. Such investments have led to groundbreaking advances in supporting the warfighter, including advanced tactical communication, commercial remote sensing, and space situational awareness technologies. In particular, the committee is aware that private industry is developing commercial low-Earth orbit based satellite technology to provide resilient broadband capabilities, including cellular and broadband connectivity to fixed and mobile devices and to commercial terminals, sensors, and internet-based platforms without the need for traditional terrestrial ground infrastructure.

The committee encourages the Department of Defense to continue to identify opportunities to develop defense-specific applications that leverage this commercial satellite network capability and services. Therefore, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services and the Senate Committee on Armed Services not later than January 31, 2021, on how this capability can be used to address military requirements, including combatant command requirements, and on plans to procure this capability and these services.

Terrestrial Based Backup for GPS

The committee is aware that Section 1618 of the Fiscal Year 2017 National Defense Authorization Act (NDAA) (PL 114–328) required the Secretaries of Defense, Transportation, and Homeland Security to report to the appropriate congressional committees on the respective requirements necessary to backup and complement the positioning, navigation and timing (PNT) capabilities of the Global Positioning System (GPS) for national security and critical infrastructure and examine the alternative methods to provide backup. The committee also notes that the Fiscal Year 2018 NDAA

(Section 1606. P.L. 115–91) called for the Secretaries to conduct a demonstration of backup technologies.

The federal government has been tasked for over sixteen years with developing a GPS backup capability, beginning with President Directive NSPD–39 in 2004. Since then, numerous studies, both public and private, have validated the critical need for backup and identified the lack of such backup as a critical vulnerability for national security and critical infrastructure. After several years of hearings and studies by the appropriate congressional committees, Congress passed the National Timing Resilience and Security Act of 2018 (NTSRA) as Section 514 of the Frank LoBiondo Coast Guard Authorization Act of 2018 (Sec. 514, P.L. 115–282, Dec. 4, 2018). Congress deemed it necessary to provide for a terrestrial based backup for the timing component as soon as possible because of the Executive Branch's failure to do so. The Act uses a public-private partnership to build and operate the backup timing system, one of the alternative models that were identified for analysis in the FY 2017 NDAA.

The Committee's view is the NTSRA is entirely complementary and not in conflict with the Committee's actions to provide backup for GPS, especially the positioning and navigation elements critical to the military and aviation. An uninterrupted timing signal is essential to the national economy in the operation of our financial networks, banking system, credit and debit transactions, operation of the electric grid and telecom networks. Congress determined that the nation could no longer risk not having at least a backup timing system and passed NTSRA as a result.

The committee notes that the backup system called for by the NTSRA was to be operational by December 2020, but the report from the demonstration has yet to been completed. The committee directs the Secretaries of Defense, Transportation, and Homeland Security to provide a briefing to the appropriate congressional committees by January 31, 2021, on the implementation of an operational backup system required under NTSRA.

Weather Acquisition Strategy

The committee continues to note that the acquisition strategy to meet warfighter and Department of Defense requirements on weather should be a priority for the Air Force. The committee notes the risk in acquisition strategy for cloud characterization and theater weather imagery, as the legacy systems are long beyond their design life and the Air Force is relying on other aging satellites to fill gaps in weather coverage. The committee supports efforts to leverage ongoing experimental electro-optical/infrared (EO/IR) prototype developments as well as efforts for rapid prototyping, using proliferated low-Earth orbit architectures and buying weather data as a service. The committee encourages the Air Force to avoid continuing to slip the acquisition schedule and to continue to pursue modern technologies, instead of pursuing other risk reduction pathways that rely on outdated and costly systems that will not meet requirements.

Therefore, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services by October 30, 2020, on the progress on weather acquisition, particularly for EO/IR weather systems.

MISSILE DEFENSE PROGRAMS

Ballistic Missile Defense System Advanced Technology Mission Assessment Architecture

The committee notes that given the Missile Defense Agency's (MDA) platforms and network security could be significantly improved by the development and deployment of a high performance computing infrastructure designed to enable secure data delivery, high fidelity cyber ranges, big data repositories with deep data analytics, machine learning, and artificial intelligence. Therefore, the committee directs the Director of the Missile Defense Agency to provide a briefing to the House Committee on Armed Services not later than January 31, 2021, on MDA's efforts to develop a cyber-secure information technology infrastructure that allows users to access data via a virtual desktop infrastructure.

Boost Phase Missile Defense

The committee notes that despite advances in midcourse and terminal missile defense systems, there are currently no efforts to develop boost phase intercept capabilities within the Missile Defense Agency's Future Years Defense Program. The committee further notes that there are opportunities to modify mature kinetic intercept technologies that could prove to be cost-effective and appropriate for regional missile defense. The committee recommends that the Missile Defense Agency (MDA) develop these technologies to further provide a layered missile defense system in the near to medium term.

In addition to a lack of kinetic boost phase intercept efforts, the committee is concerned by removal of funding for the diode pumped alkali laser (DPAL) effort, in addition to the transfer of all directed energy efforts out of MDA. Understanding that directed energy solutions for long-range missile defense largely remain in the advanced technology development phase and could require significant funding and time to fully develop and deploy, these technologies could address the cost imbalance between missile defense and offense. Further, a recent senior executive review team report stated that "If successfully developed, the unique features of DPALs, an efficient electrically powered, relatively short wavelength gas laser with the potential to deliver megawatt power with near diffraction limited beam quality from a single aperture would provide the Department of Defense/MDA with an important strategic technology . . . ."

To better understand the Department's plans for boost phase missile defense, the committee directs the Under Secretary of Defense for Research and Engineering, in coordination with the Director of the Missile Defense Agency, to submit a report to the House Committee on Armed Services not later than January 31, 2021, that details efforts across the Department of Defense. The report should include efforts and cost of developing mature technologies for kinetic boost phase defense for regional missile defense applications. The report should also address long-range directed energy efforts, including how specific long-range boost phase missile defense requirements are being addressed, specifically for energies needed beyond 500 kilowatts and how the overall directed energy roadmap

is being used to synergize efforts across the services and agencies while also addressing unique requirements for each potential platform.

Missile Defense Agency High-Speed Flight Experiment Testing

The committee identifies missile defense against the hypersonic missile threat as a key priority for the nation's future security posture, and for that reason is concerned that there are insufficient ground test facilities available to support enabling technology maturation. The committee is aware of existing U.S. Navy sounding rocket vehicles that are available to rapidly conduct flight experiments for high-speed technologies such as propulsion, warheads, thermal protection systems, seeker windows and control systems. The Missile Defense Agency's Advanced Research Program is focused on the development of innovative and enabling technologies to support this urgent requirement through contracts with small business, and universities. A key to transitioning these technologies to a future missile program is an affordable, rapid testing method for technical maturation and demonstration. The committee believes the use of sounding rocket-based flight experiments will provide this solution. Therefore, the committee directs the Director of the Missile Defense Agency, in coordination with the Secretary of the Navy, to provide a briefing to the congressional defense committees no later than January 31, 2021 on options that exist to increase testing to support hypersonic defense technology maturation.

Report on Arctic Distant Early Warning Sites

The committee notes that the Department of Defense's 2019 Report to Congress on Arctic Strategy states that DOD's ability to detect threats in the Arctic is a prerequisite to deterring or responding to strategic competitors' activities in the region. The Department's ability to detect threats and defend North America is challenged by rapidly advancing strategic competitors' capabilities. At the Halifax International Security Forum in November of 2019, General O'Shaughnessy, Commander of Northern Command and North American Aerospace Defense Command, stated that "we need to invest again" in the Defense Early Warning System.

The committee believes that military readiness in the Arctic is vital to United States national security and steps should be taken to improve Defense Early Warning Sites to detect threats in the Arctic.

Therefore, the committee directs the Secretary of Defense, in coordination with the Commander of Northern Command North American Aerospace Defense Command, not later than January 31, 2021, to submit to the congressional defense committees a report on the requirements needed and plan for upgrading Defense Early Warning Sites in Alaska to include terrestrial linkages.

Report on Discrimination Improvements to the Missile Defense System

The committee notes that the President's budget request for fiscal year 2021 cancelled the Homeland Defense Radar-Hawaii (HDR–H) and Pacific Radar, directly reducing delivery of additional

discrimination capability to the missile defense system. Increasing discrimination has been a priority to the combatant commanders and the Missile Defense Agency to address current gaps and improve homeland defense shot doctrine. The committee has been supportive of efforts to increase discrimination capability of the missile defense system, and is concerned that cancellation of these efforts will result in worsening shot doctrine and overreliance on aging ground- and sea-based radars, such as Cobra Dane and the Sea-Based X–Band (SBX) radars.

Due to these concerns, the committee directs the Director of the Missile Defense Agency, in coordination with Commanders of Northern, Indo-Pacific, and Space Commands, to submit a report to the House Committee on Armed Services not later than December 31, 2020, on the impacts of cancelling these critical discrimination efforts. The report should be unclassified, but may have a classified annex, and should include at a minimum;

(1) a description of the current discrimination capability of the missile defense system, including all assumptions made about asset availability to support the existing architecture;

(2) how HDR–H and the Pacific Radar would have increased discrimination capability for defense of the continental United States, Alaska, and Hawaii, specifically highlighting any gaps that currently exist in discriminating sensor coverage;

(3) how the above response would change if SBX was not optimally located at sea in an operational status;

(4) how the Department of Defense intends to address discrimination improvements without HDR–H and Pacific Radar;

(5) the resulting costs and sustainment requirements associated with need to extend SBX and Cobra Dane radars as a result of the cancellation of the HDR–H and Pacific Radar; and

(6) the viability of using modular, relocatable radar capabilities to close ground-based sensor coverage gaps, including an assessment of changing the acquisition model for discrimination sensors to focus on inventory rather than site-specific needs.

NUCLEAR FORCES

Air Force Global Strike Command Technology Innovation and Collaboration

The committee notes Air Force Global Strike Command's progress regarding technology innovation and collaboration. The committee continues to believe sustained attention to these issues will be required for the Air Force to successfully modernize its portions of the nuclear enterprise. The committee is encouraged by the development of innovation and collaboration infrastructure and the codification of these ideas through the command's guidance and strategic plans. The committee expects this progress to continue and expects the Secretary of the Air Force to commit sufficient resources to the ongoing development and sustainment of these activities through the budget process and to further codify the command's innovation and collaboration programs and capabilities.

Manning and Personnel Optimization for Air Force Global Strike Command and Ground-Based Strategic Deterrence Program

The committee notes that the 2019 RAND Corporation report "Managing Nuclear Modernization Challenges for the U.S. Air Force" states that "the sheer scale of the programs, which touch on nearly every part of the weapons, delivery platforms, command and control, and weapon storage, is daunting," that "this ambitious set of programs will need to be fielded by Air Force Global Strike Command, a relatively young command with a relatively small staff that has limited experience in fielding new systems," and that "all of this is happening in a tight fiscal period with some opposition to various nuclear systems in favor of other national priorities." The report identifies one of the challenges as a critical imbalance between workforce available to Air Force Global Strike Command and the major modernization programs that the command must execute to recapitalize the nuclear enterprise, including the Ground-Based Strategic Deterrent and the strategic bomber programs. Additionally, this report identifies a number of deficiencies in critical skills, in nuclear certification and survivability testing of future nuclear systems.

The committee is aware of similar findings from the Comptroller General of the United States regarding schedule risks and the expertise and personnel needs of the Air Force with regard to the Ground-Based Strategic Deterrent (GBSD) program, and the challenges within the Air Force in setting up a program office that will be able to conduct rigorous oversight of such a complex and large acquisition program.

Therefore, the committee directs the Secretary of the Air Force, in coordination with the Commander of Air Force Global Strike Command, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2020, on the command's response to the findings and recommendations of the RAND report and the challenges in filling personnel positions and expertise needs in the Air Force program office. The report should also provide the number of unfilled personnel manning positions at the command and the GBSD program office, and the number of and type of personnel required to reduce schedule and technical risks to the major programs that the command and the program office are managing.

Nuclear Employment, Strategic Conventional Strike, and the Law of Armed Conflict

The committee recognizes the importance of the rule of law in guiding U.S. military doctrine, planning, and targeting with regard to nuclear weapons. The United States adherence to the rule of law, and in particular the law of armed conflict, in the context of nuclear weapons and their use is a bedrock principle. Notably, under current Department plans, by 2030 the Department of Defense will develop and deploy a range of new, long-range conventional strike systems, of which some will be under the operational control of Commander of U.S. Strategic Command (USSTRATCOM). Given the strategic implications of these systems, the committee encourages the Department to take additional con-

sideration with regard to the strategic and legal implications of such systems.

Therefore, the committee directs the Commander of USSTRATCOM to submit a report to the House Committee on Armed Services by February 1, 2021, on plans, policies, and guidance regarding nuclear weapons employment, including from a legal perspective. The report should include:

(1) a detailed explanation for how current plans for nuclear employment apply the law of armed conflict, specifically the principle of military necessity, with illustrative scenarios;

(2) a detailed description of how USSTRATCOM is planning to incorporate long-range conventional strike options in the context of nuclear planning through 2030;

(3) a detailed legal analysis of how long-range conventional strike options might affect the legality of current nuclear strike options through 2030;

(4) the aggregate number and a description of types of targets that cannot currently be held at risk with conventional weapons, and whether certain target categories may be held at risk with conventional weapons by 2030;

(5) an analysis of the legal considerations regarding plans to respond with nuclear weapons, rather than conventional weapons, after a "non-nuclear strategic attack" as outlined in the 2018 Nuclear Posture Review; and

(6) a legal review of the status of the doctrine of "belligerent reprisal" in U.S. nuclear doctrine.

Potential Delays to Nuclear Modernization

The committee notes that the Commander, U.S. Strategic Command (USSTRATCOM) testified on February 27, 2020, that "many of the modernization and sustainment efforts necessary to ensure the deterrent's viability have zero schedule margin and are late-to need." The committee notes that this modernization effort is extremely complex, expensive, and requires the concurrent modernization of all legs of the triad, as well as the nuclear command and control systems. All three legs of the modernized triad, if on schedule, will begin to be deployed in the 2030 timeframe. Further, the Comptroller General of the United States noted recently that "the Minuteman III weapon system will be unable to meet full mission requirements after 2026." The Ground Based Strategic Deterrent is not planned to achieve first production until 2027, with initial operating capability not until 2029.

Therefore, the committee directs the Commander, U.S. Strategic Command, in consultation with the Secretary of the Air Force, to provide a report to the House Committee on Armed Services not later than February 1, 2021, detailing plans in the event of a delay of a major weapons system. At minimum, the report should describe:

(1) USSTRATCOM and Air Force planning in the event of a delay to initial operational capability of the Ground Based Strategic Deterrent program of at least 2 years;

(2) USSTRATCOM and Air Force planning in the event of a delay to full operating of the Ground Based Strategic Deterrent program of at least 4 years;

(3) specific risks to obsolesce of the Minuteman III weapon systems and their timelines; and

(4) options to mitigate these risks, including costs, both within the land-based leg of the triad and through a system approach.

Requirements Planning for Nuclear Complex and Nuclear Enterprise

The committee is concerned that the requirements levied on the nuclear complex to meet warhead and responsive infrastructure are significant and are driving tight schedules and increasing costs for the complex. The National Nuclear Security Administration (NNSA) is responsible for four concurrent warhead life extension programs, the W93, and reaching a production of 30 pits per year by 2026 and no fewer than 80 pits per year by 2030 to ensure the viability of the strategic nuclear deterrent. The Administration is growing supporting workforce to become a production-oriented organization and undertaking major recapitalization of the complex's infrastructure. These requirements have significant costs, and the Nation cannot afford delays and additional risks to the executability of ongoing programs.

The committee is aware of these challenges and of the need to ensure rigorous coordination and planning as these growing requirements are validated, as they have resource, workforce, and cost implications for the nuclear complex, and policy implications. The committee notes some improvement in coordination for the drafting of the U.S. Strategic Command (USSTRATCOM) annual requirements planning document, but notes the urgent need to improve planning tools and coordination to ensure that plans are executable and affordable, and the Nuclear Weapons Council adequately and realistically prioritizes requirements given resource constraints.

Therefore, the committee directs the Commander of USSTRATCOM, in coordination with the Administrator for Nuclear Security, to provide a copy of the most recent final requirements planning document to the House Committee on Armed Services. The committee further directs the Commander of USSTRATCOM, in coordination with the Administrator for Nuclear Security, the Under Secretary of Defense for Acquisition and Sustainment, the Under Secretary of Defense for Policy, the Secretary of the Navy, and the Secretary of the Air Force, to provide a briefing to the House Committee on Armed Services not later than October 1, 2020, on the following: what trade-offs are made within the requirements planning document; how considerations informing the requirements and planning process inform decisions, including what policy considerations, costs and resource constraints are considered; the level of coordination between USSTRATCOM, the Department, and NNSA; and lessons learned and remaining challenges for near- and long-term planning.

Use of Artificial Intelligence at U.S. Strategic Command

The committee notes that advances in artificial intelligence technologies are altering strategic weapons, reconnaissance, missile defense, cyberspace, and nuclear command, control, and communications (NC3). These technological advances will have an impact on

the nuclear enterprise: the policy that governs it and the strategic force structures of which it is comprised. For example, U.S. Strategic Command leadership has recognized that emerging artificial intelligence technologies are important capabilities to the enterprise. The committee is aware that the Department of Defense's Joint Artificial Intelligence Center is responsible for, among other things, accelerating the delivery of artificial intelligence-enabled capabilities and scaling the department-wide impact of artificial intelligence, and understands that the Department is in the early stages of determining how to leverage artificial intelligence technologies. However, the committee is concerned about the extent to which the Department has considered the implications of artificial intelligence for the nuclear enterprise. Accordingly, the committee directs the Comptroller General of the United States to review the following:

(1) to what extent has the Department examined the effects, risks, and efficiencies of artificial intelligence on the nuclear enterprise; and

(2) to what extent are these artificial intelligence effects accounted for in nuclear deterrence policy?

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than December 1, 2020, on the Comptroller General's preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

CYBER-RELATED MATTERS

21st Century Integrated Digital Experience Act

The 21st Century Integrated Digital Experience Act (IDEA) (Public Law 115–336), enacted in December 2018, required the Department of Defense to modernize internal digital services, intranets, and external websites, with the goal of improving the delivery of customer service to employees, Active Duty personnel, family members, and others that interact with the Department. In addition, Public Law 115–336 required that the Department make all paper-based forms related to serving the broader Department of Defense community, of which there are thousands, available in digital and mobile responsive format by December 2020.

The committee believes that embracing the requirements of 21st Century IDEA would have a significant positive impact on the Department's mission delivery and customer experience. Therefore, the committee directs the Secretary of Defense, in coordination with the Department of Defense Chief Information Officer, to provide a report to the House Committee on Armed Services not later than March 31, 2021, on the status of the Department's implementation of the 21st Century IDEA across the defense enterprise. Specifically, this report should include military department and unified command plans to meet the December 2020 forms modernization deadline, ensuring each department or command has a 21st Century IDEA designee and plans to budget and comply with any deadlines the Department may have missed.

Consolidated Defense Data Program

The committee commends the Department of Defense's Chief Information Officer (CIO) for undertaking efforts to ensure the Department's data resources are well maintained and ready for use by a wide range of DOD users, and especially to leverage multiple artificial intelligence initiatives. As the Department continues to evaluate software and other electronic data solutions, the committee directs the Chief Information Officer and the Chief Management Officer of the Department of Defense to provide a briefing by March 30, 2021.

(1) the digitization program for the Department's paper and analog records;

(2) cost-effective methods to ensure proper records management compliance within the Department's digital modernization strategy

Cyber Excepted Service

In the committee report accompanying the National Defense Authorization Act for Fiscal Year 2020 (H. Rept. 116–120), the committee expressed concern at the slow pace of implementation of the Cyber Excepted Service (CES) personnel system, a component of the excepted service authorized in section 1588f of title 10, United States Code, aimed at recruiting and retaining highly trained cybersecurity professionals within the Department of Defense.

The committee is encouraged by the substantial progress the Department's Chief Information Officer (CIO) has made in implementing CES authorities across the Department. The committee recognizes the importance of bolstering the nation's cybersecurity workforce with professionals with backgrounds in machine learning, artificial intelligence, software development, and data science. CES authorities will allow the Department to effectively recruit and retain these highly skilled individuals and compete with the private sector for top talent, ensuring the Department's cyber workforce is ready and equipped to address current and future cyber threats.

As the CES continues to evolve across the Department, the committee expects to be kept informed on further maturation and implementation of CES hiring authorities. Therefore, the committee directs the CIO, as the executive agent responsible for the administration of CES, to provide a report to the House Committee on Armed Services by February 1, 2021, on the use of CES authorities across the Department of Defense, mechanisms for non-CES Department of Defense components to petition for inclusion, and applicability of interim security clearances for CES positions.

Cyber Maturity Model Certification

The committee notes that the Department of Defense is in the process of rolling out its Cybersecurity Maturity Model Certification (CMMC) requirements; incorporating the CMMC into the Defense Federal Acquisition Regulation Supplement; and using it as a requirement for government contract award that contain controlled unclassified information. The committee strongly supports the intent of the CMMC requirements, including increasing Department of Defense cybersecurity posture and protecting data and

intellectual property within the defense industrial base from cyber attacks.

To ensure that proprietary information gleaned from CMMC assessments conducted by third-party institutions is protected, the committee seeks additional information on how the Department will work with the CMMC Accreditation Body (CMMC–AB) to protect non-public and proprietary information from the Defense Industrial Base (DIB) entities that have been assessed. Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services not later than December 31, 2020 on the Department of Defense's efforts to assist the community of third-party assessment organizations performing the CMMC certifications to secure non-public and proprietary information from DIB entities.

Cyber Mission Assurance Team Pilot Program

The committee applauds the National Guard Bureau for its Cyber Mission Assurance Teams (CMAT) pilot program, an effort designed to harness the cyber talent of the National Guard for the protection of critical infrastructure connected to military installations. Efforts such as the nascent CMAT program are important as the military services seek to better understand the operational risks, to include cybersecurity, of domestic installations. The capability developed can assist the National Guard, when utilized for operations under both title 32 and title 10, United States Code. The committee directs the Chief of the National Guard Bureau to present a comprehensive report to the House Committee on Armed Services not later than May 31, 2021, on the CMAT pilot program as well as the future direction of the effort. More specifically, the committee seeks greater fidelity on how the CMAT program will align to the Federal Emergency Management Agency's regional construct, as well as work with the Cybersecurity and Infrastructure Security Agency's Critical Infrastructure Vulnerability Assessments program and the Protective Security Advisors program.

Department of Defense's Use of Efficient Peering Sites

The committee is aware of the importance of private network and cloud interconnection to address fragmented Department of Defense internet architecture and the ability to successfully migrate services to the cloud. The committee understands that the use of secure, advanced, internet exchange points mitigates cyber vulnerabilities, improves data security, increases system reliability and resilience, and reduces processing time latency. Therefore, the committee directs the Chief Information Officer of the Department of Defense to provide a briefing to the House Committee on Armed Services, not later than July 31, 2021, on the Department's deployment of private, low-latency network and cloud interconnection at global peering locations.

Digital Persona Protection

The committee recognizes the evolving challenge to protect our military leaders and service members from emerging threats on digital and social channels. The committee believes that protecting the digital personas of Department of Defense personnel is a core

component of the current operating environment and that preventive measures must be taken to mitigate hostile actions against military, civil servants, military websites, domains and other digital assets in which these personas exist or may be impersonated. The committee is aware of commercially developed and tested technology that is available and is currently used by the Army to increase the protection of the digital personas of senior Army leaders. The committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services no later than January 1, 2021 on the threat to the digital personas of senior military leaders and the use of technology to mitigate associated risks.

Fourth Estate Network Optimization

The committee recognizes the importance of creating efficiencies and cost savings within the Fourth Estate and across the Department of Defense, to include the consolidation of information technology services away from legacy common use information technology services into a single service provider (SSP). The committee notes that on August 15, 2019 the Deputy Secretary of Defense directed the Defense Information Systems Agency (DISA) to execute such consolidation under the Fourth Estate Network Optimization (4ENO) effort over the period of fiscal year 2020 to fiscal year 2024. The committee directs the Secretary of Defense to provide a report to the congressional defense committees not later than February 1, 2021, on the status of the consolidation effort, including details on the schedule and plan for consolidation, progress on the transition of each Defense Agency and Field Activity (DAFA) from common use information technology services into the SSP environment, the list of assets and services being transitioned, a list of assets and services remaining within each DAFA, a justification for assets not transitioned, and the reallocation of funding as a result of the transition.

GAO Assessment on DOD Cyber Incident Management Efforts

The committee notes that the Department of Defense (DOD) has experienced a number of high-profile breaches to Department of Defense (DOD) systems and networks. For example, in July 2015, a phishing attack on the Joint Chiefs of Staff unclassified email servers resulted in the system being shut down for more than a week while cyber experts rebuilt the network, affecting the work of roughly 4,000 military and civilian personnel. In 2018, DOD disclosed a data breach to its contracted travel management system that allegedly affected approximately 30,000 military and civilian employees. In 2020, DOD similarly acknowledged that the Defense Information Systems Agency networks were breached that reportedly resulted in the personal data of approximately 200,000 network users being compromised.

The committee is concerned that while DOD established the Joint Force Headquarters–DOD Information Network (JFHQ–DODIN) to operationalize and defend DOD systems and networks, other DOD components still view these systems and networks as an administrative capability. Cyber incidents, such as those identified above, can disrupt critical military operations, lead to inappropriate access to and modification of sensitive information, result in

long-term financial obligations for credit monitoring, and threaten national security.

Therefore, the committee directs the Comptroller General of the United States to provide the congressional defense committees with an assessment of DOD management of cyber incidents and efforts to mitigate future cyber incidents. The assessment should identify:

(1) Information about cyber incidents and breaches within DOD networks and systems since 2015. Such information should include number of incidents, number of individuals potentially affected, mission and other impacts associated with the incident, causal factors associated with the incident, amount of resources (including time, personnel, and funds) used to address the incident;

(2) Information about financial costs incurred as a result of the incident including costs associated with credit monitoring;

(3) the extent to which DOD has established and implemented a process to notify DOD leaders and potential victims of cyber incidents in a timely manner;

(4) the extent to which DOD shares information about cyber incidents (including common attack techniques and forensics from the incident) with other DOD components and security operations centers; and

(5) Any other matters the Comptroller General determines to be relevant.

The committee further directs the Comptroller General to provide a briefing to the Committees on Armed Services of the Senate and the House of Representatives by March 1, 2021 on preliminary findings, and submit a final report to the congressional defense committees at a date agreed to at the time of the briefing.

GAO Study and Report on Electronic Continuity of Operations on the Department of Defense

The committee notes the centrality of electronic command, control, and communications to Department of Defense continuity of operations. To ensure that the committee is fully informed of how the Department of Defense is addressing issues related to the risk to electronic communications, the committee requests that the Comptroller General of the United States conduct a study of electronic communications continuity of operations of the Department of Defense. More specifically, this study should include:

(1) An assessment of the vulnerability of the Department's email and videoconferencing systems to widespread or systemic failure;

(2) An assessment of whether the Department is prepared in the event of a communications service failure where the Department's email and video conferencing systems are unable to operate;

(3) Lists of services or actions recommended to ensure the Department is prepared for continuity of operations in the event of a communications services failure; and

(4) Lists of actions recommended to prevent future electronic communications failure, including investments in services, technology or infrastructure.

The committee requests an interim briefing not later than December 31st, 2020 on the preliminary findings, with a final report to be presented so later than September 30th, 2021.

Improving the Cybersecurity of Disadvantaged Small Businesses in the Defense Industrial Base

The committee is aware that small and medium-sized businesses in the defense industrial base (DIB) are concerned about their ability to meet increasing cybersecurity requirements for the protection of Department of Defense (DOD) information and operations. To assist the DIB, the Department should consider a range of options, including purpose-built cloud infrastructure and virtualized hosted environments to store and work with DOD data in a protected cloud that meets stringent security accreditation requirements. The committee is aware that Department of Commerce Manufacturing Extension Partnership (MEP) offices are working with small and medium-sized DIB companies to develop options for local high-bandwidth hosting and computing environments that meet DOD security requirements and are capable of supporting thin-client operations.

The committee, therefore, directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services by February 1, 2021, on the range of options available to the Department of Defense for the encouragement or establishment of secure hosting environments for DIB companies. The briefing should consider the global nature of the Department's supply-chain, as well as the existing set of programs, policies, and initiatives as identified by Sec. 1648 of the FY 2020 National Defense Authorization Act.

Information Environment Best Practices and Audience Segmentation Methodologies

The committee is encouraged by recent efforts by the Department of Defense to better understand and operate in the information environment, as required by section 1631 of the National Defense Authorization Act for Fiscal Year 2020. The committee understands that one of the mechanisms that the Department of Defense is adopting to more effectively understand the information environment are segmentation methodologies. Specifically, this information operations framework encourages an audience-focused approach that allows for better understanding of the demographics, behavior and effectiveness of messaging themes. The committee is interested in understanding how this methodology is resulting in more informed messaging campaigns, more intelligent risk management process, and more effective content distribution in coordination with interagency partners. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services, not later than 1 December 2020, on the information environment segmentation methodology framework. The briefing should include (1) an explanation of audience segmentation frameworks; (2) measures of effectiveness; (3) contextual lessons learned and best practices from employment in Afghanistan; (4) a plan on how this methodology could be employed in other areas of operations; and (5) how this framework nests with other Department of Defense and interagency capabilities.

Information Technology Asset Management and Inventory

The committee commends the Department of Defense for the considerable improvement made on information technology, asset discovery, and asset management. However, the committee believes the Department would benefit from an established process for auditing software and hardware inventories. The lack of a single policy framework hinders the capacity of the Department to discover license duplication and the Department is at risk of wasting valuable resources on redundant or underutilized hardware and software. The Department also lacks real-time discovery of and visibility over its network attack surface, particularly its forward-facing internet assets and Department assets held in cloud environments, resulting in increased risk of exposures exploitable by malicious adversaries. The private sector has successfully navigated this challenge through the use of automated software tools widely available on the commercial market.

The committee directs the Chief Information Officer of the Department of Defense, in coordination with chief information officers of the military services, to provide a briefing to the House Committee on Armed Services, not later than March 1, 2021, on the processes in place for asset discovery and management of hardware and software products. This briefing should present the following information:

(1) process for identifying duplicative software licenses;

(2) process for identifying redundant and/or duplicative software and hardware;

(3) process for identifying and cataloging usage information for both hardware and software; and

(4) process for using systems and capabilities, including Commercial Off The Shelf (COTS) solutions, to continuously discover, manage, and monitor all globally deployed Department of Defense internet assets, including in cloud environments;

(5) process for identifying potential cost savings from the aforementioned briefing elements; and

(6) process for identifying the specific responsibilities of Department of Defense components and headquarters in performing internet operations management across the global internet.

Internet Architecture Security

The committee recognizes that the internet is inextricable and central to the American way of life, and the architecture that enables internet communications is layered, complex, and multifaceted. The committee notes that this architecture includes high-capacity cables laid underground and underseas, cable landing stations that connect cables from continent to continent, and internet exchange points that serve as clearinghouses for data between Internet Service Providers and content delivery networks; all of which are required for the internet to operate.

The committee recognizes that the executive branch has assigned responsibility for components or sectors of critical infrastructure to various executive branch departments and agencies, and internet architecture is approached in a fractured and piecemeal fashion, with multiple government stakeholder entities claiming responsibility. The committee is concerned that the lack of direction on the

subject of internet architecture security creates significant risks to the nation. Consequently, the committee directs the Comptroller General of the United States to provide a report to the House Committee on Armed Services by September 1, 2021, to examine the issue of internet architecture security.

Joint Artificial Intelligence Center Outreach to the Private Sector

The Committee notes the significant importance that artificial intelligence (AI) capability will provide to the warfighter, and more broadly, the Department of Defense over the coming years. The Committee also recognizes the strategic priority that the Department of Defense places on AI to meet the goals of the National Defense Strategy in a near peer competitor environment. The Department of Defense is investing significant funding in the President's Budget Request for Fiscal Year 2021 and anticipated in future budget requests for this important capability. The Committee is encouraged by this continued investment and development and notes the necessity of working collaboratively with the private sector to most effectively operationalize AI technologies on the battlefield. To this end, the encourages the Department's Joint Artificial Intelligence Center to leverage existing relationships between the Department and the private sector, to capitalize on the efforts already underway. These include, but are not limited to, Defense Innovation Unit (DIU); Kessel Run; SOFWERX; AFWERX and Navy Tech Innovation bridges. The Committee believes that if AI is to be a critical enabler for the warfighter and to achieve savings in efficiencies, then the Department must better understand and leverage the innovation in the private sector and academia. The committee directs a briefing from the Joint Artificial Intelligence Center by August 30, 2021 on the Center's established and prospective relationships with universities, academic consortia, and private sector institutions.

National Guard Access to Classified Information

The committee recognizes the growing importance of ensuring National Guard members who require access to classified information to carry out their official duties have timely access to both classified and unclassified information remotely. The committee notes the necessity in ensuring that policies related to the remote access of classified information is consistent with those for the active and reserve forces. To this end, the committee directs the Chief of the National Guard Bureau to submit a report to the congressional defense committees no later than April 30, 2021, on the programs and systems it uses, or plans to use, to allow authorized National Guard members to access classified information remotely.

Report and GAO Briefing on DOD Cyber Hygiene and Cybersecurity Maturity Model Certification Framework

In previous Congressional testimony, the DOD Principal Cyber Advisor told the committee that cybersecurity experts estimate 90 percent of cyberattacks could be defeated by implementing basic cyber hygiene practices. The U.S. Government Accountability Office (GAO) assessed DOD's progress in implementing cyber hygiene practices and found that DOD had not fully implemented three of

its key initiatives and practices aimed at improving cyber hygiene. DOD had also developed lists of its adversaries' most frequently used techniques, and practices to combat them. Yet, DOD does not know the extent to which the department is using these practices.

The committee is concerned that while DOD leadership recognizes that certain cyber hygiene practices could effectively protect the department from a significant number of cybersecurity risks the department has not implemented its own cyber hygiene practices and yet it plans to require private sector companies to implement cyber hygiene practices through the Cybersecurity Maturity Model Certification (CMMC) framework.

Given the importance of implementing cyber hygiene practices that could effectively protect DOD missions, information, and systems and networks, we direct the Secretary of Defense to submit a report to the defense committees identifying the extent to which each of the DOD components have implemented cyber hygiene practices and levels identified in the CMMC framework. For each DOD component that does not achieve level 3 status (referred to as "good cyber hygiene" in CMMC Model ver. 1.02), the head of the component is to provide the Congressional defense committees, the DOD Chief Information Officer, the commander of JFHQ–DODIN a plan on how the component will implement those security measures within one year and mitigate potential consequences until those practices are implemented. In order to aid in the understanding of what cyber hygiene practices have been and have not been implemented by the DOD that the department requires private sector companies to implement before they receive a contract where they would have access to controlled unclassified information, the Secretary of Defense shall submit the DOD report to the Congressional defense committees and the Comptroller General of the United States by March 1, 2021.

The committee further directs the Comptroller General to conduct an independent review of the Secretary's report and provide a briefing to the Congressional defense committees no later than the end of the fiscal year.

Report on the Security of DOD Networks While Expanding Remote Work for Classified Information and Data

The Committee understands that several organizations within the Department of Defense (DOD) are expanding remote access to classified information up to the secret level for certain personnel in response to the COVID–19 pandemic. Since the beginning of the pandemic, every service has approved significant increases in remote work. The CARES Act appropriated $300M for the DOD to procure additional information technology (IT), meant to rapidly increase network capacity, improve cybersecurity, and expand IT programs to ensure missions across the globe can continue uninterrupted. It is imperative for servicemembers and civilians in DOD organizations to have access to the information and data they need to do their jobs.

The committee recognizes that an increased user base also increases the risk to the Department of Defense Information Network (DoDIN). Peer competitors like Russia and China, their proxies, and non-state actors routinely test DOD networks for

vulnerabilities, seeking to gain valuable information through cyber means.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the Congressional Defense Committees no later than December 31st, 2020, outlining the procedures for securing its networks in DOD organizations that are expanding the use of remote classified access on its expedited timeline.

Report on Use of Automated Manufacturing Technologies

Not later than March 1, 2021, the Secretary of Defense, in consultation with the Undersecretary of Defense for Acquisition and Sustainment, and the Secretary of the Air Force, through the Assistant Secretary of Acquisition Technology and Logistics, the Secretary of the Army, through the Assistant Secretary of Acquisition, Logistics and Technology and the Secretary of the Navy through the Assistant Secretary of the Navy for Research, Development and Acquisition, shall submit to the congressional defense committees a report on the feasibility and advisability of using automated manufacturing technologies to increase the supply of suitable, mission-critical repair parts available to the Department of Defense and the Armed Forces.

The report under shall include the following:

(1) Identification of the elements within each Armed Force that would be primarily responsible for the use of automated manufacturing technology.

(2) An analysis of how software for the integration and automation of computer-aided design, computer-aided manufacturing, and computerized numerically controlled machining could be used at arsenals, depots, and fleet readiness centers to address spare part obsolescence issues.

(3) A list of United States-based industrial partners that could assist the Department of Defense in using computerized numerically controlled machining to address spare part obsolescence issues.

(4) An analysis of deployable manufacturing capabilities that may be integrated with manufacturing automation software.

Supporting Innovation for Servicemember and Family Readiness and Resiliency

The committee is concerned that the Department lacks a modern, software driven approach to support Servicemember and military family wellness, readiness and resiliency. The Department's reliance on duplicative and independent programs designed around static public health information has not kept pace with the demands of military life. The committee believes the Department must implement an aggressive digital transformation to improve the health, readiness and quality of life for servicemembers and their families that focuses on wellness and prevention.

Therefore, the committee directs the Secretary of Defense to provide a briefing to the congressional defense committees by December 1, 2020, on a plan to develop innovation partnerships for software-driven solutions that assist servicemembers and military families in implementing the total force fitness framework across their daily lives. The briefing shall include the following elements:

(1) A strategy and timeline describing how the Department will implement a software-driven, systemic approach to total force fitness;

(2) An overview of the Department's proposal to accelerate partnerships for total force fitness innovation; and

(3) A description of how the Department intends to use existing authorities, including other transaction authorities, in combination with public-private partnerships to prototype agile and scalable digital solutions to improve total force wellness, readiness, and resiliency.

INTELLIGENCE MATTERS

Department of Defense Artificial Intelligence Capabilities and Strategy

The committee believes that global leadership in artificial intelligence (AI) technology is a national security priority. In 2018, the Department of Defense issued a department-wide AI strategy to provide direction for AI development. As the Department increases its investments in AI, machine learning, and other automation technologies, the committee believes that the Department's resources, capabilities, and plans should continue to ensure U.S. competitive advantage over potential adversaries.

Therefore, the committee directs the Comptroller General of the United States to provide the committee with an assessment of the Department's resources, capabilities, and plans for AI. The assessment shall:

(1) describe the Department's overall resource posture, to include personnel and funding, dedicated to AI over the next 5 years;

(2) assess the implementation of the Department's AI strategy, including the extent to which key goals, metrics, and timelines have been developed and attained, and oversight mechanisms have been established, to ensure strategy implementation;

(3) review the functions and missions of the Joint Artificial Intelligence Center, including the actions it is taking to synchronize AI activities across the joint force and the Defense Intelligence Enterprise, including with Project Maven and the Machine-Assisted Analytic Rapid-Repository System;

(4) assess the extent to which the Department has identified key risks that it will face in the increased adoption of AI technologies, and whether it has developed mitigation plans for addressing these risks; and

(5) any other matters the Comptroller General deems appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 31, 2021, on the Comptroller General's preliminary findings, and to submit a final report to the congressional defense committees on a date agreed to at the time of the briefing.

Funding for Research Into Long-Range Weather Patterns

The committee is aware that climate change is a national security concern that impacts Department of Defense installations, missions, and operational plans. The committee supports the Depart-

ment's efforts to factor in the effects of extreme weather events into the planning process at all levels. The committee notes that meteorologists can only predict extreme weather events in the short term. The committee supports funding for research that advances long-range forecasting of seasonal and subseasonal weather patterns, which would provide national security officials with advanced warning of potentially destabilizing events and allow time to adequately plan mitigation measures.

Joint Intelligence Brigade

The committee notes that obtaining timely intelligence is necessary to support the roles and missions of the Joint Special Operations Command (JSOC) and believes that special operations intelligence components, such as the Joint Intelligence Brigade (JIB), require the appropriate resources and capabilities to support JSOC's strategic direction. As the Department of Defense continues to transition from a primary focus on counterterrorism to focusing on long-term strategic competition and nation-state actors, the committee believes that JSOC and the JIB must ensure that their resources and capabilities also transition to support the priority mission of great power competition.

Therefore, the committee directs the Comptroller General of the United States to provide an assessment of the JIB's resources, functions, and missions. The assessment shall review:

(1) the JIB's resources, to include personnel and funding, over the past 5 years;

(2) the extent to which these resources have increased or decreased over this timeframe;

(3) the functions and missions of the JIB and the extent to which these functions and missions have changed over the past 5 years and are reflective of the current National Security Strategy and JSOC's guidance and direction;

(4) the extent to which the JIB relies on other special operations organizations and the Defense Intelligence Enterprise to meet its functions and missions; and

(5) any other matters the Comptroller General deems appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 31, 2021, on the Comptroller General's preliminary findings, and to submit a final report to the Committees on Armed Services of the Senate and the House of Representatives on a date agreed to at the time of the briefing.

National Center for Medical Intelligence of the Defense Intelligence Agency Responsibilities

The committee directs the Comptroller General to assess the National Center for Medical Intelligence of the Defense Intelligence Agency. The assessment shall include:

(1) The types of products that the National Center for Medical Intelligence provides the Director of the Defense Intelligence Agency, the surgeon generals of the military departments, and other departments or agencies of the Federal Government.

(2) The extent to which the National Center for Medical Intelligence has been able to effectively forecast or warn the leaders of the Department of Defense, the surgeon generals of the military departments, and other departments or agencies of the Federal Government prior to past foreign health threats and other medical issues that could have threatened the interests of the United States worldwide;

(3) The extent to which the National Center for Medical Intelligence is providing in a timely manner, and is postured to continue providing, the leaders of the Department of Defense, the surgeon generals of the military departments, and other departments or agencies of the Federal Government with information about foreign health threats and other medical issues that threaten the interests of the United States worldwide;

(4) Gaps in the ability of the National Center for Medical Intelligence to monitor foreign environmental health and infectious disease risks and foreign biotechnology development; and

(5) Any other matters the Comptroller General deems appropriate.

The committee directs the Comptroller General to provide a briefing to the congressional defense committees by March 31, 2021 on preliminary findings and submit a final report to the congressional defense committees at a date agreed to at the time of the briefing.

LEGISLATIVE PROVISIONS

SUBTITLE A—SPACE ACTIVITIES

Section 1601—National Security Space Launch Program

This section would prohibit changes to the phase 2 acquisition strategy of the National Security Space Launch program, including with regard to mission performance requirements, acquisition schedule, and the selection of two launch providers. It would also mandate that the period for ordering phase 2 launch missions end by September 2024, cap the Launch Services Agreement funding amount for providers selected for phase 2, and require a termination date for Launch Services Agreements with providers not selected for phase 2.

This section would also require a certification on reusability of previously-flown launch hardware. In addition, this section would require the Secretary to begin investments toward phase 3 to maintain competition and support innovation, by providing up to $150.0 million for the Secretary to conduct a full and open competition and enter into three agreements to fund certification and infrastructure requirements and transformational technologies.

This section would also include a rule of construction about not delaying phase 2 awards.

Section 1602—Requirement to Buy Certain Satellite Component from National Technology and Industrial Base

This section would amend section 2534(a) of title 10, United States Code, by adding a star tracker used in a satellite weighing more than 400 pounds whose principle purpose is to support the

national security or intelligence needs of the United States Government.

Section 1603—Commercial Space Domain Awareness Capabilities

This section would require the Secretary of the Air Force to procure commercial space domain awareness services by awarding at least two contracts for low-Earth orbit. This section would limit the obligation or expenditure of funds for fiscal year 2021 to not more than 75 percent for the enterprise space battle management command and control until the Secretary of Defense certifies that the Secretary of the Air Force has awarded the contracts. This section would also require a report by the Chief of Space Operations on the commercial space domain awareness services procured by the Department of the Air Force in the preceding 2 years.

Section 1604—Responsive Satellite Infrastructure

This section would require the Secretary of Defense to establish a domestic responsive satellite manufacturing capability for Department of Defense space operations and develop a plan to rapidly reconstitute critical capability gaps in the event of destruction or failure of a space asset. It would further require an acquisition strategy for responsive satellite infrastructure to swiftly identify need, develop capability, and launch a responsive satellite to fill a critical capability gap in the event of destruction or failure of a space asset or otherwise determined need.

This section would further require the Secretary of Defense to submit a related report not later than 180 days after the date of the enactment of this Act.

Section 1605—Policy to Ensure Launch of Small-Class Payloads

This section would require the Secretary of Defense to establish a small launch and satellite policy to ensure responsive and reliable access to space through the processing and launch of Department of Defense small-class payloads. It would establish a policy and would require development and implementation of an acquisition strategy. This section would also require the Secretary of Defense to submit a related report not later than 180 days after the date of the enactment of this Act, describing a plan for the policy, including with respect to the cost of launches and an assessment of mission risk.

Section 1606—Tactically Responsive Space Launch Operations

This section would require the Secretary of the Air Force to implement a tactically responsive space launch program to provide long-term continuity for tactically responsive space launch operations across the Future Years Defense Program; to accelerate the development of responsive launch concepts of operations, tactics, training and procedures; to develop appropriate processes for tactically responsive space launch; and to identify basing capabilities necessary to enable tactically responsive space launch, including mobile launch range infrastructure.

Section 1607—Limitation on Availability of Funds for Prototype Program for Multi-Global Navigation Satellite System Receiver Development

This section would limit the obligation or expenditure of funds for fiscal year 2021 to not more than 80 percent for increment 2 of the acquisition of military Global Positioning System user equipment terminals until the Secretary of Defense provides a certification that the Secretary of the Air Force is carrying out the program required under section 1607 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92), which mandated that the Secretary establish a program to prototype an M-code based, multi-global navigation satellite system receiver that is capable of receiving covered signals to increase the resilience and capability of military position, navigation, and timing equipment and to deter the likelihood of attack on the worldwide Global Positioning System by reducing the benefits of such an attack. This section would also limit the obligation or expenditure of funds until the Secretary of Defense provides a briefing to the Committees on Armed Services of the Senate and the House of Representatives on how such a program is being implemented.

Section 1608—Limitation on Awarding Contracts to Entities Operating Commercial Terrestrial Communication Networks That Cause Interference with the Global Positioning System

This section would prohibit the Secretary of Defense from contracting with an entity that engages in commercial terrestrial operations using specified bands until certification is made that the activity would not cause harmful interference to the Department's Global Positioning System.

Section 1609—Prohibition on the Availability of Funds for Certain Purposes Relating to the Global Positioning System

This section would prohibit funding for the Department of Defense to retrofit any Global Positioning System device or system to mitigate interference from commercial terrestrial operations using certain megahertz bands, with some exceptions.

Section 1610—Report on Resilient Protected Communications Satellites

This section would require a report not later than 60 days after the date of the enactment of this Act from the Chief of Space Operations on how the Space Force will address the need for resilient protected communications satellites during the years 2025 through 2032.

SUBTITLE B—DEFENSE INTELLIGENCE AND INTELLIGENCE-RELATED ACTIVITIES

Section 1611—Validation of Capability Requirements of National Geospatial-Intelligence Agency

This section would amend section 442 of title 10, United States Code, to require the National Geospatial-Intelligence Agency to assist the Joint Chiefs of Staff, combatant commands, and the mili-

tary departments in establishing coordinating, consolidating, and validating mapping, charting, geodetic data, and safety of navigation capability requirements through a formal process governed by the Joint Staff.

Section 1612—Safety of Navigation Mission of the National Geospatial-Intelligence Agency

This section would update the National Geospatial-Intelligence Agency's authorities to reflect NGA's modern role in providing for safe navigation by land, sea, and air; using data, products, services, as well as traditional maps and charts.

Section 1613—National Academies Climate Security Roundtable

This section would require the Under Secretary of Defense for Intelligence and Security, in coordination with the Director of National Intelligence, to enter into a joint agreement with the National Academies of Science to create a new "National Academies Climate Security Roundtable" for the purpose of establishing best practices for identifying and disseminating climate indicators and warnings to ensure that environmental security is included in operational planning and intelligence analysis. This roundtable would support the work of the Climate Security Advisory Council.

Section 1614—Report on Risk to National Security Posed by Quantum Computing Technologies

This section would direct the Secretary of Defense to assess the threats and risks posed by quantum computing to national security systems as well as strategies, plans, and investments needed to mitigate risks toward these systems. This section would also require the Secretary of Defense to provide a report to the congressional defense committees not later than December 31, 2021.

SUBTITLE C—CYBERSPACE-RELATED MATTERS

Section 1621—Cyber Mission Forces and Cyberspace Operations Forces

This section would amend section 238 of title 10, United States Code, to reflect the need for consolidated budget displays for both the cyber mission forces, as well as the newly created cyber operations forces. Additionally, this would amend an existing requirement for the cyber and information technology budgets to be delivered to Congress in print and electronically, not later than 5 days after the release of the President's budget request.

Section 1622—Cyberspace Solarium Commission

This section would modify section 1652 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) to update the Cyberspace Solarium Commission's membership. Additionally, this section would permit the organization to extend further for the purposes of providing regular updates to the legislative and executive branches on the implementation of the Commission's findings.

Section 1623—Tailored Cyberspace Operations Organizations

This section would direct the Secretary of the Navy, in conjunction with the Chief of Naval Operations, to produce a study on the Navy Cyber Warfare Development Group, a small niche organization aligned to the Navy's service cyber component. This section also would authorize other military services and U.S. Special Operations Command to create counterpart organizations to Navy Cyber Warfare Development Group.

Section 1624—Responsibility for the Sector Risk Management Agency Function of the Department of Defense

This section would assign full responsibility for certification, coordination, harmonization, and deconfliction of the various efforts, initiatives, and programs that the Department of Defense manages in the furtherance of its responsibilities as the Sector-Specific Agency (SSA) for the Defense Industrial Base to the Principal Cyber Advisor. Presently, the Department is the only SSA that has not unified its various physical and cybersecurity efforts under one organization. For the purposes of carrying out its SSA mission, the Principal Cyber Advisor will be tasked with the management of all functions associated with SSAs under Presidential Policy Directive-21.

Section 1625—Department of Defense Cyber Workforce Efforts

This section would direct the Department of Defense Chief Information Officer to:

(1) study and expand the model used at the National Security Agency (NSA) that authorizes NSA employees to use up to 140 hours of paid time toward NSA cyber education efforts in local communities. This would explicitly authorize select Department of Defense civilians who are part of the Cyber Excepted Service to utilize paid time toward wider national efforts aimed at addressing the cyber workforce shortage;

(2) study and report, in conjunction with the military services, to the congressional defense committees on how the Training With Industry program can be strengthened and better utilized by the services; and

(3) study the synchronization between NSA GenCyber program and the Centers for Academic Excellence and report to the congressional defense committees on how the two programs can be better integrated and harmonized.

Section 1626—Reporting Requirements for Cross Domain Compromises and Exemptions to Policies for Information Technology

This section would direct the Secretary of Defense to report monthly to the congressional defense committees on all cross domain compromises within the Department of Defense Information Network. Additionally, this section would direct the Secretary of Defense to report biannually to the congressional defense committees on all current exemptions to information technology policies. The intent is to establish a baseline for legislative oversight on areas where the Department of Defense has accepted risk to its networks and systems.

Section 1627—Assessing Private-Public Collaboration in Cybersecurity

This section would assess the impact of the current Pathfinder initiatives, prospects for making existing Pathfinder pilots more robust, and whether and how to expand Pathfinder or similar models of public-private collaboration to other critical infrastructure sectors, particularly systemically important critical infrastructure. Developing institutional support for Pathfinder-type initiatives not only creates opportunities for increased collaboration across critical sectors, as prioritized by Federal departments and agencies, but will also buttress and accelerate nascent efforts and increase their chances of success.

Section 1628—Cyber Capabilities and Interoperability of the National Guard

This section would direct the Department of Defense to update existing policies to consider National Guard activities that could be performed and reimbursed under title 32, United States Code.

Section 1629—Evaluation of Non-Traditional Cyber Support to the Department of Defense

This section would direct the Secretary of Defense to assess the feasibility and need for a cyber reserve force, the composition of a reserve force, and the structure of a reserve force (e.g., a retainer model, a non-traditional reserve, auxiliary model).

Section 1630—Establishment of Integrated Cyber Center

This section would direct the Secretary of Homeland Security, in coordination with the Secretary of Defense, the Attorney General, the Director of the Federal Bureau of Investigation, and the Director of National Intelligence, to submit to the relevant congressional committees a report, within 180 days of the date of the enactment of this Act, on Federal cybersecurity centers and the potential for better coordination of Federal cyber efforts at an integrated cyber center within the National Cybersecurity and Communications Integration Center of the Department of Homeland Security.

Section 1631—Cyber Threat Information Collaboration Environment

This section would direct the Secretary of Homeland Security, in coordination with the Secretary of Defense and the Director of National Intelligence (acting through the Director of the National Security Agency) to develop an information collaboration environment that enables entities to identify, mitigate, and prevent malicious cyber activity. The collaboration environment would provide limited access to appropriate operationally relevant data about cybersecurity risks and cybersecurity threats, including malware forensics and data from network sensor programs, on a platform that enables query and analysis.

Section 1632—Defense Industrial Base Participation in a Threat Intelligence Sharing Program

This section would prohibit the Secretary of Defense from entering or renewing a contract with an entity in the Defense Industrial Base which is not a participant in a threat intelligence sharing program, either operated by the Department of Defense or a comparably widely utilized threat intelligence sharing program.

Section 1633—Assistance for Small Manufacturers in the Defense Industrial Supply Chain on Matters Relating to Cybersecurity

This section would allow the Secretary of Defense, in consultation with the Director of the National Institute of Standards and Technology, to award financial assistance to a center for the purpose of providing cybersecurity services to small manufacturers.

Section 1634—Defense Industrial Base Cybersecurity Threat Hunting and Sensing, Discovery, and Mitigation

This section would direct the Secretary of Defense to conduct a feasibility study, to be submitted to the congressional defense committees within 120 days after the date of the enactment of this Act, on a Department of Defense Threat Hunting Program. Should the feasibility study result in a positive determination of the program, the Secretary of Defense would be authorized to establish the program to actively identify cybersecurity threats and vulnerabilities within the information systems, including covered defense networks containing controlled unclassified information, of entities in the Defense Industrial Base. Additionally, the Secretary of Defense would not be permitted to enter into, renew, or extend contracts with entities in the Defense Industrial Base that are not in compliance with the Threat Hunting Program established in this section.

Section 1635—Defense Digital Service

This section would direct the Secretary of Defense and the Administrator of the United States Digital Service to establish a direct relationship within 120 days of the date of the enactment of this Act between the Department of Defense and the United States Digital Service to address authorities, hiring processes, roles, and responsibilities. Additionally, this section would require the Secretary of Defense and the Administrator of the United States Digital Service to jointly certify to the congressional defense committees that skills and qualifications of the Department of Defense personnel assigned to and supporting the core functions of the Defense Digital Service are consistent with the skills and qualifications of United States Digital Service personnel.

Section 1636—Limitation of Funding for National Defense University

This section would limit funding for the National Defense University.

SUBTITLE D—NUCLEAR FORCES

Section 1641—Coordination in Transfer of Funds by Department of Defense to National Nuclear Security Administration

This section would require the Secretary of Defense and Secretary of Energy to use appropriate interagency processes during the process of developing the budget materials of the Department of Defense and the National Nuclear Security Administration (NNSA), and to do so not later than the third quarter of the fiscal year preceding the budget request. This section would further require a report describing any transfers made to the NNSA and certifying that such transfers were developed in the manner described in this provision.

Section 1642—Exercises of Nuclear Command, Control, and Communications System

This section would require the President to participate in at least one large-scale nuclear command, control, and communication exercise within the first year of assuming office, per term, and would include waiver authority on a case-by-case basis.

Section 1643—Independent Studies on Nuclear Weapons Programs of Certain Foreign States

This section would require a federally funded research and development center to produce an open source analysis of foreign nuclear programs, to be made available on the internet. It would also extend a requirement for the Secretary of Defense, in consultation with the Director of National Intelligence, to produce a report on foreign and U.S. nuclear weapons capabilities.

SUBTITLE E—MISSILE DEFENSE PROGRAMS

Section 1651—Extension and Modification of Requirement for Comptroller General of the United States Review and Assessment of Missile Defense Acquisition Programs

This section would extend the annual review and assessment of missile defense acquisition programs by the Comptroller General of the United States through 2026, and review emergent issues to either include any findings of the annual report or provide briefings on those findings.

Section 1652—Extension of Transition of Ballistic Missile Defense Programs to Military Departments

This section would extend the requirement to transition ballistic missile defense programs from the Missile Defense Agency to the military departments as required in the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) from 2021 to 2023.

Section 1653—Development of Hypersonic and Ballistic Missile Tracking Space Sensor Payload

This section would express the Sense of Congress that the Missile Defense Agency (MDA) should be responsible for development

of the sensor payload for the hypersonic and ballistic tracking space sensor (HBTSS), and further reinforces section 1683 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). This section would also further limit the amount of funds authorized or otherwise made available for fiscal year 2021 to not more than 50 percent for operations and maintenance of the Space Development Agency until the Secretary of Defense provides certification that MDA is responsible for development of the HBTSS sensor payload.

Section 1654—Annual Certification on Hypersonic and Ballistic Missile Tracking Space Sensor Payload

This section would express the sense of Congress that the hypersonic and ballistic missile tracking space sensor has been underfunded by the Department of Defense despite the requirement being highlighted in the 2019 Missile Defense Review, and that the Missile Defense Agency sensor payload must be prioritized in the overall Space Development Agency space-based sensor architecture.

This section would require an annual certification from the Secretary of Defense that:

(1) the most recent Future Years Defense Program submitted includes estimated expenditures and proposed appropriations for the hypersonic and ballistic missile tracking space sensor (HBTSS) payload; and

(2) the Commander of U.S. Space Command has validated both the ballistic and hypersonic tracking requirements for the HBTSS payload.

Section 1655—Alignment of the Missile Defense Agency within the Department of Defense

This section would express the sense of Congress that the budget of the Missile Defense Agency (MDA) has experienced a 650 percent decrease in funding for advanced technology efforts since being aligned to the Under Secretary of Defense for Research and Engineering, and that the majority of MDA programs would be acquisition category 1 efforts in the standard Department of Defense 5000 acquisition system. This section would also require a report from the Secretary of Defense on what steps would need to be taken to realign MDA to the Under Secretary of Defense for Acquisition and Sustainment.

Section 1656—Analysis of Alternatives for Homeland Missile Defense Missions

This section would require the Director of Cost Assessment and Program Evaluation to conduct an analysis of alternatives (AOA) with regards to a complete architecture for using regional systems for homeland defense. The study would need to address sensors, testing, siting, manning, training, and sustainment of the entire architecture. For siting considerations, the provision would require the AOA to provide preference to sites that have already been assessed as part of the previous environmental impact analysis the Department of Defense conducted for a continental interceptor site, and for which Fort Drum, NY, was selected as the preferred location due to operational coverage.

The AOA would also need to include an independent lifecycle cost estimate for the entire architecture. The AOA should compare capabilities, costs and schedules with respect to using regional systems for homeland defense against deploying future ground-based midcourse defense systems.

In addition, this section would require the Defense Intelligence Agency, and any other intelligence community organizations that would be required, to provide an assessment on how development and deployment of regional systems to conduct longer-range missile defense would be perceived by near-peer and rogue nations, and how they would likely respond to these deployments.

Section 1657—Next Generation Interceptors

This section would require the Director of the Missile Defense Agency to notify the congressional defense committees not later than 7 days after any changes are made to requirements of the next generation interceptor program. This section would also require the Secretary of Defense, in coordination with the Director of the Missile Defense Agency, the Commander of U.S. Northern Command, and the Under Secretary of Defense for Policy, to submit a report on the next generation interceptor program.

Section 1658—Oversight of Next Generation Interceptor Program

This section would express the sense of Congress that the Secretary of Defense should ensure robust oversight and accountability for the next generation interceptor program to avoid the kind of errors that led to cancellation of the Redesigned Kill Vehicle program.

This section would require the Director of Cost Assessment and Program Evaluation to conduct an independent cost assessment of the next generation interceptor program and that the preliminary cost assessment be provided to the congressional defense committees not later than the date of contract award. Further, this section would prohibit the Missile Defense Agency from making an initial production decision for the next generation interceptor until two successful flight tests have been conducted.

Section 1659—Missile Defense Cooperation between the United States and Israel

This section would express the sense of Congress supporting U.S. and Israel missile defense cooperation under the current memorandum of understanding, support continued government-to-government information sharing with regard to the potential of using Israeli missile defense systems for U.S. purposes, and also provide support for the Secretary of Defense to expand missile defense cooperation to include directed energy capabilities.

Section 1660—Report on Defense of Guam from Integrated Air and Missile Threats

This section would require the Secretary of Defense to submit a report not later than 120 days after the date of the enactment of this Act regarding a study on the defense of Guam from integrated

air and missile threats, including ballistic, hypersonic, and cruise missiles.

Section 1661—Report on Cruise Missile Defense

This section would require the Commander of Northern Command, in coordination with the Director of the Missile Defense Agency, to submit a report not later than January 15, 2021, to identify any cruise missile vulnerability to the contiguous United States and a plan to mitigate any such vulnerability.

SUBTITLE F—OTHER MATTERS

Section 1671—Conventional Prompt Global Strike

This section would require the Secretary of the Navy to initiate integration efforts for the conventional prompt global strike program onto the DDG 1000-class destroyers not later than January 1, 2021. This section would also require the Chairman of the Joint Chiefs of Staff, in coordination with the Under Secretary of Defense for Policy, to submit a report to the congressional defense committees, not later than 120 days after the date of the enactment of this Act, that would cover operational control, policy concerns, escalation risk mitigation, and basing strategies for land-based variants.

Section 1672—Submission of Reports under Missile Defense Review and Nuclear Posture Review

This section would require the Secretary of Defense to submit reports pursuant to the 2018 Nuclear Posture Review and the 2019 Missile Defense Review to the congressional defense committees within 30 days after the date of the enactment of this Act.

Section 1673—Report on Consideration of Risks of Inadvertent Escalation to Nuclear War

This section would require the Under Secretary of Defense for Policy to submit a report to the Committees on Armed Services of the House of Representatives and the Senate detailing the Department's efforts to develop and implement guidance to ensure that the risks of inadvertent escalation to nuclear war are considered within the decision-making processes of the Department.

TITLE XVII—REPORTS AND OTHER MATTERS

ITEMS OF SPECIAL INTEREST

Assessment of Department of Defense Training Programs and Resources regarding the Role of Women as Participants of Violent Extremism

The committee directs the Secretary of Defense to conduct an assessment and submit a report to the House Committee on Armed Services by April 30, 2021 on existing programs, tools, and resources of the Department of Defense for training members of the United States Armed Forces and other personnel of the Department of Defense regarding the role of women as participants of vio-

lent extremism. The assessment shall consider the totality of the varied roles of women in all aspects of fomenting violent extremism including, but not limited to, as:

(1) recruiters;

(2) sympathizers;

(3) perpetrators; and

(4) combatants.

The committee further directs the Secretary of Defense to conduct a training needs analysis, in accordance with the Women, Peace and Security Act of 2017 (Public Law 115–68; 22 U.S.C. 2151 note), and to submit a report to the House Committee on Armed Services by September 30, 2021 that identifies opportunities in existing training programs for members of the U.S. Armed Forces (including units involved in counterterrorism operations) and other personnel of the Department of Defense to integrate attention to the varied roles of women in fomenting violent extremism and terrorism.

Feasibility Study on the Adoption of AFRICOM CIVCAS Initiatives by Each Combatant Command

The committee believes that the United States Africa Command (AFRICOM) has adopted important civilian casualty initiatives to prevent, mitigate, track, investigate, learn from, respond to, and report civilian casualties resulting from United States military operations and that the announcement by AFRICOM on March 31, 2020, that the command would be issuing a new quarterly report on the status of ongoing civilian casualty allegations and assessments was a welcome step to provide increased transparency and public accounting of U.S. military operations, demonstrating the commitment of the Department to minimize civilian casualties. The committee directs the Secretary of Defense to submit a report to the congressional defense committees by February 1, 2021, on the opportunities and challenges for each combatant command to adopt civilian casualty initiatives undertaken by AFRICOM, to include:

(1) a public facing interface to submit CIVCAS incidents;

(2) quarterly public reports on the status of ongoing civilian casualty allegations and assessments;

(3) a mechanism for civilian victims and designated representatives to include family members and non-governmental organizations (NGOs) presenting or facilitating allegations, to access updated and unclassified information specific to their cause or claim, including the status and findings of assessments or investigation.

Report on Non-Traditional Manned ISR

The committee understands the critical importance of intelligence, surveillance, and reconnaissance (ISR) platforms and capabilities for operational missions. The committee notes that there is currently a high demand for more robust ISR capacity and capability throughout the military services in order to respond to global combatant command operational requirements. The committee further notes that currently the Department of Defense is only able to address approximately 20 percent of needed ISR capability. As such, the committee believes the Department may want to consider other opportunities and capabilities in addressing manned ISR ca-

pacity demands such as non-traditional forms of manned ISR, that could include a volunteer service similar to the Civil Air Patrol. The committee expects that any use of non-traditional forms of manned ISR for operations would be consistent with all laws and regulations concerning the collection of intelligence, including civil liberty protections.

The committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by December 31, 2020 on the advisability and feasibility of the potential to use non-traditional manned ISR platforms that are piloted by volunteer civilians, and consistent with all laws and regulations concerning the collection of intelligence, including civil liberty protections. This report should consider where these platforms may be best suited to perform as well as some of the challenges and limitations that would be associated with civilian contracted pilots performing manned ISR operations. The report should also address the feasibility of implementing a pilot program to test use of these platforms in theater.

Report on Special Operations Command Armed Overwatch Concept

As the Department of Defense continues to refine the personnel and capability contributions and disposition of the U.S. Special Operations Command Armed Overwatch program, the committee encourages the Department to actively consider and include the robust capabilities of the Reserves and National Guard as critical components of the program's development and implementation. A trained and participatory Reserve and National Guard force ensures readiness, operational mobility, resiliency, and is the foundation of our nation's ability to rapidly mobilize and project power. Therefore, the committee directs the Commander of U.S. Special Operations Command to provide a briefing to the House Committee on Armed Services by March 1, 2021, on the planned utilization of the Reserve and National Guard components, including those National guard components currently projected as part of the Armed Overwatch program, and the role of these components in the development, testing, and operational employment of the Armed Overwatch platform.

LEGISLATIVE PROVISIONS

SUBTITLE A—STUDIES AND REPORTS

Section 1701—Review of Support of Special Operations to Combat Terrorism

This section would direct the Comptroller General of the United States to conduct a comprehensive review of the history, currency, processes and procedures for transitioning or terminating the programs provided by such authority, and the potential future use of the authority under section 127e of title 10, United States Code, in continued support of special operations to combat terrorism.

Section 1702—FFRDC Study of Explosive Ordnance Disposal Agencies

This section would direct the Secretary of Defense to enter into an arrangement with a federally funded research and development center (FFRDC) to conduct a study that identifies and evaluates the roles and responsibilities of the military services involved in the Explosive Ordnance Disposal (EOD) program. The study shall include an identification and evaluation of technology, research and development activities, an identification of gaps in the industrial base, an evaluation of training and retention for EOD service members, an assessment of risk in EOD force structure, and demand for activities in support of both Department of Defense and Federal agencies for EOD activities. The Secretary of Defense shall report to the congressional defense committees on the findings of the study not later than August 31, 2021.

Section 1703—Report on the Human Rights Office at United States Southern Command

This section would express the sense of Congress regarding the role of the Human Rights Office and require a report to Congress regarding U.S. Southern Command resources to support the work of the Human Rights Office.

Section 1704—Report on Joint Training Range Exercises for the Pacific Region

This section would require a report containing a plan to integrate combined, joint, and multi-domain training and experimentation in the Pacific region to test operational capabilities and weapon systems, validate joint operational concepts, and integrate allied and partner countries into national-level exercises.

Section 1705—Study on Chinese Policies and Influence in the Development of International Standards for Emerging Technologies

This section would direct the Director of the National Institute of Standards and Technology, to conduct a study and provide recommendations not later than 180 days after the date of the enactment of this Act on the impact of the policies of the People's Republic of China and coordination among industrial entities within the People's Republic of China on international bodies engaged in developing and setting international standards for emerging technologies. The entity that conducts the study must submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than two years after the date of enactment of this Act a report containing the findings and recommendations of the study.

SUBTITLE B—ELECTRONIC MESSAGE PRESERVATION

Section 1711—Short Title

This section would allow this subtitle to be cited as the "Electronic Message Preservation Act."

Section 1712—Preservation of Electronic Messages and Other Records

This section would require the Archivist of the United States to promulgate regulations related to the preservation of electronic messages and other records among Federal agencies, and it would require Federal agencies to comply with those promulgated regulations. The section would also require Federal agencies to submit reports to the Archivist on their compliance with the promulgated regulations, and it would require the Archivist to submit a report to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Oversight and Reform of the House of Representatives on Federal agency compliance with the promulgated regulations.

Section 1713—Presidential Records

This section would require the Archivist of the United States to promulgate regulations for establishing standards necessary for the economical and efficient management of electronic Presidential records during the President's term of office. This section would also require the Archivist to annually certify whether the electronic records management controls established by the President meet certain requirements, and it would require the Archivist to report annually to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Oversight and Reform of the House of Representatives on the status of those certifications. This section would also require the Archivist to submit to the Committee on Homeland Security and Governmental Affairs of the Senate and the Committee on Oversight and Reform of the House of Representatives, one year after the conclusion of a President's term of office, a report on the volume and format of electronic Presidential records deposited into the President's Presidential archival depository; and whether the electronic records management controls of that President met certain requirements.

SUBTITLE C—SPACE TECHNOLOGY ADVANCEMENT REPORT (STAR) ACT OF 2020

Section 1721—Short Title

This section would cite the short title as the "Space Technology Advancement Report (STAR) Act of 2020".

Section 1722—Findings

This section would make a series of findings with regard to the United States-China Economic and Security Commission's 2019 report to Congress, and on U.S. space programs and China's activities in space.

Section 1723—Report; Strategy

This section would require the National Space Council to submit a report to Congress, not later than one year after the date of enactment of this Act, and annually thereafter in fiscal years 2022 and 2023, on an interagency assessment of the ability of the United States to compete with foreign space programs and in the emerging

commercial space economy. This section would also require the President to develop and submit a strategy to Congress, not later than 1 year after the submission of the aforementioned report, on ensuring that the United States can compete with other national space programs; maintain leadership in the emerging commercial space economy; identify market, regulatory, and other means to address unfair competition from the PRC based on the findings of in the report; leverage commercial space capabilities to ensure United States national security and the security of United States interests in space; protect United States supply chains and manufacturing critical to competitiveness in space; and coordinate with international allies and partners in space.

SUBTITLE D—AMBER ALERT NATIONWIDE

Section 1731—Cooperation with Department of Homeland Security

This section would require the national coordinator of the Amber Alert communications network to expand their duties to ensure that they identify and eliminate gaps in the Amber Alert network to include airports, maritime ports, border crossings, checkpoints, and other ports of exit from the United States. The section would also require the national coordinator to include U.S. territories and tribal lands when developing local Amber alert plans and minimum Amber Alert communication standards.

Section 1732—AMBER Alerts along Major Transportation Routes

This section would expand the grants for the expansion of the AMBER Alert system from highways to include airports, maritime ports, border crossing areas and check points, and ports of exit as well as the expansion of the system to notify aircraft passengers, ship passengers, and other travelers. The section would also make the Virgin Islands, Guam, American Samoa, and the Northern Mariana Islands eligible for AMBER Alert grants.

Section 1733—AMBER Alert Communication Plans in the Territories

This section would allow the Attorney General to issue a grant waiver to American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, the U.S. Virgin Islands, or an Indian Tribe to provide additional funding for educational programs, law enforcement training and equipment, and new technologies related to AMBER Alert systems and communications.

Section 1734—Government Accountability Office Report

This section would require the Comptroller General to conduct a study and then provide a report to Congress not later than 5 years after the date of enactment of this Act. The report should cover the implementation of the amendments to the Exploitation of Children Today Act of 2003 (Public Law 108–21) made in this bill, challenges to integrating the territories to AMBER Alert system, ability of law enforcement to respond to exploited children, and other matters determined appropriate.

SUBTITLE E—OTHER MATTERS

Section 1741—Technical, Conforming, and Clerical Amendments

This section would make a number of technical, conforming, and clerical amendments of a non-substantive nature to existing law.

Section 1742—Addition of Chief of the National Guard Bureau to the List of Officers Providing Reports of Unfunded Priorities

This section would add the Chief of the National Guard Bureau to the list of individuals required to submit an annual unfunded priorities list to Congress.

Section 1743—Acceptance of Property by Military Academies and Museums

This section would authorize the Secretaries concerned to display, at a military museum, recognition for an individual or organization that contributes money to a nonprofit entity for the benefit of a military museum, whether or not the contribution is subject to the condition that recognition be provided. In addition, this section would authorize museum foundations to lease a museum facility to provide for use in generating revenue for activities of the museum facility.

Section 1744—Reauthorization of National Oceanographic Partnership Program

This section would amend chapter 893 of title 10, United States Code, on the National Oceanographic Partnership Program. This section would require an establishment of the Ocean Policy Committee, and require the committee to provide an annual report and briefing to the Committee on Commerce, Science, and Transportation of the Senate; the Committee on Armed Services of the Senate; the Committee on Natural Resources of the House of Representatives; the Committee on Science, Space, and Technology of the House of Representatives; and the Committee on Armed Services of the House of Representatives by March 1 each year on the National Oceanographic Partnership Program.

Section 1745—Requirements Relating to Program and Project Management

This section would amend section 503(c)(1)(D) of title 31, United States Code, by striking "consistent with widely accepted standards" and inserting "in accordance with standards accredited by the American National Standards Institute".

Section 1746—Quarterly Briefings on Joint All Domain Command and Control Concept

This section would require the Director of the Joint All Domain Command and Control (JADC2) Cross Functional Team, in consultation with the Vice Chairman, Joint Chiefs of Staff and the Chief Information Officer of the Department of Defense, to provide quarterly briefings to the House Committee on Armed Services on progress on the JADC2 concept development.

Section 1747—Resources to Implement a Department of Defense Policy on Civilian Casualties in Connection with United States Military Operations

This section would authorize the fulfillment of those resourcing requirements established by section 936 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) by authorizing the personnel, training, and information technology equipment necessary to implement the Department of Defense policy on civilian casualties in connection with U.S. military operations at each of the relevant geographic combatant commands, to include U.S. Special Operations Command.

Section 1748—Sense of Congress regarding Reporting of Civilian Casualties Resulting from United States Military Operations

This section would express the sense of Congress commending the Department of Defense for the measures taken to prevent, mitigate, track, investigate, learn from, respond to, and report civilian casualties resulting from U.S. military operations.

Section 1749—Prohibition of Public Display of Confederate Battle Flag on Department of Defense Property

This section would require the Secretary of Defense to prohibit the public display of the Confederate battle flag at all Department of Defense property with certain exceptions.

Section 1750—Deployment of Real-Time Status of Special Use Airspace

This section would require the Secretary of Defense to consult with the Administrator of the Federal Aviation Administration to enable public dissemination of real-time activation or deactivation of military operations areas and restricted areas.

Section 1751—Duties of Secretary under Uniformed and Overseas Citizens Absentee Voting Act

This section would require the Secretary to take actions as necessary to ensure absent uniformed services voter who is absent from the United States by reason of Active Duty or service at a diplomatic and consular post is able to receive and transmit balloting materials in the same manner and the same rights and protections as a uniformed services voter absent by reason of Active Duty or service at a military installation.

Section 1752—Publicly Available Database of Casualties of Members of the Armed Forces

This section would require the Secretary of Defense to publish on a publicly available website a database of all casualties of members of the Armed Forces that occur during military operations that take place during 1990 or any subsequent year.

Section 1753—Notice and Comment for Proposed Actions of the Secretary of Defense Relating to Food and Beverage Ingredients

This section requires the Secretary of Defense to publish in the Federal Register any proposed rule, statement, or determination relating to ingredients in a food or beverage provided to members of the Armed Services.

Section 1754—Space Strategies and Assessment

This section would express the sense of Congress that the United States Government should support activities in space. It would also require the President to develop and maintain a strategy to ensure that the United States, as appropriate, strengthens civil and national security capabilities and operations in space. This section would also require the Chairman of the National Space Council to submit a report on the strategy and a plan to implement the strategy, including specific elements, not later than one year after the date of the enactment of this Act.

This section would further require the Secretary of Defense to submit a report that includes an assessment of the capabilities and role of relevant departments and agencies of the Federal Government to ensure access to launch, communications, and freedom of navigation and other relevant infrastructure and services for civil and national security space programs and activities; identify vulnerabilities that could affect access to space infrastructure; and address financial security and cybersecurity concerns threatening commercial and Federal Government launch sites of the United States. The report should also include recommendations and costs to improve related capabilities.

Section 1755—Nonimmigrant Status for Certain Nationals of Portugal

This section would identify Portugal as a described foreign state for the purposes of clauses (i) and (ii) of section 101(a)(15)(E) of the Immigration and Nationality Act (8 U.S.C. 1101(a)(15)(E)) if the Government of Portugal provides similar nonimmigrant status to nationals of the United States.

Section 1756—Sense of Congress on Extension of Limitations on Importation of Uranium from Russian Federation

This section would express the sense of Congress that the Russian Suspension Agreement should be extended and that Russian market share for uranium in the United States should be 20 percent or lower.

Section 1757—Authority to Establish a Movement Coordination Center Pacific in the Indopacific Region

This section would authorize the Secretary of Defense, with the concurrence of the Secretary of State, to establish a Movement Coordination Center Pacific and participate in an Air Transport and Air-to-Air refueling and other Exchanges of Services program of the Center.

Section 1758—Establishment of Vetting Procedures and Monitoring Requirements for Certain Military Training

This section would require the Secretary of Defense to establish procedures to vet covered individuals for eligibility for physical access to Department of Defense installations and facilities within the United States not later than 90 days after the date of enactment of this Act. It would also require a report on the implementation and effects of this section.

Section 1759—Women, Peace, and Security Act Implementation

This section would express the sense of Congress regarding Department of Defense annual funding for implementation of the Women, Peace, and Security Act of 2017 (Public Law 115–68). The section specifies activities the Department of Defense shall undertake to implement the Women, Peace, and Security Act and requires a one time briefing on security cooperation capacity building and an annual report on such activities through January 1, 2025.

Section 1760—Developing Crisis Capabilities to Meet Needs for Homeland Security-Critical Supplies

This section would require the Secretary of Homeland Security to coordinate with the Secretary of Health and Human Services, the Administrator of the Environmental Protection Agency, and the heads of other relevant Federal departments and agencies to create a repository of federally approved plans and specifications for critical medical items that could help manufacturers rapidly produce those items in a potential national emergency or disaster.

Section 1761—Establishment of Western Emergency Refined Petroleum Products Reserve

This section would require the Secretary of Defense, acting through the Defense Logistics Agency, to establish a reserve to store refined petroleum products that may be made available to military and governmental entities during an emergency situation on a reimbursable basis.

DIVISION B—MILITARY CONSTRUCTION AUTHORIZATIONS

PURPOSE

Division B provides military construction, family housing, and related authorities in support of the military departments during fiscal year 2021. As recommended by the committee, division B would authorize appropriations in the amount of $8,163,325,000 for construction in support of the Active Forces, Reserve Components, defense agencies, and the North Atlantic Treaty Organization Security Investment Program for fiscal year 2021.

MILITARY CONSTRUCTION AND FAMILY HOUSING OVERVIEW

The Department of Defense requested $6,161,724,000 for military construction, $300,447,000 for Base Realignment and Closure ac-

tivities, and $1,351,392,000 for family housing for fiscal year 2021. The committee recommends authorization of appropriations of $5,886,724,000 for military construction, $440,447,000 for Base Realignment and Closure activities, and $1,486,392,000 for family housing in fiscal year 2021. The Department of Defense also requested $349,762,000 for Overseas Contingency Operations military construction for fiscal year 2021. The committee recommends authorization of appropriations of $349,762,000 for Overseas Contingency Operations military construction within title XXIX.

Section 2001—Short Title

This section would cite division B of this Act as the "Military Construction Authorization Act for Fiscal Year 2021".

Section 2002—Expiration of Authorizations and Amounts Required To Be Specified by Law

This section would ensure that the authorizations provided in titles XXI through XXVII and title XXIX of this Act shall expire on October 1, 2023, or the date of the enactment of an Act authorizing funds for military construction for fiscal year 2024, whichever is later.

Section 2003—Effective Date

This section would provide that titles XXI through XXVII and XXIX of this Act would take effect on October 1, 2020, or the date of the enactment of this Act, whichever is later.

TITLE XXI—ARMY MILITARY CONSTRUCTION

SUMMARY

The budget request contained $650,336,000 for Army military construction and $486,542,000 for family housing for fiscal year 2021. The committee recommends authorization of appropriations of $715,836,000 for military construction and $511,542,000 for family housing for the Army in fiscal year 2021.

ITEMS OF SPECIAL INTEREST

Explanation of Funding Adjustments

The committee recommends the inclusion of funding for several projects requested by the Department of the Army but not contained in the budget request for military construction and family housing. These increases include:

(1) $7.0 million for a Trainee Barrack at Fort Jackson, South Carolina;

(2) $26.0 million for a Child Development Center at Fort Shafter, Hawaii;

(3) $32.5 million for a Child Development Center at Fort Wainwright, Alaska;

(4) $39.0 million for a Child Development Center at Schofield Barracks, Hawaii; and

(5) $59.0 million for Unaccompanied Enlisted Housing at Fort Wainwright, Alaska.

In addition, the committee recommends an authorization of appropriation of $72.9 million, an increase of $25.0 million, for Housing Privatization Support in the Army's Family Housing Operation and Maintenance account. These additional funds are intended to continue the improvement of Military Housing Privatization Initiative (MHPI) oversight through the hiring of additional civilian personnel.

The committee also recommends an authorization of appropriation of $122.8 million for Army Family Housing Maintenance, an increase of $25.0 million, to address environmental hazards at government owned military family housing.

Finally, the committee recommends a reduction of funding for projects contained in the budget request submitted by the Department of the Army for military construction. These reductions are:

(1) $60.0 million for planning and design at unspecified worldwide locations. The committee believes that the Department of the Army cannot fully expend the requested funding in fiscal year 2021, and therefore recommends an authorization of $69.4 million, a reduction of $60.0 million, for this program;

(2) $38.0 million for a general instruction building at Carlisle Barracks. The committee supports the requirement for this project and fully authorized the project in National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee notes that Army has not yet executed the fund appropriated in fiscal year 2020 and have failed to fully comply with a reporting requirement related to the Carlisle Indian Industrial School that could impact future construction. Therefore, the committee recommends no funds, a reduction of $38.0 million, for this project; and

(3) $25.0 million for Army Family Housing Maintenance for general officer quarters. The committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee notes that the Army is engaged in ongoing negotiations with the American Council for Historic Preservation on materials and renovation techniques for these historic properties that may impact the timeline and cost of renovating these homes. Therefore, the committee recommends an authorization of $97.8 million, reduction of $25.0 million for maintenance of government office quarters.

Army Corps Headquarters Stationing Decision

The committee notes that on February 11, 2020, the Secretary of the Army announced the establishment of an additional Corps headquarters, designated as V Corps, and a decision to station V Corps in the United States. V Corps was established in response to a new "deterrence package" introduced by the Department of Defense as part of its effort to set the theater in Europe. As part of this deterrence package, V Corps will be permanently based in the United States but will support a persistent presence in Europe through rotational deployments. The committee is supportive of the establishment of V Corps, but questions the decision to perma-

nently base it in the United States as opposed to in Europe. Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, on the decision process for the basing of V Corps. At minimum, the briefing shall address the following elements:

(1) an overview of discussions that occurred between the Department of the Army, Office of the Secretary of Defense, U.S. European Command, and the Department of State regarding the stationing of V Corps;

(2) an explanation for why the Army proceeded with permanently stationing the V Corps in the United States as opposed to considering a temporary stationing action in the United States to provide initial operating capability of V Corps until a permanent stationing action could occur in Europe;

(3) an overview of the process used to assess infrastructure requirements and existing infrastructure capacity, both in the United States and in Europe, to support the stationing of V Corps;

(4) the estimated annual cost of supporting the planned persistent, rotational deployment of V Corps from the United States to Europe;

(5) an assessment of the strategic and tactical opportunities and challenges of stationing V Corps in Europe compared to supporting a persistent rotational force deployed to Europe from the United States and how those challenges could or will be mitigated; and

(6) whether the Army has plans to reconsider the stationing decision for the V Corps Headquarters.

Mission Training Complex Report

The committee recognizes the importance of information technology (IT) infrastructure and access to classified networks for mission training complexes that provide critical training and preparation for members of the United States Armed Forces, that includes mission planning, rehearsal and execution, and support of training events for future threats in an immersive training environment. Therefore, the committee directs the Secretary of the Army, in coordination with the Secretary of Defense, to submit a report to the House Committee on Armed Services by July 1, 2021, on necessary Army mission training complex enhancements to IT infrastructure and accessible classified networks and their relevance to future threats and readiness. The report shall assess and provide recommendations for modernization and enhancements based on, but not limited to:

(1) Existing IT infrastructure shortfalls at Army mission training complexes.

(2) Effects of IT infrastructure shortfalls at such mission training complexes on unit readiness and ability to train for future threats.

(3) An assessment of threats to, and vulnerabilities of, IT infrastructure at existing Army mission training complexes.

(4) Access to classified networks and Sensitive Compartmented Information Facilities at existing Army mission training complexes.

(5) Access to existing IT infrastructure and classified networks and facilities for Army Reserve and National Guard units.

(6) Ability to integrate Army Reserve and National Guard units into existing IT infrastructure and classified networks and facilities to improve training and unit readiness.

LEGISLATIVE PROVISIONS

Section 2101—Authorized Army Construction and Land Acquisition Projects

This section would contain a list of authorized Army construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2102—Family Housing

This section would authorize new construction, improvements, and planning and design of family housing units for the Army for fiscal year 2021.

Section 2103—Authorization of Appropriations, Army

This section would authorize appropriations for Army military construction levels identified in section 4601 of division D of this Act.

Section 2104—Limitation on Military Construction Project at Kwajalein Atoll

This section would require the Secretary of the Army to submit a resilience plan prior to obligating funds for a certain project at Kwajalein Atoll.

Section 2105—Modification of Authority to Carry Out Certain Fiscal Year 2017 Project

This section would modify the authority provided by section 2101 of the Military Construction Authorization Act for Fiscal Year 2017 (division B of Public Law 114–328) and authorize the Secretary of the Army to make certain modifications to the authorized cost of a previously authorized construction project.

TITLE XXII—NAVY MILITARY CONSTRUCTION

SUMMARY

The budget request contained $1,975,606,000 for Department of the Navy military construction and $389,390,000 for family housing for fiscal year 2021. The committee recommends authorization of appropriations of $1,676,514,000 for military construction and $439,390,000 for family housing for the Department of the Navy in fiscal year 2021.

ITEMS OF SPECIAL INTEREST

Explanation of Funding Adjustments

The committee recommends the inclusion of funding for a project requested by the Department of the Navy but not contained in the budget request for military construction and family housing. This increase is as follows:

(1) $99.6 million for a Bachelor Enlisted Quarters Replacement, Yuma, Arizona; and

(2) $5.0 million for planning and design related to Indo-Pacific Command posture initiatives.

In addition, the committee recommends an authorization of appropriation of $88.7 million, an increase of $35.0 million, for Housing Privatization Support in the Navy's Family Housing Operation and Maintenance account. These additional funds are intended to continue the improvement of Military Housing Privatization Initiative (MHPI) oversight through the hiring of additional civilian personnel.

The committee also recommends an authorization of appropriation of $110.6 million for Navy Family Housing Maintenance, an increase of $25.0 million, to address environmental hazards at government-owned military family housing. In addition, the committee recommends an authorization of appropriation of $78.7 million for Navy Family Housing Privatization Support, an increase of $25.0 million, to continue addressing oversight personnel shortfalls at both installations and in headquarters elements.

Finally, the committee recommends a reduction of funding for projects contained in the budget request submitted by the Department of the Navy for military construction. These reductions are:

(1) $144.0 million for the Joint Communication Upgrade, Joint Region Marianas, Guam. The committee supports the requirement for this project and has fully authorized the project. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Department of the Navy cannot fully expend the requested funding in fiscal year 2021, and therefore recommends an authorization of $22.0 million, a reduction of $144.0 million, for this project;

(2) $80.0 million for Bachelor Enlisted Quarters H, Joint Region Marianas, Guam. The committee supports the requirement for this project and fully authorized the project in the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee notes that the Navy has not yet executed the funds appropriated in fiscal year 2020. Therefore, the committee recommends no funds, a reduction of $80.0 million, for this project;

(3) $74.692 million for Pier 5 (Berths 2 and 3), Yokosuka, Japan. The committee supports the requirement for this project and fully authorized the project in the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee notes that the Navy has not yet executed the funds appropriated in fiscal year 2020. Therefore, the committee recommends no funds, a reduction of $74.692 million, for this project;

(4) $30.0 million for the F–35C Hangar 6 Phase 2 (Mod 3/4), Naval Air Station Lemoore, California. The committee supports the requirement for this project and has fully authorized the project.

However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Department of the Navy cannot fully expend the requested funding in fiscal year 2021, and therefore recommends an authorization of $98.07 million, a reduction of $30.0 million, for this project;

(5) $30.0 million for the Pier 6 Replacement, Naval Base San Diego, California. The committee supports the requirement for this project and has fully authorized the project. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Department of the Navy cannot fully expend the requested funding in fiscal year 2021, and therefore recommends an authorization of $98.5 million, a reduction of $30.0 million, for this project; and

(6) $5.0 million for planning and design. The committee is supportive of planning and design efforts associated with Indo-Pacific Command's posture initiatives and therefore has realigned $5.0 million from the Navy's general planning and design account to a dedicated planning and design account in support of Navy projects associated with these posture initiatives. Therefore, the committee recommends $160.71 million, a reduction of $5.0 million, for the planning and design program; and

(7) $40.0 million for the Bachelor Enlisted Quarters, Marine Corps Air Station Yuma, Arizona. The committee supports the requirement for this project and has fully authorized the project. However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Department of the Navy cannot fully expend the requested funding in fiscal year 2021, and therefore recommends an authorization of $59.6 million, a reduction of $40.0 million, for this project.

LEGISLATIVE PROVISIONS

Section 2201—Authorized Navy Construction and Land Acquisition Projects

This section would contain a list of authorized Department of the Navy construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2202—Family Housing and Improvements to Military Family Housing Units

This section would authorize new construction, improvements, and planning and design of family housing units for the Department of the Navy for fiscal year 2021.

Section 2203—Authorization of Appropriations, Navy

This section would authorize appropriations for Department of Navy military construction levels identified in section 4601 of division D of this Act.

TITLE XXIII—AIR FORCE MILITARY CONSTRUCTION

SUMMARY

The budget request contained $767,132,000 for Department of the Air Force military construction and $414,235,000 for family housing for fiscal year 2021. The committee recommends authorization of appropriations of $661,249,000 for military construction and $474,235,000 for family housing for the Department of the Air Force in fiscal year 2021.

ITEMS OF SPECIAL INTEREST

Explanation of Funding Adjustments

The committee recommends the inclusion of funding for projects requested by the Air Force but not contained in the budget request for military construction and family housing. This increase is as follows:

(1) $40.0 million for a Flight Test Engineering Laboratory Complex at Edwards Air Force Base, California;

(2) $35.0 million to support the cost-to-complete the previously authorized Advanced Munitions Technology Complex at Eglin Air Force Base, Florida;

(3) $13.0 million to support the cost-to-complete the previously authorized Consolidated Communications Center at Joint Base Andrews, Maryland;

(4) $12.0 million to support the cost-to-compete the previously authorized Weapons Storage Facility at F.E. Warren Air Force Base, Wyoming;

(5) $5.0 million for planning and design related to Indo-Pacific Command posture initiatives; and

(6) $3.0 million to support the cost-to-complete the previously authorized Add/Alter Consolidated Communications Facility at Scott Air Force Base, Illinois.

In addition, the committee recommends an authorization of appropriation of $99.7 million for Military Family Housing Management, an increase of $35.0 million, to support the continued oversight and improvement of the Military Housing Privatization Initiative (MHPI) program. The committee also recommends $165.6 million for Military Family Housing Maintenance, an increase of $25.0 million, to continue addressing environmental and maintenance issues in government-owned family housing.

Finally, the committee recommends a reduction of funding for projects contained in the budget request submitted by the Air Force for military construction. These reductions are:

(1) $146.8 million for planning & design. The committee notes that the budget request for planning & design has nearly doubled compared to amounts enacted in Fiscal Year 2020. The committee

is concerned with the Air Force's ability to obligate and expend the full amount requested in the budget request for planning & design and therefore recommends $149.6 million, a reduction of $146.8 million, for the planning & design program;

(2) $25.0 million for the Weapons Storage & Maintenance Facility at Malmstrom Air Force Base, Montana. The committee supports the requirement for this project, and notes that the project was fully authorized in the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). However, the committee notes that the Air Force has yet to award a contract for this project or expend previously authorized and appropriated funds for this project. The committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Air Force cannot expend the requested funding in fiscal year 2021, and therefore recommends no funds, a reduction of $25.0 million, for this project;

(3) $20.0 million for the Airfield Development Phase at Tinian, Commonwealth of the Northern Mariana Islands. The committee supports the requirement for this project, and notes that the project was fully authorized in Public Law 116–92. However, the committee notes that the Air Force has yet to award a contract for this project or expend previously authorized and appropriated funds for this project. The committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Air Force cannot expend the requested funding in fiscal year 2021, and therefore recommends no funds, a reduction of $20.0 million, for this project;

(4) $15.0 million for the Parking Apron at Tinian, Commonwealth of the Northern Mariana Islands. The committee supports the requirement for this project, and notes that the project was fully authorized in Public Law 116–92. However, the committee notes that the Air Force has yet to award a contract for this project or expend previously authorized and appropriated funds for this project. The committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Air Force cannot expend the requested funding in fiscal year 2021, and therefore recommends no funds, a reduction of $15.0 million, for this project; and

(5) $7.0 million for Fuel Tanks with Pipeline & Hydrant Systems at Tinian, Commonwealth of the Northern Mariana Islands. The committee supports the requirement for this project, and notes that the project was fully authorized in Public Law 116–92. However, the committee notes that the Air Force has yet to award a contract for this project or expend previously authorized and appropriated funds for this project. The committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. The committee believes that the Air Force cannot expend the requested funding in fiscal year 2021, and therefore recommends no funds, a reduction of $7.0 million, for this project.

Space Training and Readiness, S&T

The committee continues to support the Air Force's strategic basing process, which ensures that basing decisions are made using a thorough, consistent, and transparent process. As the organizational decisions are made by Space Force as they establish new commands, organizations, and capabilities, the committee encourages the Secretary of the Air Force to continue to utilize this process to decide where to permanently base Space Force's Space Training and Readiness Command, and any future Space Force Centers of Excellence or Space-related Research Laboratories. Accordingly, the committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services, not later than December 1, 2020, on the approved process and plan to make Space Force basing decisions. At a minimum, the briefing should include:

(1) Decision-making timeline and basing selection evaluation metrics for the Space Training and Readiness Command;

(2) Decision-making timeline and basing selection evaluation metrics for Space Force Research Lab, or Space Force Centers of Excellence, or any space-related research functions that would be split off from the Air Force Research Lab.

(3) Information on whether the following basing metrics will be considered, and if so, how they will be evaluated: access and proximity to existing space operations organizations, space technology research and development organizations within the military services, leading space industry partners, and space launch and test sites.

Strategic Basing Process for U.S. Space Command

The committee recognizes the critical role of space as a warfighting domain and that assured access to space is guaranteed as potential adversaries increasingly challenge U.S. space-based capabilities. The committee notes that the Secretary of the Air Force is currently utilizing its strategic basing process to decide where to permanently base the Headquarters for U.S. Space Command (USSPACECOM), which was reestablished as the eleventh unified combatant command on August 29, 2019. The Air Force strategic basing process for USSPACECOM began in 2019 and a basing decision was initially expected to be made in late 2019. However, given the establishment of the U.S. Space Force in the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) and based on the immediate manpower and organizational changes required to standup the U.S. Space Force, the Department of the Air Force extended the strategic basing process for U.S. Space Command. The committee understands that a final basing decision is now expected by the end of 2020.

The committee encourages the Department to adhere closely to the Air Force strategic basing process when making the decision on where to permanently base USSPACECOM. The committee believes this process, when properly utilized, ensures that the basing decision are made using a thorough, consistent, and transparent process. Any change to this process should be rigorously evaluated to demonstrate that it would yield significant operational benefits, cost effectiveness, and support to the joint force. In addition, the committee requests close communication, transparency, and col-

laboration with Congress as the Air Force proceeds through its basing process.

LEGISLATIVE PROVISIONS

Section 2301—Authorized Air Force Construction and Land Acquisition Projects

This section would contain a list of authorized Air Force construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2302—Family Housing and Improvements to Military Family Housing Units

This section would authorize new construction, improvements, and planning and design of family housing units for the Department of the Air Force for fiscal year 2021.

Section 2303—Authorization of Appropriations, Air Force

This section would authorize appropriations for Air Force military construction levels identified in section 4601 of division D of this Act.

Section 2304—Modification of Authority to Carry Out Certain Fiscal Year 2018 Project

This section would modify the authority provided by sections 2301 and 2903 of the Military Construction Authorization Act for Fiscal Year 2018 (division B of Public Law 115–91) and authorize the Secretary of the Air Force to make certain modifications to the scope and authorized cost of previously authorized construction project.

Section 2305—Modification of Authority to Carry Out Certain Fiscal Year 2019 Projects

This section would modify the authority provided by section 2301 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) and authorize the Secretary of the Air Force to make certain modifications to the scope and authorized cost of previously authorized construction projects.

Section 2306—Modification of Authority to Carry Out Certain Fiscal Year 2020 Projects

This section would modify the authority provided by section 2301 of the Military Construction Authorization Act for Fiscal Year 2020 (division B of Public Law 116–92) and authorize the Secretary of the Air Force to make certain modifications to the scope and authorized cost of previously authorized construction projects.

Section 2307—Technical Corrections Related to Authority to Carry Out Certain Fiscal Year 2020 Family Housing Projects

This section would make technical corrections to section 2304(a) of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) relating to the authority to carry out a certain family housing project.

TITLE XXIV—DEFENSE AGENCIES MILITARY CONSTRUCTION

SUMMARY

The budget request contained $2,027,520,000 for defense agency military construction and $61,225,000 for family housing for fiscal year 2021. The committee recommends authorization of appropriations of $2,073,760,000 for military construction and $61,225,000 for family housing for defense agencies in fiscal year 2021.

ITEMS OF SPECIAL INTEREST

Explanation of Funding Adjustments

The committee recommends the inclusion for projects requested by the Department of Defense but not contained in the budget request for military construction and family housing. This increase is as follows:

(1) $35.0 million for an Intelligence Facility Central Utility Plant at Wright-Patterson Air Force Base, Ohio;

(2) $25.2 million for PV Carports at Joint Base Anacostia-Bolling, District of Columbia;

(3) $24.0 million for 10MW Generation & Microgrid at Fort Rucker, Alabama;

(4) $17.0 million for 4.8MW Generation & Microgrid at Fort Benning, Georgia;

(5) $13.8 million for NSAB–16 Replace Chillers 3 Through 9 at Naval Support Activity Bethesda, Maryland;

(6) $8.9 million for a Solar Energy Storage System at Naval Air Weapons Station China Lake, California;

(7) $8.7 million for Industrial Control System Modernization at Joint Base Anacostia-Bolling, District of Columbia;

(8) $6.1 million for SOTF Chilled Water Upgrades at Fort Bragg, North Carolina;

(9) $4.7 million for PV Arrays and Battery Storage at Memphis, Tennessee;

(10) $2.6 million for PV Arrays and Battery Storage at Fort Smith, Arkansas.

In addition, the committee recommends an authorization of appropriation of $24.2 million for planning and design activities associated with the Energy Resilience and Conservation Investment Program (ERCIP), an increase of $10.0 million, to support the continued development of projects that improve military installation utility resiliency and efficiency.

Finally, the committee recommends a reduction of funding for projects contained in the budget request submitted by the Department of Defense for military construction. These reductions are:

(1) $80.0 million for the Medical Center Addition/Alteration at Bethesda Naval Hospital, Maryland. The committee supports the requirement for this project and provided the full project authorization of $510.0 million included in the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328). However, the committee supports the authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee believes that the Department of Defense cannot fully expend the requested funding in fiscal year 2021. Therefore, the committee recommends an authorization of appropriation of $100.0 million, a reduction of $80.0 million, for this project; and

(2) $30.0 million for Kinnick High School at Yokosuka, Japan. The committee supports the requirement for this project and provided the full project authorization of $170.3 million in the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232). However, the committee notes that the Department of Defense has yet to award a contract for this project or expend previously authorized and appropriated funds for this project. The committee supports an authorization of appropriations in an amount equivalent to the ability of the Department to execute in the year of the authorization for appropriations. For this project, the committee believes that the Department of Defense cannot expend the requested funding in fiscal year 2021. Therefore, the committee recommends no funds, a reduction of $30.0 million, for this project.

LEGISLATIVE PROVISIONS

Section 2401—Authorized Defense Agencies Construction and Land Acquisition Projects

This section would contain a list of authorized defense agencies construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2402—Authorized Energy Resilience and Conservation Investment Program Projects

This section would contain a list of authorized energy resilience and conservation projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2403—Authorization of Appropriations, Defense Agencies

This section would authorize appropriations for defense agencies' military construction at the levels identified in section 4601 of division D of this Act.

Section 2404—Military Construction Infrastructure and Weapon System Synchronization for Ground Based Strategic Deterrent

This section provides for effective oversight of the military construction associated with the Ground Based Strategic Deterrent Program.

TITLE XXV—INTERNATIONAL PROGRAMS

SUMMARY

The budget request contained $173,030,000 for the North Atlantic Treaty Organization Security Investment Program (NSIP) for fiscal year 2021. The committee recommends authorization of appropriations of $173,030,000 for NSIP for fiscal year 2021.

LEGISLATIVE PROVISIONS

SUBTITLE A—NORTH ATLANTIC TREATY ORGANIZATION SECURITY INVESTMENT PROGRAM

Section 2501—Authorized NATO Construction and Land Acquisition Projects

This section would authorize the Secretary of Defense to make contributions to the North Atlantic Treaty Organization Security Investment Program in an amount not to exceed the sum of the amount specifically authorized in section 2502 of this Act and the amount collected from the North Atlantic Treaty Organization as a result of construction previously financed by the United States.

Section 2502—Authorization of Appropriations, NATO

This section would authorize appropriations for the North Atlantic Treaty Organization Security Investment Program at the levels identified in section 4601 of division D of this Act.

SUBTITLE B—HOST COUNTRY IN-KIND CONTRIBUTIONS

Section 2511—Republic of Korea Funded Construction Projects

This section would authorize the Secretary of Defense to accept 10 military construction projects totaling $416.0 million pursuant to agreement with the Republic of Korea for required in-kind contributions.

Section 2512—State of Qatar Funded Construction Projects

This section would authorize the Secretary of Defense to accept 15 military construction projects totaling $1.324 billion pursuant to an agreement with the State of Qatar for required in-kind contributions.

TITLE XXVI—GUARD AND RESERVE FORCES FACILITIES

SUMMARY

The budget request contained $568,100,000 for military construction of National Guard and Reserve facilities for fiscal year 2021. The committee recommends authorization of appropriations of $586,335,000 for military construction for the National Guard and Reserves for fiscal year 2021.

ITEMS OF SPECIAL INTEREST

Explanation of Funding Adjustments

The committee recommends the inclusion of funding for two projects requested by the Department of the Army for the Reserve Components but not contained in the budget request for military construction and family housing. These increases include:

(1) $2.5 million for a Transient Trainee Barracks at Fort McCoy, Wisconsin; and

(2) $15.7 million for an Enlisted Transient Trainee Barracks at Hermiston National Guard Armory, Oregon.

Disposition of Building 158 at Joint Base Cape Cod

The Committee is aware of the efforts being undertaken by the Commonwealth of Massachusetts and various stakeholders, including academia, various private sector firms, and public entities in the region to support a range of requirements for the Department of Defense. In particular, the Committee is aware of the value of harnessing this region's innovation and industries supporting the maritime sector. The Committee is encouraged by the scope of research, development, testing and prototyping of unmanned underwater vehicles occurring in the region. Further, the Committee is aware of the potential value of utilizing building 158 on Joint Base Cape Cod to provide greater access to testing of these systems in a controlled environment. The Committee urges the Commonwealth of Massachusetts and the Air National Guard to continue their planning to leverage Building 158 in support of these opportunities. The Committee directs the Director, Air National Guard to report to the congressional defense committees by December 1, 2020 on the status of the discussions with the Commonwealth of Massachusetts and options for the disposition of building 158.

LEGISLATIVE PROVISIONS

Section 2601—Authorized Army National Guard Construction and Land Acquisition Projects

This section would contain the list of authorized Army National Guard construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2602—Authorized Army Reserve Construction and Land Acquisition Projects

This section would contain the list of authorized Army Reserve construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2603—Authorized Navy Reserve and Marine Corps Reserve Construction and Land Acquisition Projects

This section would contain the list of authorized Navy Reserve and Marine Corps Reserve construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2604—Authorized Air National Guard Construction and Land Acquisition Projects

This section would contain the list of authorized Air National Guard construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2605—Authorized Air Force Reserve Construction and Land Acquisition Projects

This section would contain the list of authorized Air Force Reserve construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The State list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2606—Authorization of Appropriations, National Guard and Reserve

This section would authorize appropriations for the National Guard and Reserve military construction at the levels identified in section 4601 of division D of this Act.

Section 2607—Modification of Authority to Carry Out Certain Fiscal Year 2020 Project

This section would modify the authority provided by section 2601 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) and authorize the Secretary of the Army to make certain modifications to the scope and authorized cost of a previously authorized construction project.

TITLE XXVII—BASE REALIGNMENT AND CLOSURE ACTIVITIES

SUMMARY

The budget request contained $300,447,000 for activities related to Base Realignment and Closure (BRAC) activities in fiscal year 2021. The committee recommends authorization of appropriations of $440,447,000 for BRAC activities in fiscal year 2021.

ITEMS OF SPECIAL INTEREST

Explanation of Funding Adjustments

The budget request submitted by the Department of Defense for activities related to Base Realignment and Closure (BRAC) included $300.4 million for activities related to recommendations from the previous BRAC rounds. The committee notes that additional resources may allow for the acceleration of certain activities and also allow the Department to address emerging contaminates such as perfluorooctane sulfonate and perfluorooctanoic acid. Therefore, the committee recommends an authorization of appropriations of $106.1 million, an increase of $40.0 million, for the Army Base Realignment and Closure activities and an authorization of appropriations of $225.2 million, an increase of $100.0 million, for the Navy Base Realignment and Closure activities in fiscal year 2021.

LEGISLATIVE PROVISIONS

Section 2701—Authorization of Appropriations for Base Realignment and Closure Activities Funded through Department of Defense Base Closure Account

This section would authorize appropriations for ongoing activities that are required to implement the base realignment and closure activities authorized by the Defense Base Closure and Realignment Act of 1990 (part A of title XXIX of Public Law 101–510), at the levels identified in section 4601 of division D of this Act.

TITLE XXVIII—MILITARY CONSTRUCTION GENERAL PROVISIONS

ITEMS OF SPECIAL INTEREST

Child Development Centers

The committee notes that availability of adequate childcare is a readiness enabler and key element in retention of service members. As such, the committee is concerned by the chronic underfunding of military construction and infrastructure improvements at the Department of Defense's Child Development Centers (CDCs). Accordingly, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by December 1, 2020, on the Department's CDCs, to include, at a minimum, the current condition rating of existing CDCs, plan through the future years defense plan for renovating or building new CDCs, and the

impact on readiness and retention of accepting risk in this CDC program. In addition, the report shall include a description of how the Department is measuring readiness impacts.

Construction in Support of Not-for-Profit Research and Development Entities

The committee notes there has been significant confusion within the military departments about the scope and applicability of the authority under section 2353 of title 10, United States Code. This is particularly apparent in cases where the government owns the land, but the facilities built on the land are being constructed or recapitalized by a not-for-profit research and development entity. The committee further notes that the crux of the confusion has been the interpretation of section 2353 of title 10, United States Code, that the acquisition or construction of facilities "shall be subject to the cost principles applicable to allowable contract expenses" in cases where the research and development entity that will undertake construction of new facilities is also a not-for-profit educational entity. The committee supports the recapitalization of the nation's research and development facilities, and strongly urges use of all available authorities to facilitate that recapitalization. Accordingly, the committee directs the Secretary of the Air Force to provide a report to the House Committee on Armed Services, not later than January 1, 2021, on the interpretation, scope, and applicability of section 2353 of title 10, United States Code. The report shall include at a minimum the following:

(1) the Air Force's interpretation of section 2353 of title 10, United States Code, and its applicability to contractor construction on leased land belonging to a military installation;

(2) the Air Force's interpretation as to whether a construction undertaken pursuant to section 2353 of title 10, United States Code, may be funding by a Special Use Allowance under Defense Federal Acquisition Regulation Supplement 235.015–70;

(3) an interpretation as to whether a construction undertaken pursuant to section 2353 of title 10, United States Code, may be subject to the cost principles applicable to allowable contract expenses when the contractor construction is contractor-leased land, regardless of whether the lessor is a military department;

(4) an interpretation of what is considered to be acquisition or construction that is necessary for the performance of a research contract at locations not owned by the United States and what the necessary contract clauses are that would adequately protect the interest of the United States in such facilities; and

(5) if the Air Force's position does not support (1), (2), and (3), an alternative plan to facilitate recapitalization at research and development facilities or required legislative changes to support these interpretations.

Mobilization Infrastructure Investments

The committee recognizes that Army installations serving as the nation's primary power projection platforms require substantial infrastructure investment to ensure they remain viable to mobilize forces for overseas contingency operations. During deployment and redeployment activities, significant resources and infrastructure

are necessary to store, load, and deploy a brigade combat team-sized organization. Rail infrastructure, in particular, requires forward-thinking investment. Accordingly, the committee encourages the Department of Defense to prioritize mobilization infrastructure to ensure the Army retains its ability to efficiently mobilize.

Ocean Thermal Energy Conversion and Seawater Air Conditioning Projects on Installations in the Pacific

The committee notes that technologies including Ocean Thermal Energy Conversion and Seawater Air Conditioning systems have the potential to harness thermal gradients in tropical ocean areas to produce electricity. The committee commends the Department of Defense for making early investments in these technologies as potential resilient energy sources for military installations. Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a report to the House Committee on Armed Services by December 1, 2020, on the status of these projects. The report shall include, at a minimum, information on completed, ongoing, and planned projects and an assessment of the feasibility of these technologies for use as a resilient energy source on military installations.

Oversight of Environmental Hazards at Government-Owned Family Housing

The committee remains concerned about the quality of military housing available to service members and their families. The committee notes that while the small percentage of military family housing that remains government-owned has not received the same scrutiny as those under the military housing privatization initiative, the same requirements apply. The committee is particularly concerned with ensuring that government-owned military family housing be free of environmental hazards and that families are adequately notified of potential hazards upon move-in. Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a report to the House Committee on Armed Services, not later than December 1, 2020, on the government housing inventory. The report shall contain at a minimum the following:

(1) a listing of the homes in the government inventory with lead, radon, or asbestos;

(2) the mitigation actions in place in those homes to ensure they are safe and habitable;

(3) what instructions are given to parents to ensure that lead encapsulation seal remains protective of human health for homes containing encapsulated lead-based paint;

(4) the notification process to families regarding potential hazards;

(5) the options and process for families to refuse homes containing such hazards in an overseas environment; and

(6) oversight measures undertaken by the military service who owns the housing to ensure safety.

Progress Report on Implementation of Installation Resilience Measures Related to Extreme Weather

The committee notes the January 2019 submission of the report required by the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) concerning Department of Defense installation resilience to extreme weather. The committee commends the Department for unequivocally stating that the majority of the installations assessed in the report are vulnerable to the effects of extreme weather. The committee notes that newer infrastructure that had been built or renovated to modern building standards generally fared better during Hurricanes Florence and Michael. However, the committee remains concerned that the military departments continue to take considerable risk in their facilities sustainment, restoration, and modernization accounts, which further exacerbates a maintenance backlog that contributed to the billions of dollars in damage from extreme weather in 2018 and 2019.

The committee notes that the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92) required the Department of Defense to take several actions including master planning for resiliency and amending the Unified Facilities Criteria to promote installation resiliency. Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a report to the House Committee on Armed Services by November 30, 2020, on their implementation of these provisions, and their plan across the Future Years Defense Program to buy down the maintenance backlog and lower risk. In addition, the report shall also include an update on efforts to close energy resilience gaps at installations with defense critical electric infrastructure, including analysis of the business case for installing resilient electrical infrastructure such as alternatives to wood utility poles.

Soo Locks, Sault Ste. Marie, Michigan

The committee understands that the Soo Locks on the St. Marys River at Sault Ste. Marie, Michigan, are the only waterway connection from Lake Superior to the rest of the Lower Great Lakes and the St. Lawrence Seaway. The committee believes that a failure at the Soo Locks would have a significant impact on national security, in that the U.S. iron mining-integrated steel production-manufacturing supply chain is dependent on the Soo Locks. The committee remains concerned that without redundancy, an unexpected outage at the Soo Locks could cripple steel production that is used for national defense priorities. Therefore, the committee supports a second 1,200-foot lock and believes that such a lock is necessary to maintain redundancy and resiliency at the Soo Locks and further protects our national defense priorities.

Standardization of Metrics Used to Evaluate Privatized Military Family Housing

The committee remains concerned that the Department of Defense has numerous challenges that inhibit its effort to accurately evaluate the quality of the privatized military family housing projects it oversees. The committee notes that given the number and diversity of the projects, it can be particularly difficult to extrapolate trends from the data. Accordingly, the committee directs

the Under Secretary of Defense for Acquisition and Sustainment to provide a report to the House Committee on Armed Services by December 1, 2020, on standardization of metrics to evaluate privatized military family housing, or MHPI, projects. The report shall include at a minimum the following:

(1) an assessment of current barriers to analyzing MHPI housing performance;

(2) an assessment of the current degree of standardization of MHPI performance metrics;

(3) the degree to which the Department is implementing solutions to address Government Accountability Office findings and recommendations related to oversight of MHPI housing in the report entitled "Military Housing Privatization: Preliminary Observations on DOD's Oversight of the Conditions of Privatized Military Housing" (GAO–20–280T); and

(4) an assessment of the feasibility of standardizing performance evaluation criteria across all MHPI projects and the steps required to implement such standardization.

TRLIA 200-Year Goldfields Levee Project Acquisition of Easement from Beale Air Force Base

The Committee is aware that the Three Rivers Levee Improvement Authority (TRLIA) is working to complete a Congressionally authorized flood control project, the Yuba Goldfields 200-year Flood Protection Project, authorized in the Water Resources Development Act of 2018 (Public Law 115–270). The committee notes that to begin construction of this project, the Authority must first obtain an easement from the U.S. Air Force (USAF) for approximately 0.2 acres of adjacent property at Beale Air Force Base (AFB). The committee further notes, that despite TRLIA's efforts beginning in Fall of 2018 to obtain this easement from the USAF for the purpose of constructing, operating, and maintaining this life-safety project, the USAF has yet to finalize the easement or provide a timeline for completion of the process. The committee is concerned that as a result of this delay, TRLIA is incurring unnecessary additional costs and life-saving flood reduction is being delayed. The committee notes that in order to mitigate risk during the next flood season, TRLIA needs the necessary rights no later than August 1, 2020. The committee encourages the expeditious resolution of this matter and the promulgation of procedural guidance for streamlining the process by which easements are resolved. Accordingly, the Committee directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services no later than August 1, 2020 on the resolution of the easement sought by the Three Rivers Levee Improvement Authority and its efforts to streamline the process by which easement requests are adjudicated.

LEGISLATIVE PROVISIONS

SUBTITLE A—MILITARY CONSTRUCTION PROGRAM CHANGES

Section 2801—Modification and Clarification of Construction Authority in the Event of a Declaration of War or National Emergency

This section would modify and clarify the use of military construction authorities available in the event of a declaration of war or national emergency.

Section 2802—Extension of Sunset for Annual Locality Adjustment of Dollar Thresholds Applicable to Unspecified Minor Military Construction Authorities

This section would extend the sunset date for annual locality adjustments applicable to unspecified minor military construction projects until fiscal year 2027.

Section 2803—Modification of Reporting Requirement regarding Cost Increases Associated with Certain Military Construction Projects and Military Family Housing Projects

This section would remove the requirement to provide reports on cost increases associated with certain military construction projects and military family housing projects to the Comptroller General of the United States.

Section 2804—Expansion of Department of Defense Land Exchange Authority

This section would allow consideration of installation support services in the calculation of fair market value in certain Department of Defense land exchanges.

Section 2805—Congressional Project Authorization Required for Military Construction Projects for Energy Resilience, Energy Security, and Energy Conservation

This section would require Energy Resilience, Energy Security, and Energy Conservation Program (ERCIP) projects to be line-item authorized.

Section 2806—One-Year Extension of Temporary, Limited Authority to Use Operation and Maintenance Funds for Construction Projects in Certain Areas outside the United States

This section would extend Contingency Construction Authority for one year.

Section 2807—Pilot Program to Support Combatant Command Military Construction Priorities

This section would require the Secretary of Defense to conduct a pilot program that would evaluate the usefulness of allocating 10 percent of military department military construction funds to satisfy combatant command military construction requirements.

Section 2808—Biannual Report regarding Military Installations Supported by Disaster Relief Appropriations

This section would require biannual reports by the Secretary of the Air Force and the Secretary of the Navy about disaster relief progress at certain locations.

SUBTITLE B—MILITARY FAMILY HOUSING REFORMS

Section 2811—Expenditure Priorities in Using Department of Defense Family Housing Improvement Fund

This section would amend section 2883 of title 10, United States Code, by increasing the priority of funding to Military Housing Privatization Initiative recapitalization accounts and ensuring that private partners are not paid first when they mismanage projects at the expense of the reinvestment accounts. This section shall apply only to legal documents entered into or renewed on or after the date of the enactment of this Act.

Section 2812—Promulgation of Guidance to Facilitate Return of Military Families Displaced from Privatized Military Housing

This section would require the Secretary of Defense to promulgate guidance for facilitating and managing the return of tenants of privatized military family housing who have been displaced from their homes.

Section 2813—Promulgation of Guidance on Mold Mitigation in Privatized Military Housing

This section would require the Secretary of Defense to establish a working group composed of the Surgeons General of the Armed Forces to develop guidance on best practices for mold mitigation in privatized military family housing.

Section 2814—Expansion of Uniform Code of Basic Standards for Privatized Military Housing and Hazard and Habitability Inspection and Assessment Requirements to Government-Owned and Government-Controlled Military Family Housing

This section would require the Secretary of Defense to apply the uniform code of basic housing standards for safety, comfort, and habitability for privatized military housing to government-owned and government-controlled military family housing.

Section 2815—Establishment of Exceptional Family Member Program Housing Liaison

This section would require each military department to appoint at least one Exceptional Family Member Program housing liaison.

Section 2816—Department of Defense Report on Criteria and Metrics Used to Evaluate Performance of Landlords of Privatized Military Housing That Receive Incentive Fees

This section would require the Department of Defense to submit a report on the criteria and metrics it is using to assess landlord performance in privatized military family housing.

Section 2817—Report on Department of Defense Efforts regarding Oversight and Role in Management of Privatized Military Housing This section would require the Secretary of Defense to submit a report within 180 days of the date of the enactment of this Act on its progress in implementing the recommendations contained in the Comptroller General's report GAO–20–281 dated March 2020.

SUBTITLE C—REAL PROPERTY AND FACILITIES ADMINISTRATION

Section 2821—Codification of Reporting Requirements regarding United States Overseas Military Enduring Locations and Contingency Locations

This section would amend section 2687a of title 10, United States Code, to update an annual reporting requirement regarding the overseas basing and posture of the United States Armed Forces.

Section 2822—Limitations on Renewal of Utility Privatization Contracts

This section would amend section 2688 of title 10, United States Code, to limit renewal of utility privatization contracts to the last 5 years of the existing contract term.

Section 2823—Vesting Exercise of Discretion with Service Secretaries regarding Entering into Longer-Term Contracts for Utility Services

This section would modify section 2688 of title 10, United States Code, to allow military departments to enter into utilities privatization contracts under certain circumstances.

Section 2824—Use of On-Site Energy Production to Promote Military Installation Energy Resilience and Energy Security

This section would require the Secretary of Defense to carry out at least four energy projects for the purpose of promoting certain energy resilience and energy security goals.

Section 2825—Availability of Energy Resilience and Conservation Investment Program Funds for Certain Activities Related to Privatized Utility Systems

This section would amend section 2914 of title 10, United States Code, to clarify that Energy Resilience and Conservation Investment Program funding may be used at military installations with privatized utilities.

Section 2826—Improving Water Management and Security on Military Installations

This section would require installations in the most water constrained environment to conduct water security assessments and to consider water scarcity in their grounds-keeping.

Section 2827—Pilot Program to Test Use of Emergency Diesel Generators in a Microgrid Configuration at Certain Military Installations

This section would allow the Secretary of Defense to create an emergency diesel generator microgrid pilot program to test assumptions about increased efficiency, resiliency, and lowered cost and emissions.

Section 2828—Improved Electrical Metering of Department of Defense Infrastructure Supporting Critical Missions

This section would require the Department of Defense to improve its electrical metering of infrastructure supporting critical missions.

Section 2829—Renaming Certain Military Installations and Other Defense Property

This section would require the Secretary of Defense and the Secretaries of the military departments to identify and rename certain military installations and other defense property within one-year.

SUBTITLE D—LAND CONVEYANCES

Section 2831—Land Conveyance, Camp Navajo, Arizona

This section would authorize the Secretary of the Army to convey not more than 3,000 acres at Camp Navajo, Arizona to the State of Arizona Department of Emergency and Military Affairs.

Section 2832—Modification of Land Exchange Involving Naval Industrial Reserve Ordnance Plant, Sunnyvale, California

This section modifies section 2841(a) of the Military Construction Authorization Act for Fiscal Year 2018 (Public Law 115–91)

Section 2833—Land Conveyance, Sharpe Army Depot, Lathrop, California

This section would authorize the Secretary of the Army to convey 525 acres at Sharpe Army Depot to the Port of Stockton, California.

Section 2834—Land Exchange, San Bernardino County, California

This section would authorize a land exchange between the County of San Bernardino, California and the Department of Agriculture.

Section 2835—Land Conveyance, Over-the-Horizon Backscatter Radar System Receiving Station, Modoc County, California

This section would authorize the Secretary of Agriculture to convey 927 acres in Modoc National Forest containing an obsolete Over-the-Horizon Backscatter Radar System receiving station to Modoc County, California.

Section 2836—Transfer of Administrative Jurisdiction, Naval Support Activity Panama City, Florida, Parcel

This section would transfer a parcel of inholdings within the boundary of Naval Support Activity Panama City, Florida, from the Department of Interior to the Department of the Navy.

SUBTITLE E—MILITARY LAND WITHDRAWALS

Section 2841—Renewal of Land Withdrawal and Reservation to Benefit Naval Air Facility, El Centro, California

This section would renew the land withdrawal and reservation for the benefit of Naval Air Facility El Centro, California, for a period of 25 years.

Section 2842—Renewal of Fallon Range Training Complex Land Withdrawal and Reservation

This section would renew the existing land withdrawal and reservation for the Fallon Range Training Complex for a period of 25 years.

Section 2843—Renewal of Nevada Test and Training Range Land Withdrawal and Reservation

This section would renew the existing Nevada Testing and Training Range land withdrawal and reservation for a period of 25 years.

Section 2844—Co-Management, New Memorandum of Understanding, and Additional Requirements regarding Nevada Test and Training Range

This section would require the Secretary of the Interior and the Secretary of the Air Force to co-manage the Nevada Test and Training Range lands, and enter into a memorandum of understanding setting out proper management of natural and cultural resources, consultation and access requirements for affected Indian Tribes and refuge management personnel, and a dispute resolution process.

Section 2845—Specified Duration of White Sands Missile Range Land Withdrawal and Reservation and Establishment of Special Reservation Area for Northern and Western Extension Areas

This section would renew the land and airspace withdrawals for White Sands Missile Range and its call-up areas for a period of 25 years as well as make technical changes to the airspace withdrawal.

SUBTITLE F—ASIA–PACIFIC AND INDO–PACIFIC ISSUES

Section 2851—Change to Biennial Reporting Requirement for Interagency Coordination Group of Inspectors General for Guam Realignment

This section would modify section 2835 of the Military Construction Authorization Act for Fiscal Year 2010 (division B of Public

Law 111–84) and reduce the reporting requirement for the Interagency Coordination Group of Inspectors General for Guam Realignment from an annual to a biennial report.

Section 2852—Additional Exception to Restriction on Development of Public Infrastructure in Connection with Realignment of Marine Corps Forces in Asia-Pacific Region

This section would authorize a public infrastructure project on Guam intended to provide a public health laboratory, as identified in the "Economic Adjustment Committee Implementation Plan Supporting the Preferred Alternative for the Relocation of Marine Corps Forces to Guam."

Section 2853—Development of Master Plan for Infrastructure to Support Rotational Armed Forces in Australia

This section would require the Secretary of Defense, in consultation with the Commander, U.S. Indo-Pacific Command and the military services, to submit a report to the congressional defense committees on the infrastructure investments required to support the United States Force Posture Initiatives and other activities to promote regional security and stability with Australia.

Section 2854—Study and Strategy regarding Bulk Fuels Management in United States Indo-Pacific Command Area of Responsibility

This section would provide the sense of Congress that a single organizational element should be responsible for the bulk fuel management and delivery throughout the United States Indo-Pacific Command area of responsibility. Additionally, this section would require a report, not later than 1 year after the date of the enactment of this Act, to the congressional defense committees as to an assessment of current assets and a projection of future fuel management strategies necessary to optimally support bulk fuel management.

SUBTITLE G—OTHER MATTERS

Section 2861—Defense Community Infrastructure Program

This section would amend section 2391 of title 10, United States Code, to clarify requirements of the Defense Community Infrastructure Program.

Section 2862—Pilot Program on Reduction of Effects of Military Aviation Noise on Certain Covered Property

This section would create a pilot program that allows the Secretary of Defense to provide funds for the purpose of installing noise insulation on private residences, hospitals, facilities for senior citizens, daycare facilities, and schools impacted by aviation noise from military installations.

Section 2863—Department of Defense Policy for Regulation of Dangerous Dogs in Military Communities

This section would require Secretary of Defense to establish a standardized policy for the regulation of dangerous dogs in military communities.

TITLE XXIX—OVERSEAS CONTINGENCY OPERATIONS MILITARY CONSTRUCTION

SUMMARY

The budget request contained $349,762,000 for Overseas Contingency Operations military construction for fiscal year 2021. The committee recommends authorization of appropriations of $349,762,000 for Overseas Contingency Operations military construction for fiscal year 2021.

LEGISLATIVE PROVISIONS

Section 2901—Authorized Navy Construction and Land Acquisition Projects

This section would contain the list of authorized Department of Navy construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The country list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2902—Authorized Air Force Construction and Land Acquisition Projects

This section would contain the list of certain authorized Air Force construction projects for fiscal year 2021. The authorized amounts are listed on an installation-by-installation basis. The country list contained in this Act is intended to be the binding list of the specific projects authorized at each location.

Section 2903—Authorization of Appropriations

This section would authorize appropriations for Overseas Contingency Operations military construction at the levels identified in section 4602 of division D.

DIVISION C—DEPARTMENT OF ENERGY NATIONAL SECURITY AUTHORIZATIONS AND OTHER AUTHORIZATIONS

TITLE XXXI—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

ITEMS OF SPECIAL INTEREST

NATIONAL NUCLEAR SECURITY ADMINISTRATION

Weapons Activities

Comptroller General review of construction and infrastructure recapitalization projects

The committee notes that the National Nuclear Security Administration (NNSA) is undertaking an unprecedented number of line item construction and infrastructure recapitalization efforts as part of its nuclear modernization plans. The committee believes that NNSA's past record makes close oversight of such projects essential to ensure that performance issues, such as schedule slips, scope changes, or cost overruns, are closely monitored and that the committee has independent knowledge of project progress. As a result, the committee directs the Comptroller General of the United States to review NNSA's portfolio of construction and infrastructure recapitalization efforts with particular attention to cost and schedule performance and project scope. The Comptroller General should prioritize its review of projects with a total cost in excess of $100.0 million.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by September 30, 2020, on the Comptroller General's preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

Comptroller General review of laboratory-, plant-, and site-directed research and development for nuclear weapons production improvement

The National Nuclear Security Administration (NNSA) sites devote a portion of their research efforts to creative and innovative work to maintain their vitality in disciplines relevant to their national security missions. NNSA states that these efforts are vital in attracting scientists, engineers and technicians to its sites. These efforts include Laboratory and Plant-Directed Research and Development (LDRD and PDRD, respectively; or directed R&D, collectively). LDRD funding may comprise up to 6 percent of laboratories' budgets and PDRD funding may comprise up to 4 percent of other sites' budgets. Collectively, NNSA's laboratories, two of which have production functions, budget about $300 million annually to be spent on LDRD; NNSA's plants and its Nevada National Security Site collectively budget about $160 million annually to be spent on PDRD.

NNSA is currently in the midst of a massive effort to modernize its nuclear weapons and related facilities. In doing so, NNSA is

working to restart mothballed or discontinued fabrication and production processes that may be inefficient, unsafe, and/or obsolete. Over the past decade, NNSA has relied on LDRD and PDRD to explore more up-to-date alternatives to its legacy fabrication and manufacturing processes.

Given the many demands placed on NNSA's production sites and its laboratory-based production functions, the committee wants to ensure that NNSA's research into improved technology and manufacturing is efficiently funded. Accordingly, the committee directs the Comptroller General of the United States to undertake a review of NNSA's PDRD, the manufacturing-related portions of LDRD, and the relationship of these funds to NNSA's weapons technology and manufacturing maturation program. This review should include:

(1) recent PDRD and manufacturing related LDRD projects and funding at NNSA's sites;

(2) the process used to vet and select projects for directed R&D purposes; and

(3) the determining factors for use of directed R&D, weapons technology and manufacturing program funding, or weapon modernization program funding to develop and mature technology and manufacturing efforts.

The Comptroller General shall deliver a preliminary briefing to the House Committee on Armed Services not later than November 1, 2020, and to submit a final report on a date agreed to at the time of the briefing.

Cooperative Audit Strategy

The committee notes that the Department of Energy established the Cooperative Audit Strategy in 1992 to maximize the overall audit coverage at management and operating (M&O) contractors and fulfill its responsibility for auditing the costs incurred by the Department's major facilities contractors. For its M&O contracts, the Department does not use an independent third party to audit contractors' costs and ensure that invoiced costs are allowable under the contract. Instead, the M&O contractors' internal audit organization is responsible for performing operational and financial audits, assessing the adequacy of management control systems, and conducting an audit of the M&O contractors' incurred cost statements. Each year the Department of Energy's Office of the Inspector General (OIG) performs an assessment of incurred cost statements for the ten M&O contractors that incurred and claimed the most costs that year. For the remaining M&O contractors, the OIG performs assessments based on risk. If not considered high-risk, the OIG assesses the contractor at least once every four years. The Comptroller General has raised concerns about the timeliness and completeness of these audits. The committee is also concerned about whether the Cooperative Audit Strategy is rigorous enough for the tens of billions of dollars the Department of Energy spends on these contracts annually. Therefore, to address these and other concerns, the committee directs the Administrator of the National Nuclear Security Administration to submit a report to House Committee on Armed Services not later than February 28, 2021, reviewing the Cooperative Audit Strategy. At a minimum, the report should include:

(1) a plan to independently audit each M&O contractor at least every 3 years;
(2) resources and timelines required to implement such a plan; and,
(3) the challenges and benefits of implementing such a plan.

Establishment of an industrial base analysis capability

The committee notes that over time, globalization and consolidation of the U.S. defense industrial base have reduced competition and made it more common to rely on sole suppliers for certain subsystems, components, and materials needed to meet U.S. national security objectives. Unlike the Department of Defense, the National Nuclear Security Administration (NNSA) does not comprehensively monitor and report on the health of the industrial base supporting its national security activities or identify specific industrial base risks to address strategically. The committee is concerned that, with NNSA in the midst of the most extensive nuclear modernization since the Cold War, there are troubling similarities between the industrial bases and supply chains of the Department of Defense and NNSA. According to NNSA, its difficulties in maintaining a viable industrial base and secure supply chain stem from the small quantities of parts and materials NNSA procures, the irregular nature of NNSA's procurements, intense foreign competition, and the agency's exacting performance requirements for nuclear weapons. While various NNSA programs and contractors are monitoring select parts of NNSA's industrial base and supply chain, in 2018 the Department of Energy's Inspector General found that these efforts were potentially fragmented or duplicative. Therefore, the committee directs the Administrator of the National Nuclear Security Administration to provide a report to the congressional defense committees not later than February 1, 2021, detailing a plan to consistently and strategically monitor its industrial base as pertains to nuclear weapon components, subsystems, and materials to determine how this capability should perform its functions and what ongoing resources it will need to be successful. The committee further directs the Administrator to provide a preliminary briefing to House Committee on Armed Services not later than August 1, 2020, on achieving this capability.

Leasing Authority for National Nuclear Security Administration and Management and Operating Contractors

The committee urges the National Nuclear Security Administration (NNSA) to adopt an interpretation of leasing authorities aligned with Government Services Administration (GSA) authorities contained in 40 U.S.C. § 356 and § 585 and similar to those applied to Department of Energy Office of Science laboratories such that the NNSA Administrator may enter into a lease agreement or authorize a Management and Operating Contractor of the NNSA to enter into a lease agreement with any person for the accommodation of the Administration in a building (or improvement), to be used by the Administration as offices, warehouses, light laboratory use or other similar use, without regard to whether the building exists or is being constructed by the lessor. The committee encourages the NNSA to consider cost savings and long term costs when considering such authorizes. Therefore, the committee directs the

mittee directs the NNSA Administrator to provide a briefing to the House Committee on Armed Services no later than November 1, 2020 on the NNSA interpretation of leasing authorities.

Stockpile Responsiveness

The committee notes the value that the Department of Defense and Department of Energy attach to the Stockpile Responsiveness program. However, the committee also notes that the program has been insufficiently focused on the overriding challenge of the nuclear enterprise: production. As the complex transitions from a maintenance and sustainment focus to a production focus over the next decade, the committee encourages the Secretary of Defense and the Administrator of the National Nuclear Security Administration to focus some resources and effort toward reducing cost, risk, and difficulty of manufacturing and producing nuclear weapons. While the National Nuclear Security Administration maintains significant funding for production modernization and technology maturation, this funding is primarily focused on achieving specific tail number missions.

Therefore, the committee directs the Administrator of the National Nuclear Security Administration, in consultation with the Secretary of Defense, to provide a briefing to the House Committee on Armed Services by August 1, 2020, on plans to leverage the Stockpile Responsiveness program to increase the responsiveness of the production complex.

Stockpile stewardship

Testifying before the committee in March 2020, the Administrator of the National Nuclear Security Administration noted that the "science-based stockpile stewardship program [SSP] supported certifying to the President for the 24th consecutive year that the U.S. nuclear weapons stockpile remains safe, secure, and reliable without the need for nuclear explosive testing." In its 25th year, SSP has been a key success of the National Nuclear Security Administration (NNSA) that continues to yield vital national security benefits to the United States. The next 25 years of SSP must continue that success. As the NNSA begins to transition the complex's focus toward production, the importance of SSP will only increase. In particular, the future certification of W87–1 warhead is reliant on the continued success of SSP. Therefore, the committee encourages the Administrator to ensure its continued success by prioritizing efforts to bolster the stockpile stewardship program and by ensuring design decisions made with regard to future life extension programs will achieve certification.

W93 warhead program

The committee notes that the Department of Defense and Department of Energy are proposing to begin work on a warhead program, previously called the Next Navy Warhead, now called the W93. The committee has received unclassified and classified testimony with regard to the details of this warhead, and why the National Nuclear Security Administration is developing it earlier than planned. However, the committee notes that important details about this program are classified, unlike all other life-extension programs. Key benchmarks by which the committee measures and

oversees program performance, need, and schedule, such as first production unit, are classified. The committee encourages both the Department of Defense and Department of Energy to consider updating and altering such guidance, while protecting national security and the national security information of our allies, to ensure that Congress and the public can have an informed debate with regard to the nation's approach to nuclear deterrence. The committee further encourages the Department of Defense and Department of Energy to more fully explain the rationale, need, and requirements of this warhead in greater depth.

Defense Nuclear Nonproliferation

Comptroller General review of safeguards

The committee notes the importance of maintaining a robust and capable safeguards program at International Atomic Energy Agency (IAEA). In implementing its safeguards mission, IAEA faces a number of continuing and emerging challenges that could further burden or dilute the safeguards program's resources. These include the continued expansion of nuclear power worldwide, growth in nuclear material stockpiles, the development of new advanced reactors concepts that will utilize new fuel types and technologies, and the potential emergence of new nuclear fuel reprocessing programs in Asia. Additionally, IAEA could be asked to monitor and verify any potential future denuclearization initiative with North Korea and possibly intensify inspections of Iran's nuclear program.

The Department of Energy provides vital assistance to the IAEA in developing its safeguards approaches, staff and expertise, technologies, and other resources. Many of these efforts are led by National Nuclear Security Administration's (NNSA) Office of Defense Nuclear Nonproliferation.

The committee therefore directs the Comptroller General of the United States to conduct a review of the assistance provided by the Department of Energy and NNSA to the IAEA's safeguards programs, and other U.S. agencies' contributions as appropriate. Specifically, the committee expects GAO's review to provide information on:

(1) the lessons NNSA has learned from IAEA inspections in Iran and what other key challenges it has identified to its safeguards mission over the next decade,

(2) the various forms and sources of assistance provided to IAEA safeguards by the Department of Energy;

(3) how NNSA assistance is coordinated with or augmented by other relevant agencies;

(4) how NNSA prioritize IAEA requests for assistance; and

(5) how effective has assistance provided by the Department of Energy, NNSA, and other agencies been in strengthening safeguards approaches, technologies, staff, and other resources, and where are the continuing gaps or issues of concern.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by January 30, 2021, on the Comptroller General's preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

Incident at Harborview Research and Training Facility

The committee notes the release of the Joint Investigation Report on the breach of the sealed source and resultant contamination of personnel, observers, the Harborview Research and Training Facility and local environment that occurred in May 2019. The report concluded that "[t]his event was preventable. It was the result of weak and partially implemented processes within the Department of Energy, Triad, and INIS." The committee notes the National Nuclear Security Administration's (NNSA) efforts to understand the causes of this incident and to ensure that any and all remediation necessary is completed in a safe and timely manner, and the committee emphasizes the need and to improve oversight and accountability at the subcontractor, contractor, and Federal levels.

Therefore, the committee directs the Administrator of the National Nuclear Security Administration to provide a briefing to the House Committee on Armed Services not later than October 30, 2020, on the report and remediation activities. The briefing shall include the following elements:

(1) NNSA's efforts and progress in implementing findings and recommendations of the report;

(2) status of remediation efforts and timelines for completion;

(3) total costs expected to complete remediation;

(4) any actions taken to ensure accountability for the incident at the subcontractor, contractor, and Federal levels, and any barriers to doing so; and

(5) any other lessons learned to reduce the risk of another incident, and to improve safety and emergency planning.

Federal Salaries and Expenses

Financial Integration

The committee recognizes the National Nuclear Security Administration's (NNSA) progress in implementing financial integration across the nuclear security enterprise. Based on recent Government Accountability Office (GAO) reports, it appears that NNSA is making progress in implementing a common work breakdown structure. The committee continues to believe that it is important for NNSA to fully implement a common work breakdown structure that includes infrastructure costs so NNSA and the committee can better understand the total costs of NNSA's programs.

Environmental and Other Defense Activities

Defense Environmental Cleanup

Comptroller General review of Environmental Management

The committee notes that having strong leadership and a strategic long-term plan will be key to the Department of Energy's success in managing its environmental liabilities. The Government Accountability Office has made numerous recommendations to improve Environmental Management (EM) planning. Having the right staff with the right skills is a fundamental first step for EM to effectively address its liabilities and mission goals.

Further, the committee notes that instability in its leadership and organizational structure has limited the capacity of EM to

carry out its mission. Since 1991, EM has had nine different assistant secretaries and nine Acting Assistant Secretaries or Senior Advisors. In the past 5 years, the average length of service for EM leadership is 1 year. In addition, EM has been moved under four different Under Secretaries in the past 15 years.

Considering this lack of continuity in its leadership and in position within the Department of Energy, the committee directs the Comptroller General of the United States to undertake a review of EM's capacity to carry out its enduring mission. Specifically, the review should include consideration of:

(1) what are the key elements in EM's mission to manage environmental cleanup and address environmental liabilities, and how has EM's mission changed since its creation;

(2) to what extent has the Department of Energy provided EM sufficient capacity and ensured leadership stability to carry out its mission; and

(3) to what extent do current and former Department of Energy and EM leaders believe EM has had sufficient capacity and leadership stability to carry out its mission?

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by November 1, 2020, on the Comptroller General's preliminary findings and to submit a final report on a date agreed to at the time of the briefing.

Other Defense Activities

Advanced Computer Tools to Identify Classified Information

The committee notes the Department of Energy's efforts to increase automation with regard to classification in order to decrease the risk of inadvertent release of classification, as well as increased efficiency. The committee notes that such tools are also necessary to reduce the backlog of information awaiting declassification. In particular, the committee is encouraged by the Department's effort to ensure the Advanced Computer Tools to Identify Classified Information (ACTICI) initiative is funded and successful. Therefore, the committee directs the Director of the Office of Classification to provide a briefing to the House Committee on Armed Services not later than August 1, 2020, on the ACTICI program. The briefing should include:

(1) the goals of the program;

(2) options and strategies for leveraging other tools and processes developed both within and outside government to increase efficiency and reliability of the mission;

(3) timelines for implementing such tools; and

(4) options for accelerating or expanding the program beyond current scope.

LEGISLATIVE PROVISIONS

SUBTITLE A—NATIONAL SECURITY PROGRAMS AND AUTHORIZATIONS

Section 3101—National Nuclear Security Administration

This section would authorize appropriations for the National Nuclear Security Administration of the Department of Energy for fis-

cal year 2021 at the levels specified in the funding table in division D of this Act.

Section 3102—Defense Environmental Cleanup

This section would authorize appropriations for defense environmental cleanup for the Department of Energy for fiscal year 2021 at the levels specified in the funding table in division D of this Act.

Section 3103—Other Defense Activities

This section would authorize appropriations for other defense activities for the Department of Energy for fiscal year 2021 at the levels specified in the funding table in division D of this Act.

Section 3104—Nuclear Energy

This section would authorize appropriations for nuclear energy for the Department of Energy for fiscal year 2021 at the levels specified in the funding table in division D of this Act.

SUBTITLE B—PROGRAM AUTHORIZATIONS, RESTRICTIONS, LIMITATIONS, AND OTHER MATTERS

Section 3111—Nuclear Warhead Acquisition Processes

This section would require the Administrator of the National Nuclear Security Administration (NNSA) to ensure the National Laboratories engage in peer review of proposed designs of nuclear weapons and include the production facilities in such design reviews. The section would update requirements with respect to selected acquisition reports and independent cost estimates of the NNSA. The section would also include a number of reporting requirements of the Administrator, the Commander of U.S. Strategic Command, and the Director of the Cost Estimation and Program Evaluation.

Section 3112—Uncosted and Unobligated Amounts of National Nuclear Security Administration

This section would require the National Nuclear Security Administration to report in the President's annual budget request, for the next 5 fiscal years, uncosted and unobligated balances by program element and the year in which the funds were appropriated.

Section 3113—Extension of Limitation Relating to Reclassification of High-Level Waste

This section would extend by 1 year the prohibition on the Department of Energy to reclassify high level waste in the state of Washington.

Section 3114—Extension of Pilot Program on Unavailability for Overhead Costs of Amounts Specified for Laboratory-Directed Research and Development

This section would amend section 3119 of the National Defense Authorization Act for Fiscal Year 2017 (Public Law 114–328) in subsection (c)(2), by striking "four" and inserting "five" to extend a

pilot program, and in subsection (d), by striking "February 15, 2020" and inserting "December 31, 2020" regarding a report from the Nuclear Security Administrator.

Section 3115—Plutonium Pit Production

This section would require an independent cost assessment of the Savannah River Plutonium Pit Production Facility and include a percent confidence rating regarding the cost and schedule for the plan. Should the confidence percentage be below 90 percent, the Secretary of Energy and Commander of U.S. Strategic Command would be required to complete reports regarding the facility and the pit production requirement.

Section 3116—Program for Research and Development of Advanced Naval Nuclear Fuel System Based on Low-Enriched Uranium

This section would require the Nuclear Security Administrator to establish, not later than 60 days after the date of the enactment of this Act, a program to assess the viability of using low-enriched uranium in naval nuclear propulsion reactors, including such reactors located on aircraft carriers and submarines, that meet the requirements of the Navy. It would require activities including down-blending of high-enriched uranium into low-enriched uranium; manufacturing of candidate advanced low-enriched uranium fuels; irradiation tests and post-irradiation examination of these fuels; and modification or procurement of equipment and infrastructure relating to such activities. It would also require the Administrator to submit a plan no later than 120 days after the date of the enactment of this Act, outlining the activities the Administrator will carry out under the program, including the funding requirements associated with developing a low-enriched uranium fuel.

Section 3117—Independent Study on Effects of Use of Nuclear Weapons

This section would require the Administrator of the National Nuclear Security Administration to enter into contract with the National Academies of Sciences, Engineering, and Medicine to study the effects of nuclear use under specific scenarios.

Section 3118—Reports on Diversity of Certain Contractor Employees of National Nuclear Security Administration

This section would require the Administrator of the National Nuclear Security Administration (NNSA) to submit a report to the congressional defense committees on an annual basis through 2022 regarding diversity in hiring and retention at the NNSA's laboratories plants and sites. This section would also require the reports to be published on the Department of Energy website. This section also contains the sense of Congress on the importance of hiring a highly educated and diverse workforce as NNSA increases its workload in order to meet modernization requirements.

Section 3119—Findings, Purpose, and Apology Relating to Fallout Emitted During the Government's Atmospheric Nuclear Tests

This section would amend section 2(a)(10) of the Radiation Exposure Compensation Act (Public Law 101–426) to include New Mexico, Idaho, Colorado, Arizona, Utah, Texas, Wyoming, Oregon, Washington, South Dakota, North Dakota, Nevada, Guam, and the Northern Mariana Islands to the list of states and territories receiving a congressional apology.

Section 3120—Sense of Congress regarding Uranium Mining and Nuclear Testing

This section would express the sense of Congress that the United States should compensate and recognize all of the miners, workers, downwinders, and others suffering from the effects of uranium mining and nuclear testing carried out during the Cold War.

TITLE XXXII—DEFENSE NUCLEAR FACILITIES SAFETY BOARD

ITEMS OF SPECIAL INTEREST

Defense Nuclear Facilities Safety Board and the Department of Energy

The committee notes the importance of the Defense Nuclear Facilities Safety Board's independent oversight of defense nuclear facilities, and its value in protecting public health and safety at such defense facilities, including with respect to the health and safety of employees and contractors at such facilities. The committee is encouraged by the Department of Energy's (DOE) efforts to revise DOE Order 140.1 in order to ensure it complies with section 3202 of the National Defense Authorization Act for Fiscal Year 2020 (Public Law 116–92). The committee further encourages the Department to work to solve all existing points of disagreement between the Board and the Department with respect to the provision of and access to information. With regard to access to information, the intent of section 3202 of Public Law 116–92 was to ensure the Board maintained its long-held access to all information related to safety and public health, including pre-decisional information. In some cases, such as the nuclear explosive safety meetings, the Board has long attended such meetings and the committee encourages the Department to continue to allow Board staff to attend.

Additionally, the committee notes that given the increases in workload, construction, and workforce defense nuclear facilities are experiencing, the Board's work is only increasing in importance. Finally, the committee encourages the Secretary of Energy and the Department to recognize that the Board does not exist to merely provide advice, but conducts investigations and evaluations, issues recommendations, and has the additional authority to impose reporting requirements on the Secretary of Energy per section 2286(b) of title 42, United States Code.

LEGISLATIVE PROVISIONS

Section 3201—Authorization

This section would authorize $28,836,000 for the Defense Nuclear Facilities Safety Board.

TITLE XXXIV—NAVAL PETROLEUM RESERVES

LEGISLATIVE PROVISIONS

Section 3401—Authorization of Appropriations

This section would authorize $13,006,000 for fiscal year 2021 for operation and maintenance of the Naval Petroleum Reserves.

TITLE XXXV—MARITIME ADMINISTRATION

ITEMS OF SPECIAL INTEREST

Commercial Design Options for Sealift Recapitalization

The committee notes that the strategic sealift force can only generate 65 percent of the Department of Defense's required capacity and faces an imminent decline in capacity as obsolete ships are retired. The committee continues to believe that the most cost-effective and time-sensitive strategy for acquiring a new domestically built sealift ship is through a commercial model that focuses on mature designs. The committee believes the Navy should focus on maximizing commercial design criteria where possible and limit the amount of military specifications. The Maritime Administration has been utilizing a commercial-style contracting process for the acquisition of the National Security Multi-Mission Vessel (NSMV). The committee strongly encourages the Secretary of the Navy to coordinate closely with the Maritime Administrator in order to leverage lessons learned from the NSMV process and ultimately develop a similar acquisition strategy for sealift recapitalization. Based on the authorities granted by Congress such as incremental funding, the committee believes that the Navy could acquire a new-construction ship without overly disrupting the Navy shipbuilding account and still meet the 2026 delivery mandate.

Therefore, the committee directs the Secretary of the Navy, in coordination with the Maritime Administrator, to provide a briefing to the Committee on Armed Services of the House of Representatives not later than September 1, 2020, on what progress the Navy has made in developing an acquisition strategy for sealift recapitalization that maximizes commercial designs and contracting best practices.

LEGISLATIVE PROVISIONS

SUBTITLE A—MARITIME ADMINISTRATION

Section 3501—Authorization of the Maritime Administration

This section would authorize appropriations for the national security aspects of the Maritime Administration for fiscal year 2021.

Section 3502—Sense of Congress regarding Role of Domestic Maritime Industry in National Security

This section would express the sense of the Congress regarding the role of the domestic maritime industry in national security.

Section 3503—Nonapplicability of Requirement Relating to Minimum Number of Operating Days for Vessels Operating under MSP Operating Agreements

This section would waive the minimum number of operating days required for vessels operating under maritime security program agreements.

Section 3504—Improvements to Process for Waiving Navigation and Vessel-Inspection Laws

This section would improve and tighten both the waiver and vessel inspection process currently in place under the Merchant Marine Act of 1920.

SUBTITLE B—TANKER SECURITY FLEET

Section 3511—Tanker Security Fleet

This section would amend part C of subtitle V of title 46, United States Code, to authorize the establishment of a Tanker Security Program in order to provide a fleet of 10 United States flagged tanker vessels.

DIVISION D—FUNDING TABLES

Section 4001—Authorization of Amounts in Funding Tables

This section would provide for the allocation of funds among programs, projects, and activities in accordance with the tables in division D of this Act, subject to reprogramming guidance in accordance with established procedures.

Consistent with the previously expressed views of the committee, this section would also require that a decision by an agency head to commit, obligate, or expend funds to a specific entity on the basis of such funding tables be based on merit-based selection procedures in accordance with the requirements of section 2304(k) and section 2374 of title 10, United States Code, and other applicable provisions of law.

SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2021

(In Thousands of Dollars)

	FY 2021 Request	House Change	House Authorized
DISCRETIONARY AUTHORIZATIONS WITHIN THE JURISDICTION OF THE ARMED SERVICES COMMITTEE			
National Defense Funding, Base Budget Request			
Function 051, Department of Defense-Military			
Division A: Department of Defense Authorizations			
Title I—Procurement			
Aircraft Procurement, Army	3,074,594	192,800	3,267,394
Missile Procurement, Army	3,491,507	–88,750	3,402,757
Weapons & Tracked Combat Vehicles, Army	3,696,740	219,298	3,916,038
Procurement of Ammunition, Army	2,777,716	82,500	2,860,216
Other Procurement, Army	8,625,206	–337,067	8,288,139
Aircraft Procurement, Navy	17,127,378	1,170,700	18,298,078
Weapons Procurement, Navy	4,884,995	–75,300	4,809,695
Procurement of Ammunition, Navy & Marine Corps	883,602	–39,842	843,760
Shipbuilding & Conversion, Navy	19,902,757	2,421,700	22,324,457
Other Procurement, Navy	10,948,518	–712,500	10,236,018
Procurement, Marine Corps	2,903,976	56,583	2,960,559
Aircraft Procurement, Air Force	17,908,145	–674,400	17,233,745
Missile Procurement, Air Force	2,396,417		2,396,417
Procurement of Ammunition, Air Force	596,338		596,338
Other Procurement, Air Force	23,695,720	–77,535	23,618,185
Procurement, Space Force	2,446,064	–38,000	2,408,064
Procurement, Defense-Wide	5,324,487	60,500	5,384,987
Subtotal, Title I—Procurement	**130,684,160**	**2,160,687**	**132,844,847**
Title II—Research, Development, Test and Evaluation			
Research, Development, Test & Evaluation, Army	12,587,343	–204,437	12,382,906
Research, Development, Test & Evaluation, Navy	21,427,048	–308,100	21,118,948
Research, Development, Test & Evaluation, Air Force	37,391,826	–324,489	37,067,337
Research, Development, Test & Evaluation, Space Force	10,327,595	86,889	10,414,484
Research, Development, Test & Evaluation, Defense-Wide	24,280,891	1,014,972	25,295,863
Operational Test & Evaluation, Defense	210,090		210,090
Subtotal, Title II—Research, Development, Test and Evaluation	**106,224,793**	**264,835**	**106,489,628**
Title III—Operation and Maintenance			
Operation & Maintenance, Army	40,312,968	–123,232	40,189,736
Operation & Maintenance, Army Reserve	2,934,717	–4,041	2,930,676
Operation & Maintenance, Army National Guard	7,420,014	–3,678	7,416,336
Operation & Maintenance, Navy	49,692,742	–1,201,302	48,491,440
Operation & Maintenance, Marine Corps	7,328,607	–319,729	7,008,878
Operation & Maintenance, Navy Reserve	1,127,046	–2,897	1,124,149
Operation & Maintenance, Marine Corps Reserve	284,656	67	284,723
Operation & Maintenance, Air Force	34,750,597	–315,205	34,435,392

SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2021—Continued

(In Thousands of Dollars)

	FY 2021 Request	House Change	House Authorized
Operation & Maintenance, Space Force	2,531,294	–5,400	2,525,894
Operation & Maintenance, Air Force Reserve	3,350,284	15,015	3,365,299
Operation & Maintenance, Air National Guard	6,753,642	37,693	6,791,335
Operation & Maintenance, Defense-Wide	38,649,079	275,634	38,924,713
US Court of Appeals for the Armed Forces, Defense	15,211		15,211
DOD Acquisition Workforce Development Fund	58,181	140,320	198,501
Overseas Humanitarian, Disaster and Civic Aid	109,900		109,900
Cooperative Threat Reduction	238,490	135,200	373,690
Environmental Restoration	1,073,068	50,000	1,123,068
Undistributed	0	–1,455,870	–1,455,870
Subtotal, Title III—Operation and Maintenance	**196,630,496**	**–2,777,425**	**193,853,071**
Title IV—Military Personnel			
Military Personnel Appropriations	150,524,104	–1,139,800	149,384,304
Medicare-Eligible Retiree Health Fund Contributions	8,372,741		8,372,741
Subtotal, Title IV—Military Personnel	**158,896,845**	**–1,139,800**	**157,757,045**
Title XIV—Other Authorizations			
Working Capital Fund, Army	56,717		56,717
Working Capital Fund, Air Force	95,712		95,712
Working Capital Fund, DECA	1,146,660		1,146,660
Working Capital Fund, Defense-Wide	49,821		49,821
National Defense Sealift Fund	0	541,405	541,405
Chemical Agents & Munitions Destruction	889,500	–13,000	876,500
Drug Interdiction and Counter Drug Activities	769,629		769,629
Office of the Inspector General	371,439	16,257	387,696
Defense Health Program	32,690,372	51,200	32,741,572
Subtotal, Title XIV—Other Authorizations	**36,069,850**	**595,862**	**36,665,712**
Total, Division A: Department of Defense Authorizations	**628,506,144**	**–895,841**	**627,610,303**
Division B: Military Construction Authorizations			
Military Construction			
Army	650,336	65,500	715,836
Navy	1,975,606	–299,092	1,676,514
Air Force	767,132	–105,883	661,249
Defense-Wide	2,027,520	46,240	2,073,760
NATO Security Investment Program	173,030		173,030
Army National Guard	321,437	15,735	337,172
Army Reserve	88,337	2,500	90,837
Navy and Marine Corps Reserve	70,995		70,995
Air National Guard	64,214		64,214
Air Force Reserve	23,117		23,117
Unaccompanied Housing Improvement Fund	600		600
Subtotal, Military Construction	**6,162,324**	**–275,000**	**5,887,324**
Family Housing			

SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2021—Continued

(In Thousands of Dollars)

	FY 2021 Request	House Change	House Authorized
Construction, Army	119,400		119,400
Operation & Maintenance, Army	367,142	25,000	392,142
Construction, Navy and Marine Corps	42,897		42,897
Operation & Maintenance, Navy and Marine Corps	346,493	50,000	396,493
Construction, Air Force	97,214		97,214
Operation & Maintenance, Air Force	317,021	60,000	377,021
Operation & Maintenance, Defense-Wide	54,728		54,728
Improvement Fund	5,897		5,897
Subtotal, Family Housing	**1,350,792**	**135,000**	**1,485,792**
Base Realignment and Closure			
Base Realignment and Closure—Army	66,060	40,000	106,060
Base Realignment and Closure—Navy	125,165	100,000	225,165
Base Realignment and Closure—Air Force	109,222		109,222
Subtotal, Base Realignment and Closure	**300,447**	**140,000**	**440,447**
Total, Division B: Military Construction Authorizations	**7,813,563**	**0**	**7,813,563**
Total, 051, Department of Defense-Military	**636,319,707**	**–895,841**	**635,423,866**
Division C: Department of Energy National Security Authorization and Other Authorizations			
Function 053, Atomic Energy Defense Activities			
Environmental and Other Defense Activities			
Nuclear Energy	137,800		137,800
Weapons Activities	15,602,000		15,602,000
Defense Nuclear Nonproliferation	2,031,000	80,000	2,111,000
Naval Reactors	1,684,000		1,684,000
Federal Salaries and Expenses	454,000		454,000
Defense Environmental Cleanup	4,983,608	790,100	5,773,708
Other Defense Activities	1,054,727	–155,438	899,289
Subtotal, Environmental and Other Defense Activities	**25,947,135**	**714,662**	**26,661,797**
Independent Federal Agency Authorization			
Defense Nuclear Facilities Safety Board	28,836		28,836
Subtotal, Independent Federal Agency Authorization	**28,836**	**0**	**28,836**
Subtotal, 053, Atomic Energy Defense Activities	**25,975,971**	**714,662**	**26,690,633**
Function 054, Defense-Related Activities			
Other Agency Authorizations			
Maritime Security Program	314,008	180,000	494,008
Subtotal, Independent Federal Agency Authorization	**314,008**	**180,000**	**494,008**
Subtotal, 054, Defense-Related Activities	**314,008**	**180,000**	**494,008**

SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2021—Continued

(In Thousands of Dollars)

	FY 2021 Request	House Change	House Authorized
Subtotal, Division C: Department of Energy National Security Authorization and Other Authorizations	**26,289,979**	**894,662**	**27,184,641**
Total, National Defense Funding, Base Budget Request	**662,609,686**	**–1,179**	**662,608,507**
National Defense Funding, Overseas Contingency Operations			
Function 051, Department of Defense-Military			
Procurement			
Aircraft Procurement, Army	461,080	–4,800	456,280
Missile Procurement, Army	881,592		881,592
Weapons & Tracked Combat Vehicles, Army	15,225		15,225
Procurement of Ammunition, Army	110,668		110,668
Other Procurement, Army	924,077		924,077
Aircraft Procurement, Navy	33,241		33,241
Weapons Procurement, Navy	5,572		5,572
Procurement of Ammunition, Navy & Marine Corps	95,942		95,942
Other Procurement, Navy	343,526		343,526
Procurement, Marine Corps	47,963		47,963
Aircraft Procurement, Air Force	569,155	17,400	586,555
Missile Procurement, Air Force	223,772		223,772
Procurement of Ammunition, Air Force	802,455		802,455
Other Procurement, Air Force	355,339		355,339
Procurement, Defense-Wide	258,491	45,100	303,591
National Guard & Reserve Equipment	0	150,000	150,000
Subtotal, Procurement	**5,128,098**	**207,700**	**5,335,798**
Research, Development, Test and Evaluation			
Research, Development, Test & Evaluation, Army	182,824		182,824
Research, Development, Test & Evaluation, Navy	59,562		59,562
Research, Development, Test & Evaluation, Air Force	5,304		5,304
Research, Development, Test & Evaluation, Defense-Wide	82,818		82,818
Subtotal, Research, Development, Test and Evaluation	**330,508**	**0**	**330,508**
Operation and Maintenance			
Operation & Maintenance, Army	17,137,754	–1,353,824	15,783,930
Operation & Maintenance, Army Reserve	33,399		33,399
Operation & Maintenance, Army National Guard	79,792		79,792
Afghanistan Security Forces Fund	4,015,612	–500,000	3,515,612
Counter-ISIS Train and Equip Fund	845,000	–145,000	700,000
Operation & Maintenance, Navy	10,700,305	928,794	11,629,099
Operation & Maintenance, Marine Corps	1,102,600	400,000	1,502,600
Operation & Maintenance, Navy Reserve	21,492		21,492
Operation & Maintenance, Marine Corps Reserve	8,707		8,707

SUMMARY OF NATIONAL DEFENSE AUTHORIZATIONS FOR FISCAL YEAR 2021—Continued

(In Thousands of Dollars)

	FY 2021 Request	House Change	House Authorized
Operation & Maintenance, Air Force	17,930,020	486,330	18,416,350
Operation & Maintenance, Space Force	77,115		77,115
Operation & Maintenance, Air Force Reserve	30,090		30,090
Operation & Maintenance, Air National Guard	175,642		175,642
Operation & Maintenance, Defense-Wide	6,022,254	–274,000	5,748,254
Ukraine Security Assistance		250,000	250,000
Subtotal, Operation and Maintenance	**58,179,782**	**–207,700**	**57,972,082**
Military Personnel			
Military Personnel Appropriations	4,602,593		4,602,593
Subtotal, Military Personnel	**4,602,593**	**0**	**4,602,593**
Other Authorizations			
Working Capital Fund, Army	20,090		20,090
Office of the Inspector General	24,069		24,069
Defense Health Program	365,098		365,098
Subtotal, Title XIV—Other Authorizations	**409,257**	**0**	**409,257**
Military Construction			
Army	15,873		15,873
Navy	70,020		70,020
Air Force	263,869		263,869
Subtotal, Military Construction	**349,762**	**0**	**349,762**
Subtotal, 051, Department of Defense-Military	**69,000,000**	**0**	**69,000,000**
Total, National Defense Funding, Overseas Contingency Operations Funding	**69,000,000**	**0**	**69,000,000**
Total, National Defense	**731,609,686**	**–1,179**	**731,608,507**
MEMORANDUM: NON-DEFENSE AUTHORIZATIONS	**83,306**		**83,306**
Title XIV—Armed Forces Retirement Home (Function 600)	70,300		70,300
Title XXXIV—Naval Petroleum and Oil Shale Reserves (Function 270)	13,006		13,006
MEMORANDUM: TRANSFER AUTHORITIES (NON-ADD)			
Title X—General Transfer Authority			[4,000,000]
Title XV—Special Transfer Authority			[2,500,000]
MEMORANDUM: DEFENSE AUTHORIZATIONS NOT UNDER THE JURISDICTION OF THE ARMED SERVICES COMMITTEE (NON-ADD)			
Defense Production Act	181,931		

NATIONAL DEFENSE BUDGET AUTHORITY IMPLICATION

(In Thousands of Dollars)

	FY 2021 Request	House Change	House Authorized
Summary, Discretionary Authorizations Within the Jurisdiction of the Armed Services Committee			
SUBTOTAL, DEPARTMENT OF DEFENSE (051)	**636,319,707**	**–895,841**	**635,423,866**
SUBTOTAL, ATOMIC ENERGY DEFENSE PROGRAMS (053)	**25,975,971**	**714,662**	**26,690,633**
SUBTOTAL, DEFENSE-RELATED ACTIVITIES (054)	**314,008**	**180,000**	**494,008**
TOTAL, NATIONAL DEFENSE (050)—BASE BILL	**662,609,686**	**–1,179**	**662,608,507**
TOTAL, OVERSEAS CONTINGENCY OPERATIONS	**69,000,000**		**69,000,000**
GRAND TOTAL, NATIONAL DEFENSE	**731,609,686**	**–1,179**	**731,608,507**
Scoring adjustments			
Transfers to non-Defense budget functions already credited to 050 by OMB	–152,000		–152,000
Subtotal, Scoring Adjustments	**–152,000**		**–152,000**
Base National Defense Discretionary Programs that are Not In the Jurisdiction of the Armed Services Committee or Do Not Require Additional Authorization (CBO Estimates)			
Defense Production Act Purchases	181,931		181,931
Indefinite Account: Disposal Of DOD Real Property	9,739		9,739
Indefinite Account: Lease Of DOD Real Property	32,623		32,623
Subtotal, Budget Sub-Function 051	**224,293**		**224,293**
Other Discretionary Programs	8,811,000		8,811,000
Adjustments for revised BCA caps	6,000		6,000
Subtotal, Budget Sub-Function 054	**9,131,008**		**9,131,008**
Total Defense Discretionary Adjustments (050)	**9,203,301**		**9,203,301**
Budget Authority Implication, National Defense Discretionary			
Department of Defense--Military (051)	705,392,000	–895,841	704,496,159
Atomic Energy Defense Activities (053)	25,975,971	714,662	26,690,633
Defense-Related Activities (054)	9,131,008	180,000	9,311,008
Total BA Implication, National Defense Discretionary	**740,498,979**	**–1,179**	**740,497,800**
National Defense Mandatory Programs, Current Law (CBO Baseline)			
Concurrent receipt accrual payments to the Military Retirement Fund	9,799,000		9,799,000
Revolving, trust and other DOD Mandatory	1,833,000		1,833,000
Offsetting receipts	–1,989,000		–1,989,000
Subtotal, Budget Sub-Function 051	**9,643,000**		**9,643,000**
Energy employees occupational illness compensation programs and other	1,682,000		1,682,000
Subtotal, Budget Sub-Function 053	**1,682,000**		**1,682,000**
Radiation exposure compensation trust fund	61,000		61,000
Payment to CIA retirement fund and other	514,000		514,000
Subtotal, Budget Sub-Function 054	**575,000**		**575,000**
Total National Defense Mandatory (050)	**11,900,000**		**11,900,000**
Budget Authority Implication, National Defense Discretionary and Mandatory			
Department of Defense--Military (051)	715,035,000	–895,841	714,139,159

NATIONAL DEFENSE BUDGET AUTHORITY IMPLICATION—Continued

(In Thousands of Dollars)

	FY 2021 Request	House Change	House Authorized
Atomic Energy Defense Activities (053)	27,657,971	714,662	28,372,633
Defense-Related Activities (054)	9,706,008	180,000	9,886,008
Total BA Implication, National Defense Discretionary and Mandatory	**752,398,979**	**–1,179**	**752,397,800**

TITLE XLI—PROCUREMENT

SEC. 4101. PROCUREMENT.

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	AIRCRAFT PROCUREMENT, ARMY						
	FIXED WING						
002	MQ–1 UAV				75,000		75,000
	Additional aircraft				[75,000]		
003	FUTURE UAS FAMILY		1,100				1,100
004	RQ–11 (RAVEN)		20,851				20,851
	ROTARY						
007	AH–64 APACHE BLOCK IIIA REMAN	50	792,027			50	792,027
008	AH–64 APACHE BLOCK IIIA REMAN AP		169,460				169,460
011	UH–60 BLACKHAWK M MODEL (MYP)	36	742,998		–17,700	36	725,298
	Unjustified costs				[–17,700]		
012	UH–60 BLACKHAWK M MODEL (MYP) AP		87,427				87,427
013	UH–60 BLACK HAWK L AND V MODELS	24	172,797			24	172,797
014	CH–47 HELICOPTER	6	160,750	5	106,100	11	266,850
	Program increase			[5]	[136,000]		
	Unjustified cost growth				[–29,900]		
015	CH–47 HELICOPTER AP		18,372		29,000		47,372
	Program increase				[29,000]		
	MODIFICATION OF AIRCRAFT						
018	UNIVERSAL GROUND CONTROL EQUIPMENT (UAS)		7,509				7,509

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
019	GRAY EAGLE MODS2		16,280				16,280
020	MULTI SENSOR ABN RECON (MIP)		35,864				35,864
021	AH–64 MODS		118,316		–5,100		113,216
	Unjustified cost growth—M-DSA				[–5,100]		
022	CH–47 CARGO HELICOPTER MODS (MYP)		15,548				15,548
023	GRCS SEMA MODS (MIP)		2,947				2,947
024	ARL SEMA MODS (MIP)		9,598				9,598
025	EMARSS SEMA MODS (MIP)		2,452				2,452
026	UTILITY/CARGO AIRPLANE MODS		13,868				13,868
027	UTILITY HELICOPTER MODS		25,842		5,500		31,342
	Program increase				[5,500]		
028	NETWORK AND MISSION PLAN		77,432				77,432
029	COMMS, NAV SURVEILLANCE		101,355				101,355
031	AVIATION ASSURED PNT		54,609				54,609
032	GATM ROLLUP		12,180				12,180
034	UAS MODS		4,204				4,204
	GROUND SUPPORT AVIONICS						
035	AIRCRAFT SURVIVABILITY EQUIPMENT		49,455				49,455
036	SURVIVABILITY CM		8,035				8,035
037	CMWS		10,567				10,567
038	COMMON INFRARED COUNTERMEASURES (CIRCM)	120	237,467			120	237,467
	OTHER SUPPORT						
039	AVIONICS SUPPORT EQUIPMENT		1,789				1,789
040	COMMON GROUND EQUIPMENT		17,584				17,584
041	AIRCREW INTEGRATED SYSTEMS		48,265				48,265
042	AIR TRAFFIC CONTROL		26,408				26,408

044	LAUNCHER, 2.75 ROCKET		2,256				2,256
045	LAUNCHER GUIDED MISSILE: LONGBOW HELLFIRE XM2		8,982				8,982
	TOTAL AIRCRAFT PROCUREMENT, ARMY	**236**	**3,074,594**	**5**	**192,800**	**241**	**3,267,394**
	MISSILE PROCUREMENT, ARMY						
	SURFACE-TO-AIR MISSILE SYSTEM						
002	M-SHORAD—PROCUREMENT	50	378,654			50	378,654
003	MSE MISSILE	122	603,188			122	603,188
004	PRECISION STRIKE MISSILE (PRSM)	30	49,941		–7,500	30	42,441
	Contract delay				[–7,500]		
005	INDIRECT FIRE PROTECTION CAPABILITY INC 2–I		106,261		–81,250		25,011
	Army identified funds excess to need				[–40,500]		
	Funding excess to need				[–40,750]		
	AIR-TO-SURFACE MISSILE SYSTEM						
006	HELLFIRE SYS SUMMARY	428	91,225			428	91,225
007	JOINT AIR-TO-GROUND MSLS (JAGM)	657	213,397			657	213,397
008	LONG RANGE PRECISION MUNITION		45,307				45,307
	ANTI-TANK/ASSAULT MISSILE SYS						
009	JAVELIN (AAWS-M) SYSTEM SUMMARY	773	190,325			773	190,325
010	TOW 2 SYSTEM SUMMARY	1,405	121,074			1,405	121,074
011	GUIDED MLRS ROCKET (GMLRS)	5,384	850,157			5,384	850,157
012	MLRS REDUCED RANGE PRACTICE ROCKETS (RRPR)	3,270	30,836			3,270	30,836
013	HIGH MOBILITY ARTILLERY ROCKET SYSTEM (HIMARS	5	41,226			5	41,226
	MODIFICATIONS						
016	PATRIOT MODS		278,050				278,050
017	ATACMS MODS		141,690				141,690
020	AVENGER MODS		13,942				13,942
021	ITAS/TOW MODS		5,666				5,666
022	MLRS MODS		310,419				310,419
023	HIMARS MODIFICATIONS		6,081				6,081
	SPARES AND REPAIR PARTS						
024	SPARES AND REPAIR PARTS		5,090				5,090

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	SUPPORT EQUIPMENT & FACILITIES						
025	AIR DEFENSE TARGETS		8,978				8,978
	TOTAL MISSILE PROCUREMENT, ARMY	**12,124**	**3,491,507**		**–88,750**	**12,124**	**3,402,757**
	PROCUREMENT OF W&TCV, ARMY						
	TRACKED COMBAT VEHICLES						
002	ARMORED MULTI PURPOSE VEHICLE (AMPV)	32	192,971		–20,000	32	172,971
	Prior year carry-over				[–80,000]		
	Program increase				[60,000]		
	MODIFICATION OF TRACKED COMBAT VEHICLES						
004	STRYKER UPGRADE	154	847,212	60	335,840	214	1,183,052
	CROWS-J program delay				[–39,160]		
	Program increase—Army UPL			[60]	[375,000]		
005	BRADLEY PROGRAM (MOD)		493,109		–57,350		435,759
	Prior year carry-over				[–17,350]		
	UBIS early to need				[–40,000]		
006	M109 FOV MODIFICATIONS		26,893		–5,000		21,893
	Prior year carryover				[–5,000]		
007	PALADIN INTEGRATED MANAGEMENT (PIM)	30	435,825			30	435,825
009	ASSAULT BRIDGE (MOD)		5,074				5,074
010	ASSAULT BREACHER VEHICLE	4	19,500			4	19,500
011	M88 FOV MODS		18,382		–5,300		13,082
	Program reduction				[–5,300]		
012	JOINT ASSAULT BRIDGE	14	72,178		–10,300	14	61,878
	Program delay				[–10,300]		
013	M1 ABRAMS TANK (MOD)		392,013		–5,735		386,278

	Prior year carry-over				[–5,735]		
014	ABRAMS UPGRADE PROGRAM	89	1,033,253		–12,857	89	1,020,396
	Component cost savings				[–3,480]		
	Prior year carry-over				[–9,377]		
	WEAPONS & OTHER COMBAT VEHICLES						
016	MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S		17,864				17,864
018	MORTAR SYSTEMS		10,288				10,288
019	XM320 GRENADE LAUNCHER MODULE (GLM)		5,969				5,969
020	PRECISION SNIPER RIFLE		10,137				10,137
021	COMPACT SEMI-AUTOMATIC SNIPER SYSTEM		999				999
022	CARBINE		7,411				7,411
023	NEXT GENERATION SQUAD WEAPON		35,822				35,822
024	COMMON REMOTELY OPERATED WEAPONS STATION		24,534				24,534
025	HANDGUN		4,662				4,662
	MOD OF WEAPONS AND OTHER COMBAT VEH						
026	MK–19 GRENADE MACHINE GUN MODS		6,444				6,444
027	M777 MODS		10,983				10,983
028	M4 CARBINE MODS		4,824				4,824
031	M240 MEDIUM MACHINE GUN MODS		6,385				6,385
032	SNIPER RIFLES MODIFICATIONS		1,898				1,898
033	M119 MODIFICATIONS		2,009				2,009
034	MORTAR MODIFICATION		1,689				1,689
035	MODIFICATIONS LESS THAN $5.0M (WOCV-WTCV)		2,604				2,604
	SUPPORT EQUIPMENT & FACILITIES						
036	ITEMS LESS THAN $5.0M (WOCV-WTCV)		2,763				2,763
037	PRODUCTION BASE SUPPORT (WOCV-WTCV)		3,045				3,045
	TOTAL PROCUREMENT OF W&TCV, ARMY	**323**	**3,696,740**	**60**	**219,298**	**383**	**3,916,038**
	PROCUREMENT OF AMMUNITION, ARMY						
	SMALL/MEDIUM CAL AMMUNITION						
001	CTG, 5.56MM, ALL TYPES		68,472				68,472
002	CTG, 7.62MM, ALL TYPES		109,933				109,933

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
003	NEXT GENERATION SQUAD WEAPON AMMUNITION		11,988				11,988
004	CTG, HANDGUN, ALL TYPES		853				853
005	CTG, .50 CAL, ALL TYPES		58,280				58,280
006	CTG, 20MM, ALL TYPES		31,708				31,708
007	CTG, 25MM, ALL TYPES		9,111				9,111
008	CTG, 30MM, ALL TYPES		58,172				58,172
009	CTG, 40MM, ALL TYPES		114,638				114,638
	MORTAR AMMUNITION						
010	60MM MORTAR, ALL TYPES		31,222				31,222
011	81MM MORTAR, ALL TYPES		42,857				42,857
012	120MM MORTAR, ALL TYPES		107,762				107,762
	TANK AMMUNITION						
013	CARTRIDGES, TANK, 105MM AND 120MM, ALL TYPES		233,444				233,444
	ARTILLERY AMMUNITION						
014	ARTILLERY CARTRIDGES, 75MM & 105MM, ALL TYPES		35,963				35,963
015	ARTILLERY PROJECTILE, 155MM, ALL TYPES		293,692		–10,000		283,692
	Program delays				[–10,000]		
016	PROJ 155MM EXTENDED RANGE M982	597	69,159			597	69,159
017	ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL		232,913				232,913
	MINES						
018	MINES & CLEARING CHARGES, ALL TYPES		65,278		–2,500		62,778
	Program decrease				[–2,500]		
019	CLOSE TERRAIN SHAPING OBSTACLE		4,995		–2,000		2,995
	Program reduction				[–2,000]		
	ROCKETS						
020	SHOULDER LAUNCHED MUNITIONS, ALL TYPES		69,112		–7,500		61,612

	Prior year carryover			[–7,500]			
021	ROCKET, HYDRA 70, ALL TYPES		125,915			125,915	
	OTHER AMMUNITION						
022	CAD/PAD, ALL TYPES		8,891			8,891	
023	DEMOLITION MUNITIONS, ALL TYPES		54,043			54,043	
024	GRENADES, ALL TYPES		28,931			28,931	
025	SIGNALS, ALL TYPES		27,036			27,036	
026	SIMULATORS, ALL TYPES		10,253			10,253	
	MISCELLANEOUS						
027	AMMO COMPONENTS, ALL TYPES		3,476			3,476	
029	ITEMS LESS THAN $5 MILLION (AMMO)		10,569			10,569	
030	AMMUNITION PECULIAR EQUIPMENT		12,338			12,338	
031	FIRST DESTINATION TRANSPORTATION (AMMO)		15,908			15,908	
032	CLOSEOUT LIABILITIES		99			99	
	PRODUCTION BASE SUPPORT						
033	INDUSTRIAL FACILITIES		592,224	104,500		696,724	
	Program increase			[104,500]			
034	CONVENTIONAL MUNITIONS DEMILITARIZATION		235,112			235,112	
035	ARMS INITIATIVE		3,369			3,369	
	TOTAL PROCUREMENT OF AMMUNITION, ARMY	**597**	**2,777,716**	**82,500**	**597**	**2,860,216**	
	OTHER PROCUREMENT, ARMY						
	TACTICAL VEHICLES						
001	TACTICAL TRAILERS/DOLLY SETS		12,986			12,986	
002	SEMITRAILERS, FLATBED:		31,443			31,443	
003	SEMITRAILERS, TANKERS		17,082			17,082	
004	HI MOB MULTI-PURP WHLD VEH (HMMWV)		44,795			44,795	
005	GROUND MOBILITY VEHICLES (GMV)		37,932			37,932	
008	JOINT LIGHT TACTICAL VEHICLE FAMILY OF VEHICL		894,414			894,414	
009	TRUCK, DUMP, 20T (CCE)		29,368			29,368	
010	FAMILY OF MEDIUM TACTICAL VEH (FMTV)		95,092			95,092	
011	FAMILY OF COLD WEATHER ALL-TERRAIN VEHICLE (C		999			999	

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
012	FIRETRUCKS & ASSOCIATED FIREFIGHTING EQUIP		27,687				27,687
014	PLS ESP		21,969				21,969
015	HVY EXPANDED MOBILE TACTICAL TRUCK EXT SERV		65,635		67,000		132,635
	Program increase				[67,000]		
016	HMMWV RECAPITALIZATION PROGRAM		5,927				5,927
017	TACTICAL WHEELED VEHICLE PROTECTION KITS		36,497				36,497
018	MODIFICATION OF IN SVC EQUIP		114,977				114,977
	NON-TACTICAL VEHICLES						
020	PASSENGER CARRYING VEHICLES		1,246				1,246
021	NONTACTICAL VEHICLES, OTHER		19,870				19,870
	COMM—JOINT COMMUNICATIONS						
022	SIGNAL MODERNIZATION PROGRAM		160,469		–10,000		150,469
	Unit cost growth				[–10,000]		
023	TACTICAL NETWORK TECHNOLOGY MOD IN SVC		360,379		–22,500		337,879
	Program delays				[–10,000]		
	Unit cost growth				[–12,500]		
024	SITUATION INFORMATION TRANSPORT		63,396				63,396
026	JCSE EQUIPMENT (USRDECOM)		5,170				5,170
	COMM—SATELLITE COMMUNICATIONS						
029	DEFENSE ENTERPRISE WIDEBAND SATCOM SYSTEMS		101,498				101,498
030	TRANSPORTABLE TACTICAL COMMAND COMMUNICATIONS		72,450		–7,500		64,950
	Program delays				[–7,500]		
031	SHF TERM		13,173				13,173
032	ASSURED POSITIONING, NAVIGATION AND TIMING		134,928				134,928
033	SMART-T (SPACE)		8,611				8,611
034	GLOBAL BRDCST SVC—GBS		8,191				8,191

	COMM—C3 SYSTEM			
036	COE TACTICAL SERVER INFRASTRUCTURE (TSI)	94,871		94,871
	COMM—COMBAT COMMUNICATIONS			
037	HANDHELD MANPACK SMALL FORM FIT (HMS)	550,848		550,848
038	RADIO TERMINAL SET, MIDS LVT(2)	8,237		8,237
041	SPIDER FAMILY OF NETWORKED MUNITIONS INCR	13,967	–13,967	0
	Program cancellation		[–13,967]	
043	UNIFIED COMMAND SUITE	19,579		19,579
044	COTS COMMUNICATIONS EQUIPMENT	94,156		94,156
045	FAMILY OF MED COMM FOR COMBAT CASUALTY CARE	18,313		18,313
046	ARMY COMMUNICATIONS & ELECTRONICS	51,480		51,480
	COMM—INTELLIGENCE COMM			
048	CI AUTOMATION ARCHITECTURE (MIP)	13,146		13,146
049	DEFENSE MILITARY DECEPTION INITIATIVE	5,624		5,624
	INFORMATION SECURITY			
051	INFORMATION SYSTEM SECURITY PROGRAM-ISSP	4,596		4,596
052	COMMUNICATIONS SECURITY (COMSEC)	159,272	–10,000	149,272
	Program decrease		[–10,000]	
053	DEFENSIVE CYBER OPERATIONS	54,753		54,753
054	INSIDER THREAT PROGRAM—UNIT ACTIVITY MONITO	1,760		1,760
056	ITEMS LESS THAN $5M (INFO SECURITY)	260		260
	COMM—LONG HAUL COMMUNICATIONS			
057	BASE SUPPORT COMMUNICATIONS	29,761		29,761
	COMM—BASE COMMUNICATIONS			
058	INFORMATION SYSTEMS	147,696		147,696
059	EMERGENCY MANAGEMENT MODERNIZATION PROGRAM	4,900		4,900
060	HOME STATION MISSION COMMAND CENTERS (HSMCC)	15,227		15,227
061	JOINT INFORMATION ENVIRONMENT (JIE)	3,177		3,177
062	INSTALLATION INFO INFRASTRUCTURE MOD PROGRAM	300,035	–20,000	280,035
	Unjustified growth		[–20,000]	
	ELECT EQUIP—TACT INT REL ACT (TIARA)			
065	JTT/CIBS-M (MIP)	5,304		5,304

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
066	TERRESTRIAL LAYER SYSTEMS (TLS) (MIP)		8,081				8,081
068	DCGS-A (MIP)		151,886				151,886
070	TROJAN (MIP)		17,593				17,593
071	MOD OF IN-SVC EQUIP (INTEL SPT) (MIP)		28,558				28,558
073	BIOMETRIC TACTICAL COLLECTION DEVICES (MIP)		999				999
	ELECT EQUIP—ELECTRONIC WARFARE (EW)						
075	LIGHTWEIGHT COUNTER MORTAR RADAR		5,332				5,332
076	EW PLANNING & MANAGEMENT TOOLS (EWPMT)		7,849				7,849
077	AIR VIGILANCE (AV) (MIP)		8,160				8,160
079	MULTI-FUNCTION ELECTRONIC WARFARE (MFEW) SYST		8,669				8,669
082	CI MODERNIZATION (MIP)		300				300
	ELECT EQUIP—TACTICAL SURV. (TAC SURV)						
083	SENTINEL MODS		58,884				58,884
084	NIGHT VISION DEVICES		1,127,375		–230,000		897,375
	IVAS reduction				[–230,000]		
086	SMALL TACTICAL OPTICAL RIFLE MOUNTED MLRF		13,954				13,954
088	INDIRECT FIRE PROTECTION FAMILY OF SYSTEMS		10,069				10,069
089	FAMILY OF WEAPON SIGHTS (FWS)		133,590		–18,500		115,090
	Program decrease				[–18,500]		
091	JOINT BATTLE COMMAND—PLATFORM (JBC-P)		243,850		–17,500		226,350
	Program delays				[–17,500]		
092	JOINT EFFECTS TARGETING SYSTEM (JETS)		69,641		–19,100		50,541
	Early to need				[–19,100]		
094	COMPUTER BALLISTICS: LHMBC XM32		7,509				7,509
095	MORTAR FIRE CONTROL SYSTEM		3,800				3,800
096	MORTAR FIRE CONTROL SYSTEMS MODIFICATIONS		7,292				7,292

097	COUNTERFIRE RADARS	72,421	–1,000	71,421
	Excess to need		[–1,000]	
	ELECT EQUIP—TACTICAL C2 SYSTEMS			
098	ARMY COMMAND POST INTEGRATED INFRASTRUCTURE (	49,947		49,947
099	FIRE SUPPORT C2 FAMILY	9,390		9,390
100	AIR & MSL DEFENSE PLANNING & CONTROL SYS	47,374		47,374
101	IAMD BATTLE COMMAND SYSTEM	201,587	–10,000	191,587
	Program reduction		[–10,000]	
102	LIFE CYCLE SOFTWARE SUPPORT (LCSS)	4,495		4,495
103	NETWORK MANAGEMENT INITIALIZATION AND SERVICE	18,651		18,651
105	GLOBAL COMBAT SUPPORT SYSTEM-ARMY (GCSS-A)	2,792		2,792
106	INTEGRATED PERSONNEL AND PAY SYSTEM-ARMY (IPP	9,071		9,071
107	RECONNAISSANCE AND SURVEYING INSTRUMENT SET	12,117		12,117
108	MOD OF IN-SVC EQUIPMENT (ENFIRE)	3,004	2,000	5,004
	Program increase		[2,000]	
	ELECT EQUIP—AUTOMATION			
109	ARMY TRAINING MODERNIZATION	14,574		14,574
110	AUTOMATED DATA PROCESSING EQUIP	140,619		140,619
111	GENERAL FUND ENTERPRISE BUSINESS SYSTEMS FAM	4,448		4,448
112	HIGH PERF COMPUTING MOD PGM (HPCMP)	68,405		68,405
113	CONTRACT WRITING SYSTEM	8,459		8,459
114	CSS COMMUNICATIONS	57,651		57,651
115	RESERVE COMPONENT AUTOMATION SYS (RCAS)	14,848		14,848
	ELECT EQUIP—AUDIO VISUAL SYS (A/V)			
117	ITEMS LESS THAN $5M (SURVEYING EQUIPMENT)	4,995		4,995
	ELECT EQUIP—SUPPORT			
119	BCT EMERGING TECHNOLOGIES	16,983	–8,000	8,983
	Program reduction		[–8,000]	
	CLASSIFIED PROGRAMS			
19A	CLASSIFIED PROGRAMS	1,582		1,582
	CHEMICAL DEFENSIVE EQUIPMENT			
123	CBRN DEFENSE	28,456		28,456

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
124	SMOKE & OBSCURANT FAMILY: SOF (NON AAO ITEM)		13,995				13,995
	BRIDGING EQUIPMENT						
125	TACTICAL BRIDGING		10,545				10,545
126	TACTICAL BRIDGE, FLOAT-RIBBON		72,074				72,074
127	BRIDGE SUPPLEMENTAL SET		32,493				32,493
128	COMMON BRIDGE TRANSPORTER (CBT) RECAP		62,978				62,978
	ENGINEER (NON-CONSTRUCTION) EQUIPMENT						
129	HANDHELD STANDOFF MINEFIELD DETECTION SYS-HST		5,570				5,570
130	GRND STANDOFF MINE DETECTN SYSM (GSTAMIDS)		2,497				2,497
132	HUSKY MOUNTED DETECTION SYSTEM (HMDS)		109,069		–10,000		99,069
	Program reduction				[–10,000]		
134	EOD ROBOTICS SYSTEMS RECAPITALIZATION		36,584				36,584
135	ROBOTICS AND APPLIQUE SYSTEMS		179,544		–4,800		174,744
	SMET contract delay				[–4,800]		
137	RENDER SAFE SETS KITS OUTFITS		64,583				64,583
139	FAMILY OF BOATS AND MOTORS		5,289				5,289
	COMBAT SERVICE SUPPORT EQUIPMENT						
140	HEATERS AND ECU'S		8,200				8,200
142	PERSONNEL RECOVERY SUPPORT SYSTEM (PRSS)		4,625				4,625
143	GROUND SOLDIER SYSTEM		154,937				154,937
144	MOBILE SOLDIER POWER		34,297				34,297
147	CARGO AERIAL DEL & PERSONNEL PARACHUTE SYSTEM		53,021				53,021
148	FAMILY OF ENGR COMBAT AND CONSTRUCTION SETS		23,324				23,324
149	ITEMS LESS THAN $5M (ENG SPT)		8,014				8,014
	PETROLEUM EQUIPMENT						
150	DISTRIBUTION SYSTEMS, PETROLEUM & WATER		78,448				78,448

	MEDICAL EQUIPMENT			
151	COMBAT SUPPORT MEDICAL	59,485	5,000	64,485
	Future Warfighter Shelter		[5,000]	
	MAINTENANCE EQUIPMENT			
152	MOBILE MAINTENANCE EQUIPMENT SYSTEMS	40,337		40,337
153	ITEMS LESS THAN $5.0M (MAINT EQ)	5,386		5,386
	CONSTRUCTION EQUIPMENT			
154	GRADER, ROAD MTZD, HVY, 6X4 (CCE)	5,406		5,406
155	SCRAPERS, EARTHMOVING	4,188		4,188
156	LOADERS	4,521		4,521
157	HYDRAULIC EXCAVATOR	5,186		5,186
158	TRACTOR, FULL TRACKED	4,715		4,715
159	ALL TERRAIN CRANES	70,560		70,560
162	CONST EQUIP ESP	8,925		8,925
	RAIL FLOAT CONTAINERIZATION EQUIPMENT			
164	ARMY WATERCRAFT ESP	40,910		40,910
165	MANEUVER SUPPORT VESSEL (MSV)	76,576		76,576
166	ITEMS LESS THAN $5.0M (FLOAT/RAIL)	1,844		1,844
	GENERATORS			
167	GENERATORS AND ASSOCIATED EQUIP	53,433		53,433
168	TACTICAL ELECTRIC POWER RECAPITALIZATION	22,216		22,216
	MATERIAL HANDLING EQUIPMENT			
169	FAMILY OF FORKLIFTS	16,145		16,145
	TRAINING EQUIPMENT			
170	COMBAT TRAINING CENTERS SUPPORT	90,580		90,580
171	TRAINING DEVICES, NONSYSTEM	161,814		161,814
172	SYNTHETIC TRAINING ENVIRONMENT (STE)	13,063		13,063
175	GAMING TECHNOLOGY IN SUPPORT OF ARMY TRAINING	1,950		1,950
	TEST MEASURE AND DIG EQUIPMENT (TMD)			
176	CALIBRATION SETS EQUIPMENT	2,511		2,511
177	INTEGRATED FAMILY OF TEST EQUIPMENT (IFTE)	78,578	–5,000	73,578
	Program reduction		[–5,000]	

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
178	TEST EQUIPMENT MODERNIZATION (TEMOD)		14,941				14,941
	OTHER SUPPORT EQUIPMENT						
180	RAPID EQUIPPING SOLDIER SUPPORT EQUIPMENT		8,629				8,629
181	PHYSICAL SECURITY SYSTEMS (OPA3)		75,499		–3,200		72,299
	Early to need				[–3,200]		
182	BASE LEVEL COMMON EQUIPMENT		27,444				27,444
183	MODIFICATION OF IN-SVC EQUIPMENT (OPA–3)		32,485				32,485
187	SPECIAL EQUIPMENT FOR TEST AND EVALUATION		39,436				39,436
	OPA2						
189	INITIAL SPARES—C&E		9,950				9,950
	TOTAL OTHER PROCUREMENT, ARMY		**8,625,206**		**–337,067**		**8,288,139**
	AIRCRAFT PROCUREMENT, NAVY						
	COMBAT AIRCRAFT						
001	F/A–18E/F (FIGHTER) HORNET	24	1,761,146			24	1,761,146
002	F/A–18E/F (FIGHTER) HORNET AP				28,100		28,100
	FY22 aircraft				[28,100]		
003	JOINT STRIKE FIGHTER CV	21	2,181,780		–75,100	21	2,106,680
	Excess depot standup funding				[–6,500]		
	F135 affordability challenges				[–21,000]		
	Lot 15 target cost savings				[–41,600]		
	Unjustified ALIS funding				[–6,000]		
004	JOINT STRIKE FIGHTER CV AP		330,386				330,386
005	JSF STOVL	10	1,109,393		–55,500	10	1,053,893
	Excess depot standup funding				[–5,000]		
	F135 affordability challenges				[–15,000]		

	Lot 15 target cost savings				[–18,000]		
	Unjustified ALIS funding				[–10,000]		
	Unjustified production engineering support				[–7,500]		
006	JSF STOVL AP		303,035				303,035
007	CH–53K (HEAVY LIFT)	7	813,324			7	813,324
008	CH–53K (HEAVY LIFT) AP		201,188				201,188
009	V–22 (MEDIUM LIFT)	9	934,793	2	211,400	11	1,146,193
	Navy UPL			[2]	[211,400]		
010	V–22 (MEDIUM LIFT) AP		39,547				39,547
011	H–1 UPGRADES (UH–1Y/AH–1Z)		7,267				7,267
013	P–8A POSEIDON		80,134	6	939,900	6	1,020,034
	Line shutdown early to need				[–80,100]		
	Six additional aircraft			[6]	[1,020,000]		
015	E–2D ADV HAWKEYE	4	626,109			4	626,109
016	E–2D ADV HAWKEYE AP		123,166				123,166
	TRAINER AIRCRAFT						
017	ADVANCED HELICOPTER TRAINING SYSTEM	36	269,867			36	269,867
	OTHER AIRCRAFT						
018	KC–130J	5	380,984			5	380,984
019	KC–130J AP		67,022				67,022
021	MQ–4 TRITON		150,570		130,000		280,570
	One additional aircraft				[130,000]		
023	MQ–8 UAV		40,375				40,375
024	STUASL0 UAV		30,930				30,930
026	VH–92A EXECUTIVE HELO	5	610,231			5	610,231
	MODIFICATION OF AIRCRAFT						
028	F–18 A-D UNIQUE		208,261				208,261
029	F–18E/F AND EA–18G MODERNIZATION AND SUSTAINM		468,954				468,954
030	AEA SYSTEMS		21,061				21,061
031	AV–8 SERIES		34,082				34,082
032	INFRARED SEARCH AND TRACK (IRST)		158,055				158,055
033	ADVERSARY		42,946				42,946

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
034	F–18 SERIES		379,351				379,351
035	H–53 SERIES		74,771				74,771
036	MH–60 SERIES		131,584		5,000		136,584
	Program increase				[5,000]		
037	H–1 SERIES		185,140				185,140
038	EP–3 SERIES		26,602				26,602
040	E–2 SERIES		175,540				175,540
041	TRAINER A/C SERIES		7,085				7,085
042	C–2A		9,525				9,525
043	C–130 SERIES		141,705				141,705
044	FEWSG		684				684
045	CARGO/TRANSPORT A/C SERIES		8,911				8,911
046	E–6 SERIES		197,206				197,206
047	EXECUTIVE HELICOPTERS SERIES		29,086				29,086
049	T–45 SERIES		155,745				155,745
050	POWER PLANT CHANGES		24,633				24,633
051	JPATS SERIES		22,682				22,682
052	AVIATION LIFE SUPPORT MODS		40,401				40,401
053	COMMON ECM EQUIPMENT		138,480				138,480
054	COMMON AVIONICS CHANGES		143,322				143,322
055	COMMON DEFENSIVE WEAPON SYSTEM		2,142				2,142
056	ID SYSTEMS		35,999				35,999
057	P–8 SERIES		180,530				180,530
058	MAGTF EW FOR AVIATION		27,794				27,794
059	MQ–8 SERIES		28,774				28,774
060	V–22 (TILT/ROTOR ACFT) OSPREY		334,405				334,405

061	NEXT GENERATION JAMMER (NGJ)		176,638				176,638
062	F–35 STOVL SERIES		153,588		–7,200		146,388
	Block IV/TR3 upgrade delays				[–7,200]		
063	F–35 CV SERIES		105,452		–5,900		99,552
	Block IV/TR3 upgrade delays				[–5,900]		
064	QRC		126,618				126,618
065	MQ–4 SERIES		12,998				12,998
066	RQ–21 SERIES		18,550				18,550
	AIRCRAFT SPARES AND REPAIR PARTS						
070	SPARES AND REPAIR PARTS		2,198,460				2,198,460
	AIRCRAFT SUPPORT EQUIP & FACILITIES						
071	COMMON GROUND EQUIPMENT		543,559				543,559
072	AIRCRAFT INDUSTRIAL FACILITIES		75,685				75,685
073	WAR CONSUMABLES		40,633				40,633
074	OTHER PRODUCTION CHARGES		21,194				21,194
075	SPECIAL SUPPORT EQUIPMENT		155,179				155,179
076	FIRST DESTINATION TRANSPORTATION		2,121				2,121
	TOTAL AIRCRAFT PROCUREMENT, NAVY	**121**	**17,127,378**	**8**	**1,170,700**	**129**	**18,298,078**
	WEAPONS PROCUREMENT, NAVY						
	MODIFICATION OF MISSILES						
001	TRIDENT II MODS		1,173,837				1,173,837
	SUPPORT EQUIPMENT & FACILITIES						
002	MISSILE INDUSTRIAL FACILITIES		7,275				7,275
	STRATEGIC MISSILES						
003	TOMAHAWK	155	277,694			155	277,694
	TACTICAL MISSILES						
004	AMRAAM	325	326,952			325	326,952
005	SIDEWINDER	270	126,485			270	126,485
007	STANDARD MISSILE	125	456,206			125	456,206
008	STANDARD MISSILE AP		66,716				66,716
009	SMALL DIAMETER BOMB II	357	78,867			357	78,867

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
010	RAM	100	90,533			100	90,533
011	JOINT AIR GROUND MISSILE (JAGM)	203	49,386			203	49,386
014	AERIAL TARGETS		174,336				174,336
015	DRONES AND DECOYS	68	41,256			68	41,256
016	OTHER MISSILE SUPPORT		3,501				3,501
017	LRASM	48	168,845			48	168,845
018	LCS OTH MISSILE	15	32,910			15	32,910
	MODIFICATION OF MISSILES						
019	TOMAHAWK MODS		164,915				164,915
020	ESSM	120	215,375		–8,900	120	206,475
	Excessive production support growth				[–8,900]		
022	HARM MODS	24	147,572			24	147,572
023	STANDARD MISSILES MODS		83,654		–66,400		17,254
	SM–2 Blk IIC excessive concurrency				[–66,400]		
	SUPPORT EQUIPMENT & FACILITIES						
024	WEAPONS INDUSTRIAL FACILITIES		1,996				1,996
025	FLEET SATELLITE COMM FOLLOW-ON		53,401				53,401
	ORDNANCE SUPPORT EQUIPMENT						
027	ORDNANCE SUPPORT EQUIPMENT		215,659				215,659
	TORPEDOES AND RELATED EQUIP						
028	SSTD		5,811				5,811
029	MK–48 TORPEDO	110	284,901			110	284,901
030	ASW TARGETS		13,833				13,833
	MOD OF TORPEDOES AND RELATED EQUIP						
031	MK–54 TORPEDO MODS		110,286				110,286
032	MK–48 TORPEDO ADCAP MODS		57,214				57,214

033	MARITIME MINES		5,832			5,832	
	SUPPORT EQUIPMENT						
034	TORPEDO SUPPORT EQUIPMENT		97,581			97,581	
035	ASW RANGE SUPPORT		4,159			4,159	
	DESTINATION TRANSPORTATION						
036	FIRST DESTINATION TRANSPORTATION		4,106			4,106	
	GUNS AND GUN MOUNTS						
037	SMALL ARMS AND WEAPONS		16,030			16,030	
	MODIFICATION OF GUNS AND GUN MOUNTS						
038	CIWS MODS		37,147			37,147	
039	COAST GUARD WEAPONS		45,804			45,804	
040	GUN MOUNT MODS		74,427			74,427	
041	LCS MODULE WEAPONS	32	4,253		32	4,253	
042	AIRBORNE MINE NEUTRALIZATION SYSTEMS		6,662			6,662	
	SPARES AND REPAIR PARTS						
045	SPARES AND REPAIR PARTS		159,578			159,578	
	TOTAL WEAPONS PROCUREMENT, NAVY	**1,952**	**4,884,995**	**–75,300**	**1,952**	**4,809,695**	
	PROCUREMENT OF AMMO, NAVY & MC						
	NAVY AMMUNITION						
001	GENERAL PURPOSE BOMBS		41,496			41,496	
002	JDAM	2,865	64,631		2,865	64,631	
003	AIRBORNE ROCKETS, ALL TYPES		60,719			60,719	
004	MACHINE GUN AMMUNITION		11,158			11,158	
005	PRACTICE BOMBS		51,409			51,409	
006	CARTRIDGES & CART ACTUATED DEVICES		64,694			64,694	
007	AIR EXPENDABLE COUNTERMEASURES		51,523			51,523	
008	JATOS		6,761			6,761	
009	5 INCH/54 GUN AMMUNITION		31,517			31,517	
010	INTERMEDIATE CALIBER GUN AMMUNITION		38,005			38,005	
011	OTHER SHIP GUN AMMUNITION		40,626			40,626	
012	SMALL ARMS & LANDING PARTY AMMO		48,202			48,202	

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
013	PYROTECHNIC AND DEMOLITION		9,766				9,766
015	AMMUNITION LESS THAN $5 MILLION		2,115				2,115
	MARINE CORPS AMMUNITION						
016	MORTARS		46,781				46,781
017	DIRECT SUPPORT MUNITIONS		119,504		–39,842		79,662
	USMC identified funds excess to need				[–39,842]		
018	INFANTRY WEAPONS AMMUNITION		83,220				83,220
019	COMBAT SUPPORT MUNITIONS		32,650				32,650
020	AMMO MODERNIZATION		15,144				15,144
021	ARTILLERY MUNITIONS		59,539				59,539
022	ITEMS LESS THAN $5 MILLION		4,142				4,142
	TOTAL PROCUREMENT OF AMMO, NAVY & MC	**2,865**	**883,602**		**–39,842**	**2,865**	**843,760**
	SHIPBUILDING AND CONVERSION, NAVY						
	FLEET BALLISTIC MISSILE SHIPS						
001	OHIO REPLACEMENT SUBMARINE	1	2,891,475			1	2,891,475
002	OHIO REPLACEMENT SUBMARINE AP		1,123,175				1,123,175
	OTHER WARSHIPS						
003	CARRIER REPLACEMENT PROGRAM		997,544		–90,000		907,544
	Full funding early to need				[–90,000]		
004	CVN–81		1,645,606		–180,000		1,465,606
	Full funding early to need				[–180,000]		
005	VIRGINIA CLASS SUBMARINE	1	2,334,693	1	2,296,000	2	4,630,693
	Restore second Virginia-class SSN			[1]	[2,296,000]		
006	VIRGINIA CLASS SUBMARINE		1,901,187		272,000		2,173,187
	Restore second Virginia-class SSN				[272,000]		

007	CVN REFUELING OVERHAULS		1,878,453				1,878,453
008	CVN REFUELING OVERHAULS AP		17,384				17,384
009	DDG 1000		78,205				78,205
010	DDG–51	2	3,040,270			2	3,040,270
011	DDG–51 AP		29,297				29,297
013	FFG-FRIGATE	1	1,053,123		–98,600	1	954,523
	Anticipated learning curve				[–98,600]		
	AMPHIBIOUS SHIPS						
014	LPD FLIGHT II	1	1,155,801		–37,700	1	1,118,101
	Excessive unit cost growth				[–37,700]		
019	EXPEDITIONARY FAST TRANSPORT (EPF)				260,000		260,000
	One additional ship				[260,000]		
	AUXILIARIES, CRAFT AND PRIOR YR PROGRAM COST						
022	TOWING, SALVAGE, AND RESCUE SHIP (ATS)	2	168,209			2	168,209
023	LCU 1700	5	87,395			5	87,395
024	OUTFITTING		825,586				825,586
026	SERVICE CRAFT		249,781				249,781
027	LCAC SLEP	3	56,461			3	56,461
028	COMPLETION OF PY SHIPBUILDING PROGRAMS		369,112				369,112
	TOTAL SHIPBUILDING AND CONVERSION, NAVY	**16**	**19,902,757**	**1**	**2,421,700**	**17**	**22,324,457**
	OTHER PROCUREMENT, NAVY						
	SHIP PROPULSION EQUIPMENT						
001	SURFACE POWER EQUIPMENT		11,738				11,738
	GENERATORS						
002	SURFACE COMBATANT HM&E		58,497				58,497
	NAVIGATION EQUIPMENT						
003	OTHER NAVIGATION EQUIPMENT		74,084				74,084
	OTHER SHIPBOARD EQUIPMENT						
004	SUB PERISCOPE, IMAGING AND SUPT EQUIP PROG		204,806				204,806
005	DDG MOD		547,569		–16,400		531,169
	Excessive CSSQT cost growth				[–16,400]		

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
006	FIREFIGHTING EQUIPMENT		18,394				18,394
007	COMMAND AND CONTROL SWITCHBOARD		2,374				2,374
008	LHA/LHD MIDLIFE		78,265				78,265
009	POLLUTION CONTROL EQUIPMENT		23,035				23,035
010	SUBMARINE SUPPORT EQUIPMENT		64,632		–4,500		60,132
	Excess cost growth				[–4,500]		
011	VIRGINIA CLASS SUPPORT EQUIPMENT		22,868				22,868
012	LCS CLASS SUPPORT EQUIPMENT		3,976				3,976
013	SUBMARINE BATTERIES		31,322				31,322
014	LPD CLASS SUPPORT EQUIPMENT		50,475		5,000		55,475
	Electronic actuator pilot program				[5,000]		
015	DDG 1000 CLASS SUPPORT EQUIPMENT		42,279		–5,500		36,779
	Excess cost growth				[–5,500]		
016	STRATEGIC PLATFORM SUPPORT EQUIP		15,429				15,429
017	DSSP EQUIPMENT		2,918				2,918
018	CG MODERNIZATION		87,978				87,978
019	LCAC		9,366				9,366
020	UNDERWATER EOD EQUIPMENT		16,842				16,842
021	ITEMS LESS THAN $5 MILLION		105,715		–10,000		95,715
	Cost growth				[–10,000]		
022	CHEMICAL WARFARE DETECTORS		3,044				3,044
023	SUBMARINE LIFE SUPPORT SYSTEM		5,885				5,885
	REACTOR PLANT EQUIPMENT						
024	SHIP MAINTENANCE, REPAIR AND MODERNIZATION		1,260,721		–860,100		400,621
	LCS in-service modernization excess cost growth				[–12,100]		
	Realignment to OPN–24A for Shipyard Infrastructure Optimization Plan ..				[–198,000]		

	Transfer to O&M for ship depot maintenance		[–650,000]	
024A	SHIPYARD INFRASTRUCTURE OPTIMIZATION PLAN		198,000	198,000
	Realignment from OPN–24 for Shipyard Infrastructure Optimization Plan		[198,000]	
025	REACTOR POWER UNITS	5,305		5,305
026	REACTOR COMPONENTS	415,404		415,404
	OCEAN ENGINEERING			
027	DIVING AND SALVAGE EQUIPMENT	11,143		11,143
	SMALL BOATS			
028	STANDARD BOATS	52,371		52,371
	PRODUCTION FACILITIES EQUIPMENT			
029	OPERATING FORCES IPE	233,667		233,667
	OTHER SHIP SUPPORT			
030	LCS COMMON MISSION MODULES EQUIPMENT	39,714		39,714
031	LCS MCM MISSION MODULES	218,822	–50,900	167,922
	COBRA early to need		[–9,300]	
	Program Decrease		[–41,600]	
032	LCS ASW MISSION MODULES	61,759		61,759
033	LCS SUW MISSION MODULES	24,412		24,412
034	LCS IN-SERVICE MODERNIZATION	121,848	30,000	151,848
	Preservation of LCS 3 and LCS 4		[30,000]	
035	SMALL & MEDIUM UUV	67,709	–24,000	43,709
	Early to need based on IOTE schedule		[–24,000]	
	SHIP SONARS			
037	SPQ–9B RADAR	27,517		27,517
038	AN/SQQ–89 SURF ASW COMBAT SYSTEM	128,664		128,664
039	SSN ACOUSTIC EQUIPMENT	374,737		374,737
040	UNDERSEA WARFARE SUPPORT EQUIPMENT	9,286		9,286
	ASW ELECTRONIC EQUIPMENT			
041	SUBMARINE ACOUSTIC WARFARE SYSTEM	26,066		26,066
042	SSTD	13,241		13,241
043	FIXED SURVEILLANCE SYSTEM	193,446		193,446
044	SURTASS	63,838		63,838

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	ELECTRONIC WARFARE EQUIPMENT						
045	AN/SLQ–32		387,195				387,195
	RECONNAISSANCE EQUIPMENT						
046	SHIPBOARD IW EXPLOIT		235,744		–12,100		223,644
	Excess cost growth				[–12,100]		
047	AUTOMATED IDENTIFICATION SYSTEM (AIS)		3,862				3,862
	OTHER SHIP ELECTRONIC EQUIPMENT						
048	COOPERATIVE ENGAGEMENT CAPABILITY		26,006				26,006
049	NAVAL TACTICAL COMMAND SUPPORT SYSTEM (NTCSS)		15,385				15,385
050	ATDLS		103,835				103,835
051	NAVY COMMAND AND CONTROL SYSTEM (NCCS)		3,594				3,594
052	MINESWEEPING SYSTEM REPLACEMENT		15,744				15,744
053	SHALLOW WATER MCM		5,493				5,493
054	NAVSTAR GPS RECEIVERS (SPACE)		38,043				38,043
055	AMERICAN FORCES RADIO AND TV SERVICE		2,592				2,592
056	STRATEGIC PLATFORM SUPPORT EQUIP		7,985				7,985
	AVIATION ELECTRONIC EQUIPMENT						
057	ASHORE ATC EQUIPMENT		83,475				83,475
058	AFLOAT ATC EQUIPMENT		65,113				65,113
059	ID SYSTEMS		23,815				23,815
060	JOINT PRECISION APPROACH AND LANDING SYSTEM (		100,751				100,751
061	NAVAL MISSION PLANNING SYSTEMS		13,947				13,947
	OTHER SHORE ELECTRONIC EQUIPMENT						
062	MARITIME INTEGRATED BROADCAST SYSTEM		1,375				1,375
063	TACTICAL/MOBILE C4I SYSTEMS		22,771				22,771
064	DCGS-N		18,872				18,872

065	CANES	389,585		389,585
066	RADIAC	10,335		10,335
067	CANES-INTELL	48,654		48,654
068	GPETE	8,133		8,133
069	MASF	4,150		4,150
070	INTEG COMBAT SYSTEM TEST FACILITY	5,934		5,934
071	EMI CONTROL INSTRUMENTATION	4,334		4,334
072	ITEMS LESS THAN $5 MILLION	159,815		159,815
	SHIPBOARD COMMUNICATIONS			
073	SHIPBOARD TACTICAL COMMUNICATIONS	56,106		56,106
074	SHIP COMMUNICATIONS AUTOMATION	124,288		124,288
075	COMMUNICATIONS ITEMS UNDER $5M	45,120		45,120
	SUBMARINE COMMUNICATIONS			
076	SUBMARINE BROADCAST SUPPORT	31,133		31,133
077	SUBMARINE COMMUNICATION EQUIPMENT	62,214		62,214
	SATELLITE COMMUNICATIONS			
078	SATELLITE COMMUNICATIONS SYSTEMS	47,421		47,421
079	NAVY MULTIBAND TERMINAL (NMT)	64,552		64,552
	SHORE COMMUNICATIONS			
080	JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE)	4,398		4,398
	CRYPTOGRAPHIC EQUIPMENT			
081	INFO SYSTEMS SECURITY PROGRAM (ISSP)	157,551	–10,000	147,551
	Program decrease		[–10,000]	
082	MIO INTEL EXPLOITATION TEAM	985		985
	CRYPTOLOGIC EQUIPMENT			
083	CRYPTOLOGIC COMMUNICATIONS EQUIP	15,906		15,906
	OTHER ELECTRONIC SUPPORT			
090	COAST GUARD EQUIPMENT	70,689		70,689
	SONOBUOYS			
092	SONOBUOYS—ALL TYPES	237,639	49,000	286,639
	Inventory increase		[49,000]	
	AIRCRAFT SUPPORT EQUIPMENT			

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
093	MINOTAUR		5,077				5,077
094	WEAPONS RANGE SUPPORT EQUIPMENT		83,969				83,969
095	AIRCRAFT SUPPORT EQUIPMENT		187,758				187,758
096	ADVANCED ARRESTING GEAR (AAG)		16,059				16,059
097	METEOROLOGICAL EQUIPMENT		15,192				15,192
099	LEGACY AIRBORNE MCM		6,674				6,674
100	LAMPS EQUIPMENT		1,189				1,189
101	AVIATION SUPPORT EQUIPMENT		58,873				58,873
102	UMCS-UNMAN CARRIER AVIATION(UCA)MISSION CNTRL		60,937				60,937
	SHIP GUN SYSTEM EQUIPMENT						
103	SHIP GUN SYSTEMS EQUIPMENT		5,540				5,540
	SHIP MISSILE SYSTEMS EQUIPMENT						
104	HARPOON SUPPORT EQUIPMENT		208				208
105	SHIP MISSILE SUPPORT EQUIPMENT		262,077		–10,000		252,077
	Excess cost growth				[–10,000]		
106	TOMAHAWK SUPPORT EQUIPMENT		84,087		–8,000		76,087
	TMPC cost growth				[–8,000]		
	FBM SUPPORT EQUIPMENT						
107	STRATEGIC MISSILE SYSTEMS EQUIP		258,910				258,910
	ASW SUPPORT EQUIPMENT						
108	SSN COMBAT CONTROL SYSTEMS		173,770				173,770
109	ASW SUPPORT EQUIPMENT		26,584				26,584
	OTHER ORDNANCE SUPPORT EQUIPMENT						
110	EXPLOSIVE ORDNANCE DISPOSAL EQUIP		7,470				7,470
111	ITEMS LESS THAN $5 MILLION		6,356				6,356
	OTHER EXPENDABLE ORDNANCE						

112	ANTI-SHIP MISSILE DECOY SYSTEM	86,356		86,356
113	SUBMARINE TRAINING DEVICE MODS	69,240		69,240
114	SURFACE TRAINING EQUIPMENT	192,245		192,245
	CIVIL ENGINEERING SUPPORT EQUIPMENT			
115	PASSENGER CARRYING VEHICLES	6,123		6,123
116	GENERAL PURPOSE TRUCKS	2,693		2,693
117	CONSTRUCTION & MAINTENANCE EQUIP	47,301		47,301
118	FIRE FIGHTING EQUIPMENT	10,352		10,352
119	TACTICAL VEHICLES	31,475		31,475
121	POLLUTION CONTROL EQUIPMENT	2,630		2,630
122	ITEMS LESS THAN $5 MILLION	47,972		47,972
123	PHYSICAL SECURITY VEHICLES	1,171		1,171
	SUPPLY SUPPORT EQUIPMENT			
124	SUPPLY EQUIPMENT	19,693		19,693
125	FIRST DESTINATION TRANSPORTATION	4,956		4,956
126	SPECIAL PURPOSE SUPPLY SYSTEMS	668,639	–30,000	638,639
	Program decrease		[–30,000]	
	TRAINING DEVICES			
127	TRAINING SUPPORT EQUIPMENT	4,026		4,026
128	TRAINING AND EDUCATION EQUIPMENT	73,454		73,454
	COMMAND SUPPORT EQUIPMENT			
129	COMMAND SUPPORT EQUIPMENT	32,390		32,390
130	MEDICAL SUPPORT EQUIPMENT	974		974
132	NAVAL MIP SUPPORT EQUIPMENT	5,606		5,606
133	OPERATING FORCES SUPPORT EQUIPMENT	16,024		16,024
134	C4ISR EQUIPMENT	6,697		6,697
135	ENVIRONMENTAL SUPPORT EQUIPMENT	27,503		27,503
136	PHYSICAL SECURITY EQUIPMENT	138,281		138,281
137	ENTERPRISE INFORMATION TECHNOLOGY	42,680		42,680
	OTHER			
140	NEXT GENERATION ENTERPRISE SERVICE	184,443		184,443
141	CYBERSPACE ACTIVITIES	16,523		16,523

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	CLASSIFIED PROGRAMS						
41A	CLASSIFIED PROGRAMS		18,446				18,446
	SPARES AND REPAIR PARTS						
142	SPARES AND REPAIR PARTS		374,195		47,000		421,195
	SPY–1 battle spare				[47,000]		
	TOTAL OTHER PROCUREMENT, NAVY		**10,948,518**		**–712,500**		**10,236,018**
	PROCUREMENT, MARINE CORPS						
	TRACKED COMBAT VEHICLES						
001	AAV7A1 PIP		87,476				87,476
002	AMPHIBIOUS COMBAT VEHICLE FAMILY OF VEHICLES	72	478,874			72	478,874
003	LAV PIP		41,988				41,988
	ARTILLERY AND OTHER WEAPONS						
004	155MM LIGHTWEIGHT TOWED HOWITZER		59				59
005	ARTILLERY WEAPONS SYSTEM		174,687	31	59,650	31	234,337
	Ground Based Anti-Ship Missiles—USMC UPL			[31]	[59,650]		
006	WEAPONS AND COMBAT VEHICLES UNDER $5 MILLION		24,867				24,867
	OTHER SUPPORT						
007	MODIFICATION KITS		3,067		–3,067		0
	USMC funds identified excess to need				[–3,067]		
	GUIDED MISSILES						
008	GROUND BASED AIR DEFENSE		18,920				18,920
009	ANTI-ARMOR MISSILE-JAVELIN	98	19,888			98	19,888
010	FAMILY ANTI-ARMOR WEAPON SYSTEMS (FOAAWS)		21,891				21,891
011	ANTI-ARMOR MISSILE-TOW		34,985				34,985
012	GUIDED MLRS ROCKET (GMLRS)	952	133,689			952	133,689

	COMMAND AND CONTROL SYSTEMS				
013	COMMON AVIATION COMMAND AND CONTROL SYSTEM (C		35,057		35,057
	REPAIR AND TEST EQUIPMENT				
014	REPAIR AND TEST EQUIPMENT		24,405		24,405
	OTHER SUPPORT (TEL)				
015	MODIFICATION KITS		1,006		1,006
	COMMAND AND CONTROL SYSTEM (NON-TEL)				
016	ITEMS UNDER $5 MILLION (COMM & ELEC)		69,725		69,725
017	AIR OPERATIONS C2 SYSTEMS		15,611		15,611
	RADAR + EQUIPMENT (NON-TEL)				
019	GROUND/AIR TASK ORIENTED RADAR (G/ATOR)	8	284,283	8	284,283
	INTELL/COMM EQUIPMENT (NON-TEL)				
020	GCSS-MC		1,587		1,587
021	FIRE SUPPORT SYSTEM		24,934		24,934
022	INTELLIGENCE SUPPORT EQUIPMENT		50,728		50,728
024	UNMANNED AIR SYSTEMS (INTEL)		24,853		24,853
025	DCGS-MC		38,260		38,260
026	UAS PAYLOADS		5,489		5,489
	OTHER SUPPORT (NON-TEL)				
029	NEXT GENERATION ENTERPRISE NETWORK (NGEN)		78,922		78,922
030	COMMON COMPUTER RESOURCES		35,349		35,349
031	COMMAND POST SYSTEMS		33,713		33,713
032	RADIO SYSTEMS		343,250		343,250
033	COMM SWITCHING & CONTROL SYSTEMS		40,627		40,627
034	COMM & ELEC INFRASTRUCTURE SUPPORT		43,782		43,782
035	CYBERSPACE ACTIVITIES		53,896		53,896
	CLASSIFIED PROGRAMS				
36A	CLASSIFIED PROGRAMS		3,797		3,797
	ADMINISTRATIVE VEHICLES				
037	COMMERCIAL CARGO VEHICLES		22,460		22,460
	TACTICAL VEHICLES				
038	MOTOR TRANSPORT MODIFICATIONS		10,739		10,739

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
039	JOINT LIGHT TACTICAL VEHICLE	752	381,675			752	381,675
040	FAMILY OF TACTICAL TRAILERS		2,963				2,963
	ENGINEER AND OTHER EQUIPMENT						
042	ENVIRONMENTAL CONTROL EQUIP ASSORT		385				385
043	TACTICAL FUEL SYSTEMS		501				501
044	POWER EQUIPMENT ASSORTED		23,430				23,430
045	AMPHIBIOUS SUPPORT EQUIPMENT		5,752				5,752
046	EOD SYSTEMS		20,939				20,939
	MATERIALS HANDLING EQUIPMENT						
047	PHYSICAL SECURITY EQUIPMENT		23,063				23,063
	GENERAL PROPERTY						
048	FIELD MEDICAL EQUIPMENT		4,187				4,187
049	TRAINING DEVICES		101,765				101,765
050	FAMILY OF CONSTRUCTION EQUIPMENT		19,305				19,305
051	ULTRA-LIGHT TACTICAL VEHICLE (ULTV)		678				678
	OTHER SUPPORT						
052	ITEMS LESS THAN $5 MILLION		9,174				9,174
	SPARES AND REPAIR PARTS						
053	SPARES AND REPAIR PARTS		27,295				27,295
	TOTAL PROCUREMENT, MARINE CORPS	**1,882**	**2,903,976**	**31**	**56,583**	**1,913**	**2,960,559**
	AIRCRAFT PROCUREMENT, AIR FORCE						
	TACTICAL FORCES						
001	F–35	48	4,567,018		–331,000	48	4,236,018
	Excess depot standup funding				[–22,000]		
	Excess miscellaneous support costs				[–156,000]		

	Excess production engineering support				[–10,000]			
	F135 affordability challenges				[–48,000]			
	Lot 15 target cost savings				[–75,000]			
	Unjustified ALIS funding				[–20,000]			
002	F–35 AP		610,800				610,800	
004	F–15EX	12	1,269,847			12	1,269,847	
005	F–15EX AP		133,500				133,500	
	TACTICAL AIRLIFT							
007	KC–46A MDAP	15	2,850,151	–3	–661,000	12	2,189,151	
	Decrease quantity by three aircraft			[–3]	[–462,000]			
	Prior year carryover				[–119,000]			
	Spares excess to need due to quantity decrease				[–40,000]			
	Wing Air Refueling Pods early to need				[–40,000]			
	OTHER AIRLIFT							
008	C–130J		37,131				37,131	
010	MC–130J	4	362,807		–121,000	4	241,807	
	Prior year carryover				[–121,000]			
011	MC–130J AP		39,987		–10,000		29,987	
	FY22 quantity reduction				[–10,000]			
	HELICOPTERS							
012	UH–1N REPLACEMENT	8	194,016			8	194,016	
013	COMBAT RESCUE HELICOPTER	16	973,473			16	973,473	
	MISSION SUPPORT AIRCRAFT							
015	CIVIL AIR PATROL A/C		2,811		8,400		11,211	
	Program Increase				[8,400]			
	OTHER AIRCRAFT							
016	TARGET DRONES	38	133,273			38	133,273	
018	COMPASS CALL		161,117	2	130,000	2	291,117	
	Program increase			[2]	[130,000]			
020	MQ–9		29,409	16	90,800	16	120,209	
	Program increase			[16]	[108,000]			
	Unjustified request				[–17,200]			

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	STRATEGIC AIRCRAFT						
022	B–1		3,853				3,853
023	B–2A		31,476				31,476
024	B–1B		21,808		–20,000		1,808
	Slow modernization execution				[–20,000]		
025	B–52		53,949		–31,700		22,249
	GPS IU early to need				[–28,700]		
	Tactical data link contract delay				[–3,000]		
025A	LONG-RANGE STRIKE BOMBER ADVANCED PROCUREMENT				20,000		20,000
	Advanced procurement				[20,000]		
026	LARGE AIRCRAFT INFRARED COUNTERMEASURES		9,999				9,999
	TACTICAL AIRCRAFT						
027	A–10		135,793				135,793
028	E–11 BACN/HAG		33,645				33,645
029	F–15		349,304				349,304
030	F–16		615,760				615,760
032	F–22A		387,905		–26,200		361,705
	Contract delays				[–26,200]		
033	F–35 MODIFICATIONS		322,185		–31,700		290,485
	Block IV/TR3 delays				[–31,700]		
034	F–15 EPAW	6	31,995		–4,800	6	27,195
	Concurrency				[–4,800]		
035	INCREMENT 3.2B		5,889				5,889
036	KC–46A MDAP		24,085		–15,000		9,085
	Excessive airworthiness directives and service bulletins				[–15,000]		
	AIRLIFT AIRCRAFT						

037	C–5	62,108	–12,100	50,008
	Unjustified PMA cost growth		[–12,100]	
038	C–17A	66,798	–10,000	56,798
	BLOS ahead of need		[–10,000]	
040	C–32A	2,947		2,947
041	C–37A	12,985	–7,000	5,985
	SATCOM installs ahead of need		[–7,000]	
	TRAINER AIRCRAFT			
042	GLIDER MODS	977		977
043	T–6	26,829		26,829
044	T–1	4,465		4,465
045	T–38	36,806	5,000	41,806
	T–38 ejection seat improvements		[5,000]	
	OTHER AIRCRAFT			
046	U–2 MODS	110,618		110,618
047	KC–10A (ATCA)	117		117
049	VC–25A MOD	1,983		1,983
050	C–40	9,252	–2,000	7,252
	SATCOM installs ahead of need		[–2,000]	
051	C–130	5,871	134,800	140,671
	AMP 1 excess to need		[–3,800]	
	Eight-bladed propeller upgrade kits only		[55,000]	
	Improved modular airborne fire fighting system (iMAFFS)		[4,600]	
	T–56 3.5 engine mod		[79,000]	
052	C–130J MODS	140,032		140,032
053	C–135	88,250	–1,800	86,450
	Other government cost growth		[–1,800]	
055	COMPASS CALL	193,389		193,389
057	RC–135	191,332		191,332
058	E–3	172,141		172,141
059	E–4	58,803		58,803
060	E–8	11,037	27,000	38,037

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	Program increase				[27,000]		
061	AIRBORNE WARNING AND CNTRL SYS (AWACS) 40/45		53,343				53,343
062	FAMILY OF BEYOND LINE-OF-SIGHT TERMINALS		1,573				1,573
063	H–1		4,410				4,410
064	H–60		44,538				44,538
065	RQ–4 MODS		40,468				40,468
066	HC/MC–130 MODIFICATIONS		20,780				20,780
067	OTHER AIRCRAFT		100,774				100,774
068	MQ–9 MODS		188,387				188,387
070	CV–22 MODS		122,306	2	206,200	2	328,506
	SOCOM UPL			[2]	[206,200]		
	AIRCRAFT SPARES AND REPAIR PARTS						
071	INITIAL SPARES/REPAIR PARTS		926,683		–11,300		915,383
	Unobligated balances—F–16s				[–11,300]		
	COMMON SUPPORT EQUIPMENT						
073	AIRCRAFT REPLACEMENT SUPPORT EQUIP		132,719				132,719
	POST PRODUCTION SUPPORT						
074	B–2A		1,683				1,683
075	B–2B		46,734				46,734
076	B–52		1,034				1,034
079	E–11 BACN/HAG		63,419				63,419
080	F–15		2,632				2,632
081	F–16		14,163				14,163
083	OTHER AIRCRAFT		4,595				4,595
084	RQ–4 POST PRODUCTION CHARGES		32,585				32,585
	INDUSTRIAL PREPAREDNESS						

085	INDUSTRIAL RESPONSIVENESS		18,215				18,215
	WAR CONSUMABLES						
086	WAR CONSUMABLES		36,046				36,046
	OTHER PRODUCTION CHARGES						
087	OTHER PRODUCTION CHARGES		1,439,640				1,439,640
	CLASSIFIED PROGRAMS						
89A	CLASSIFIED PROGRAMS		21,692				21,692
	TOTAL AIRCRAFT PROCUREMENT, AIR FORCE	**147**	**17,908,145**	**17**	**–674,400**	**164**	**17,233,745**
	MISSILE PROCUREMENT, AIR FORCE						
	MISSILE REPLACEMENT EQUIPMENT—BALLISTIC						
001	MISSILE REPLACEMENT EQ-BALLISTIC		75,012				75,012
	TACTICAL						
002	REPLAC EQUIP & WAR CONSUMABLES		4,495				4,495
004	JOINT AIR-SURFACE STANDOFF MISSILE	376	475,949			376	475,949
005	LRASM0	5	19,800			5	19,800
006	SIDEWINDER (AIM–9X)	331	164,769			331	164,769
007	AMRAAM	414	453,223			414	453,223
008	PREDATOR HELLFIRE MISSILE	548	40,129			548	40,129
009	SMALL DIAMETER BOMB	1,179	45,475			1,179	45,475
010	SMALL DIAMETER BOMB II	1,133	273,272			1,133	273,272
	INDUSTRIAL FACILITIES						
011	INDUSTR'L PREPAREDNS/POL PREVENTION		814				814
	CLASS IV						
013	ICBM FUZE MOD	20	3,458			20	3,458
014	ICBM FUZE MOD AP		43,450				43,450
015	MM III MODIFICATIONS		85,310				85,310
016	AGM–65D MAVERICK		298				298
017	AIR LAUNCH CRUISE MISSILE (ALCM)		52,924				52,924
	MISSILE SPARES AND REPAIR PARTS						
018	MSL SPRS/REPAIR PARTS (INITIAL)		9,402				9,402
019	MSL SPRS/REPAIR PARTS (REPLEN)		84,671				84,671

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	SPECIAL PROGRAMS						
025	SPECIAL UPDATE PROGRAMS		23,501				23,501
	CLASSIFIED PROGRAMS						
25A	CLASSIFIED PROGRAMS		540,465				540,465
	TOTAL MISSILE PROCUREMENT, AIR FORCE	**4,006**	**2,396,417**			**4,006**	**2,396,417**
	PROCUREMENT OF AMMUNITION, AIR FORCE						
	ROCKETS						
001	ROCKETS		14,962				14,962
	CARTRIDGES						
002	CARTRIDGES		123,365				123,365
	BOMBS						
003	PRACTICE BOMBS		59,725				59,725
006	JOINT DIRECT ATTACK MUNITION	10,000	206,989			10,000	206,989
007	B61		35,634				35,634
	OTHER ITEMS						
009	CAD/PAD		47,830				47,830
010	EXPLOSIVE ORDNANCE DISPOSAL (EOD)		6,232				6,232
011	SPARES AND REPAIR PARTS		542				542
012	MODIFICATIONS		1,310				1,310
013	ITEMS LESS THAN $5,000,000		4,753				4,753
	FLARES						
015	FLARES		40,088				40,088
	FUZES						
016	FUZES		40,983				40,983
	SMALL ARMS						

017	SMALL ARMS		13,925			13,925	
	TOTAL PROCUREMENT OF AMMUNITION, AIR FORCE	**10,000**	**596,338**		**10,000**	**596,338**	
	PROCUREMENT, SPACE FORCE						
	SPACE PROCUREMENT, SF						
001	ADVANCED EHF		14,823			14,823	
002	AF SATELLITE COMM SYSTEM		48,326	–5,000		43,326	
	Insufficient justification			[–5,000]			
003	COUNTERSPACE SYSTEMS		65,540	–8,000		57,540	
	Insufficient justification			[–8,000]			
004	FAMILY OF BEYOND LINE-OF-SIGHT TERMINALS		66,190			66,190	
005	GENERAL INFORMATION TECH—SPACE		3,299			3,299	
006	GPSIII FOLLOW ON	2	627,796	–15,000	2	612,796	
	Unjustified growth			[–15,000]			
007	GPS III SPACE SEGMENT		20,122			20,122	
008	GLOBAL POSTIONING (SPACE)		2,256			2,256	
009	SPACEBORNE EQUIP (COMSEC)		35,495			35,495	
010	MILSATCOM		15,795			15,795	
011	SBIR HIGH (SPACE)		160,891			160,891	
012	SPECIAL SPACE ACTIVITIES		78,387			78,387	
013	NATIONAL SECURITY SPACE LAUNCH	3	1,043,171		3	1,043,171	
014	NUDET DETECTION SYSTEM		6,638			6,638	
015	ROCKET SYSTEMS LAUNCH PROGRAM		47,741			47,741	
016	SPACE FENCE		11,279			11,279	
017	SPACE MODS		96,551	–10,000		86,551	
	Insufficient justification			[–10,000]			
018	SPACELIFT RANGE SYSTEM SPACE		100,492			100,492	
	SPARES						
019	SPARES AND REPAIR PARTS		1,272			1,272	
	TOTAL PROCUREMENT, SPACE FORCE	**5**	**2,446,064**	**–38,000**	**5**	**2,408,064**	
	OTHER PROCUREMENT, AIR FORCE						

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	PASSENGER CARRYING VEHICLES						
001	PASSENGER CARRYING VEHICLES		9,016				9,016
	CARGO AND UTILITY VEHICLES						
002	MEDIUM TACTICAL VEHICLE		15,058				15,058
003	CAP VEHICLES		1,059		741		1,800
	Program increase				[741]		
004	CARGO AND UTILITY VEHICLES		38,920				38,920
	SPECIAL PURPOSE VEHICLES						
005	JOINT LIGHT TACTICAL VEHICLE		30,544				30,544
006	SECURITY AND TACTICAL VEHICLES		319				319
007	SPECIAL PURPOSE VEHICLES		43,157		–8,776		34,381
	Program decrease				[–2,500]		
	Unjustified request				[–6,276]		
	FIRE FIGHTING EQUIPMENT						
008	FIRE FIGHTING/CRASH RESCUE VEHICLES		8,621				8,621
	MATERIALS HANDLING EQUIPMENT						
009	MATERIALS HANDLING VEHICLES		12,897				12,897
	BASE MAINTENANCE SUPPORT						
010	RUNWAY SNOW REMOV AND CLEANING EQU		3,577				3,577
011	BASE MAINTENANCE SUPPORT VEHICLES		43,095				43,095
	COMM SECURITY EQUIPMENT(COMSEC)						
013	COMSEC EQUIPMENT		54,864				54,864
	INTELLIGENCE PROGRAMS						
014	INTERNATIONAL INTEL TECH & ARCHITECTURES		9,283				9,283
015	INTELLIGENCE TRAINING EQUIPMENT		6,849				6,849
016	INTELLIGENCE COMM EQUIPMENT		33,471				33,471

	ELECTRONICS PROGRAMS			
017	AIR TRAFFIC CONTROL & LANDING SYS	29,409		29,409
018	BATTLE CONTROL SYSTEM—FIXED	7,909		7,909
019	THEATER AIR CONTROL SYS IMPROVEMEN	32,632		32,632
020	WEATHER OBSERVATION FORECAST	33,021		33,021
021	STRATEGIC COMMAND AND CONTROL	31,353		31,353
022	CHEYENNE MOUNTAIN COMPLEX	10,314		10,314
023	MISSION PLANNING SYSTEMS	15,132		15,132
025	INTEGRATED STRAT PLAN & ANALY NETWORK (ISPAN)	9,806		9,806
	SPCL COMM-ELECTRONICS PROJECTS			
026	GENERAL INFORMATION TECHNOLOGY	39,887		39,887
027	AF GLOBAL COMMAND & CONTROL SYS	2,602		2,602
029	MOBILITY COMMAND AND CONTROL	10,541		10,541
030	AIR FORCE PHYSICAL SECURITY SYSTEM	96,277	–2,500	93,777
	Program decrease		[–2,500]	
031	COMBAT TRAINING RANGES	195,185		195,185
032	MINIMUM ESSENTIAL EMERGENCY COMM N	29,664		29,664
033	WIDE AREA SURVEILLANCE (WAS)	59,633		59,633
034	C3 COUNTERMEASURES	105,584		105,584
036	DEFENSE ENTERPRISE ACCOUNTING & MGT SYS	899		899
038	THEATER BATTLE MGT C2 SYSTEM	3,392		3,392
039	AIR & SPACE OPERATIONS CENTER (AOC)	24,983		24,983
	AIR FORCE COMMUNICATIONS			
041	BASE INFORMATION TRANSPT INFRAST (BITI) WIRED	19,147		19,147
042	AFNET	84,515		84,515
043	JOINT COMMUNICATIONS SUPPORT ELEMENT (JCSE)	6,185		6,185
044	USCENTCOM	19,649		19,649
045	USSTRATCOM	4,337		4,337
	ORGANIZATION AND BASE			
046	TACTICAL C-E EQUIPMENT	137,033		137,033
047	RADIO EQUIPMENT	15,264		15,264
049	BASE COMM INFRASTRUCTURE	132,281		132,281

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	MODIFICATIONS						
050	COMM ELECT MODS		21,471				21,471
	PERSONAL SAFETY & RESCUE EQUIP						
051	PERSONAL SAFETY AND RESCUE EQUIPMENT		49,578				49,578
	DEPOT PLANT+MTRLS HANDLING EQ						
052	POWER CONDITIONING EQUIPMENT		11,454				11,454
053	MECHANIZED MATERIAL HANDLING EQUIP		12,110				12,110
	BASE SUPPORT EQUIPMENT						
054	BASE PROCURED EQUIPMENT		21,142				21,142
055	ENGINEERING AND EOD EQUIPMENT		7,700				7,700
056	MOBILITY EQUIPMENT		18,266		4,700		22,966
	Program increase				[4,700]		
057	FUELS SUPPORT EQUIPMENT (FSE)		9,601				9,601
058	BASE MAINTENANCE AND SUPPORT EQUIPMENT		42,078		–11,700		30,378
	Program decrease				[–4,700]		
	Unjustified request				[–7,000]		
	SPECIAL SUPPORT PROJECTS						
060	DARP RC135		27,164				27,164
061	DCGS-AF		121,528				121,528
063	SPECIAL UPDATE PROGRAM		782,641				782,641
	CLASSIFIED PROGRAMS						
63A	CLASSIFIED PROGRAMS		21,086,112		–60,000		21,026,112
	Program adjustment				[–60,000]		
	SPARES AND REPAIR PARTS						
064	SPARES AND REPAIR PARTS (CYBER)		1,664				1,664
065	SPARES AND REPAIR PARTS		15,847				15,847

	TOTAL OTHER PROCUREMENT, AIR FORCE		**23,695,720**		**–77,535**		**23,618,185**
	PROCUREMENT, DEFENSE-WIDE						
	MAJOR EQUIPMENT, OSD						
026	MAJOR EQUIPMENT, DPAA	10	500			10	500
049	MAJOR EQUIPMENT, OSD		3,099				3,099
	MAJOR EQUIPMENT, NSA						
048	INFORMATION SYSTEMS SECURITY PROGRAM (ISSP)		101				101
	MAJOR EQUIPMENT, WHS						
053	MAJOR EQUIPMENT, WHS		515				515
	MAJOR EQUIPMENT, DISA						
011	INFORMATION SYSTEMS SECURITY		17,211				17,211
012	TELEPORT PROGRAM		29,841				29,841
013	JOINT FORCES HEADQUARTERS—DODIN		3,091				3,091
014	ITEMS LESS THAN $5 MILLION		41,569				41,569
016	DEFENSE INFORMATION SYSTEM NETWORK		26,978				26,978
017	WHITE HOUSE COMMUNICATION AGENCY		44,161				44,161
018	SENIOR LEADERSHIP ENTERPRISE		35,935				35,935
019	JOINT REGIONAL SECURITY STACKS (JRSS)		88,741		–80,000		8,741
	Program decrease				[–80,000]		
020	JOINT SERVICE PROVIDER		157,538				157,538
021	FOURTH ESTATE NETWORK OPTIMIZATION (4ENO)		42,084				42,084
	MAJOR EQUIPMENT, DLA						
023	MAJOR EQUIPMENT		417,459				417,459
	MAJOR EQUIPMENT, DCSA						
003	MAJOR EQUIPMENT		2,212				2,212
	MAJOR EQUIPMENT, TJS						
050	MAJOR EQUIPMENT, TJS		8,329				8,329
051	MAJOR EQUIPMENT—TJS CYBER		1,247				1,247
	MAJOR EQUIPMENT, MISSILE DEFENSE AGENCY						
031	THAAD	41	495,396	1	106,000	42	601,396
	THAAD battery #8			[1]	[106,000]		

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
034	AEGIS BMD	34	356,195			34	356,195
035	AEGIS BMD AP		44,901				44,901
037	SM–3 IIAS	6	218,322	4	115,000	10	333,322
	Increase SM–3 Block IIA quantities			[4]	[115,000]		
038	ARROW 3 UPPER TIER SYSTEMS	1	77,000			1	77,000
039	SHORT RANGE BALLISTIC MISSILE DEFENSE (SRBMD)	1	50,000			1	50,000
040	AEGIS ASHORE PHASE III		39,114				39,114
041	IRON DOME	1	73,000			1	73,000
042	AEGIS BMD HARDWARE AND SOFTWARE	49	104,241			49	104,241
	MAJOR EQUIPMENT, DHRA						
005	PERSONNEL ADMINISTRATION		4,213				4,213
	MAJOR EQUIPMENT, DEFENSE THREAT REDUCTION AGENCY						
028	VEHICLES		215				215
029	OTHER MAJOR EQUIPMENT		9,994				9,994
	MAJOR EQUIPMENT, DEFENSE SECURITY COOPERATION AGENCY						
027	REGIONAL CENTER PROCUREMENT		1,598				1,598
	MAJOR EQUIPMENT, DODEA						
025	AUTOMATION/EDUCATIONAL SUPPORT & LOGISTICS		1,319				1,319
	MAJOR EQUIPMENT, DCMA						
002	MAJOR EQUIPMENT		1,398				1,398
	MAJOR EQUIPMENT, DMACT						
024	MAJOR EQUIPMENT		7,993				7,993
	CLASSIFIED PROGRAMS						
54A	CLASSIFIED PROGRAMS		554,264				554,264
	AVIATION PROGRAMS						
055	ARMED OVERWATCH/TARGETING	5	101,000		–48,000	5	53,000

	Program decrease		[–80,000]	
	U.S. Special Operations Command Armed Overwatch program		[32,000]	
059	ROTARY WING UPGRADES AND SUSTAINMENT	211,041		211,041
060	UNMANNED ISR	25,488	–5,000	20,488
	Program decrease		[–5,000]	
061	NON-STANDARD AVIATION	61,874	–5,000	56,874
	Program decrease		[–5,000]	
062	U–28	3,825		3,825
063	MH–47 CHINOOK	135,482		135,482
064	CV–22 MODIFICATION	14,829		14,829
065	MQ–9 UNMANNED AERIAL VEHICLE	6,746		6,746
066	PRECISION STRIKE PACKAGE	243,111	–5,000	238,111
	Program decrease		[–5,000]	
067	AC/MC–130J	163,914		163,914
068	C–130 MODIFICATIONS	20,414		20,414
	SHIPBUILDING			
069	UNDERWATER SYSTEMS	20,556		20,556
	AMMUNITION PROGRAMS			
070	ORDNANCE ITEMS <$5M	186,197		186,197
	OTHER PROCUREMENT PROGRAMS			
071	INTELLIGENCE SYSTEMS	94,982		94,982
072	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	11,645		11,645
073	OTHER ITEMS <$5M	96,333		96,333
074	COMBATANT CRAFT SYSTEMS	17,278		17,278
075	SPECIAL PROGRAMS	78,865	–7,500	71,365
	Program decrease		[–7,500]	
076	TACTICAL VEHICLES	30,158		30,158
077	WARRIOR SYSTEMS <$5M	260,733		260,733
078	COMBAT MISSION REQUIREMENTS	19,848		19,848
079	GLOBAL VIDEO SURVEILLANCE ACTIVITIES	2,401		2,401
080	OPERATIONAL ENHANCEMENTS INTELLIGENCE	13,861	–5,000	8,861
	Program decrease		[–5,000]	

SEC. 4101. PROCUREMENT
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
081	OPERATIONAL ENHANCEMENTS		247,038		–5,000		242,038
	Program decrease				[–5,000]		
	CBDP						
082	CHEMICAL BIOLOGICAL SITUATIONAL AWARENESS		147,150				147,150
083	CB PROTECTION & HAZARD MITIGATION		149,944				149,944
	TOTAL PROCUREMENT, DEFENSE-WIDE	**148**	**5,324,487**	**5**	**60,500**	**153**	**5,384,987**
	TOTAL PROCUREMENT	**34,422**	**130,684,160**	**127**	**2,160,687**	**34,549**	**132,844,847**

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS.

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	AIRCRAFT PROCUREMENT, ARMY						
	ROTARY						
009	AH–64 APACHE BLOCK IIIB NEW BUILD	2	69,154		–4,800	2	64,354
	Unjustified costs				[–4,800]		
014	CH–47 HELICOPTER	1	50,472			1	50,472
	MODIFICATION OF AIRCRAFT						
017	MQ–1 PAYLOAD (MIP)		5,968				5,968
020	MULTI SENSOR ABN RECON (MIP)		122,520				122,520
025	EMARSS SEMA MODS (MIP)		26,460				26,460
030	DEGRADED VISUAL ENVIRONMENT		1,916				1,916
	GROUND SUPPORT AVIONICS						
037	CMWS		149,162				149,162
038	COMMON INFRARED COUNTERMEASURES (CIRCM)		32,400				32,400
	OTHER SUPPORT						
041	AIRCREW INTEGRATED SYSTEMS		3,028				3,028
	TOTAL AIRCRAFT PROCUREMENT, ARMY	**3**	**461,080**		**–4,800**	**3**	**456,280**
	MISSILE PROCUREMENT, ARMY						
	SURFACE-TO-AIR MISSILE SYSTEM						
002	M-SHORAD—PROCUREMENT	22	158,300			22	158,300
003	MSE MISSILE	46	176,585			46	176,585
	AIR-TO-SURFACE MISSILE SYSTEM						
006	HELLFIRE SYS SUMMARY	3,090	236,265			3,090	236,265
	ANTI-TANK/ASSAULT MISSILE SYS						

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
011	GUIDED MLRS ROCKET (GMLRS)	904	127,015			904	127,015
015	LETHAL MINIATURE AERIAL MISSILE SYSTEM (LMAMS	1,130	84,993			1,130	84,993
	MODIFICATIONS						
017	ATACMS MODS		78,434				78,434
022	MLRS MODS		20,000				20,000
	TOTAL MISSILE PROCUREMENT, ARMY	**5,192**	**881,592**			**5,192**	**881,592**
	PROCUREMENT OF W&TCV, ARMY						
	WEAPONS & OTHER COMBAT VEHICLES						
016	MULTI-ROLE ANTI-ARMOR ANTI-PERSONNEL WEAPON S		4,765				4,765
018	MORTAR SYSTEMS		10,460				10,460
	TOTAL PROCUREMENT OF W&TCV, ARMY		**15,225**				**15,225**
	PROCUREMENT OF AMMUNITION, ARMY						
	SMALL/MEDIUM CAL AMMUNITION						
001	CTG, 5.56MM, ALL TYPES		567				567
002	CTG, 7.62MM, ALL TYPES		40				40
004	CTG, HANDGUN, ALL TYPES		17				17
005	CTG, .50 CAL, ALL TYPES		189				189
008	CTG, 30MM, ALL TYPES		24,900				24,900
	ARTILLERY AMMUNITION						
016	PROJ 155MM EXTENDED RANGE M982	275	29,213			275	29,213
017	ARTILLERY PROPELLANTS, FUZES AND PRIMERS, ALL		21,675				21,675
	ROCKETS						
020	SHOULDER LAUNCHED MUNITIONS, ALL TYPES		176				176
021	ROCKET, HYDRA 70, ALL TYPES		33,880				33,880

	MISCELLANEOUS				
029	ITEMS LESS THAN $5 MILLION (AMMO)		11		11
	TOTAL PROCUREMENT OF AMMUNITION, ARMY	**275**	**110,668**	**275**	**110,668**
	OTHER PROCUREMENT, ARMY				
	TACTICAL VEHICLES				
013	FAMILY OF HEAVY TACTICAL VEHICLES (FHTV)		6,500		6,500
014	PLS ESP		15,163		15,163
017	TACTICAL WHEELED VEHICLE PROTECTION KITS		27,066		27,066
	COMM—SATELLITE COMMUNICATIONS				
030	TRANSPORTABLE TACTICAL COMMAND COMMUNICATIONS		2,700		2,700
032	ASSURED POSITIONING, NAVIGATION AND TIMING		12,566		12,566
033	SMART-T (SPACE)		289		289
034	GLOBAL BRDCST SVC—GBS		319		319
	COMM—COMBAT COMMUNICATIONS				
045	FAMILY OF MED COMM FOR COMBAT CASUALTY CARE		1,257		1,257
	COMM—INTELLIGENCE COMM				
048	CI AUTOMATION ARCHITECTURE (MIP)		1,230		1,230
	INFORMATION SECURITY				
052	COMMUNICATIONS SECURITY (COMSEC)		128		128
	COMM—BASE COMMUNICATIONS				
058	INFORMATION SYSTEMS		15,277		15,277
062	INSTALLATION INFO INFRASTRUCTURE MOD PROGRAM		74,004		74,004
	ELECT EQUIP—TACT INT REL ACT (TIARA)				
068	DCGS-A (MIP)		47,709		47,709
070	TROJAN (MIP)		1,766		1,766
071	MOD OF IN-SVC EQUIP (INTEL SPT) (MIP)		61,450		61,450
073	BIOMETRIC TACTICAL COLLECTION DEVICES (MIP)		12,337		12,337
	ELECT EQUIP—ELECTRONIC WARFARE (EW)				
080	FAMILY OF PERSISTENT SURVEILLANCE CAP. (MIP)		44,293		44,293
081	COUNTERINTELLIGENCE/SECURITY COUNTERMEASURES		49,100		49,100
	ELECT EQUIP—TACTICAL SURV. (TAC SURV)				

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
083	SENTINEL MODS		33,496				33,496
084	NIGHT VISION DEVICES		643				643
087	RADIATION MONITORING SYSTEMS		11				11
088	INDIRECT FIRE PROTECTION FAMILY OF SYSTEMS		37,000				37,000
094	COMPUTER BALLISTICS: LHMBC XM32		280				280
095	MORTAR FIRE CONTROL SYSTEM		13,672				13,672
	ELECT EQUIP—TACTICAL C2 SYSTEMS						
100	AIR & MSL DEFENSE PLANNING & CONTROL SYS		15,143				15,143
	ELECT EQUIP—AUTOMATION						
109	ARMY TRAINING MODERNIZATION		4,688				4,688
110	AUTOMATED DATA PROCESSING EQUIP		16,552				16,552
	CHEMICAL DEFENSIVE EQUIPMENT						
121	FAMILY OF NON-LETHAL EQUIPMENT (FNLE)		25,480				25,480
122	BASE DEFENSE SYSTEMS (BDS)		98,960				98,960
123	CBRN DEFENSE		18,887				18,887
	BRIDGING EQUIPMENT						
125	TACTICAL BRIDGING		50,400				50,400
	ENGINEER (NON-CONSTRUCTION) EQUIPMENT						
137	RENDER SAFE SETS KITS OUTFITS		84,000				84,000
	COMBAT SERVICE SUPPORT EQUIPMENT						
140	HEATERS AND ECU'S		370				370
142	PERSONNEL RECOVERY SUPPORT SYSTEM (PRSS)		3,721				3,721
145	FORCE PROVIDER		56,400				56,400
146	FIELD FEEDING EQUIPMENT		2,279				2,279
147	CARGO AERIAL DEL & PERSONNEL PARACHUTE SYSTEM		2,040				2,040
	PETROLEUM EQUIPMENT						

150	DISTRIBUTION SYSTEMS, PETROLEUM & WATER	4,374	4,374
	MEDICAL EQUIPMENT		
151	COMBAT SUPPORT MEDICAL	6,390	6,390
	MAINTENANCE EQUIPMENT		
152	MOBILE MAINTENANCE EQUIPMENT SYSTEMS	7,769	7,769
153	ITEMS LESS THAN $5.0M (MAINT EQ)	184	184
	CONSTRUCTION EQUIPMENT		
156	LOADERS	3,190	3,190
157	HYDRAULIC EXCAVATOR	7,600	7,600
158	TRACTOR, FULL TRACKED	7,450	7,450
160	HIGH MOBILITY ENGINEER EXCAVATOR (HMEE)	3,703	3,703
162	CONST EQUIP ESP	657	657
	GENERATORS		
167	GENERATORS AND ASSOCIATED EQUIP	106	106
	MATERIAL HANDLING EQUIPMENT		
169	FAMILY OF FORKLIFTS	1,885	1,885
	OTHER SUPPORT EQUIPMENT		
180	RAPID EQUIPPING SOLDIER SUPPORT EQUIPMENT	8,500	8,500
181	PHYSICAL SECURITY SYSTEMS (OPA3)	3,248	3,248
185	BUILDING, PRE-FAB, RELOCATABLE	31,845	31,845
	TOTAL OTHER PROCUREMENT, ARMY	**924,077**	**924,077**
	AIRCRAFT PROCUREMENT, NAVY		
	OTHER AIRCRAFT		
024	STUASL0 UAV	7,921	7,921
	MODIFICATION OF AIRCRAFT		
053	COMMON ECM EQUIPMENT	3,474	3,474
055	COMMON DEFENSIVE WEAPON SYSTEM	3,339	3,339
064	QRC	18,507	18,507
	TOTAL AIRCRAFT PROCUREMENT, NAVY	**33,241**	**33,241**
	WEAPONS PROCUREMENT, NAVY		

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	TACTICAL MISSILES						
012	HELLFIRE	115	5,572			115	5,572
	TOTAL WEAPONS PROCUREMENT, NAVY	**115**	**5,572**			**115**	**5,572**
	PROCUREMENT OF AMMO, NAVY & MC						
	NAVY AMMUNITION						
001	GENERAL PURPOSE BOMBS		8,068				8,068
002	JDAM	673	15,529			673	15,529
003	AIRBORNE ROCKETS, ALL TYPES		23,000				23,000
004	MACHINE GUN AMMUNITION		22,600				22,600
006	CARTRIDGES & CART ACTUATED DEVICES		3,927				3,927
007	AIR EXPENDABLE COUNTERMEASURES		15,978				15,978
008	JATOS		2,100				2,100
011	OTHER SHIP GUN AMMUNITION		2,611				2,611
012	SMALL ARMS & LANDING PARTY AMMO		1,624				1,624
013	PYROTECHNIC AND DEMOLITION		505				505
	TOTAL PROCUREMENT OF AMMO, NAVY & MC	**673**	**95,942**			**673**	**95,942**
	OTHER PROCUREMENT, NAVY						
	SMALL BOATS						
028	STANDARD BOATS		19,104				19,104
	OTHER SHIP SUPPORT						
035	SMALL & MEDIUM UUV		2,946				2,946
	ASW ELECTRONIC EQUIPMENT						
043	FIXED SURVEILLANCE SYSTEM		213,000				213,000
	SONOBUOYS						

092	SONOBUOYS—ALL TYPES		26,196		26,196
	AIRCRAFT SUPPORT EQUIPMENT				
095	AIRCRAFT SUPPORT EQUIPMENT		60,217		60,217
	OTHER ORDNANCE SUPPORT EQUIPMENT				
110	EXPLOSIVE ORDNANCE DISPOSAL EQUIP		2,124		2,124
	CIVIL ENGINEERING SUPPORT EQUIPMENT				
115	PASSENGER CARRYING VEHICLES		177		177
116	GENERAL PURPOSE TRUCKS		416		416
118	FIRE FIGHTING EQUIPMENT		801		801
	SUPPLY SUPPORT EQUIPMENT				
125	FIRST DESTINATION TRANSPORTATION		520		520
	TRAINING DEVICES				
128	TRAINING AND EDUCATION EQUIPMENT		11,500		11,500
	COMMAND SUPPORT EQUIPMENT				
130	MEDICAL SUPPORT EQUIPMENT		3,525		3,525
136	PHYSICAL SECURITY EQUIPMENT		3,000		3,000
	TOTAL OTHER PROCUREMENT, NAVY		**343,526**		**343,526**
	PROCUREMENT, MARINE CORPS				
	GUIDED MISSILES				
012	GUIDED MLRS ROCKET (GMLRS)	120	17,456	120	17,456
	OTHER SUPPORT (TEL)				
015	MODIFICATION KITS		4,200		4,200
	INTELL/COMM EQUIPMENT (NON-TEL)				
022	INTELLIGENCE SUPPORT EQUIPMENT		10,124		10,124
	TACTICAL VEHICLES				
038	MOTOR TRANSPORT MODIFICATIONS		16,183		16,183
	TOTAL PROCUREMENT, MARINE CORPS	**120**	**47,963**	**120**	**47,963**
	AIRCRAFT PROCUREMENT, AIR FORCE				
	HELICOPTERS				
013	COMBAT RESCUE HELICOPTER	3	174,000	3	174,000

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	OTHER AIRCRAFT						
020	MQ–9		142,490				142,490
021	RQ–20B PUMA		13,770				13,770
	STRATEGIC AIRCRAFT						
026	LARGE AIRCRAFT INFRARED COUNTERMEASURES		57,521				57,521
	OTHER AIRCRAFT						
046	U–2 MODS		9,600				9,600
055	COMPASS CALL		12,800				12,800
066	HC/MC–130 MODIFICATIONS		58,020				58,020
069	MQ–9 UAS PAYLOADS		46,100	1	17,400	1	63,500
	WAMI combat loss replacement			[1]	[17,400]		
070	CV–22 MODS		6,290				6,290
	AIRCRAFT SPARES AND REPAIR PARTS						
071	INITIAL SPARES/REPAIR PARTS		10,700				10,700
072	MQ–9		12,250				12,250
	COMMON SUPPORT EQUIPMENT						
073	AIRCRAFT REPLACEMENT SUPPORT EQUIP		25,614				25,614
	TOTAL AIRCRAFT PROCUREMENT, AIR FORCE	**3**	**569,155**	**1**	**17,400**	**4**	**586,555**
	MISSILE PROCUREMENT, AIR FORCE						
	TACTICAL						
004	JOINT AIR-SURFACE STANDOFF MISSILE	24	30,000			24	30,000
008	PREDATOR HELLFIRE MISSILE	3,969	143,420			3,969	143,420
009	SMALL DIAMETER BOMB	1,283	50,352			1,283	50,352
	TOTAL MISSILE PROCUREMENT, AIR FORCE	**5,276**	**223,772**			**5,276**	**223,772**

	PROCUREMENT OF AMMUNITION, AIR FORCE				
	ROCKETS				
001	ROCKETS		19,489		19,489
	CARTRIDGES				
002	CARTRIDGES		40,434		40,434
	BOMBS				
004	GENERAL PURPOSE BOMBS		369,566		369,566
006	JOINT DIRECT ATTACK MUNITION	6,800	237,723	6,800	237,723
	FLARES				
015	FLARES		21,171		21,171
	FUZES				
016	FUZES		107,855		107,855
	SMALL ARMS				
017	SMALL ARMS		6,217		6,217
	TOTAL PROCUREMENT OF AMMUNITION, AIR FORCE	**6,800**	**802,455**	**6,800**	**802,455**
	OTHER PROCUREMENT, AIR FORCE				
	PASSENGER CARRYING VEHICLES				
001	PASSENGER CARRYING VEHICLES		1,302		1,302
	CARGO AND UTILITY VEHICLES				
002	MEDIUM TACTICAL VEHICLE		3,400		3,400
004	CARGO AND UTILITY VEHICLES		12,475		12,475
	SPECIAL PURPOSE VEHICLES				
005	JOINT LIGHT TACTICAL VEHICLE		26,150		26,150
007	SPECIAL PURPOSE VEHICLES		51,254		51,254
	FIRE FIGHTING EQUIPMENT				
008	FIRE FIGHTING/CRASH RESCUE VEHICLES		24,903		24,903
	MATERIALS HANDLING EQUIPMENT				
009	MATERIALS HANDLING VEHICLES		14,167		14,167
	BASE MAINTENANCE SUPPORT				
010	RUNWAY SNOW REMOV AND CLEANING EQU		5,759		5,759
011	BASE MAINTENANCE SUPPORT VEHICLES		20,653		20,653

SEC. 4102. PROCUREMENT FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request		House Change		House Authorized	
		Qty	Cost	Qty	Cost	Qty	Cost
	SPCL COMM-ELECTRONICS PROJECTS						
026	GENERAL INFORMATION TECHNOLOGY		5,100				5,100
030	AIR FORCE PHYSICAL SECURITY SYSTEM		56,496				56,496
	ORGANIZATION AND BASE						
049	BASE COMM INFRASTRUCTURE		30,717				30,717
	BASE SUPPORT EQUIPMENT						
055	ENGINEERING AND EOD EQUIPMENT		13,172				13,172
056	MOBILITY EQUIPMENT		33,694				33,694
057	FUELS SUPPORT EQUIPMENT (FSE)		1,777				1,777
058	BASE MAINTENANCE AND SUPPORT EQUIPMENT		31,620				31,620
	SPECIAL SUPPORT PROJECTS						
061	DCGS-AF		18,700				18,700
	SPARES AND REPAIR PARTS						
065	SPARES AND REPAIR PARTS		4,000				4,000
	TOTAL OTHER PROCUREMENT, AIR FORCE		**355,339**				**355,339**
	PROCUREMENT, DEFENSE-WIDE						
	MAJOR EQUIPMENT, DISA						
016	DEFENSE INFORMATION SYSTEM NETWORK		6,120				6,120
	MAJOR EQUIPMENT, DEFENSE THREAT REDUCTION AGENCY						
030	COUNTER IMPROVISED THREAT TECHNOLOGIES		2,540				2,540
	CLASSIFIED PROGRAMS						
54A	CLASSIFIED PROGRAMS		3,500				3,500
	AVIATION PROGRAMS						
056	MANNED ISR		5,000		40,100		45,100
	Combat loss replacement—DHC–8				[40,100]		

057	MC–12		5,000				5,000
060	UNMANNED ISR		8,207				8,207
	AMMUNITION PROGRAMS						
070	ORDNANCE ITEMS <$5M		105,355				105,355
	OTHER PROCUREMENT PROGRAMS						
071	INTELLIGENCE SYSTEMS		16,234				16,234
073	OTHER ITEMS <$5M		984				984
076	TACTICAL VEHICLES		2,990				2,990
077	WARRIOR SYSTEMS <$5M		32,573		5,000		37,573
	Development of autonomous, multi-sensor cUAS capabilities with kinetic effects.				[5,000]		
078	COMBAT MISSION REQUIREMENTS		10,000				10,000
080	OPERATIONAL ENHANCEMENTS INTELLIGENCE		6,724				6,724
081	OPERATIONAL ENHANCEMENTS		53,264				53,264
	TOTAL PROCUREMENT, DEFENSE-WIDE		**258,491**		**45,100**		**303,591**
	NATIONAL GUARD AND RESERVE EQUIPMENT ACCOUNT						
	UNDISTRIBUTED						
007	UNDISTRIBUTED				150,000		150,000
	Program increase				[150,000]		
	TOTAL NATIONAL GUARD AND RESERVE EQUIPMENT ACCOUNT				**150,000**		**150,000**
	TOTAL NATIONAL GUARD AND RESERVE EQUIPMENT				**150,000**		**150,000**
	TOTAL PROCUREMENT	**18,457**	**5,128,098**	**1**	**357,700**	**18,458**	**5,485,798**

TITLE XLII—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION.

SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
		RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY			
		BASIC RESEARCH			
002	0601102A	DEFENSE RESEARCH SCIENCES	303,257	5,000	308,257
		Counter-UAS Army research lab		[5,000]	
003	0601103A	UNIVERSITY RESEARCH INITIATIVES	67,148		67,148
004	0601104A	UNIVERSITY AND INDUSTRY RESEARCH CENTERS	87,877	9,000	96,877
		Automotive research center modeling and simulation		[5,000]	
		Biotechnology advancements		[4,000]	
005	0601121A	CYBER COLLABORATIVE RESEARCH ALLIANCE	5,077		5,077
		SUBTOTAL BASIC RESEARCH	**463,359**	**14,000**	**477,359**
		APPLIED RESEARCH			
007	0602115A	BIOMEDICAL TECHNOLOGY	11,835		11,835
011	0602134A	COUNTER IMPROVISED-THREAT ADVANCED STUDIES	2,000		2,000
012	0602141A	LETHALITY TECHNOLOGY	42,425	5,000	47,425
		Next generation additive manufacturing and 3–D printed electronics		[5,000]	
013	0602142A	ARMY APPLIED RESEARCH	30,757		30,757
014	0602143A	SOLDIER LETHALITY TECHNOLOGY	125,435	7,000	132,435
		HEROES program increase		[5,000]	

		Syn-bio enabled functional materials for the soldier		[2,000]	
015	0602144A	GROUND TECHNOLOGY	28,047	17,000	45,047
		Cold weather military research		[2,000]	
		Materials recovery technologies for defense supply resiliency		[10,000]	
		Polymeric composites via cold spray additive manufacturing		[5,000]	
016	0602145A	NEXT GENERATION COMBAT VEHICLE TECHNOLOGY	217,565		217,565
017	0602146A	NETWORK C3I TECHNOLOGY	114,404	15,000	129,404
		Alternative positioning navigation and timing		[5,000]	
		Multi-drone/multi-sensor intelligence, surveillance, and reconnaissance capabilities		[2,000]	
		Program increase		[5,000]	
		Sensor and electronic network initatives		[3,000]	
018	0602147A	LONG RANGE PRECISION FIRES TECHNOLOGY	60,553		60,553
019	0602148A	FUTURE VERTICLE LIFT TECHNOLOGY	96,484	5,000	101,484
		High density eVOTL power source research		[5,000]	
020	0602150A	AIR AND MISSILE DEFENSE TECHNOLOGY	56,298	20,000	76,298
		Advanced tracking and targeting capability		[5,000]	
		High energy laser technology		[5,000]	
		Radar research		[5,000]	
		UAS threat detection		[5,000]	
022	0602213A	C3I APPLIED CYBER	18,816		18,816
040	0602785A	MANPOWER/PERSONNEL/TRAINING TECHNOLOGY	20,766		20,766
042	0602787A	MEDICAL TECHNOLOGY	95,496		95,496
		SUBTOTAL APPLIED RESEARCH	**920,881**	**69,000**	**989,881**
		ADVANCED TECHNOLOGY DEVELOPMENT			
044	0603002A	MEDICAL ADVANCED TECHNOLOGY	38,896		38,896
049	0603007A	MANPOWER, PERSONNEL AND TRAINING ADVANCED TECHNOLOGY	11,659		11,659
052	0603115A	MEDICAL DEVELOPMENT	27,723		27,723
053	0603117A	ARMY ADVANCED TECHNOLOGY DEVELOPMENT	62,663		62,663
054	0603118A	SOLDIER LETHALITY ADVANCED TECHNOLOGY	109,608	9,000	118,608
		Advanced AI/AA analytics for modernization and readiness		[5,000]	
		Anthropomorphic study for body armor modernization		[4,000]	

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
055	0603119A	GROUND ADVANCED TECHNOLOGY	14,795	8,500	23,295
		Rapid entry and sustainment for the arctic		[5,000]	
		Survivability and energy reduction of hard shelters		[3,500]	
059	0603134A	COUNTER IMPROVISED-THREAT SIMULATION	25,000		25,000
063	0603457A	C3I CYBER ADVANCED DEVELOPMENT	23,357		23,357
064	0603461A	HIGH PERFORMANCE COMPUTING MODERNIZATION PROGRAM	188,024		188,024
065	0603462A	NEXT GENERATION COMBAT VEHICLE ADVANCED TECHNOLOGY	199,358	17,000	216,358
		Cyber security support for vehicle development		[2,000]	
		Fuel cell powered vehicle development		[15,000]	
066	0603463A	NETWORK C3I ADVANCED TECHNOLOGY	158,608	5,000	163,608
		Tactical geospatial information development		[5,000]	
067	0603464A	LONG RANGE PRECISION FIRES ADVANCED TECHNOLOGY	121,060	10,000	131,060
		Hypervelocity projectile		[10,000]	
068	0603465A	FUTURE VERTICAL LIFT ADVANCED TECHNOLOGY	156,194		156,194
069	0603466A	AIR AND MISSILE DEFENSE ADVANCED TECHNOLOGY	58,130	5,000	63,130
		Program acceleration		[5,000]	
077	0603920A	HUMANITARIAN DEMINING	8,515		8,515
		SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	**1,203,590**	**54,500**	**1,258,090**
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES			
078	0603305A	ARMY MISSLE DEFENSE SYSTEMS INTEGRATION	11,062	10,000	21,062
		Accelerated test and integration		[10,000]	
079	0603308A	ARMY SPACE SYSTEMS INTEGRATION	26,230		26,230
080	0603327A	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	26,482		26,482
081	0603619A	LANDMINE WARFARE AND BARRIER—ADV DEV	64,092	2,000	66,092
		MICLIC replacement development		[2,000]	
083	0603639A	TANK AND MEDIUM CALIBER AMMUNITION	92,753		92,753

084	0603645A	ARMORED SYSTEM MODERNIZATION—ADV DEV	151,478	12,500	163,978
		Fuel cell powered vehicle development		[15,000]	
		Modeling and simulation support for vehicle development		[12,500]	
		Program decrease		[–15,000]	
085	0603747A	SOLDIER SUPPORT AND SURVIVABILITY	5,841		5,841
086	0603766A	TACTICAL ELECTRONIC SURVEILLANCE SYSTEM—ADV DEV	194,775		194,775
087	0603774A	NIGHT VISION SYSTEMS ADVANCED DEVELOPMENT	24,316		24,316
088	0603779A	ENVIRONMENTAL QUALITY TECHNOLOGY—DEM/VAL	13,387		13,387
089	0603790A	NATO RESEARCH AND DEVELOPMENT	4,762		4,762
090	0603801A	AVIATION—ADV DEV	647,937		647,937
091	0603804A	LOGISTICS AND ENGINEER EQUIPMENT—ADV DEV	4,761		4,761
092	0603807A	MEDICAL SYSTEMS—ADV DEV	28,520		28,520
093	0603827A	SOLDIER SYSTEMS—ADVANCED DEVELOPMENT	26,138	–3,000	23,138
		IHPS program delays		[–3,000]	
094	0604017A	ROBOTICS DEVELOPMENT	121,207	–5,800	115,407
		Program reduction		[–5,800]	
096	0604021A	ELECTRONIC WARFARE TECHNOLOGY MATURATION (MIP)	22,840		22,840
097	0604035A	LOW EARTH ORBIT (LEO) SATELLITE CAPABILITY	22,678		22,678
098	0604100A	ANALYSIS OF ALTERNATIVES	10,082		10,082
099	0604101A	SMALL UNMANNED AERIAL VEHICLE (SUAV) (6.4)	1,378		1,378
100	0604113A	FUTURE TACTICAL UNMANNED AIRCRAFT SYSTEM (FTUAS)	40,083		40,083
101	0604114A	LOWER TIER AIR MISSILE DEFENSE (LTAMD) SENSOR	376,373		376,373
102	0604115A	TECHNOLOGY MATURATION INITIATIVES	156,834		156,834
103	0604117A	MANEUVER—SHORT RANGE AIR DEFENSE (M-SHORAD)	4,995		4,995
105	0604119A	ARMY ADVANCED COMPONENT DEVELOPMENT & PROTOTYPING	170,490		170,490
106	0604120A	ASSURED POSITIONING, NAVIGATION AND TIMING (PNT)	128,125		128,125
107	0604121A	SYNTHETIC TRAINING ENVIRONMENT REFINEMENT & PROTOTYPING	129,547		129,547
108	0604134A	COUNTER IMPROVISED-THREAT DEMONSTRATION, PROTOTYPE DEVELOPMENT, AND TESTING	13,831		13,831
109	0604182A	HYPERSONICS	801,417	10,000	811,417
		Program increase		[10,000]	
111	0604403A	FUTURE INTERCEPTOR	7,992		7,992
112	0604541A	UNIFIED NETWORK TRANSPORT	40,677		40,677

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
115	0305251A	CYBERSPACE OPERATIONS FORCES AND FORCE SUPPORT	50,525		50,525
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**3,421,608**	**25,700**	**3,447,308**
		SYSTEM DEVELOPMENT & DEMONSTRATION			
118	0604201A	AIRCRAFT AVIONICS	2,764		2,764
119	0604270A	ELECTRONIC WARFARE DEVELOPMENT	62,426		62,426
121	0604601A	INFANTRY SUPPORT WEAPONS	91,574	7,000	98,574
		Advanced gunner protection kit development		[2,000]	
		Soldier Enhancement Program		[5,000]	
122	0604604A	MEDIUM TACTICAL VEHICLES	8,523		8,523
123	0604611A	JAVELIN	7,493		7,493
124	0604622A	FAMILY OF HEAVY TACTICAL VEHICLES	24,792		24,792
125	0604633A	AIR TRAFFIC CONTROL	3,511		3,511
126	0604642A	LIGHT TACTICAL WHEELED VEHICLES	1,976		1,976
127	0604645A	ARMORED SYSTEMS MODERNIZATION (ASM)—ENG DEV	135,488		135,488
128	0604710A	NIGHT VISION SYSTEMS—ENG DEV	61,445		61,445
129	0604713A	COMBAT FEEDING, CLOTHING, AND EQUIPMENT	2,814		2,814
130	0604715A	NON-SYSTEM TRAINING DEVICES—ENG DEV	28,036		28,036
131	0604741A	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE—ENG DEV	43,651	–4,000	39,651
		Army identified funds excess to need		[–4,000]	
132	0604742A	CONSTRUCTIVE SIMULATION SYSTEMS DEVELOPMENT	10,150		10,150
133	0604746A	AUTOMATIC TEST EQUIPMENT DEVELOPMENT	5,578		5,578
134	0604760A	DISTRIBUTIVE INTERACTIVE SIMULATIONS (DIS)—ENG DEV	7,892		7,892
135	0604768A	BRILLIANT ANTI-ARMOR SUBMUNITION (BAT)	24,975		24,975
136	0604780A	COMBINED ARMS TACTICAL TRAINER (CATT) CORE	3,568		3,568
137	0604798A	BRIGADE ANALYSIS, INTEGRATION AND EVALUATION	19,268		19,268
138	0604802A	WEAPONS AND MUNITIONS—ENG DEV	265,811		265,811

139	0604804A	LOGISTICS AND ENGINEER EQUIPMENT—ENG DEV	49,694		49,694
140	0604805A	COMMAND, CONTROL, COMMUNICATIONS SYSTEMS—ENG DEV	11,079		11,079
141	0604807A	MEDICAL MATERIEL/MEDICAL BIOLOGICAL DEFENSE EQUIPMENT—ENG DEV	49,870		49,870
142	0604808A	LANDMINE WARFARE/BARRIER—ENG DEV	9,589		9,589
143	0604818A	ARMY TACTICAL COMMAND & CONTROL HARDWARE & SOFTWARE	162,513	–10,000	152,513
		Command post integrated infrastructure contract delay		[–10,000]	
144	0604820A	RADAR DEVELOPMENT	109,259		109,259
145	0604822A	GENERAL FUND ENTERPRISE BUSINESS SYSTEM (GFEBS)	21,201		21,201
146	0604823A	FIREFINDER	20,008	–3,200	16,808
		Prior year carry-over		[–3,200]	
147	0604827A	SOLDIER SYSTEMS—WARRIOR DEM/VAL	6,534		6,534
148	0604852A	SUITE OF SURVIVABILITY ENHANCEMENT SYSTEMS—EMD	82,459	26,921	109,380
		Prior year carry-over		[–5,079]	
		Program increase for vehicle protection systems		[32,000]	
149	0604854A	ARTILLERY SYSTEMS—EMD	11,611		11,611
150	0605013A	INFORMATION TECHNOLOGY DEVELOPMENT	142,678	–5,000	137,678
		Reprioritization		[–5,000]	
151	0605018A	INTEGRATED PERSONNEL AND PAY SYSTEM-ARMY (IPPS-A)	115,286		115,286
152	0605028A	ARMORED MULTI-PURPOSE VEHICLE (AMPV)	96,594	–20,000	76,594
		Army identified funds excess to need		[–20,000]	
154	0605030A	JOINT TACTICAL NETWORK CENTER (JTNC)	16,264		16,264
155	0605031A	JOINT TACTICAL NETWORK (JTN)	31,696		31,696
157	0605033A	GROUND-BASED OPERATIONAL SURVEILLANCE SYSTEM—EXPEDITIONARY (GBOSS-E)	5,976		5,976
159	0605035A	COMMON INFRARED COUNTERMEASURES (CIRCM)	23,321	5,000	28,321
		AI virtual training environments		[5,000]	
161	0605038A	NUCLEAR BIOLOGICAL CHEMICAL RECONNAISSANCE VEHICLE (NBCRV) SENSOR SUITE	4,846		4,846
162	0605041A	DEFENSIVE CYBER TOOL DEVELOPMENT	28,544		28,544
163	0605042A	TACTICAL NETWORK RADIO SYSTEMS (LOW-TIER)	28,178		28,178
164	0605047A	CONTRACT WRITING SYSTEM	22,860		22,860
166	0605051A	AIRCRAFT SURVIVABILITY DEVELOPMENT	35,893		35,893
167	0605052A	INDIRECT FIRE PROTECTION CAPABILITY INC 2—BLOCK 1	235,770	–47,800	187,970
		Army identified funds excess to need		[–47,800]	

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Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
168	0605053A	GROUND ROBOTICS	13,710		13,710
169	0605054A	EMERGING TECHNOLOGY INITIATIVES	294,739	–10,000	284,739
		Program decrease		[–10,000]	
170	0605145A	MEDICAL PRODUCTS AND SUPPORT SYSTEMS DEVELOPMENT	954		954
171	0605203A	ARMY SYSTEM DEVELOPMENT & DEMONSTRATION	150,201		150,201
172	0605205A	SMALL UNMANNED AERIAL VEHICLE (SUAV) (6.5)	5,999		5,999
174	0605450A	JOINT AIR-TO-GROUND MISSILE (JAGM)	8,891		8,891
175	0605457A	ARMY INTEGRATED AIR AND MISSILE DEFENSE (AIAMD)	193,929		193,929
176	0605625A	MANNED GROUND VEHICLE	327,732	–83,000	244,732
		Army identified funds excess to need		[–83,000]	
177	0605766A	NATIONAL CAPABILITIES INTEGRATION (MIP)	7,670		7,670
178	0605812A	JOINT LIGHT TACTICAL VEHICLE (JLTV) ENGINEERING AND MANUFACTURING DEVELOPMENT PH	1,742		1,742
179	0605830A	AVIATION GROUND SUPPORT EQUIPMENT	1,467	3,000	4,467
		Aircraft cleaning and deicing system development		[3,000]	
180	0303032A	TROJAN—RH12	3,451		3,451
183	0304270A	ELECTRONIC WARFARE DEVELOPMENT	55,855		55,855
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	**3,199,798**	**–141,079**	**3,058,719**
		MANAGEMENT SUPPORT			
185	0604256A	THREAT SIMULATOR DEVELOPMENT	14,515		14,515
186	0604258A	TARGET SYSTEMS DEVELOPMENT	10,668		10,668
187	0604759A	MAJOR T&E INVESTMENT	106,270	5,000	111,270
		Program increase		[5,000]	
188	0605103A	RAND ARROYO CENTER	13,481		13,481
189	0605301A	ARMY KWAJALEIN ATOLL	231,824		231,824
190	0605326A	CONCEPTS EXPERIMENTATION PROGRAM	54,898		54,898
192	0605601A	ARMY TEST RANGES AND FACILITIES	350,359		350,359

193	0605602A	ARMY TECHNICAL TEST INSTRUMENTATION AND TARGETS	48,475	14,500	62,975
		Aviation component testing		[5,000]	
		Testing additive manufacturing technology		[9,500]	
194	0605604A	SURVIVABILITY/LETHALITY ANALYSIS	36,001		36,001
195	0605606A	AIRCRAFT CERTIFICATION	2,736		2,736
196	0605702A	METEOROLOGICAL SUPPORT TO RDT&E ACTIVITIES	6,488		6,488
197	0605706A	MATERIEL SYSTEMS ANALYSIS	21,859		21,859
198	0605709A	EXPLOITATION OF FOREIGN ITEMS	7,936		7,936
199	0605712A	SUPPORT OF OPERATIONAL TESTING	54,470		54,470
200	0605716A	ARMY EVALUATION CENTER	63,141		63,141
201	0605718A	ARMY MODELING & SIM X-CMD COLLABORATION & INTEG	2,572		2,572
202	0605801A	PROGRAMWIDE ACTIVITIES	87,472		87,472
203	0605803A	TECHNICAL INFORMATION ACTIVITIES	26,244		26,244
204	0605805A	MUNITIONS STANDARDIZATION, EFFECTIVENESS AND SAFETY	40,133	10,000	50,133
		Development of polymer-cased ammunition		[5,000]	
		Program acceleration		[5,000]	
205	0605857A	ENVIRONMENTAL QUALITY TECHNOLOGY MGMT SUPPORT	1,780		1,780
206	0605898A	ARMY DIRECT REPORT HEADQUARTERS—R&D - MHA	55,045		55,045
208	0606002A	RONALD REAGAN BALLISTIC MISSILE DEFENSE TEST SITE	71,306		71,306
209	0606003A	COUNTERINTEL AND HUMAN INTEL MODERNIZATION	1,063		1,063
210	0606105A	MEDICAL PROGRAM-WIDE ACTIVITIES	19,891		19,891
211	0606942A	ASSESSMENTS AND EVALUATIONS CYBER VULNERABILITIES	4,496		4,496
		SUBTOTAL MANAGEMENT SUPPORT	**1,333,123**	**29,500**	**1,362,623**
		OPERATIONAL SYSTEMS DEVELOPMENT			
214	0603778A	MLRS PRODUCT IMPROVEMENT PROGRAM	10,157		10,157
216	0605024A	ANTI-TAMPER TECHNOLOGY SUPPORT	8,682		8,682
217	0607131A	WEAPONS AND MUNITIONS PRODUCT IMPROVEMENT PROGRAMS	20,409		20,409
219	0607134A	LONG RANGE PRECISION FIRES (LRPF)	122,733	–66,100	56,633
		Program reduction		[–66,100]	
221	0607136A	BLACKHAWK PRODUCT IMPROVEMENT PROGRAM	11,236	5,000	16,236
		Thermoplastic drive shafts		[5,000]	

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Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
222	0607137A	CHINOOK PRODUCT IMPROVEMENT PROGRAM	46,091	5,000	51,091
		Carbon composite materials for wheels and brakes		[5,000]	
224	0607139A	IMPROVED TURBINE ENGINE PROGRAM	249,257		249,257
225	0607142A	AVIATION ROCKET SYSTEM PRODUCT IMPROVEMENT AND DEVELOPMENT	17,155		17,155
226	0607143A	UNMANNED AIRCRAFT SYSTEM UNIVERSAL PRODUCTS	7,743		7,743
227	0607145A	APACHE FUTURE DEVELOPMENT	77,177		77,177
228	0607150A	INTEL CYBER DEVELOPMENT	14,652		14,652
229	0607312A	ARMY OPERATIONAL SYSTEMS DEVELOPMENT	35,851		35,851
230	0607665A	FAMILY OF BIOMETRICS	1,324		1,324
231	0607865A	PATRIOT PRODUCT IMPROVEMENT	187,840		187,840
232	0203728A	JOINT AUTOMATED DEEP OPERATION COORDINATION SYSTEM (JADOCS)	44,691		44,691
233	0203735A	COMBAT VEHICLE IMPROVEMENT PROGRAMS	268,919	–5,667	263,252
		CROWS-J program delay		[–5,667]	
234	0203743A	155MM SELF-PROPELLED HOWITZER IMPROVEMENTS	427,254	–136,291	290,963
		Prior year carry-over		[–6,291]	
		Program decrease		[–130,000]	
235	0203744A	AIRCRAFT MODIFICATIONS/PRODUCT IMPROVEMENT PROGRAMS	11,688	–4,000	7,688
		Early to need		[–4,000]	
236	0203752A	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	80		80
237	0203758A	DIGITIZATION	4,516		4,516
238	0203801A	MISSILE/AIR DEFENSE PRODUCT IMPROVEMENT PROGRAM	1,288		1,288
239	0203802A	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	79,424	–60,000	19,424
		Program decrease		[–60,000]	
243	0205412A	ENVIRONMENTAL QUALITY TECHNOLOGY—OPERATIONAL SYSTEM DEV	259		259
244	0205456A	LOWER TIER AIR AND MISSILE DEFENSE (AMD) SYSTEM	166		166
245	0205778A	GUIDED MULTIPLE-LAUNCH ROCKET SYSTEM (GMLRS)	75,575		75,575
246	0208053A	JOINT TACTICAL GROUND SYSTEM	9,510		9,510

249	0303140A	INFORMATION SYSTEMS SECURITY PROGRAM	29,270		29,270
250	0303141A	GLOBAL COMBAT SUPPORT SYSTEM	86,908		86,908
251	0303142A	SATCOM GROUND ENVIRONMENT (SPACE)	18,684		18,684
256	0305179A	INTEGRATED BROADCAST SERVICE (IBS)	467		467
257	0305204A	TACTICAL UNMANNED AERIAL VEHICLES	4,051		4,051
258	0305206A	AIRBORNE RECONNAISSANCE SYSTEMS	13,283		13,283
259	0305208A	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	47,204		47,204
264	0708045A	END ITEM INDUSTRIAL PREPAREDNESS ACTIVITIES	61,012	6,000	67,012
		6.8mm projectile development		[4,000]	
		Lightweight film armor development		[2,000]	
266A	9999999999	CLASSIFIED PROGRAMS	3,983		3,983
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**1,998,539**	**–256,058**	**1,742,481**
		SOFTWARE AND DIGITAL TECHNOLOGY PILOT PROGRAMS			
267	0608041A	DEFENSIVE CYBER—SOFTWARE PROTOTYPE DEVELOPMENT	46,445		46,445
		SUBTOTAL SOFTWARE AND DIGITAL TECHNOLOGY PILOT PROGRAMS	**46,445**		**46,445**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY	**12,587,343**	**–204,437**	**12,382,906**
		RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY			
		BASIC RESEARCH			
001	0601103N	UNIVERSITY RESEARCH INITIATIVES	116,816	5,000	121,816
		Navy Defense University Research Instrumentation program increase		[5,000]	
002	0601152N	IN-HOUSE LABORATORY INDEPENDENT RESEARCH	19,113		19,113
003	0601153N	DEFENSE RESEARCH SCIENCES	467,158		467,158
		SUBTOTAL BASIC RESEARCH	**603,087**	**5,000**	**608,087**
		APPLIED RESEARCH			
004	0602114N	POWER PROJECTION APPLIED RESEARCH	17,792		17,792
005	0602123N	FORCE PROTECTION APPLIED RESEARCH	122,281	25,000	147,281
		Additive manufacturing of unmanned maritime systems		[5,000]	
		Cyber physical security and resiliency research		[5,000]	

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Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
		Expeditionary unmanned systems launch and recovery		[5,000]	
		Talent and technology for power and energy systems		[5,000]	
		Unmanned logistics technology		[5,000]	
006	0602131M	MARINE CORPS LANDING FORCE TECHNOLOGY	50,623		50,623
007	0602235N	COMMON PICTURE APPLIED RESEARCH	48,001		48,001
008	0602236N	WARFIGHTER SUSTAINMENT APPLIED RESEARCH	67,765	10,000	77,765
		High mobility ground robots		[5,000]	
		Robotics in complex unstructured environments		[5,000]	
009	0602271N	ELECTROMAGNETIC SYSTEMS APPLIED RESEARCH	84,994		84,994
010	0602435N	OCEAN WARFIGHTING ENVIRONMENT APPLIED RESEARCH	63,392	10,000	73,392
		Extreme weather events research		[5,000]	
		Program increase		[5,000]	
011	0602651M	JOINT NON-LETHAL WEAPONS APPLIED RESEARCH	6,343		6,343
012	0602747N	UNDERSEA WARFARE APPLIED RESEARCH	56,397	35,000	91,397
		Academic partnerships for undersea vehicle research		[10,000]	
		Autonomous undersea robotics		[10,000]	
		Cross-domain autonomy for persistent maritime operations		[10,000]	
		Expandable structures for operational effectiveness research		[5,000]	
013	0602750N	FUTURE NAVAL CAPABILITIES APPLIED RESEARCH	167,590		167,590
014	0602782N	MINE AND EXPEDITIONARY WARFARE APPLIED RESEARCH	30,715		30,715
015	0602792N	INNOVATIVE NAVAL PROTOTYPES (INP) APPLIED RESEARCH	160,537		160,537
016	0602861N	SCIENCE AND TECHNOLOGY MANAGEMENT—ONR FIELD ACITIVITIES	76,745		76,745
		SUBTOTAL APPLIED RESEARCH	**953,175**	**80,000**	**1,033,175**
		ADVANCED TECHNOLOGY DEVELOPMENT			
017	0603123N	FORCE PROTECTION ADVANCED TECHNOLOGY	24,410	5,000	29,410
		Additive manufacturing		[5,000]	

018	0603271N	ELECTROMAGNETIC SYSTEMS ADVANCED TECHNOLOGY	8,008		8,008
019	0603640M	USMC ADVANCED TECHNOLOGY DEMONSTRATION (ATD)	219,045	30,000	249,045
		Expeditionary autonomous logistics		[5,000]	
		Heavy payload solar powered UAS		[20,000]	
		Modular Advanced Armed Robotic System		[5,000]	
020	0603651M	JOINT NON-LETHAL WEAPONS TECHNOLOGY DEVELOPMENT	13,301		13,301
021	0603673N	FUTURE NAVAL CAPABILITIES ADVANCED TECHNOLOGY DEVELOPMENT	246,054		246,054
022	0603680N	MANUFACTURING TECHNOLOGY PROGRAM	60,122		60,122
023	0603729N	WARFIGHTER PROTECTION ADVANCED TECHNOLOGY	4,851		4,851
024	0603758N	NAVY WARFIGHTING EXPERIMENTS AND DEMONSTRATIONS	40,709		40,709
025	0603782N	MINE AND EXPEDITIONARY WARFARE ADVANCED TECHNOLOGY	1,948		1,948
026	0603801N	INNOVATIVE NAVAL PROTOTYPES (INP) ADVANCED TECHNOLOGY DEVELOPMENT	141,948	20,000	161,948
		Accelerated railgun technology maturation		[20,000]	
		SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	**760,396**	**55,000**	**815,396**
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES			
027	0603178N	MEDIUM AND LARGE UNMANNED SURFACE VEHICLES (USVS)	464,042	–193,600	270,442
		EPF conversion to LUSV prototype		[45,000]	
		Two additional Overlord vessels excess to need		[–238,600]	
028	0603207N	AIR/OCEAN TACTICAL APPLICATIONS	35,386		35,386
029	0603216N	AVIATION SURVIVABILITY	13,428		13,428
030	0603239N	ISO NAVAL CONSTRUCTION FORCES	2,350		2,350
031	0603251N	AIRCRAFT SYSTEMS	418		418
032	0603254N	ASW SYSTEMS DEVELOPMENT	15,719		15,719
033	0603261N	TACTICAL AIRBORNE RECONNAISSANCE	3,411		3,411
034	0603382N	ADVANCED COMBAT SYSTEMS TECHNOLOGY	70,218		70,218
035	0603502N	SURFACE AND SHALLOW WATER MINE COUNTERMEASURES	52,358		52,358
036	0603506N	SURFACE SHIP TORPEDO DEFENSE	12,816		12,816
037	0603512N	CARRIER SYSTEMS DEVELOPMENT	7,559		7,559
038	0603525N	PILOT FISH	358,757	–80,200	278,557
		Excess cost growth		[–25,000]	
		Program adjustment		[–55,200]	

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
039	0603527N	RETRACT LARCH	12,562		12,562
040	0603536N	RETRACT JUNIPER	148,000		148,000
041	0603542N	RADIOLOGICAL CONTROL	778		778
042	0603553N	SURFACE ASW	1,161		1,161
043	0603561N	ADVANCED SUBMARINE SYSTEM DEVELOPMENT	185,356	–95,000	90,356
		Excessive accelerated development		[–28,200]	
		Project 1 insufficient budget justification		[–66,800]	
044	0603562N	SUBMARINE TACTICAL WARFARE SYSTEMS	10,528		10,528
045	0603563N	SHIP CONCEPT ADVANCED DESIGN	126,396	10,000	136,396
		Expeditionary sustainment and repair-related technologies		[5,000]	
		Polymorphic build farm for open source technologies		[5,000]	
046	0603564N	SHIP PRELIMINARY DESIGN & FEASIBILITY STUDIES	70,270		70,270
047	0603570N	ADVANCED NUCLEAR POWER SYSTEMS	149,188		149,188
048	0603573N	ADVANCED SURFACE MACHINERY SYSTEMS	38,449		38,449
049	0603576N	CHALK EAGLE	71,181		71,181
050	0603581N	LITTORAL COMBAT SHIP (LCS)	32,178		32,178
051	0603582N	COMBAT SYSTEM INTEGRATION	17,843		17,843
052	0603595N	OHIO REPLACEMENT	317,196		317,196
053	0603596N	LCS MISSION MODULES	67,875		67,875
054	0603597N	AUTOMATED TEST AND ANALYSIS	4,797		4,797
055	0603599N	FRIGATE DEVELOPMENT	82,309		82,309
056	0603609N	CONVENTIONAL MUNITIONS	9,922		9,922
057	0603635M	MARINE CORPS GROUND COMBAT/SUPPORT SYSTEM	189,603	–7,000	182,603
		Program delay		[–7,000]	
058	0603654N	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	43,084		43,084
059	0603713N	OCEAN ENGINEERING TECHNOLOGY DEVELOPMENT	6,346		6,346
060	0603721N	ENVIRONMENTAL PROTECTION	20,601		20,601

061	0603724N	NAVY ENERGY PROGRAM	23,422		23,422
062	0603725N	FACILITIES IMPROVEMENT	4,664		4,664
063	0603734N	CHALK CORAL	545,763	–25,000	520,763
		Excess cost growth		[–25,000]	
064	0603739N	NAVY LOGISTIC PRODUCTIVITY	3,884		3,884
065	0603746N	RETRACT MAPLE	353,226		353,226
066	0603748N	LINK PLUMERIA	544,388	–25,000	519,388
		Excess cost growth		[–25,000]	
067	0603751N	RETRACT ELM	86,730		86,730
068	0603764M	LINK EVERGREEN	236,234		236,234
070	0603790N	NATO RESEARCH AND DEVELOPMENT	6,880		6,880
071	0603795N	LAND ATTACK TECHNOLOGY	10,578		10,578
072	0603851M	JOINT NON-LETHAL WEAPONS TESTING	28,435		28,435
073	0603860N	JOINT PRECISION APPROACH AND LANDING SYSTEMS—DEM/VAL	33,612		33,612
074	0603925N	DIRECTED ENERGY AND ELECTRIC WEAPON SYSTEMS	128,845	88,000	216,845
		One additional system		[88,000]	
075	0604014N	F/A –18 INFRARED SEARCH AND TRACK (IRST)	84,190		84,190
076	0604027N	DIGITAL WARFARE OFFICE	54,699		54,699
077	0604028N	SMALL AND MEDIUM UNMANNED UNDERSEA VEHICLES	53,942		53,942
078	0604029N	UNMANNED UNDERSEA VEHICLE CORE TECHNOLOGIES	40,060		40,060
079	0604030N	RAPID PROTOTYPING, EXPERIMENTATION AND DEMONSTRATION.	12,100		12,100
080	0604031N	LARGE UNMANNED UNDERSEA VEHICLES	78,122	–36,000	42,122
		Early to need, phase 1 results needed first		[–36,000]	
081	0604112N	GERALD R. FORD CLASS NUCLEAR AIRCRAFT CARRIER (CVN 78—80)	107,895		107,895
082	0604126N	LITTORAL AIRBORNE MCM	17,366		17,366
083	0604127N	SURFACE MINE COUNTERMEASURES	18,754		18,754
084	0604272N	TACTICAL AIR DIRECTIONAL INFRARED COUNTERMEASURES (TADIRCM)	59,776		59,776
086	0604292N	FUTURE VERTICAL LIFT (MARITIME STRIKE)	5,097		5,097
087	0604320M	RAPID TECHNOLOGY CAPABILITY PROTOTYPE	3,664		3,664
088	0604454N	LX (R)	10,203		10,203
089	0604536N	ADVANCED UNDERSEA PROTOTYPING	115,858	–10,000	105,858
		XLUUV late test and evaluation award		[–10,000]	

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090	0604636N	COUNTER UNMANNED AIRCRAFT SYSTEMS (C-UAS)	14,259		14,259
091	0604659N	PRECISION STRIKE WEAPONS DEVELOPMENT PROGRAM	1,102,387	–15,000	1,087,387
		Transition to DDG–1000—initial integration		[–15,000]	
092	0604707N	SPACE AND ELECTRONIC WARFARE (SEW) ARCHITECTURE/ENGINEERING SUPPORT	7,657		7,657
093	0604786N	OFFENSIVE ANTI-SURFACE WARFARE WEAPON DEVELOPMENT	35,750		35,750
094	0303354N	ASW SYSTEMS DEVELOPMENT—MIP	9,151		9,151
095	0304240M	ADVANCED TACTICAL UNMANNED AIRCRAFT SYSTEM	22,589	–15,600	6,989
		K-MAX		[7,000]	
		MUX uncertain acquisition strategy		[–22,600]	
097	0304270N	ELECTRONIC WARFARE DEVELOPMENT—MIP	809		809
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**6,503,074**	**–404,400**	**6,098,674**
		SYSTEM DEVELOPMENT & DEMONSTRATION			
098	0603208N	TRAINING SYSTEM AIRCRAFT	4,332		4,332
099	0604212N	OTHER HELO DEVELOPMENT	18,133		18,133
100	0604214M	AV–8B AIRCRAFT—ENG DEV	20,054		20,054
101	0604215N	STANDARDS DEVELOPMENT	4,237		4,237
102	0604216N	MULTI-MISSION HELICOPTER UPGRADE DEVELOPMENT	27,340		27,340
104	0604221N	P–3 MODERNIZATION PROGRAM	606		606
105	0604230N	WARFARE SUPPORT SYSTEM	9,065		9,065
106	0604231N	TACTICAL COMMAND SYSTEM	97,968		97,968
107	0604234N	ADVANCED HAWKEYE	309,373		309,373
108	0604245M	H–1 UPGRADES	62,310		62,310
109	0604261N	ACOUSTIC SEARCH SENSORS	47,182		47,182
110	0604262N	V–22A	132,624		132,624
111	0604264N	AIR CREW SYSTEMS DEVELOPMENT	21,445		21,445
112	0604269N	EA–18	106,134		106,134

113	0604270N	ELECTRONIC WARFARE DEVELOPMENT	134,194		134,194
114	0604273M	EXECUTIVE HELO DEVELOPMENT	99,321		99,321
115	0604274N	NEXT GENERATION JAMMER (NGJ)	477,680	10,000	487,680
		High band risk reduction		[10,000]	
116	0604280N	JOINT TACTICAL RADIO SYSTEM—NAVY (JTRS-NAVY)	232,818		232,818
117	0604282N	NEXT GENERATION JAMMER (NGJ) INCREMENT II	170,039		170,039
118	0604307N	SURFACE COMBATANT COMBAT SYSTEM ENGINEERING	403,712		403,712
119	0604311N	LPD–17 CLASS SYSTEMS INTEGRATION	945		945
120	0604329N	SMALL DIAMETER BOMB (SDB)	62,488		62,488
121	0604366N	STANDARD MISSILE IMPROVEMENTS	386,225	–27,000	359,225
		SM–6 excessive cost growth; program accountability		[–27,000]	
122	0604373N	AIRBORNE MCM	10,909		10,909
123	0604378N	NAVAL INTEGRATED FIRE CONTROL—COUNTER AIR SYSTEMS ENGINEERING	44,548		44,548
124	0604419N	ADVANCED SENSORS APPLICATION PROGRAM (ASAP)	13,673		13,673
125	0604501N	ADVANCED ABOVE WATER SENSORS	87,809		87,809
126	0604503N	SSN–688 AND TRIDENT MODERNIZATION	93,097	18,000	111,097
		Submarine electronic warfare capability improvement		[18,000]	
127	0604504N	AIR CONTROL	38,863		38,863
128	0604512N	SHIPBOARD AVIATION SYSTEMS	9,593		9,593
129	0604518N	COMBAT INFORMATION CENTER CONVERSION	12,718		12,718
130	0604522N	AIR AND MISSILE DEFENSE RADAR (AMDR) SYSTEM	78,319		78,319
131	0604530N	ADVANCED ARRESTING GEAR (AAG)	65,834		65,834
132	0604558N	NEW DESIGN SSN	259,443	23,500	282,943
		Accelerate design		[23,500]	
133	0604562N	SUBMARINE TACTICAL WARFARE SYSTEM	63,878		63,878
134	0604567N	SHIP CONTRACT DESIGN/ LIVE FIRE T&E	51,853	14,600	66,453
		Advanced Degaussing System		[14,600]	
135	0604574N	NAVY TACTICAL COMPUTER RESOURCES	3,853		3,853
136	0604601N	MINE DEVELOPMENT	92,607	–27,500	65,107
		Forward funded in FY20		[–27,500]	
137	0604610N	LIGHTWEIGHT TORPEDO DEVELOPMENT	146,012		146,012
138	0604654N	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	8,383		8,383

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139	0604657M	USMC GROUND COMBAT/SUPPORTING ARMS SYSTEMS—ENG DEV	33,784		33,784
140	0604703N	PERSONNEL, TRAINING, SIMULATION, AND HUMAN FACTORS	8,599		8,599
141	0604727N	JOINT STANDOFF WEAPON SYSTEMS	73,744		73,744
142	0604755N	SHIP SELF DEFENSE (DETECT & CONTROL)	157,490		157,490
143	0604756N	SHIP SELF DEFENSE (ENGAGE: HARD KILL)	121,761		121,761
144	0604757N	SHIP SELF DEFENSE (ENGAGE: SOFT KILL/EW)	89,373		89,373
145	0604761N	INTELLIGENCE ENGINEERING	15,716		15,716
146	0604771N	MEDICAL DEVELOPMENT	2,120	20,000	22,120
		Autonomous aerial distributed logistics		[10,000]	
		ETEC disease research		[10,000]	
147	0604777N	NAVIGATION/ID SYSTEM	50,180		50,180
148	0604800M	JOINT STRIKE FIGHTER (JSF)—EMD	561		561
149	0604800N	JOINT STRIKE FIGHTER (JSF)—EMD	250		250
150	0604850N	SSN(X)	1,000		1,000
151	0605013M	INFORMATION TECHNOLOGY DEVELOPMENT	974		974
152	0605013N	INFORMATION TECHNOLOGY DEVELOPMENT	356,173	–5,000	351,173
		Unjustified growth		[–5,000]	
153	0605024N	ANTI-TAMPER TECHNOLOGY SUPPORT	7,810		7,810
154	0605212M	CH–53K RDTE	406,406		406,406
155	0605215N	MISSION PLANNING	86,134		86,134
156	0605217N	COMMON AVIONICS	54,540		54,540
157	0605220N	SHIP TO SHORE CONNECTOR (SSC)	5,155		5,155
158	0605327N	T-AO 205 CLASS	5,148		5,148
159	0605414N	UNMANNED CARRIER AVIATION (UCA)	266,970		266,970
160	0605450M	JOINT AIR-TO-GROUND MISSILE (JAGM)	12,713		12,713
161	0605500N	MULTI-MISSION MARITIME AIRCRAFT (MMA)	24,424		24,424
162	0605504N	MULTI-MISSION MARITIME (MMA) INCREMENT III	182,870		182,870

163	0605611M	MARINE CORPS ASSAULT VEHICLES SYSTEM DEVELOPMENT & DEMONSTRATION	41,775		41,775
164	0605813M	JOINT LIGHT TACTICAL VEHICLE (JLTV) SYSTEM DEVELOPMENT & DEMONSTRATION	2,541		2,541
165	0204202N	DDG–1000	208,448	15,000	223,448
		Transfer from CPS—initial integration		[15,000]	
169	0304785N	TACTICAL CRYPTOLOGIC SYSTEMS	111,434		111,434
170	0306250M	CYBER OPERATIONS TECHNOLOGY DEVELOPMENT	26,173		26,173
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	**6,263,883**	**41,600**	**6,305,483**
		MANAGEMENT SUPPORT			
171	0604256N	THREAT SIMULATOR DEVELOPMENT	22,075		22,075
172	0604258N	TARGET SYSTEMS DEVELOPMENT	10,224		10,224
173	0604759N	MAJOR T&E INVESTMENT	85,195		85,195
175	0605152N	STUDIES AND ANALYSIS SUPPORT—NAVY	3,089		3,089
176	0605154N	CENTER FOR NAVAL ANALYSES	43,517		43,517
179	0605804N	TECHNICAL INFORMATION SERVICES	932		932
180	0605853N	MANAGEMENT, TECHNICAL & INTERNATIONAL SUPPORT	94,297		94,297
181	0605856N	STRATEGIC TECHNICAL SUPPORT	3,813		3,813
183	0605863N	RDT&E SHIP AND AIRCRAFT SUPPORT	104,822		104,822
184	0605864N	TEST AND EVALUATION SUPPORT	446,960		446,960
185	0605865N	OPERATIONAL TEST AND EVALUATION CAPABILITY	27,241		27,241
186	0605866N	NAVY SPACE AND ELECTRONIC WARFARE (SEW) SUPPORT	15,787		15,787
187	0605867N	SEW SURVEILLANCE/RECONNAISSANCE SUPPORT	8,559		8,559
188	0605873M	MARINE CORPS PROGRAM WIDE SUPPORT	42,749		42,749
189	0605898N	MANAGEMENT HQ—R&D	41,094		41,094
190	0606355N	WARFARE INNOVATION MANAGEMENT	37,022		37,022
193	0305327N	INSIDER THREAT	2,310		2,310
194	0902498N	MANAGEMENT HEADQUARTERS (DEPARTMENTAL SUPPORT ACTIVITIES)	1,536		1,536
		SUBTOTAL MANAGEMENT SUPPORT	**991,222**		**991,222**
		OPERATIONAL SYSTEMS DEVELOPMENT			
199	0604227N	HARPOON MODIFICATIONS	697		697
200	0604840M	F–35 C2D2	379,549	–37,900	341,649

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		Block IV/TR3 upgrade delays		[–37,900]	
201	0604840N	F–35 C2D2	413,875	–41,400	372,475
		Block IV/TR3 upgrade delays		[–41,400]	
202	0607658N	COOPERATIVE ENGAGEMENT CAPABILITY (CEC)	143,667		143,667
204	0101221N	STRATEGIC SUB & WEAPONS SYSTEM SUPPORT	173,056		173,056
205	0101224N	SSBN SECURITY TECHNOLOGY PROGRAM	45,970		45,970
206	0101226N	SUBMARINE ACOUSTIC WARFARE DEVELOPMENT	69,190	5,000	74,190
		Next-generation countermeasure acoustic device		[5,000]	
207	0101402N	NAVY STRATEGIC COMMUNICATIONS	42,277		42,277
208	0204136N	F/A–18 SQUADRONS	171,030	4,000	175,030
		Jet noise reduction		[4,000]	
210	0204228N	SURFACE SUPPORT	33,482		33,482
211	0204229N	TOMAHAWK AND TOMAHAWK MISSION PLANNING CENTER (TMPC)	200,308		200,308
212	0204311N	INTEGRATED SURVEILLANCE SYSTEM	102,975		102,975
213	0204313N	SHIP-TOWED ARRAY SURVEILLANCE SYSTEMS	10,873		10,873
214	0204413N	AMPHIBIOUS TACTICAL SUPPORT UNITS (DISPLACEMENT CRAFT)	1,713		1,713
215	0204460M	GROUND/AIR TASK ORIENTED RADAR (G/ATOR)	22,205		22,205
216	0204571N	CONSOLIDATED TRAINING SYSTEMS DEVELOPMENT	83,956		83,956
218	0204575N	ELECTRONIC WARFARE (EW) READINESS SUPPORT	56,791		56,791
219	0205601N	HARM IMPROVEMENT	146,166		146,166
221	0205620N	SURFACE ASW COMBAT SYSTEM INTEGRATION	29,348		29,348
222	0205632N	MK–48 ADCAP	110,349		110,349
223	0205633N	AVIATION IMPROVEMENTS	133,953		133,953
224	0205675N	OPERATIONAL NUCLEAR POWER SYSTEMS	110,313		110,313
225	0206313M	MARINE CORPS COMMUNICATIONS SYSTEMS	207,662		207,662
226	0206335M	COMMON AVIATION COMMAND AND CONTROL SYSTEM (CAC2S)	4,406		4,406
227	0206623M	MARINE CORPS GROUND COMBAT/SUPPORTING ARMS SYSTEMS	61,381		61,381

228	0206624M	MARINE CORPS COMBAT SERVICES SUPPORT	10,421		10,421
229	0206625M	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP)	29,977		29,977
230	0206629M	AMPHIBIOUS ASSAULT VEHICLE	6,469		6,469
231	0207161N	TACTICAL AIM MISSILES	5,859		5,859
232	0207163N	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	44,323		44,323
236	0303109N	SATELLITE COMMUNICATIONS (SPACE)	41,978	5,000	46,978
		Interference mitigation technology, test and verification		[5,000]	
237	0303138N	CONSOLIDATED AFLOAT NETWORK ENTERPRISE SERVICES (CANES)	29,684		29,684
238	0303140N	INFORMATION SYSTEMS SECURITY PROGRAM	39,094		39,094
239	0305192N	MILITARY INTELLIGENCE PROGRAM (MIP) ACTIVITIES	6,154		6,154
240	0305204N	TACTICAL UNMANNED AERIAL VEHICLES	7,108		7,108
241	0305205N	UAS INTEGRATION AND INTEROPERABILITY	62,098		62,098
242	0305208M	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	21,500		21,500
244	0305220N	MQ–4C TRITON	11,120		11,120
245	0305231N	MQ–8 UAV	28,968		28,968
246	0305232M	RQ–11 UAV	537		537
247	0305234N	SMALL (LEVEL 0) TACTICAL UAS (STUASL0)	8,773		8,773
248	0305239M	RQ–21A	10,853		10,853
249	0305241N	MULTI-INTELLIGENCE SENSOR DEVELOPMENT	60,413		60,413
250	0305242M	UNMANNED AERIAL SYSTEMS (UAS) PAYLOADS (MIP)	5,000		5,000
251	0305251N	CYBERSPACE OPERATIONS FORCES AND FORCE SUPPORT	34,967		34,967
252	0305421N	RQ–4 MODERNIZATION	178,799		178,799
253	0307577N	INTELLIGENCE MISSION DATA (IMD)	2,120		2,120
254	0308601N	MODELING AND SIMULATION SUPPORT	8,683		8,683
255	0702207N	DEPOT MAINTENANCE (NON-IF)	45,168		45,168
256	0708730N	MARITIME TECHNOLOGY (MARITECH)	6,697		6,697
257	1203109N	SATELLITE COMMUNICATIONS (SPACE)	70,056		70,056
257A	9999999999	CLASSIFIED PROGRAMS	1,795,032		1,795,032
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**5,327,043**	**–65,300**	**5,261,743**
		SOFTWARE AND DIGITAL TECHNOLOGY PILOT PROGRAMS			
258	0608013N	RISK MANAGEMENT INFORMATION—SOFTWARE PILOT PROGRAM	14,300		14,300

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259	0608231N	MARITIME TACTICAL COMMAND AND CONTROL (MTC2)—SOFTWARE PILOT PROGRAM	10,868		10,868
		SUBTOTAL SOFTWARE AND DIGITAL TECHNOLOGY PILOT PROGRAMS	**25,168**		**25,168**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	**21,427,048**	**–288,100**	**21,138,948**
		RESEARCH, DEVELOPMENT, TEST & EVAL, AF			
		BASIC RESEARCH			
001	0601102F	DEFENSE RESEARCH SCIENCES	315,348		315,348
002	0601103F	UNIVERSITY RESEARCH INITIATIVES	161,861	5,000	166,861
		Solar block research		[5,000]	
003	0601108F	HIGH ENERGY LASER RESEARCH INITIATIVES	15,085		15,085
		SUBTOTAL BASIC RESEARCH	**492,294**	**5,000**	**497,294**
		APPLIED RESEARCH			
004	0602020F	FUTURE AF CAPABILITIES APPLIED RESEARCH	100,000		100,000
005	0602102F	MATERIALS	140,781	25,000	165,781
		Advanced materials manufacturing flexible biosensors		[5,000]	
		Metals affordability research		[15,000]	
		Thermal protection systems		[5,000]	
006	0602201F	AEROSPACE VEHICLE TECHNOLOGIES	349,225	25,000	374,225
		Advanced batteries for directed energy		[5,000]	
		High speed expendable turbine development		[5,000]	
		On-orbit propulsion technologies		[5,000]	
		Secure unmanned aerial vehicles		[10,000]	
007	0602202F	HUMAN EFFECTIVENESS APPLIED RESEARCH	115,222		115,222
009	0602204F	AEROSPACE SENSORS	211,301		211,301
011	0602298F	SCIENCE AND TECHNOLOGY MANAGEMENT— MAJOR HEADQUARTERS ACTIVITIES	8,926		8,926

012	0602602F	CONVENTIONAL MUNITIONS	132,425		132,425
013	0602605F	DIRECTED ENERGY TECHNOLOGY	128,113		128,113
014	0602788F	DOMINANT INFORMATION SCIENCES AND METHODS	178,668	30,000	208,668
		Counter UAS platform integration testbed		[5,000]	
		Quantum Innovation Center		[5,000]	
		Quantum network testbed		[10,000]	
		Trusted UAS traffic management and C-UAS testbed		[10,000]	
015	0602890F	HIGH ENERGY LASER RESEARCH	45,088		45,088
		SUBTOTAL APPLIED RESEARCH	**1,409,749**	**80,000**	**1,489,749**
		ADVANCED TECHNOLOGY DEVELOPMENT			
017	0603030F	AF FOUNDATIONAL DEVELOPMENT/DEMOS	103,280	7,000	110,280
		Agile composite manufacturing initiatives		[5,000]	
		Foam engine wash		[2,000]	
018	0603032F	FUTURE AF INTEGRATED TECHNOLOGY DEMOS	157,619	–30,000	127,619
		Inappropriate use of S&T funds for Golden Horde demonstration & validation		[–30,000]	
019	0603033F	NEXT GEN PLATFORM DEV/DEMO	199,556		199,556
020	0603034F	PERSISTENT KNOWLEDGE, AWARENESS, & C2 TECH	102,276		102,276
021	0603035F	NEXT GEN EFFECTS DEV/DEMOS	215,817		215,817
		SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	**778,548**	**–23,000**	**755,548**
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES			
038	0603260F	INTELLIGENCE ADVANCED DEVELOPMENT	4,320		4,320
039	0603742F	COMBAT IDENTIFICATION TECHNOLOGY	26,396		26,396
040	0603790F	NATO RESEARCH AND DEVELOPMENT	3,647		3,647
041	0603851F	INTERCONTINENTAL BALLISTIC MISSILE—DEM/VAL	32,959		32,959
043	0604002F	AIR FORCE WEATHER SERVICES RESEARCH	869		869
044	0604003F	ADVANCED BATTLE MANAGEMENT SYSTEM (ABMS)	302,323	–85,500	216,823
		Unjustified costs		[–85,500]	
045	0604004F	ADVANCED ENGINE DEVELOPMENT	636,495		636,495
046	0604015F	LONG RANGE STRIKE—BOMBER	2,848,410	–20,000	2,828,410
		Transfer to APA line 025A		[–20,000]	

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047	0604032F	DIRECTED ENERGY PROTOTYPING	20,964		20,964
048	0604033F	HYPERSONICS PROTOTYPING	381,862		381,862
050	0604257F	ADVANCED TECHNOLOGY AND SENSORS	24,747		24,747
051	0604288F	NATIONAL AIRBORNE OPS CENTER (NAOC) RECAP	76,417		76,417
052	0604317F	TECHNOLOGY TRANSFER	3,011		3,011
053	0604327F	HARD AND DEEPLY BURIED TARGET DEFEAT SYSTEM (HDBTDS) PROGRAM	52,921		52,921
054	0604414F	CYBER RESILIENCY OF WEAPON SYSTEMS-ACS	69,783		69,783
055	0604776F	DEPLOYMENT & DISTRIBUTION ENTERPRISE R&D	25,835		25,835
056	0604858F	TECH TRANSITION PROGRAM	219,252	30,000	249,252
		Program increase—LCAAT prototyping		[30,000]	
057	0605230F	GROUND BASED STRATEGIC DETERRENT	1,524,759		1,524,759
059	0207110F	NEXT GENERATION AIR DOMINANCE	1,044,089		1,044,089
060	0207455F	THREE DIMENSIONAL LONG-RANGE RADAR (3DELRR)	19,356		19,356
061	0207522F	AIRBASE AIR DEFENSE SYSTEMS (ABADS)	8,737		8,737
062	0208099F	UNIFIED PLATFORM (UP)	5,990		5,990
063	0305236F	COMMON DATA LINK EXECUTIVE AGENT (CDL EA)	39,293		39,293
065	0305601F	MISSION PARTNER ENVIRONMENTS	11,430		11,430
066	0306250F	CYBER OPERATIONS TECHNOLOGY DEVELOPMENT	259,823		259,823
067	0306415F	ENABLED CYBER ACTIVITIES	10,560		10,560
068	0401310F	C–32 EXECUTIVE TRANSPORT RECAPITALIZATION	9,908		9,908
069	0901410F	CONTRACTING INFORMATION TECHNOLOGY SYSTEM	8,662		8,662
074	1206427F	SPACE SYSTEMS PROTOTYPE TRANSITIONS (SSPT)	8,787		8,787
077	1206730F	SPACE SECURITY AND DEFENSE PROGRAM	56,311		56,311
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**7,737,916**	**–75,500**	**7,662,416**
		SYSTEM DEVELOPMENT & DEMONSTRATION			
082	0604200F	FUTURE ADVANCED WEAPON ANALYSIS & PROGRAMS	25,161		25,161

083	0604201F	PNT RESILIENCY, MODS, AND IMPROVEMENTS	38,564		38,564
084	0604222F	NUCLEAR WEAPONS SUPPORT	35,033		35,033
085	0604270F	ELECTRONIC WARFARE DEVELOPMENT	2,098		2,098
086	0604281F	TACTICAL DATA NETWORKS ENTERPRISE	131,909		131,909
087	0604287F	PHYSICAL SECURITY EQUIPMENT	6,752		6,752
088	0604329F	SMALL DIAMETER BOMB (SDB)—EMD	17,280		17,280
090	0604602F	ARMAMENT/ORDNANCE DEVELOPMENT	23,076		23,076
091	0604604F	SUBMUNITIONS	3,091		3,091
092	0604617F	AGILE COMBAT SUPPORT	20,609		20,609
093	0604618F	JOINT DIRECT ATTACK MUNITION	7,926		7,926
094	0604706F	LIFE SUPPORT SYSTEMS	23,660		23,660
095	0604735F	COMBAT TRAINING RANGES	8,898		8,898
096	0604800F	F–35—EMD	5,423	–5,000	423
		Excess SDD funding		[–5,000]	
097	0604932F	LONG RANGE STANDOFF WEAPON	474,430		474,430
098	0604933F	ICBM FUZE MODERNIZATION	167,099		167,099
100	0605056F	OPEN ARCHITECTURE MANAGEMENT	30,547		30,547
102	0605223F	ADVANCED PILOT TRAINING	248,669		248,669
103	0605229F	COMBAT RESCUE HELICOPTER	63,169		63,169
105	0101125F	NUCLEAR WEAPONS MODERNIZATION	9,683		9,683
106	0207171F	F–15 EPAWSS	170,679	–14,700	155,979
		Cost growth		[–14,700]	
107	0207328F	STAND IN ATTACK WEAPON	160,438	–17,700	142,738
		Unjustified cost increase		[–17,700]	
108	0207701F	FULL COMBAT MISSION TRAINING	9,422		9,422
110	0305176F	COMBAT SURVIVOR EVADER LOCATOR	973		973
111	0401221F	KC–46A TANKER SQUADRONS	106,262	–20,000	86,262
		Slow execution		[–20,000]	
113	0401319F	VC–25B	800,889		800,889
114	0701212F	AUTOMATED TEST SYSTEMS	10,673		10,673
115	0804772F	TRAINING DEVELOPMENTS	4,479		4,479
116	0901299F	AF A1 SYSTEMS	8,467		8,467

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Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	**2,615,359**	**–57,400**	**2,557,959**
		MANAGEMENT SUPPORT			
131	0604256F	THREAT SIMULATOR DEVELOPMENT	57,725		57,725
132	0604759F	MAJOR T&E INVESTMENT	208,680		208,680
133	0605101F	RAND PROJECT AIR FORCE	35,803		35,803
135	0605712F	INITIAL OPERATIONAL TEST & EVALUATION	13,557		13,557
136	0605807F	TEST AND EVALUATION SUPPORT	764,606	–10,000	754,606
		Program decrease		[–10,000]	
142	0605831F	ACQ WORKFORCE- CAPABILITY INTEGRATION	1,362,038		1,362,038
143	0605832F	ACQ WORKFORCE- ADVANCED PRGM TECHNOLOGY	40,768		40,768
144	0605833F	ACQ WORKFORCE- NUCLEAR SYSTEMS	179,646		179,646
145	0605898F	MANAGEMENT HQ—R&D	5,734		5,734
146	0605976F	FACILITIES RESTORATION AND MODERNIZATION—TEST AND EVALUATION SUPPORT	70,985		70,985
147	0605978F	FACILITIES SUSTAINMENT—TEST AND EVALUATION SUPPORT	29,880		29,880
148	0606017F	REQUIREMENTS ANALYSIS AND MATURATION	63,381		63,381
149	0606398F	MANAGEMENT HQ—T&E	5,785		5,785
150	0303255F	COMMAND, CONTROL, COMMUNICATION, AND COMPUTERS (C4)—STRATCOM	24,564		24,564
151	0308602F	ENTEPRISE INFORMATION SERVICES (EIS)	9,883		9,883
152	0702806F	ACQUISITION AND MANAGEMENT SUPPORT	13,384		13,384
153	0804731F	GENERAL SKILL TRAINING	1,262		1,262
155	1001004F	INTERNATIONAL ACTIVITIES	3,599		3,599
		SUBTOTAL MANAGEMENT SUPPORT	**2,891,280**	**–10,000**	**2,881,280**
		OPERATIONAL SYSTEMS DEVELOPMENT			
163	0604233F	SPECIALIZED UNDERGRADUATE FLIGHT TRAINING	8,777		8,777
164	0604776F	DEPLOYMENT & DISTRIBUTION ENTERPRISE R&D	499		499

165	0604840F	F–35 C2D2	785,336	–78,500	706,836
		Block IV/TR3 upgrade delays		[–78,500]	
166	0605018F	AF INTEGRATED PERSONNEL AND PAY SYSTEM (AF-IPPS)	27,035		27,035
167	0605024F	ANTI-TAMPER TECHNOLOGY EXECUTIVE AGENCY	50,508		50,508
168	0605117F	FOREIGN MATERIEL ACQUISITION AND EXPLOITATION	71,229		71,229
169	0605278F	HC/MC–130 RECAP RDT&E	24,705		24,705
170	0606018F	NC3 INTEGRATION	26,356		26,356
172	0101113F	B–52 SQUADRONS	520,023	–181,500	338,523
		GPS-IU contract delays		[–10,000]	
		No acquisition strategy for AEHF		[–2,500]	
		Radar modernization program contract delays		[–40,000]	
		Virtual prototype contract delay		[–125,000]	
		VLF/LF contract delays		[–4,000]	
173	0101122F	AIR-LAUNCHED CRUISE MISSILE (ALCM)	1,433		1,433
174	0101126F	B–1B SQUADRONS	15,766		15,766
175	0101127F	B–2 SQUADRONS	187,399		187,399
		Airspace compliance contract delays		[–2,000]	
		JASSM-ER Milestone B delay		[–5,000]	
		Virtual training		[7,000]	
176	0101213F	MINUTEMAN SQUADRONS	116,569		116,569
177	0101316F	WORLDWIDE JOINT STRATEGIC COMMUNICATIONS	27,235		27,235
178	0101324F	INTEGRATED STRATEGIC PLANNING & ANALYSIS NETWORK	24,227		24,227
179	0101328F	ICBM REENTRY VEHICLES	112,753		112,753
181	0102110F	UH–1N REPLACEMENT PROGRAM	44,464		44,464
182	0102326F	REGION/SECTOR OPERATION CONTROL CENTER MODERNIZATION PROGRAM	5,929		5,929
183	0102412F	NORTH WARNING SYSTEM (NWS)	100		100
184	0205219F	MQ–9 UAV	162,080		162,080
186	0207131F	A–10 SQUADRONS	24,535		24,535
187	0207133F	F–16 SQUADRONS	223,437		223,437
188	0207134F	F–15E SQUADRONS	298,908		298,908
189	0207136F	MANNED DESTRUCTIVE SUPPRESSION	14,960		14,960
190	0207138F	F–22A SQUADRONS	665,038	–16,100	648,938

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		Software delays		[–16,100]	
191	0207142F	F–35 SQUADRONS	132,229	–2,600	129,629
		Unjustified USAF ALIS unique funding		[–2,600]	
192	0207146F	F–15EX	159,761		159,761
193	0207161F	TACTICAL AIM MISSILES	19,417		19,417
194	0207163F	ADVANCED MEDIUM RANGE AIR-TO-AIR MISSILE (AMRAAM)	51,799		51,799
195	0207227F	COMBAT RESCUE—PARARESCUE	669		669
196	0207247F	AF TENCAP	21,644		21,644
197	0207249F	PRECISION ATTACK SYSTEMS PROCUREMENT	9,261		9,261
198	0207253F	COMPASS CALL	15,854		15,854
199	0207268F	AIRCRAFT ENGINE COMPONENT IMPROVEMENT PROGRAM	95,896		95,896
200	0207325F	JOINT AIR-TO-SURFACE STANDOFF MISSILE (JASSM)	70,792		70,792
201	0207410F	AIR & SPACE OPERATIONS CENTER (AOC)	51,187		51,187
202	0207412F	CONTROL AND REPORTING CENTER (CRC)	16,041		16,041
203	0207417F	AIRBORNE WARNING AND CONTROL SYSTEM (AWACS)	138,303		138,303
204	0207418F	AFSPECWAR—TACP	4,223		4,223
206	0207431F	COMBAT AIR INTELLIGENCE SYSTEM ACTIVITIES	16,564		16,564
207	0207438F	THEATER BATTLE MANAGEMENT (TBM) C4I	7,858		7,858
208	0207444F	TACTICAL AIR CONTROL PARTY-MOD	12,906		12,906
210	0207452F	DCAPES	14,816		14,816
211	0207521F	AIR FORCE CALIBRATION PROGRAMS	1,970		1,970
212	0207573F	NATIONAL TECHNICAL NUCLEAR FORENSICS	396		396
213	0207590F	SEEK EAGLE	29,680		29,680
214	0207601F	USAF MODELING AND SIMULATION	17,666		17,666
215	0207605F	WARGAMING AND SIMULATION CENTERS	6,353		6,353
216	0207610F	BATTLEFIELD ABN COMM NODE (BACN)	6,827		6,827
217	0207697F	DISTRIBUTED TRAINING AND EXERCISES	3,390		3,390

218	0208006F	MISSION PLANNING SYSTEMS	91,768		91,768
219	0208007F	TACTICAL DECEPTION	2,370		2,370
220	0208064F	OPERATIONAL HQ—CYBER	5,527		5,527
221	0208087F	DISTRIBUTED CYBER WARFARE OPERATIONS	68,279		68,279
222	0208088F	AF DEFENSIVE CYBERSPACE OPERATIONS	15,165		15,165
223	0208097F	JOINT CYBER COMMAND AND CONTROL (JCC2)	38,480		38,480
224	0208099F	UNIFIED PLATFORM (UP)	84,645		84,645
230	0301025F	GEOBASE	2,767		2,767
231	0301112F	NUCLEAR PLANNING AND EXECUTION SYSTEM (NPES)	32,759		32,759
238	0301401F	AIR FORCE SPACE AND CYBER NON-TRADITIONAL ISR FOR BATTLESPACE AWARENESS	2,904		2,904
239	0302015F	E–4B NATIONAL AIRBORNE OPERATIONS CENTER (NAOC)	3,468		3,468
240	0303131F	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)	61,887		61,887
242	0303140F	INFORMATION SYSTEMS SECURITY PROGRAM	10,351		10,351
243	0303142F	GLOBAL FORCE MANAGEMENT—DATA INITIATIVE	1,346		1,346
246	0304260F	AIRBORNE SIGINT ENTERPRISE	128,110	–8,000	120,110
		Program decrease		[–8,000]	
247	0304310F	COMMERCIAL ECONOMIC ANALYSIS	4,042		4,042
251	0305020F	CCMD INTELLIGENCE INFORMATION TECHNOLOGY	1,649		1,649
252	0305022F	ISR MODERNIZATION & AUTOMATION DVMT (IMAD)	19,265		19,265
253	0305099F	GLOBAL AIR TRAFFIC MANAGEMENT (GATM)	4,645		4,645
254	0305103F	CYBER SECURITY INITIATIVE	384		384
255	0305111F	WEATHER SERVICE	23,640	7,000	30,640
		Commercial weather pilot		[7,000]	
256	0305114F	AIR TRAFFIC CONTROL, APPROACH, AND LANDING SYSTEM (ATCALS)	6,553		6,553
257	0305116F	AERIAL TARGETS	449		449
260	0305128F	SECURITY AND INVESTIGATIVE ACTIVITIES	432		432
262	0305146F	DEFENSE JOINT COUNTERINTELLIGENCE ACTIVITIES	4,890		4,890
264	0305179F	INTEGRATED BROADCAST SERVICE (IBS)	8,864		8,864
265	0305202F	DRAGON U–2	18,660		18,660
267	0305206F	AIRBORNE RECONNAISSANCE SYSTEMS	121,512	18,000	139,512
		Gorgon Stare Wide Area Motion Imagery program increase		[10,000]	
		Sensor Open Systems Architecture		[8,000]	

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268	0305207F	MANNED RECONNAISSANCE SYSTEMS	14,711		14,711
269	0305208F	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	14,152		14,152
270	0305220F	RQ–4 UAV	134,589		134,589
271	0305221F	NETWORK-CENTRIC COLLABORATIVE TARGETING	15,049		15,049
272	0305238F	NATO AGS	36,731		36,731
273	0305240F	SUPPORT TO DCGS ENTERPRISE	33,547		33,547
274	0305600F	INTERNATIONAL INTELLIGENCE TECHNOLOGY AND ARCHITECTURES	13,635		13,635
275	0305881F	RAPID CYBER ACQUISITION	4,262		4,262
276	0305984F	PERSONNEL RECOVERY COMMAND & CTRL (PRC2)	2,207		2,207
277	0307577F	INTELLIGENCE MISSION DATA (IMD)	6,277		6,277
278	0401115F	C–130 AIRLIFT SQUADRON	41,973		41,973
279	0401119F	C–5 AIRLIFT SQUADRONS (IF)	32,560		32,560
280	0401130F	C–17 AIRCRAFT (IF)	9,991		9,991
281	0401132F	C–130J PROGRAM	10,674		10,674
282	0401134F	LARGE AIRCRAFT IR COUNTERMEASURES (LAIRCM)	5,507		5,507
283	0401218F	KC–135S	4,591		4,591
286	0401318F	CV–22	18,419		18,419
288	0408011F	SPECIAL TACTICS / COMBAT CONTROL	7,673		7,673
290	0708055F	MAINTENANCE, REPAIR & OVERHAUL SYSTEM	24,513		24,513
291	0708610F	LOGISTICS INFORMATION TECHNOLOGY (LOGIT)	35,225		35,225
292	0708611F	SUPPORT SYSTEMS DEVELOPMENT	11,838		11,838
293	0804743F	OTHER FLIGHT TRAINING	1,332		1,332
295	0901202F	JOINT PERSONNEL RECOVERY AGENCY	2,092		2,092
296	0901218F	CIVILIAN COMPENSATION PROGRAM	3,869		3,869
297	0901220F	PERSONNEL ADMINISTRATION	1,584		1,584
298	0901226F	AIR FORCE STUDIES AND ANALYSIS AGENCY	1,197		1,197
299	0901538F	FINANCIAL MANAGEMENT INFORMATION SYSTEMS DEVELOPMENT	7,006		7,006

300	0901554F	DEFENSE ENTERPRISE ACNTNG AND MGT SYS (DEAMS)	45,638		45,638
301	1201017F	GLOBAL SENSOR INTEGRATED ON NETWORK (GSIN)	1,889	–1,889	
		Transfer to Space Force		[–1,889]	
302	1201921F	SERVICE SUPPORT TO STRATCOM—SPACE ACTIVITIES	993		993
303	1202140F	SERVICE SUPPORT TO SPACECOM ACTIVITIES	8,999		8,999
314	1203400F	SPACE SUPERIORITY INTELLIGENCE	16,810		16,810
316	1203620F	NATIONAL SPACE DEFENSE CENTER	2,687		2,687
318	1203906F	NCMC—TW/AA SYSTEM	6,990		6,990
322A	9999999999	CLASSIFIED PROGRAMS	15,777,856		15,777,856
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**21,466,680**	**–263,589**	**21,203,091**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, AF	**37,391,826**	**–344,489**	**37,047,337**
		RESEARCH, DEVELOPMENT, TEST & EVAL, SPACE FORCE			
		APPLIED RESEARCH			
001	1206601SF	SPACE TECHNOLOGY	130,874	34,000	164,874
		Ground based optical GEO surveillance		[5,000]	
		Rapid development of low-cost, small satellite technology		[20,000]	
		Small satellite mission operations center		[9,000]	
		SUBTOTAL APPLIED RESEARCH	**130,874**	**34,000**	**164,874**
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES			
002	1203164SF	NAVSTAR GLOBAL POSITIONING SYSTEM (USER EQUIPMENT) (SPACE)	390,704		390,704
003	1203710SF	EO/IR WEATHER SYSTEMS	131,000	–25,000	106,000
		Program reduction for phase 2 risk reduction Spec OT2		[–25,000]	
004	1206422SF	WEATHER SYSTEM FOLLOW-ON	83,384		83,384
005	1206425SF	SPACE SITUATION AWARENESS SYSTEMS	33,359		33,359
006	1206427SF	SPACE SYSTEMS PROTOTYPE TRANSITIONS (SSPT)	142,808		142,808
007	1206438SF	SPACE CONTROL TECHNOLOGY	35,575		35,575
008	1206760SF	PROTECTED TACTICAL ENTERPRISE SERVICE (PTES)	114,390	–5,000	109,390
		Unjustified growth		[–5,000]	
009	1206761SF	PROTECTED TACTICAL SERVICE (PTS)	205,178	–5,000	200,178

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		Unjustified growth		[–5,000]	
010	1206855SF	EVOLVED STRATEGIC SATCOM (ESS)	71,395		71,395
011	1206857SF	SPACE RAPID CAPABILITIES OFFICE	103,518		103,518
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**1,311,311**	**–35,000**	**1,276,311**
		SYSTEM DEVELOPMENT & DEMONSTRATION			
012	1203269SF	GPS III FOLLOW-ON (GPS IIIF)	263,496	–10,000	253,496
		Execution lagging		[–10,000]	
013	1203940SF	SPACE SITUATION AWARENESS OPERATIONS	41,897		41,897
014	1206421SF	COUNTERSPACE SYSTEMS	54,689		54,689
015	1206422SF	WEATHER SYSTEM FOLLOW-ON	2,526		2,526
016	1206425SF	SPACE SITUATION AWARENESS SYSTEMS	173,074		173,074
017	1206431SF	ADVANCED EHF MILSATCOM (SPACE)	138,257		138,257
018	1206432SF	POLAR MILSATCOM (SPACE)	190,235		190,235
019	1206442SF	NEXT GENERATION OPIR	2,318,864	–49,000	2,269,864
		Block 0 GEO unjustified cost growth		[–20,000]	
		Program decrease		[–29,000]	
020	1206853SF	NATIONAL SECURITY SPACE LAUNCH PROGRAM (SPACE)—EMD	560,978	150,000	710,978
		Program increase		[150,000]	
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	**3,744,016**	**91,000**	**3,835,016**
		MANAGEMENT SUPPORT			
021	1206116SF	SPACE TEST AND TRAINING RANGE DEVELOPMENT	20,281		20,281
022	1206392SF	ACQ WORKFORCE—SPACE & MISSILE SYSTEMS	183,930		183,930
023	1206398SF	SPACE & MISSILE SYSTEMS CENTER—MHA	9,765		9,765
024	1206860SF	ROCKET SYSTEMS LAUNCH PROGRAM (SPACE)	17,993	10,000	27,993
		Tactically Responsive Launch Operations		[10,000]	

025	1206864SF	SPACE TEST PROGRAM (STP)	26,541		26,541
		SUBTOTAL MANAGEMENT SUPPORT	**258,510**	**10,000**	**268,510**
		OPERATIONAL SYSTEM DEVELOPMENT			
026	1201017SF	GLOBAL SENSOR INTEGRATED ON NETWORK (GSIN)	3,708	1,889	5,597
		Transfer from Air Force		[1,889]	
027	1203001SF	FAMILY OF ADVANCED BLOS TERMINALS (FAB-T)	247,229	–10,000	237,229
		Program decrease		[–10,000]	
028	1203110SF	SATELLITE CONTROL NETWORK (SPACE)	75,480	–15,000	60,480
		Program decrease		[–15,000]	
029	1203165SF	NAVSTAR GLOBAL POSITIONING SYSTEM (SPACE AND CONTROL SEGMENTS)	1,984		1,984
030	1203173SF	SPACE AND MISSILE TEST AND EVALUATION CENTER	4,397		4,397
031	1203174SF	SPACE INNOVATION, INTEGRATION AND RAPID TECHNOLOGY DEVELOPMENT	44,746	–5,000	39,746
		Underexecution		[–5,000]	
032	1203182SF	SPACELIFT RANGE SYSTEM (SPACE)	11,020	5,000	16,020
		Space launch range services and capabilities		[5,000]	
033	1203265SF	GPS III SPACE SEGMENT	10,777		10,777
034	1203873SF	BALLISTIC MISSILE DEFENSE RADARS	28,179		28,179
035	1203913SF	NUDET DETECTION SYSTEM (SPACE)	29,157		29,157
036	1203940SF	SPACE SITUATION AWARENESS OPERATIONS	44,809	–5,000	39,809
		Underexecution		[–5,000]	
037	1206423SF	GLOBAL POSITIONING SYSTEM III—OPERATIONAL CONTROL SEGMENT	481,999	–10,000	471,999
		Program decrease		[–5,000]	
		Unjustified growth		[–5,000]	
041	1206770SF	ENTERPRISE GROUND SERVICES	116,791		116,791
041A	9999999999	CLASSIFIED PROGRAMS	3,632,866		3,632,866
		SUBTOTAL OPERATIONAL SYSTEM DEVELOPMENT	**4,733,142**	**–38,111**	**4,695,031**
		SOFTWARE & DIGITAL TECHNOLOGY PILOT PROGRAMS			
042	1203614SF	JSPOC MISSION SYSTEM	149,742	–20,000	129,742
		Unjustified increase; transfer to commercial Space Domain Awareness Services and Data		[–20,000]	
42A	9999999999	COMMERCIAL SATCOM		45,000	45,000

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		Commercial polar space-based proliferated LEO broadband services and demonstrations		[25,000]	
		Increase for commercial space domain awareness services and data		[20,000]	
		SUBTOTAL SOFTWARE & DIGITAL TECHNOLOGY PILOT PROGRAMS	**149,742**	**25,000**	**174,742**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, SPACE FORCE	**10,327,595**	**86,889**	**10,414,484**
		RESEARCH, DEVELOPMENT, TEST & EVAL, DW			
		BASIC RESEARCH			
001	0601000BR	DTRA BASIC RESEARCH	14,617		14,617
002	0601101E	DEFENSE RESEARCH SCIENCES	479,958		479,958
003	0601110D8Z	BASIC RESEARCH INITIATIVES	35,565	22,000	57,565
		Restore Minerva research initiative		[17,000]	
		START research consortium of excellence for irregular warfare and advanced analytics		[5,000]	
004	0601117E	BASIC OPERATIONAL MEDICAL RESEARCH SCIENCE	53,730		53,730
005	0601120D8Z	NATIONAL DEFENSE EDUCATION PROGRAM	100,241	5,000	105,241
		Civics education pilot		[5,000]	
006	0601228D8Z	HISTORICALLY BLACK COLLEGES AND UNIVERSITIES/MINORITY INSTITUTIONS	30,975	20,000	50,975
		PIPELINE program		[3,000]	
		Program increase		[17,000]	
007	0601384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	45,300		45,300
		SUBTOTAL BASIC RESEARCH	**760,386**	**47,000**	**807,386**
		APPLIED RESEARCH			
008	0602000D8Z	JOINT MUNITIONS TECHNOLOGY	19,409	5,000	24,409
		New energetic materials design		[5,000]	
009	0602115E	BIOMEDICAL TECHNOLOGY	107,568		107,568
011	0602230D8Z	DEFENSE TECHNOLOGY INNOVATION	35,000		35,000

012	0602234D8Z	LINCOLN LABORATORY RESEARCH PROGRAM	41,080		41,080
013	0602251D8Z	APPLIED RESEARCH FOR THE ADVANCEMENT OF S&T PRIORITIES	60,722		60,722
014	0602303E	INFORMATION & COMMUNICATIONS TECHNOLOGY	435,920	–32,000	403,920
		Program decrease		[–32,000]	
015	0602383E	BIOLOGICAL WARFARE DEFENSE	26,950		26,950
016	0602384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	201,807	5,000	206,807
		Treatment testing technology for nuclear, chemical, and biological exposure		[5,000]	
017	0602668D8Z	CYBER SECURITY RESEARCH	15,255		15,255
018	0602702E	TACTICAL TECHNOLOGY	233,271		233,271
019	0602715E	MATERIALS AND BIOLOGICAL TECHNOLOGY	250,107		250,107
020	0602716E	ELECTRONICS TECHNOLOGY	322,693		322,693
021	0602718BR	COUNTER WEAPONS OF MASS DESTRUCTION APPLIED RESEARCH	174,571		174,571
022	0602751D8Z	SOFTWARE ENGINEERING INSTITUTE (SEI) APPLIED RESEARCH	9,573		9,573
023	1160401BB	SOF TECHNOLOGY DEVELOPMENT	42,464	5,000	47,464
		Sustained Human Performance and Resilience		[5,000]	
		SUBTOTAL APPLIED RESEARCH	**1,976,390**	**–17,000**	**1,959,390**
		ADVANCED TECHNOLOGY DEVELOPMENT			
024	0603000D8Z	JOINT MUNITIONS ADVANCED TECHNOLOGY	22,920		22,920
025	0603121D8Z	SO/LIC ADVANCED DEVELOPMENT	4,914		4,914
026	0603122D8Z	COMBATING TERRORISM TECHNOLOGY SUPPORT	51,089		51,089
027	0603133D8Z	FOREIGN COMPARATIVE TESTING	25,183		25,183
029	0603160BR	COUNTER WEAPONS OF MASS DESTRUCTION ADVANCED TECHNOLOGY DEVELOPMENT	366,659		366,659
030	0603176C	ADVANCED CONCEPTS AND PERFORMANCE ASSESSMENT	14,910	50,000	64,910
		Restore low power laser demonstrator		[50,000]	
032	0603180C	ADVANCED RESEARCH	18,687	10,000	28,687
		Program increase		[10,000]	
033	0603225D8Z	JOINT DOD-DOE MUNITIONS TECHNOLOGY DEVELOPMENT	18,873		18,873
034	0603286E	ADVANCED AEROSPACE SYSTEMS	230,978		230,978
035	0603287E	SPACE PROGRAMS AND TECHNOLOGY	158,439		158,439
036	0603288D8Z	ANALYTIC ASSESSMENTS	23,775		23,775
037	0603289D8Z	ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS	36,524		36,524

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Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
038	0603291D8Z	ADVANCED INNOVATIVE ANALYSIS AND CONCEPTS—MHA	14,703		14,703
039	0603294C	COMMON KILL VEHICLE TECHNOLOGY	11,058		11,058
040	0603338D8Z	DEFENSE MODERNIZATION AND PROTOTYPING	133,375		133,375
042	0603342D8Z	DEFENSE INNOVATION UNIT (DIU)	26,141		26,141
043	0603375D8Z	TECHNOLOGY INNOVATION	27,709		27,709
044	0603384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—ADVANCED DEVELOPMENT	188,001		188,001
045	0603527D8Z	RETRACT LARCH	130,283		130,283
046	0603618D8Z	JOINT ELECTRONIC ADVANCED TECHNOLOGY	15,164		15,164
047	0603648D8Z	JOINT CAPABILITY TECHNOLOGY DEMONSTRATIONS	85,452		85,452
048	0603662D8Z	NETWORKED COMMUNICATIONS CAPABILITIES	5,882		5,882
049	0603680D8Z	DEFENSE-WIDE MANUFACTURING SCIENCE AND TECHNOLOGY PROGRAM	93,817	50,000	143,817
		Accelerating rapid prototyping by integrating high performance computing and advanced manufacturing.		[5,000]	
		Additive manufacturing training		[5,000]	
		Advanced structural manufacturing technologies		[30,000]	
		Flexible hybrid electronics		[5,000]	
		Hypersonic thermal management research		[5,000]	
050	0603680S	MANUFACTURING TECHNOLOGY PROGRAM	40,025		40,025
052	0603712S	GENERIC LOGISTICS R&D TECHNOLOGY DEMONSTRATIONS	10,235		10,235
053	0603716D8Z	STRATEGIC ENVIRONMENTAL RESEARCH PROGRAM	53,862	105,000	158,862
		AFFF replacement		[50,000]	
		PFAS Innovation Award Fund		[5,000]	
		PFAS remediation and disposal technology		[50,000]	
054	0603720S	MICROELECTRONICS TECHNOLOGY DEVELOPMENT AND SUPPORT	124,049		124,049
055	0603727D8Z	JOINT WARFIGHTING PROGRAM	3,871		3,871
056	0603739E	ADVANCED ELECTRONICS TECHNOLOGIES	95,864		95,864
057	0603760E	COMMAND, CONTROL AND COMMUNICATIONS SYSTEMS	221,724		221,724

058	0603766E	NETWORK-CENTRIC WARFARE TECHNOLOGY	661,158		661,158
059	0603767E	SENSOR TECHNOLOGY	200,220		200,220
060	0603769D8Z	DISTRIBUTED LEARNING ADVANCED TECHNOLOGY DEVELOPMENT	6,765		6,765
061	0603781D8Z	SOFTWARE ENGINEERING INSTITUTE	12,598		12,598
064	0603924D8Z	HIGH ENERGY LASER ADVANCED TECHNOLOGY PROGRAM	105,410		105,410
065	0603941D8Z	TEST & EVALUATION SCIENCE & TECHNOLOGY	187,065		187,065
		Directed energy test workloads			
066	0603950D8Z	NATIONAL SECURITY INNOVATION NETWORK		40,000	40,000
		Restore program		[40,000]	
067	0604055D8Z	OPERATIONAL ENERGY CAPABILITY IMPROVEMENT		65,000	65,000
		Program increase		[65,000]	
070	1160402BB	SOF ADVANCED TECHNOLOGY DEVELOPMENT	89,072	5,000	94,072
		SOF 3–D printing technologies		[5,000]	
071	1206310SDA	SPACE SCIENCE AND TECHNOLOGY RESEARCH AND DEVELOPMENT	72,422		72,422
		SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	**3,588,876**	**325,000**	**3,913,876**
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES			
072	0603161D8Z	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E ADC&P	32,636		32,636
073	0603600D8Z	WALKOFF	106,529		106,529
075	0603851D8Z	ENVIRONMENTAL SECURITY TECHNICAL CERTIFICATION PROGRAM	61,345	52,000	113,345
		PFAS remediation and disposal technology		[50,000]	
		Program increase		[2,000]	
076	0603881C	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT	412,627	–100,000	312,627
		Insufficient justification—homeland defense underlay		[–100,000]	
077	0603882C	BALLISTIC MISSILE DEFENSE MIDCOURSE DEFENSE SEGMENT	1,004,305	–85,000	919,305
		Unjustified growth—RKV cancellation		[–85,000]	
078	0603884BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—DEM/VAL	76,167	5,000	81,167
		Decontamination technologies for civilian pandemic preparedness		[5,000]	
079	0603884C	BALLISTIC MISSILE DEFENSE SENSORS	281,957		281,957
080	0603890C	BMD ENABLING PROGRAMS	599,380		599,380
081	0603891C	SPECIAL PROGRAMS—MDA	420,216		420,216
082	0603892C	AEGIS BMD	814,936	–10,000	804,936

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Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
		Program decrease		[–10,000]	
083	0603896C	BALLISTIC MISSILE DEFENSE COMMAND AND CONTROL, BATTLE MANAGEMENT AND COMMUNICATI	593,353		593,353
084	0603898C	BALLISTIC MISSILE DEFENSE JOINT WARFIGHTER SUPPORT	49,560		49,560
085	0603904C	MISSILE DEFENSE INTEGRATION & OPERATIONS CENTER (MDIOC)	55,356		55,356
086	0603906C	REGARDING TRENCH	11,863		11,863
087	0603907C	SEA BASED X-BAND RADAR (SBX)	118,318		118,318
088	0603913C	ISRAELI COOPERATIVE PROGRAMS	300,000		300,000
089	0603914C	BALLISTIC MISSILE DEFENSE TEST	378,302		378,302
090	0603915C	BALLISTIC MISSILE DEFENSE TARGETS	536,133		536,133
092	0603923D8Z	COALITION WARFARE	10,129		10,129
093	0604011D8Z	NEXT GENERATION INFORMATION COMMUNICATIONS TECHNOLOGY (5G)	449,000	–49,000	400,000
		Program decrease for Restoring S&T		[–49,000]	
094	0604016D8Z	DEPARTMENT OF DEFENSE CORROSION PROGRAM	3,325		3,325
095	0604115C	TECHNOLOGY MATURATION INITIATIVES	67,389		67,389
098	0604181C	HYPERSONIC DEFENSE	206,832		206,832
099	0604250D8Z	ADVANCED INNOVATIVE TECHNOLOGIES	730,508	–1,000	729,508
		Micro nuclear reactors		[50,000]	
		Program decrease for Restoring S&T		[–51,000]	
100	0604294D8Z	TRUSTED & ASSURED MICROELECTRONICS	489,076		489,076
101	0604331D8Z	RAPID PROTOTYPING PROGRAM	102,023	–20,000	82,023
		Program decrease for Restoring S&T		[–20,000]	
102	0604341D8Z	DEFENSE INNOVATION UNIT (DIU) PROTOTYPING	13,255	3,000	16,255
		Talent optimization pilot program		[3,000]	
103	0604400D8Z	DEPARTMENT OF DEFENSE (DOD) UNMANNED SYSTEM COMMON DEVELOPMENT	2,787		2,787
105	0604672C	HOMELAND DEFENSE RADAR—HAWAII (HDR-H)		130,000	130,000
		Continue radar development and siting efforts		[130,000]	
107	0604682D8Z	WARGAMING AND SUPPORT FOR STRATEGIC ANALYSIS (SSA)	3,469		3,469

109	0604826J	JOINT C5 CAPABILITY DEVELOPMENT, INTEGRATION AND INTEROPERABILITY ASSESSMENTS	19,190		19,190
110	0604873C	LONG RANGE DISCRIMINATION RADAR (LRDR)	137,256		137,256
111	0604874C	IMPROVED HOMELAND DEFENSE INTERCEPTORS	664,138	–250,000	414,138
		Delayed NGI contract award		[–250,000]	
112	0604876C	BALLISTIC MISSILE DEFENSE TERMINAL DEFENSE SEGMENT TEST	7,768		7,768
113	0604878C	AEGIS BMD TEST	170,880	–75,000	95,880
		Unjustified cost growth		[–75,000]	
114	0604879C	BALLISTIC MISSILE DEFENSE SENSOR TEST	76,456		76,456
115	0604880C	LAND-BASED SM–3 (LBSM3)	56,628		56,628
116	0604887C	BALLISTIC MISSILE DEFENSE MIDCOURSE SEGMENT TEST	67,071		67,071
118	0300206R	ENTERPRISE INFORMATION TECHNOLOGY SYSTEMS	2,198		2,198
119	0303191D8Z	JOINT ELECTROMAGNETIC TECHNOLOGY (JET) PROGRAM	997		997
120	0305103C	CYBER SECURITY INITIATIVE	1,148		1,148
121	1206410SDA	SPACE TECHNOLOGY DEVELOPMENT AND PROTOTYPING	215,994	–60,000	155,994
		HBTSS—transfer to 1206895C		[–20,000]	
		Unjustified growth		[–40,000]	
122	1206893C	SPACE TRACKING & SURVEILLANCE SYSTEM	34,144		34,144
123	1206895C	BALLISTIC MISSILE DEFENSE SYSTEM SPACE PROGRAMS	32,068	120,000	152,068
		HBTSS—transfer from 1206410SDA		[20,000]	
		HBTSS sensor payload development		[100,000]	
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**9,416,712**	**–340,000**	**9,076,712**
		SYSTEM DEVELOPMENT & DEMONSTRATION			
124	0604161D8Z	NUCLEAR AND CONVENTIONAL PHYSICAL SECURITY EQUIPMENT RDT&E SDD	7,173		7,173
126	0604384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM—EMD	319,976		319,976
127	0604771D8Z	JOINT TACTICAL INFORMATION DISTRIBUTION SYSTEM (JTIDS)	54,985		54,985
128	0605000BR	COUNTER WEAPONS OF MASS DESTRUCTION SYSTEMS DEVELOPMENT	15,650		15,650
129	0605013BL	INFORMATION TECHNOLOGY DEVELOPMENT	1,441		1,441
130	0605021SE	HOMELAND PERSONNEL SECURITY INITIATIVE	7,287		7,287
131	0605022D8Z	DEFENSE EXPORTABILITY PROGRAM	12,928		12,928
132	0605027D8Z	OUSD(C) IT DEVELOPMENT INITIATIVES	10,259		10,259
133	0605070S	DOD ENTERPRISE SYSTEMS DEVELOPMENT AND DEMONSTRATION	1,377		1,377

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
134	0605075D8Z	CMO POLICY AND INTEGRATION	1,648		1,648
135	0605080S	DEFENSE AGENCY INITIATIVES (DAI)—FINANCIAL SYSTEM	20,537		20,537
136	0605090S	DEFENSE RETIRED AND ANNUITANT PAY SYSTEM (DRAS)	1,638		1,638
137	0605141BR	MISSION ASSURANCE RISK MANAGEMENT SYSTEM (MARMS)	5,500		5,500
138	0605210D8Z	DEFENSE-WIDE ELECTRONIC PROCUREMENT CAPABILITIES	8,279		8,279
139	0605294D8Z	TRUSTED & ASSURED MICROELECTRONICS	107,585		107,585
140	0605772D8Z	NUCLEAR COMMAND, CONTROL, & COMMUNICATIONS	3,685		3,685
143	0305304D8Z	DOD ENTERPRISE ENERGY INFORMATION MANAGEMENT (EEIM)	3,275		3,275
144	0305310D8Z	CWMD SYSTEMS: SYSTEM DEVELOPMENT AND DEMONSTRATION	20,585		20,585
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	**603,808**		**603,808**
		MANAGEMENT SUPPORT			
145	0603829J	JOINT CAPABILITY EXPERIMENTATION	11,239		11,239
146	0604774D8Z	DEFENSE READINESS REPORTING SYSTEM (DRRS)	9,793		9,793
147	0604875D8Z	JOINT SYSTEMS ARCHITECTURE DEVELOPMENT	8,497		8,497
148	0604940D8Z	CENTRAL TEST AND EVALUATION INVESTMENT DEVELOPMENT (CTEIP)	422,451	13,000	435,451
		Gulf Test range and training enhancements		[13,000]	
149	0604942D8Z	ASSESSMENTS AND EVALUATIONS	18,379		18,379
150	0605001E	MISSION SUPPORT	74,334		74,334
151	0605100D8Z	JOINT MISSION ENVIRONMENT TEST CAPABILITY (JMETC)	79,046		79,046
153	0605126J	JOINT INTEGRATED AIR AND MISSILE DEFENSE ORGANIZATION (JIAMDO)	50,255		50,255
155	0605142D8Z	SYSTEMS ENGINEERING	49,376		49,376
156	0605151D8Z	STUDIES AND ANALYSIS SUPPORT—OSD	5,777		5,777
157	0605161D8Z	NUCLEAR MATTERS-PHYSICAL SECURITY	16,552		16,552
158	0605170D8Z	SUPPORT TO NETWORKS AND INFORMATION INTEGRATION	9,582		9,582
159	0605200D8Z	GENERAL SUPPORT TO USD (INTELLIGENCE)	1,940		1,940
160	0605384BP	CHEMICAL AND BIOLOGICAL DEFENSE PROGRAM	122,951		122,951

167	0605790D8Z	SMALL BUSINESS INNOVATION RESEARCH (SBIR)/ SMALL BUSINESS TECHNOLOGY TRANSFER	3,582		3,582
168	0605797D8Z	MAINTAINING TECHNOLOGY ADVANTAGE	29,566		29,566
169	0605798D8Z	DEFENSE TECHNOLOGY ANALYSIS	29,059		29,059
170	0605801KA	DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	59,369	–43,300	16,069
		Program decrease		[–43,300]	
171	0605803SE	R&D IN SUPPORT OF DOD ENLISTMENT, TESTING AND EVALUATION	29,420		29,420
172	0605804D8Z	DEVELOPMENT TEST AND EVALUATION	27,198		27,198
173	0605898E	MANAGEMENT HQ—R&D	13,434		13,434
174	0605998KA	MANAGEMENT HQ—DEFENSE TECHNICAL INFORMATION CENTER (DTIC)	2,837		2,837
175	0606100D8Z	BUDGET AND PROGRAM ASSESSMENTS	13,173		13,173
176	0606225D8Z	ODNA TECHNOLOGY AND RESOURCE ANALYSIS	3,200		3,200
177	0606589D8W	DEFENSE DIGITAL SERVICE (DDS) DEVELOPMENT SUPPORT	999		999
180	0203345D8Z	DEFENSE OPERATIONS SECURITY INITIATIVE (DOSI)	3,099		3,099
181	0204571J	JOINT STAFF ANALYTICAL SUPPORT	3,058		3,058
182	0208045K	C4I INTEROPERABILITY	59,813		59,813
185	0303140SE	INFORMATION SYSTEMS SECURITY PROGRAM	1,112		1,112
186	0303166J	SUPPORT TO INFORMATION OPERATIONS (IO) CAPABILITIES	545		545
187	0303260D8Z	DEFENSE MILITARY DECEPTION PROGRAM OFFICE (DMDPO)	1,036		1,036
188	0305172K	COMBINED ADVANCED APPLICATIONS	30,824		30,824
190	0305208K	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	3,048		3,048
194	0804768J	COCOM EXERCISE ENGAGEMENT AND TRAINING TRANSFORMATION (CE2T2)—NON-MHA	31,125		31,125
195	0808709SE	DEFENSE EQUAL OPPORTUNITY MANAGEMENT INSTITUTE (DEOMI)	100		100
196	0901598C	MANAGEMENT HQ—MDA	26,902		26,902
197	0903235K	JOINT SERVICE PROVIDER (JSP)	3,138		3,138
198A	9999999999	CLASSIFIED PROGRAMS	41,583		41,583
		SUBTOTAL MANAGEMENT SUPPORT	**1,297,392**	**–30,300**	**1,267,092**
		OPERATIONAL SYSTEMS DEVELOPMENT			
199	0604130V	ENTERPRISE SECURITY SYSTEM (ESS)	14,378		14,378
200	0604532K	JOINT ARTIFICIAL INTELLIGENCE	132,058		132,058
201	0605127T	REGIONAL INTERNATIONAL OUTREACH (RIO) AND PARTNERSHIP FOR PEACE INFORMATION MANA	1,986		1,986
202	0605147T	OVERSEAS HUMANITARIAN ASSISTANCE SHARED INFORMATION SYSTEM (OHASIS)	316		316

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203	0607210D8Z	INDUSTRIAL BASE ANALYSIS AND SUSTAINMENT SUPPORT	9,151	70,000	79,151
		Autotune filter manufacturing scale-up for advanced offboard electronic warfare		[10,000]	
		Domestic organic light emitting diode microdisplay manufacturing		[5,000]	
		Domestic rare earth magnet capability		[5,000]	
		Domestic tungsten		[5,000]	
		Program increase		[15,000]	
		Radar supplier resiliency plan		[5,000]	
		Submarine workforce development and training		[20,000]	
		Ultra-hard armor		[5,000]	
204	0607310D8Z	CWMD SYSTEMS: OPERATIONAL SYSTEMS DEVELOPMENT	19,082		19,082
205	0607327T	GLOBAL THEATER SECURITY COOPERATION MANAGEMENT INFORMATION SYSTEMS (G-TSCMIS)	3,992		3,992
206	0607384BP	CHEMICAL AND BIOLOGICAL DEFENSE (OPERATIONAL SYSTEMS DEVELOPMENT)	39,530		39,530
207	0208043J	PLANNING AND DECISION AID SYSTEM (PDAS)	3,039		3,039
212	0302019K	DEFENSE INFO INFRASTRUCTURE ENGINEERING AND INTEGRATION	16,324		16,324
213	0303126K	LONG-HAUL COMMUNICATIONS—DCS	11,884		11,884
214	0303131K	MINIMUM ESSENTIAL EMERGENCY COMMUNICATIONS NETWORK (MEECN)	5,560		5,560
215	0303136G	KEY MANAGEMENT INFRASTRUCTURE (KMI)	73,356		73,356
216	0303140D8Z	INFORMATION SYSTEMS SECURITY PROGRAM	46,577		46,577
217	0303140G	INFORMATION SYSTEMS SECURITY PROGRAM	356,713	–20,000	336,713
		GenCyber		[20,000]	
		Program decrease		[–40,000]	
218	0303140K	INFORMATION SYSTEMS SECURITY PROGRAM	8,922		8,922
219	0303150K	GLOBAL COMMAND AND CONTROL SYSTEM	3,695		3,695
220	0303153K	DEFENSE SPECTRUM ORGANIZATION	20,113		20,113
223	0303228K	JOINT REGIONAL SECURITY STACKS (JRSS)	9,728	–9,728	
		Program decrease		[–9,728]	
231	0305128V	SECURITY AND INVESTIGATIVE ACTIVITIES	5,700		5,700

235	0305186D8Z	POLICY R&D PROGRAMS	7,144		7,144
236	0305199D8Z	NET CENTRICITY	21,793		21,793
238	0305208BB	DISTRIBUTED COMMON GROUND/SURFACE SYSTEMS	6,066		6,066
245	0305387D8Z	HOMELAND DEFENSE TECHNOLOGY TRANSFER PROGRAM	2,190		2,190
252	0708012K	LOGISTICS SUPPORT ACTIVITIES	1,654		1,654
253	0708012S	PACIFIC DISASTER CENTERS	1,785		1,785
254	0708047S	DEFENSE PROPERTY ACCOUNTABILITY SYSTEM	7,301		7,301
256	1105219BB	MQ–9 UAV	21,265		21,265
258	1160403BB	AVIATION SYSTEMS	230,812		230,812
259	1160405BB	INTELLIGENCE SYSTEMS DEVELOPMENT	19,558		19,558
260	1160408BB	OPERATIONAL ENHANCEMENTS	136,041	15,000	151,041
		Machine learning and AI technologies to enable operational maneuver		[10,000]	
		Modular expeditionary compact high-energy lasers		[5,000]	
261	1160431BB	WARRIOR SYSTEMS	59,511	35,000	94,511
		Increased research for cUAS in austere locations abroad		[35,000]	
262	1160432BB	SPECIAL PROGRAMS	10,500		10,500
263	1160434BB	UNMANNED ISR	19,154		19,154
264	1160480BB	SOF TACTICAL VEHICLES	9,263		9,263
265	1160483BB	MARITIME SYSTEMS	59,882		59,882
266	1160489BB	GLOBAL VIDEO SURVEILLANCE ACTIVITIES	4,606		4,606
267	1160490BB	OPERATIONAL ENHANCEMENTS INTELLIGENCE	11,612		11,612
268	1203610K	TELEPORT PROGRAM	3,239		3,239
268A	9999999999	CLASSIFIED PROGRAMS	4,746,466		4,746,466
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**6,161,946**	**90,272**	**6,252,218**
		SOFTWARE AND DIGITAL TECHNOLOGY PILOT PROGRAMS			
269	0608197V	NATIONAL BACKGROUND INVESTIGATION SERVICES—SOFTWARE PILOT PROGRAM	121,676		121,676
270	0608648D8Z	ACQUISITION VISIBILITY—SOFTWARE PILOT PROGRAM	16,848		16,848
271	0303150K	GLOBAL COMMAND AND CONTROL SYSTEM	86,750	–10,000	76,750
		Program decrease		[–10,000]	
272	0308588D8Z	ALGORITHMIC WARFARE CROSS FUNCTIONAL TEAMS—SOFTWARE PILOT PROGRAM	250,107	–50,000	200,107
		Program decrease		[–50,000]	

SEC. 4201. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION
(In Thousands of Dollars)

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
		SUBTOTAL SOFTWARE AND DIGITAL TECHNOLOGY PILOT PROGRAMS	**475,381**	**–60,000**	**415,381**
		UNDISTRIBUTED			
273A	9999999999	PANDEMIC PREPAREDNESS AND RESILIENCE NATIONAL SECURITY FUND		1,000,000	1,000,000
		Program increase		[1,000,000]	
		SUBTOTAL UNDISTRIBUTED		**1,000,000**	**1,000,000**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, DW	**24,280,891**	**1,014,972**	**25,295,863**
		OPERATIONAL TEST & EVAL, DEFENSE			
		MANAGEMENT SUPPORT			
001	0605118OTE	OPERATIONAL TEST AND EVALUATION	100,021		100,021
002	0605131OTE	LIVE FIRE TEST AND EVALUATION	70,933		70,933
003	0605814OTE	OPERATIONAL TEST ACTIVITIES AND ANALYSES	39,136		39,136
		SUBTOTAL MANAGEMENT SUPPORT	**210,090**		**210,090**
		TOTAL OPERATIONAL TEST & EVAL, DEFENSE	**210,090**		**210,090**
		TOTAL RDT&E	**106,224,793**	**264,835**	**106,489,628**

SEC. 4202. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS.

SEC. 4202. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
		RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY			
		APPLIED RESEARCH			
016	0602145A	NEXT GENERATION COMBAT VEHICLE TECHNOLOGY	2,000		2,000
		SUBTOTAL APPLIED RESEARCH	**2,000**		**2,000**
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES			
080	0603327A	AIR AND MISSILE DEFENSE SYSTEMS ENGINEERING	500		500
114	0604785A	INTEGRATED BASE DEFENSE (BUDGET ACTIVITY 4)	2,020		2,020
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**2,520**		**2,520**
		SYSTEM DEVELOPMENT & DEMONSTRATION			
131	0604741A	AIR DEFENSE COMMAND, CONTROL AND INTELLIGENCE—ENG DEV	27,000		27,000
159	0605035A	COMMON INFRARED COUNTERMEASURES (CIRCM)	2,300		2,300
166	0605051A	AIRCRAFT SURVIVABILITY DEVELOPMENT	64,625		64,625
183	0304270A	ELECTRONIC WARFARE DEVELOPMENT	3,900		3,900
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	**97,825**		**97,825**
		MANAGEMENT SUPPORT			
198	0605709A	EXPLOITATION OF FOREIGN ITEMS	1,000		1,000
209	0606003A	COUNTERINTEL AND HUMAN INTEL MODERNIZATION	4,137		4,137
		SUBTOTAL MANAGEMENT SUPPORT	**5,137**		**5,137**
		OPERATIONAL SYSTEMS DEVELOPMENT			
239	0203802A	OTHER MISSILE PRODUCT IMPROVEMENT PROGRAMS	2,300		2,300

SEC. 4202. RESEARCH, DEVELOPMENT, TEST, AND EVALUATION FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Program Element	Item	FY 2021 Request	House Change	House Authorized
248	0303028A	SECURITY AND INTELLIGENCE ACTIVITIES	23,367		23,367
257	0305204A	TACTICAL UNMANNED AERIAL VEHICLES	34,100		34,100
258	0305206A	AIRBORNE RECONNAISSANCE SYSTEMS	15,575		15,575
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**75,342**		**75,342**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, ARMY	**182,824**		**182,824**
		RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY			
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES			
039	0603527N	RETRACT LARCH	36,500		36,500
058	0603654N	JOINT SERVICE EXPLOSIVE ORDNANCE DEVELOPMENT	14,461		14,461
063	0603734N	CHALK CORAL	3,000		3,000
071	0603795N	LAND ATTACK TECHNOLOGY	1,457		1,457
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**55,418**		**55,418**
		SYSTEM DEVELOPMENT & DEMONSTRATION			
142	0604755N	SHIP SELF DEFENSE (DETECT & CONTROL)	1,144		1,144
		SUBTOTAL SYSTEM DEVELOPMENT & DEMONSTRATION	**1,144**		**1,144**
		OPERATIONAL SYSTEMS DEVELOPMENT			
229	0206625M	USMC INTELLIGENCE/ELECTRONIC WARFARE SYSTEMS (MIP)	3,000		3,000
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**3,000**		**3,000**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, NAVY	**59,562**		**59,562**
		RESEARCH, DEVELOPMENT, TEST & EVAL, AF			
		OPERATIONAL SYSTEMS DEVELOPMENT			

185	0205671F	JOINT COUNTER RCIED ELECTRONIC WARFARE	4,080	4,080
228	0208288F	INTEL DATA APPLICATIONS	1,224	1,224
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**5,304**	**5,304**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, AF	**5,304**	**5,304**
		RESEARCH, DEVELOPMENT, TEST & EVAL, DW		
		APPLIED RESEARCH		
010	0602134BR	COUNTER IMPROVISED-THREAT ADVANCED STUDIES	3,699	3,699
		SUBTOTAL APPLIED RESEARCH	**3,699**	**3,699**
		ADVANCED TECHNOLOGY DEVELOPMENT		
026	0603122D8Z	COMBATING TERRORISM TECHNOLOGY SUPPORT	19,288	19,288
028	0603134BR	COUNTER IMPROVISED-THREAT SIMULATION	3,861	3,861
		SUBTOTAL ADVANCED TECHNOLOGY DEVELOPMENT	**23,149**	**23,149**
		ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES		
097	0604134BR	COUNTER IMPROVISED-THREAT DEMONSTRATION, PROTOTYPE DEVELOPMENT, AND TESTING	19,931	19,931
		SUBTOTAL ADVANCED COMPONENT DEVELOPMENT & PROTOTYPES	**19,931**	**19,931**
		OPERATIONAL SYSTEMS DEVELOPMENT		
260	1160408BB	OPERATIONAL ENHANCEMENTS	1,186	1,186
261	1160431BB	WARRIOR SYSTEMS	5,796	5,796
263	1160434BB	UNMANNED ISR	5,000	5,000
268A	9999999999	CLASSIFIED PROGRAMS	24,057	24,057
		SUBTOTAL OPERATIONAL SYSTEMS DEVELOPMENT	**36,039**	**36,039**
		TOTAL RESEARCH, DEVELOPMENT, TEST & EVAL, DW	**82,818**	**82,818**
		TOTAL RDT&E	**330,508**	**330,508**

TITLE XLIII—OPERATION AND MAINTENANCE

SEC. 4301. OPERATION AND MAINTENANCE.

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	OPERATION & MAINTENANCE, ARMY			
	OPERATING FORCES			
020	MODULAR SUPPORT BRIGADES	159,834	–16,000	143,834
	Unjustified funding for Dynamic Force Employment		[–16,000]	
030	ECHELONS ABOVE BRIGADE	663,751	–2,800	660,951
	Unjustified funding for Dynamic Force Employment		[–2,800]	
040	THEATER LEVEL ASSETS	956,477		956,477
050	LAND FORCES OPERATIONS SUPPORT	1,157,635	10,349	1,167,984
	Establishment of Joint CUAS Office		[10,349]	
060	AVIATION ASSETS	1,453,024	–50,000	1,403,024
	Unjustified funding for Dynamic Force Employment		[–50,000]	
070	FORCE READINESS OPERATIONS SUPPORT	4,713,660		4,713,660
080	LAND FORCES SYSTEMS READINESS	404,161		404,161
090	LAND FORCES DEPOT MAINTENANCE	1,413,359	100,000	1,513,359
	Program increase for depot maintenance activities		[100,000]	
100	BASE OPERATIONS SUPPORT	8,220,093	100,000	8,320,093
	Child Youth Services program increase		[100,000]	
110	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	3,581,071	66,316	3,647,387
	Program increase for additional facility requirements		[66,316]	
120	MANAGEMENT AND OPERATIONAL HEADQUARTERS	411,844		411,844
160	US AFRICA COMMAND	239,387		239,387

170	US EUROPEAN COMMAND	160,761		160,761
180	US SOUTHERN COMMAND	197,826		197,826
190	US FORCES KOREA	65,152		65,152
200	CYBERSPACE ACTIVITIES—CYBERSPACE OPERATIONS	430,109		430,109
210	CYBERSPACE ACTIVITIES—CYBERSECURITY	464,117		464,117
	SUBTOTAL OPERATING FORCES	**24,692,261**	**207,865**	**24,900,126**
	MOBILIZATION			
220	STRATEGIC MOBILITY	402,236		402,236
230	ARMY PREPOSITIONED STOCKS	324,306		324,306
240	INDUSTRIAL PREPAREDNESS	3,653		3,653
	SUBTOTAL MOBILIZATION	**730,195**		**730,195**
	TRAINING AND RECRUITING			
250	OFFICER ACQUISITION	165,142		165,142
260	RECRUIT TRAINING	76,509		76,509
270	ONE STATION UNIT TRAINING	88,523		88,523
280	SENIOR RESERVE OFFICERS TRAINING CORPS	535,578		535,578
290	SPECIALIZED SKILL TRAINING	981,436		981,436
300	FLIGHT TRAINING	1,204,768		1,204,768
310	PROFESSIONAL DEVELOPMENT EDUCATION	215,195		215,195
320	TRAINING SUPPORT	575,232		575,232
330	RECRUITING AND ADVERTISING	722,612	–50,000	672,612
	Program decrease		[–50,000]	
340	EXAMINING	185,522		185,522
350	OFF-DUTY AND VOLUNTARY EDUCATION	221,503		221,503
360	CIVILIAN EDUCATION AND TRAINING	154,651		154,651
370	JUNIOR RESERVE OFFICER TRAINING CORPS	173,286		173,286
	SUBTOTAL TRAINING AND RECRUITING	**5,299,957**	**–50,000**	**5,249,957**
	ADMIN & SRVWIDE ACTIVITIES			
390	SERVICEWIDE TRANSPORTATION	491,926		491,926

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
400	CENTRAL SUPPLY ACTIVITIES	812,613		812,613
410	LOGISTIC SUPPORT ACTIVITIES	676,178		676,178
420	AMMUNITION MANAGEMENT	437,774		437,774
430	ADMINISTRATION	438,048	–5,000	433,048
	Program decrease		[–5,000]	
440	SERVICEWIDE COMMUNICATIONS	1,638,872	–10,000	1,628,872
	Reprioritization		[–10,000]	
450	MANPOWER MANAGEMENT	300,046		300,046
460	OTHER PERSONNEL SUPPORT	701,103		701,103
470	OTHER SERVICE SUPPORT	1,887,133	–34,640	1,852,493
	Servicewoman's Commemorative Partnership		[3,000]	
	Transfer to DAWDF—reversal of DWR transfers		[–37,640]	
480	ARMY CLAIMS ACTIVITIES	195,291		195,291
490	REAL ESTATE MANAGEMENT	229,537		229,537
500	FINANCIAL MANAGEMENT AND AUDIT READINESS	306,370		306,370
510	INTERNATIONAL MILITARY HEADQUARTERS	373,030		373,030
520	MISC. SUPPORT OF OTHER NATIONS	32,719		32,719
565	CLASSIFIED PROGRAMS	1,069,915		1,069,915
	SUBTOTAL ADMIN & SRVWIDE ACTIVITIES	**9,590,555**	**–49,640**	**9,540,915**
	UNDISTRIBUTED			
570	UNDISTRIBUTED		–231,457	–231,457
	Foreign Currency adjustments		[–137,300]	
	Historical unobligated balances		[–94,157]	
	SUBTOTAL UNDISTRIBUTED		**–231,457**	**–231,457**
	TOTAL OPERATION & MAINTENANCE, ARMY	**40,312,968**	**–123,232**	**40,189,736**

	OPERATION & MAINTENANCE, ARMY RES			
	OPERATING FORCES			
010	MODULAR SUPPORT BRIGADES	10,784		10,784
020	ECHELONS ABOVE BRIGADE	530,425		530,425
030	THEATER LEVEL ASSETS	123,737		123,737
040	LAND FORCES OPERATIONS SUPPORT	589,582		589,582
050	AVIATION ASSETS	89,332		89,332
060	FORCE READINESS OPERATIONS SUPPORT	387,545		387,545
070	LAND FORCES SYSTEMS READINESS	97,569		97,569
080	LAND FORCES DEPOT MAINTENANCE	43,148		43,148
090	BASE OPERATIONS SUPPORT	587,098		587,098
100	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	327,180	6,059	333,239
	Program increase for additional facility requirements		[6,059]	
110	MANAGEMENT AND OPERATIONAL HEADQUARTERS	28,783		28,783
120	CYBERSPACE ACTIVITIES—CYBERSPACE OPERATIONS	2,745		2,745
130	CYBERSPACE ACTIVITIES—CYBERSECURITY	7,438		7,438
	SUBTOTAL OPERATING FORCES	**2,825,366**	**6,059**	**2,831,425**
	ADMIN & SRVWD ACTIVITIES			
140	SERVICEWIDE TRANSPORTATION	15,530		15,530
150	ADMINISTRATION	17,761		17,761
160	SERVICEWIDE COMMUNICATIONS	14,256		14,256
170	MANPOWER MANAGEMENT	6,564		6,564
180	RECRUITING AND ADVERTISING	55,240		55,240
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**109,351**		**109,351**
	UNDISTRIBUTED			
210	UNDISTRIBUTED		–10,100	–10,100
	Historical unobligated balances		[–10,100]	
	SUBTOTAL UNDISTRIBUTED		**–10,100**	**–10,100**

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	TOTAL OPERATION & MAINTENANCE, ARMY RES	**2,934,717**	**–4,041**	**2,930,676**
	OPERATION & MAINTENANCE, ARNG			
	OPERATING FORCES			
010	MANEUVER UNITS	769,449		769,449
020	MODULAR SUPPORT BRIGADES	204,604		204,604
030	ECHELONS ABOVE BRIGADE	812,072		812,072
040	THEATER LEVEL ASSETS	103,650		103,650
050	LAND FORCES OPERATIONS SUPPORT	32,485		32,485
060	AVIATION ASSETS	1,011,142		1,011,142
070	FORCE READINESS OPERATIONS SUPPORT	712,881		712,881
080	LAND FORCES SYSTEMS READINESS	47,732		47,732
090	LAND FORCES DEPOT MAINTENANCE	265,408		265,408
100	BASE OPERATIONS SUPPORT	1,106,704		1,106,704
110	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	876,032	16,222	892,254
	Program increase for additional facility requirements		[16,222]	
120	MANAGEMENT AND OPERATIONAL HEADQUARTERS	1,050,257		1,050,257
130	CYBERSPACE ACTIVITIES—CYBERSPACE OPERATIONS	7,998		7,998
140	CYBERSPACE ACTIVITIES—CYBERSECURITY	7,756		7,756
	SUBTOTAL OPERATING FORCES	**7,008,170**	**16,222**	**7,024,392**
	ADMIN & SRVWD ACTIVITIES			
150	SERVICEWIDE TRANSPORTATION	8,018		8,018
160	ADMINISTRATION	74,309		74,309
170	SERVICEWIDE COMMUNICATIONS	66,140		66,140
180	MANPOWER MANAGEMENT	9,087		9,087
190	OTHER PERSONNEL SUPPORT	251,714		251,714

200	REAL ESTATE MANAGEMENT	2,576		2,576
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**411,844**		**411,844**
	UNDISTRIBUTED			
220	UNDISTRIBUTED		–19,900	–19,900
	Historical unobligated balances		[–19,900]	
	SUBTOTAL UNDISTRIBUTED		**–19,900**	**–19,900**
	TOTAL OPERATION & MAINTENANCE, ARNG	**7,420,014**	**–3,678**	**7,416,336**
	OPERATION & MAINTENANCE, NAVY			
	OPERATING FORCES			
010	MISSION AND OTHER FLIGHT OPERATIONS	5,738,746	–378,794	5,359,952
	Transfer to OCO		[–378,794]	
020	FLEET AIR TRAINING	2,213,673	–52,000	2,161,673
	Restoration of Congressional mark		[–52,000]	
030	AVIATION TECHNICAL DATA & ENGINEERING SERVICES	57,144		57,144
040	AIR OPERATIONS AND SAFETY SUPPORT	171,949		171,949
050	AIR SYSTEMS SUPPORT	838,767	–4,700	834,067
	Restoration of Congressional mark		[–4,700]	
060	AIRCRAFT DEPOT MAINTENANCE	1,459,447		1,459,447
070	AIRCRAFT DEPOT OPERATIONS SUPPORT	57,789		57,789
080	AVIATION LOGISTICS	1,264,665	–30,235	1,234,430
	Restoration of Congressional mark		[–30,235]	
090	MISSION AND OTHER SHIP OPERATIONS		–178,060	–178,060
	Insufficient justification		[–195,000]	
	Preservation of LCS 3 and LCS 4		[16,940]	
100	SHIP OPERATIONS SUPPORT & TRAINING	1,117,067	–6,800	1,110,267
	Restoration of Congressional mark		[–6,800]	
110	SHIP DEPOT MAINTENANCE	7,859,104	671,560	8,530,664
	Preservation of LCS 3 and LCS 4		[21,560]	
	Realignment from Procurement for Ship Depot Maintenance Pilot		[650,000]	

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
120	SHIP DEPOT OPERATIONS SUPPORT	2,262,196	–400	2,261,796
	Preservation of LCS 3 and LCS 4		[12,600]	
	Restoration of Congressional mark		[–13,000]	
125	SHIPYARD INFRASTRUCTURE OPTIMIZATION PLAN		90,000	90,000
	Realignment from Sustainment, Readiness, and Modernization		[90,000]	
130	COMBAT COMMUNICATIONS AND ELECTRONIC WARFARE	1,521,360	–19,000	1,502,360
	Restoration of Congressional mark		[–19,000]	
140	SPACE SYSTEMS AND SURVEILLANCE	274,087		274,087
150	WARFARE TACTICS	741,609		741,609
160	OPERATIONAL METEOROLOGY AND OCEANOGRAPHY	401,382		401,382
170	COMBAT SUPPORT FORCES	1,546,273	–610,000	936,273
	Restoration of Congressional mark		[–60,000]	
	Transfer to OCO		[–550,000]	
180	EQUIPMENT MAINTENANCE AND DEPOT OPERATIONS SUPPORT	177,951		177,951
190	COMBATANT COMMANDERS CORE OPERATIONS	61,484		61,484
200	COMBATANT COMMANDERS DIRECT MISSION SUPPORT	102,330	21,800	124,130
	Indo-Pacific Counter-Terrorism Information Facility		[2,000]	
	Indo-Pacific Special Operations Joint Task Force		[6,300]	
	INDOPACOM Mission Command and Control (MPE-C2)		[13,500]	
210	MILITARY INFORMATION SUPPORT OPERATIONS	8,810		8,810
220	CYBERSPACE ACTIVITIES	567,496		567,496
230	FLEET BALLISTIC MISSILE	1,428,102		1,428,102
240	WEAPONS MAINTENANCE	995,762	–45,000	950,762
	Restoration of Congressional mark		[–45,000]	
250	OTHER WEAPON SYSTEMS SUPPORT	524,008		524,008
260	ENTERPRISE INFORMATION	1,229,056	–45,000	1,184,056
	Program decrease		[–25,000]	

	Restoration of Congressional mark		[–20,000]	
270	SUSTAINMENT, RESTORATION AND MODERNIZATION	3,453,099	–26,054	3,427,045
	Program increase for additional facility requirements		[63,946]	
	Realignment to Shipyard Infrastructure Optimization Plan		[–90,000]	
280	BASE OPERATING SUPPORT	4,627,966	–24,000	4,603,966
	Restoration of Congressional mark		[–24,000]	
	SUBTOTAL OPERATING FORCES	**40,701,322**	**–636,683**	**40,064,639**
	MOBILIZATION			
290	SHIP PREPOSITIONING AND SURGE	849,993	–192,093	657,900
	Realignment to National Defense Sealift Fund		[–314,193]	
	Restoration of Congressional mark		[–20,000]	
	Strategic sealift (MSC surge) annual operating result loss		[57,000]	
	Surge sealift readiness		[85,100]	
300	READY RESERVE FORCE	436,029	–60,000	376,029
	Acquisition and conversion of additional used vessels		[60,000]	
	Realignment to National Defense Sealift Fund		[–120,000]	
310	SHIP ACTIVATIONS/INACTIVATIONS	286,416	–28,000	258,416
	Restoration of Congressional mark		[–28,000]	
320	EXPEDITIONARY HEALTH SERVICES SYSTEMS	99,402	–57,212	42,190
	Realignment to National Defense Sealift Fund		[–57,212]	
330	COAST GUARD SUPPORT	25,235		25,235
	SUBTOTAL MOBILIZATION	**1,697,075**	**–337,305**	**1,359,770**
	TRAINING AND RECRUITING			
340	OFFICER ACQUISITION	186,117		186,117
350	RECRUIT TRAINING	13,206		13,206
360	RESERVE OFFICERS TRAINING CORPS	163,683		163,683
370	SPECIALIZED SKILL TRAINING	947,841	–17,200	930,641
	Restoration of Congressional mark		[–17,200]	
380	PROFESSIONAL DEVELOPMENT EDUCATION	367,647	1,500	369,147
	Sea Cadets		[1,500]	

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
390	TRAINING SUPPORT	254,928		254,928
400	RECRUITING AND ADVERTISING	206,305		206,305
410	OFF-DUTY AND VOLUNTARY EDUCATION	103,799		103,799
420	CIVILIAN EDUCATION AND TRAINING	66,060		66,060
430	JUNIOR ROTC	56,276		56,276
	SUBTOTAL TRAINING AND RECRUITING	**2,365,862**	**–15,700**	**2,350,162**
	ADMIN & SRVWD ACTIVITIES			
440	ADMINISTRATION	1,249,410	–63,000	1,186,410
	Program decrease		[–30,000]	
	Restoration of Congressional mark		[–33,000]	
450	CIVILIAN MANPOWER AND PERSONNEL MANAGEMENT	189,625		189,625
460	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	499,904		499,904
470	MEDICAL ACTIVITIES	196,747		196,747
480	SERVICEWIDE TRANSPORTATION	165,708	–5,094	160,614
	Unjustified funding for Dynamic Force Employment		[–5,094]	
500	PLANNING, ENGINEERING, AND PROGRAM SUPPORT	519,716		519,716
510	ACQUISITION, LOGISTICS, AND OVERSIGHT	751,184	–60,620	690,564
	Transfer to DAWDF—reversal of DWR transfers		[–60,620]	
520	INVESTIGATIVE AND SECURITY SERVICES	747,519	–11,000	736,519
	Restoration of Congressional mark		[–11,000]	
625	CLASSIFIED PROGRAMS	608,670		608,670
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**4,928,483**	**–139,714**	**4,788,769**
	UNDISTRIBUTED			
770	UNDISTRIBUTED		–71,900	–71,900
	Foreign Currency adjustments		[–48,500]	

	Historical unobligated balances		[–23,400]	
	SUBTOTAL UNDISTRIBUTED		**–71,900**	**–71,900**
	TOTAL OPERATION & MAINTENANCE, NAVY	**49,692,742**	**–1,201,302**	**48,491,440**
	OPERATION & MAINTENANCE, MARINE CORPS			
	OPERATING FORCES			
010	OPERATIONAL FORCES	941,143	–413,400	527,743
	Transfer to OCO		[–400,000]	
	Unjustified funding for Dynamic Force Employment		[–13,400]	
020	FIELD LOGISTICS	1,277,798		1,277,798
030	DEPOT MAINTENANCE	206,907		206,907
040	MARITIME PREPOSITIONING	103,614		103,614
050	CYBERSPACE ACTIVITIES	215,974		215,974
060	SUSTAINMENT, RESTORATION & MODERNIZATION	938,063	17,371	955,434
	Program increase for additional facility requirements		[17,371]	
070	BASE OPERATING SUPPORT	2,264,680	96,000	2,360,680
	Program increase		[96,000]	
	SUBTOTAL OPERATING FORCES	**5,948,179**	**–300,029**	**5,648,150**
	TRAINING AND RECRUITING			
080	RECRUIT TRAINING	20,751		20,751
090	OFFICER ACQUISITION	1,193		1,193
100	SPECIALIZED SKILL TRAINING	110,149		110,149
110	PROFESSIONAL DEVELOPMENT EDUCATION	69,509		69,509
120	TRAINING SUPPORT	412,613		412,613
130	RECRUITING AND ADVERTISING	215,464		215,464
140	OFF-DUTY AND VOLUNTARY EDUCATION	33,719		33,719
150	JUNIOR ROTC	25,784		25,784
	SUBTOTAL TRAINING AND RECRUITING	**889,182**		**889,182**
	ADMIN & SRVWD ACTIVITIES			

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
160	SERVICEWIDE TRANSPORTATION	32,005		32,005
170	ADMINISTRATION	399,363		399,363
215	CLASSIFIED PROGRAMS	59,878		59,878
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**491,246**		**491,246**
	UNDISTRIBUTED			
230	UNDISTRIBUTED		–19,700	–19,700
	Foreign Currency adjustments		[–13,400]	
	Historical unobligated balances		[–6,300]	
	SUBTOTAL UNDISTRIBUTED		**–19,700**	**–19,700**
	TOTAL OPERATION & MAINTENANCE, MARINE CORPS	**7,328,607**	**–319,729**	**7,008,878**
	OPERATION & MAINTENANCE, NAVY RES			
	OPERATING FORCES			
010	MISSION AND OTHER FLIGHT OPERATIONS	635,070		635,070
020	INTERMEDIATE MAINTENANCE	8,713		8,713
030	AIRCRAFT DEPOT MAINTENANCE	105,088		105,088
040	AIRCRAFT DEPOT OPERATIONS SUPPORT	398		398
050	AVIATION LOGISTICS	27,284		27,284
070	COMBAT COMMUNICATIONS	17,894		17,894
080	COMBAT SUPPORT FORCES	132,862		132,862
090	CYBERSPACE ACTIVITIES	453		453
100	ENTERPRISE INFORMATION	26,073		26,073
110	SUSTAINMENT, RESTORATION AND MODERNIZATION	48,762	903	49,665
	Program increase for additional facility requirements		[903]	
120	BASE OPERATING SUPPORT	103,580		103,580

	SUBTOTAL OPERATING FORCES	**1,106,177**	**903**	**1,107,080**
	ADMIN & SRVWD ACTIVITIES			
130	ADMINISTRATION	1,927		1,927
140	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	15,895		15,895
150	ACQUISITION AND PROGRAM MANAGEMENT	3,047		3,047
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**20,869**		**20,869**
	UNDISTRIBUTED			
190	UNDISTRIBUTED		–3,800	–3,800
	Historical unobligated balances		[–3,800]	
	SUBTOTAL UNDISTRIBUTED		**–3,800**	**–3,800**
	TOTAL OPERATION & MAINTENANCE, NAVY RES	**1,127,046**	**–2,897**	**1,124,149**
	OPERATION & MAINTENANCE, MC RESERVE			
	OPERATING FORCES			
010	OPERATING FORCES	104,616		104,616
020	DEPOT MAINTENANCE	17,053		17,053
030	SUSTAINMENT, RESTORATION AND MODERNIZATION	41,412	767	42,179
	Program increase for additional facility requirements		[767]	
040	BASE OPERATING SUPPORT	107,773		107,773
	SUBTOTAL OPERATING FORCES	**270,854**	**767**	**271,621**
	ADMIN & SRVWD ACTIVITIES			
050	ADMINISTRATION	13,802		13,802
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**13,802**		**13,802**
	UNDISTRIBUTED			
70	UNDISTRIBUTED		–700	–700
	Historical unobligated balances		[–700]	
	SUBTOTAL UNDISTRIBUTED		**–700**	**–700**

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	TOTAL OPERATION & MAINTENANCE, MC RESERVE	**284,656**	**67**	**284,723**
	OPERATION & MAINTENANCE, AIR FORCE			
	OPERATING FORCES			
010	PRIMARY COMBAT FORCES	731,511	1,670	733,181
	A–10 retention		[1,670]	
020	COMBAT ENHANCEMENT FORCES	1,275,485		1,275,485
030	AIR OPERATIONS TRAINING (OJT, MAINTAIN SKILLS)	1,437,095	12,430	1,449,525
	A–10 retention		[12,430]	
040	DEPOT PURCHASE EQUIPMENT MAINTENANCE		154,260	154,260
	A–10 retention		[81,460]	
	KC–135 and KC–10 aircraft retention		[72,800]	
050	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	3,241,216	60,022	3,301,238
	Program increase for additional facility requirements		[60,022]	
060	CYBERSPACE SUSTAINMENT	235,816		235,816
070	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	1,508,342		1,508,342
080	FLYING HOUR PROGRAM	4,458,457	52,860	4,511,317
	A–10 retention		[52,860]	
090	BASE SUPPORT	7,497,288	–10,200	7,487,088
	Unjustified funding for Dynamic Force Employment		[–10,200]	
100	GLOBAL C3I AND EARLY WARNING	849,842		849,842
110	OTHER COMBAT OPS SPT PROGRAMS	1,067,055	–246,330	820,725
	Realignment from Base to OCO		[–246,330]	
120	CYBERSPACE ACTIVITIES	698,579	–5,000	693,579
	Program decrease		[–5,000]	
150	SPACE CONTROL SYSTEMS	34,194		34,194

160	US NORTHCOM/NORAD	204,268		204,268
170	US STRATCOM	526,809		526,809
180	US CYBERCOM	314,524		314,524
190	US CENTCOM	186,116		186,116
200	US SOCOM	9,881		9,881
210	US TRANSCOM	1,046		1,046
230	USSPACECOM	249,022		249,022
235	CLASSIFIED PROGRAMS	1,289,339		1,289,339
	SUBTOTAL OPERATING FORCES	**25,815,885**	**19,712**	**25,835,597**
	MOBILIZATION			
240	AIRLIFT OPERATIONS	1,350,031	–240,000	1,110,031
	Realignment from Base to OCO		[–240,000]	
250	MOBILIZATION PREPAREDNESS	647,168		647,168
	SUBTOTAL MOBILIZATION	**1,997,199**	**–240,000**	**1,757,199**
	TRAINING AND RECRUITING			
260	OFFICER ACQUISITION	142,548		142,548
270	RECRUIT TRAINING	25,720		25,720
280	RESERVE OFFICERS TRAINING CORPS (ROTC)	128,295		128,295
290	SPECIALIZED SKILL TRAINING	417,335		417,335
300	FLIGHT TRAINING	615,033		615,033
310	PROFESSIONAL DEVELOPMENT EDUCATION	298,795		298,795
320	TRAINING SUPPORT	85,844		85,844
330	RECRUITING AND ADVERTISING	155,065		155,065
340	EXAMINING	4,474		4,474
350	OFF-DUTY AND VOLUNTARY EDUCATION	219,349		219,349
360	CIVILIAN EDUCATION AND TRAINING	361,570	10,000	371,570
	Sustainment Workforce Development Program increase		[10,000]	
370	JUNIOR ROTC	72,126		72,126
	SUBTOTAL TRAINING AND RECRUITING	**2,526,154**	**10,000**	**2,536,154**

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	ADMIN & SRVWD ACTIVITIES			
380	LOGISTICS OPERATIONS	672,426		672,426
390	TECHNICAL SUPPORT ACTIVITIES	145,130	–42,060	103,070
	Transfer to DAWDF—reversal of DWR transfers		[–42,060]	
400	ADMINISTRATION	851,251		851,251
410	SERVICEWIDE COMMUNICATIONS	28,554		28,554
420	OTHER SERVICEWIDE ACTIVITIES	1,188,414	–4,600	1,183,814
	Program Decrease		[–4,600]	
430	CIVIL AIR PATROL	28,772	14,443	43,215
	Program increase		[14,443]	
450	INTERNATIONAL SUPPORT	158,803		158,803
455	CLASSIFIED PROGRAMS	1,338,009		1,338,009
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**4,411,359**	**–32,217**	**4,379,142**
	UNDISTRIBUTED			
550	UNDISTRIBUTED		–72,700	–72,700
	Foreign Currency adjustments		[–39,400]	
	Historical unobligated balances		[–33,300]	
	SUBTOTAL UNDISTRIBUTED		**–72,700**	**–72,700**
	TOTAL OPERATION & MAINTENANCE, AIR FORCE	**34,750,597**	**–315,205**	**34,435,392**
	OPERATION & MAINTENANCE, SPACE FORCE			
	OPERATING FORCES			
020	GLOBAL C3I & EARLY WARNING	276,109		276,109
030	SPACE LAUNCH OPERATIONS	177,056		177,056
040	SPACE OPERATIONS	475,338		475,338

050	EDUCATION & TRAINING	18,660		18,660
060	SPECIAL PROGRAMS	137,315		137,315
070	DEPOT MAINTENANCE	250,324		250,324
080	CONTRACTOR LOGISTICS & SYSTEM SUPPORT	1,063,969	–3,000	1,060,969
	Program decrease		[–3,000]	
	SUBTOTAL OPERATING FORCES	**2,398,771**	**–3,000**	**2,395,771**
	ADMINISTRATION AND SERVICE WIDE ACTIVITIES			
090	ADMINISTRATION	132,523		132,523
	SUBTOTAL ADMINISTRATION AND SERVICE WIDE ACTIVITIES	**132,523**		**132,523**
	UNDISTRIBUTED			
110	UNDISTRIBUTED		–2,400	–2,400
	Historical unobligated balances		[–2,400]	
	SUBTOTAL UNDISTRIBUTED		**–2,400**	**–2,400**
	TOTAL OPERATION & MAINTENANCE, SPACE FORCE	**2,531,294**	**–5,400**	**2,525,894**
	OPERATION & MAINTENANCE, AF RESERVE			
	OPERATING FORCES			
010	PRIMARY COMBAT FORCES	1,782,016		1,782,016
020	MISSION SUPPORT OPERATIONS	215,209		215,209
030	DEPOT PURCHASE EQUIPMENT MAINTENANCE	453,896	22,200	476,096
	KC–135 and KC–10 aircraft retention		[22,200]	
040	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	103,414	1,915	105,329
	Program increase for additional facility requirements		[1,915]	
050	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	224,977		224,977
060	BASE SUPPORT	452,468		452,468
070	CYBERSPACE ACTIVITIES	2,259		2,259
	SUBTOTAL OPERATING FORCES	**3,234,239**	**24,115**	**3,258,354**
	ADMINISTRATION AND SERVICEWIDE ACTIVITIES			

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
080	ADMINISTRATION	74,258		74,258
090	RECRUITING AND ADVERTISING	23,121		23,121
100	MILITARY MANPOWER AND PERS MGMT (ARPC)	12,006		12,006
110	OTHER PERS SUPPORT (DISABILITY COMP)	6,165		6,165
120	AUDIOVISUAL	495		495
	SUBTOTAL ADMINISTRATION AND SERVICEWIDE ACTIVITIES	**116,045**		**116,045**
	UNDISTRIBUTED			
130	UNDISTRIBUTED		–9,100	–9,100
	Historical unobligated balances		[–9,100]	
	SUBTOTAL UNDISTRIBUTED		**–9,100**	**–9,100**
	TOTAL OPERATION & MAINTENANCE, AF RESERVE	**3,350,284**	**15,015**	**3,365,299**
	OPERATION & MAINTENANCE, ANG			
	OPERATING FORCES			
010	AIRCRAFT OPERATIONS	2,476,205		2,476,205
020	MISSION SUPPORT OPERATIONS	611,325		611,325
030	DEPOT PURCHASE EQUIPMENT MAINTENANCE	1,138,919	15,000	1,153,919
	KC–135 aircraft retention		[15,000]	
040	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	323,605	35,993	359,598
	Installation recovery		[30,000]	
	Program increase for additional facility requirements		[5,993]	
050	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	1,100,828		1,100,828
060	BASE SUPPORT	962,438		962,438
070	CYBERSPACE SUSTAINMENT	27,028		27,028
080	CYBERSPACE ACTIVITIES	16,380		16,380

	SUBTOTAL OPERATING FORCES	**6,656,728**	**50,993**	**6,707,721**
	ADMINISTRATION AND SERVICE-WIDE ACTIVITIES			
090	ADMINISTRATION	48,218		48,218
100	RECRUITING AND ADVERTISING	48,696		48,696
	SUBTOTAL ADMINISTRATION AND SERVICE-WIDE ACTIVITIES	**96,914**		**96,914**
	UNDISTRIBUTED			
110	UNDISTRIBUTED		–13,300	–13,300
	Historical unobligated balances		[–13,300]	
	SUBTOTAL UNDISTRIBUTED		**–13,300**	**–13,300**
	TOTAL OPERATION & MAINTENANCE, ANG	**6,753,642**	**37,693**	**6,791,335**
	OPERATION AND MAINTENANCE, DEFENSE-WIDE			
	OPERATING FORCES			
010	JOINT CHIEFS OF STAFF	439,111		439,111
020	JOINT CHIEFS OF STAFF—CE2T2	535,728		535,728
030	JOINT CHIEFS OF STAFF—CYBER	24,728		24,728
040	SPECIAL OPERATIONS COMMAND COMBAT DEVELOPMENT ACTIVITIES	1,069,971		1,069,971
050	SPECIAL OPERATIONS COMMAND CYBERSPACE ACTIVITIES	9,800		9,800
060	SPECIAL OPERATIONS COMMAND INTELLIGENCE	561,907	–5,000	556,907
	Unjustified growth		[–5,000]	
070	SPECIAL OPERATIONS COMMAND MAINTENANCE	685,097	–5,000	680,097
	Program decrease		[–5,000]	
080	SPECIAL OPERATIONS COMMAND MANAGEMENT/OPERATIONAL HEADQUARTERS	158,971		158,971
090	SPECIAL OPERATIONS COMMAND OPERATIONAL SUPPORT	1,062,748		1,062,748
100	SPECIAL OPERATIONS COMMAND THEATER FORCES	2,598,385		2,598,385
	SUBTOTAL OPERATING FORCES	**7,146,446**	**–10,000**	**7,136,446**
	TRAINING AND RECRUITING			
120	DEFENSE ACQUISITION UNIVERSITY	162,963		162,963

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
130	JOINT CHIEFS OF STAFF	95,684		95,684
140	PROFESSIONAL DEVELOPMENT EDUCATION	33,301		33,301
	SUBTOTAL TRAINING AND RECRUITING	**291,948**		**291,948**
	ADMIN & SRVWIDE ACTIVITIES			
160	CIVIL MILITARY PROGRAMS	147,993	20,000	167,993
	Program increase—STARBASE		[20,000]	
180	DEFENSE CONTRACT AUDIT AGENCY	604,835	31,730	636,565
	Restoration of DWR reductions		[31,730]	
190	DEFENSE CONTRACT AUDIT AGENCY—CYBER	3,282		3,282
210	DEFENSE CONTRACT MANAGEMENT AGENCY	1,370,681	75,100	1,445,781
	Restoration of DWR reductions		[75,100]	
220	DEFENSE CONTRACT MANAGEMENT AGENCY—CYBER	22,532		22,532
230	DEFENSE COUNTERINTELLIGENCE AND SECURITY AGENCY	949,008		949,008
250	DEFENSE COUNTERINTELLIGENCE AND SECURITY AGENCY—CYBER	9,577		9,577
260	DEFENSE HUMAN RESOURCES ACTIVITY	799,952	13,404	813,356
	Defense Flagship Language and Project Global Officer program increase		[13,404]	
270	DEFENSE HUMAN RESOURCES ACTIVITY—CYBER	20,806		20,806
280	DEFENSE INFORMATION SYSTEMS AGENCY	1,883,190	–11,600	1,871,590
	JRSS program decrease		[–11,600]	
290	DEFENSE INFORMATION SYSTEMS AGENCY—CYBER	582,639		582,639
330	DEFENSE LEGAL SERVICES AGENCY	37,637		37,637
340	DEFENSE LOGISTICS AGENCY	382,084	30,000	412,084
	Maternity Uniform Pilot Program		[10,000]	
	Program increase—PTAP		[20,000]	
350	DEFENSE MEDIA ACTIVITY	196,997	9,000	205,997
	Stars and Stripes		[9,000]	

360	DEFENSE PERSONNEL ACCOUNTING AGENCY	129,225		129,225
370	DEFENSE SECURITY COOPERATION AGENCY	598,559		598,559
400	DEFENSE TECHNOLOGY SECURITY ADMINISTRATION	38,432		38,432
410	DEFENSE THREAT REDUCTION AGENCY	591,780		591,780
430	DEFENSE THREAT REDUCTION AGENCY—CYBER	24,635		24,635
440	DEPARTMENT OF DEFENSE EDUCATION ACTIVITY	2,941,429	50,000	2,991,429
	Impact Aid		[40,000]	
	Impact Aid for children with disabilities		[10,000]	
450	MISSILE DEFENSE AGENCY	505,858		505,858
480	OFFICE OF ECONOMIC ADJUSTMENT	40,272	89,000	129,272
	Defense Community Infrastructure Program		[50,000]	
	Guam Public Health Laboratory		[19,000]	
	Restoration of DWR reduction		[20,000]	
490	OFFICE OF THE SECRETARY OF DEFENSE	1,540,446	79,000	1,619,446
	Additional FTEs, Office of the Deputy Assistant Secretary for Environment		[2,000]	
	Additional FTEs, Office of the Deputy Assistant Secretary for Facilities Management		[2,000]	
	Basic needs allowance		[50,000]	
	JASON scientific advisory group		[3,000]	
	National Security Commission on Artificial Intelligence (NSCAI)		[2,500]	
	Program decrease		[–15,500]	
	Program increase—Readiness and Environmental Protection Initiative		[25,000]	
	Undersecretary of Defense for Intelligence and Security, medical intelligence improvements		[10,000]	
500	OFFICE OF THE SECRETARY OF DEFENSE—CYBER	51,630		51,630
510	SPACE DEVELOPMENT AGENCY	48,166	–12,000	36,166
	Reduction for studies		[–7,000]	
	Unjustified growth		[–5,000]	
530	WASHINGTON HEADQUARTERS SERVICES	340,291		340,291
535	CLASSIFIED PROGRAMS	17,348,749		17,348,749
	SUBTOTAL ADMIN & SRVWIDE ACTIVITIES	**31,210,685**	**373,634**	**31,584,319**
	UNDISTRIBUTED			
600	UNDISTRIBUTED		–88,000	–88,000

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	Foreign Currency adjustments		[–18,700]	
	Historical unobligated balances		[–69,300]	
	SUBTOTAL UNDISTRIBUTED		**–88,000**	**–88,000**
	TOTAL OPERATION AND MAINTENANCE, DEFENSE-WIDE	**38,649,079**	**275,634**	**38,924,713**
	US COURT OF APPEALS FOR ARMED FORCES, DEF			
	ADMINISTRATION AND ASSOCIATED ACTIVITIES			
010	US COURT OF APPEALS FOR THE ARMED FORCES, DEFENSE	15,211		15,211
	SUBTOTAL ADMINISTRATION AND ASSOCIATED ACTIVITIES	**15,211**		**15,211**
	TOTAL US COURT OF APPEALS FOR ARMED FORCES, DEF	**15,211**		**15,211**
	DOD ACQUISITION WORKFORCE DEVELOPMENT FUND			
	ACQUISITION WORKFORCE DEVELOPMENT			
010	ACQ WORKFORCE DEV FD	58,181	140,320	198,501
	Transfer from services—reversal of DWR transfers		[140,320]	
	SUBTOTAL ACQUISITION WORKFORCE DEVELOPMENT	**58,181**	**140,320**	**198,501**
	TOTAL DOD ACQUISITION WORKFORCE DEVELOPMENT FUND	**58,181**	**140,320**	**198,501**
	OVERSEAS HUMANITARIAN, DISASTER, AND CIVIC AID			
	HUMANITARIAN ASSISTANCE			
010	OVERSEAS HUMANITARIAN, DISASTER AND CIVIC AID	109,900		109,900
	SUBTOTAL HUMANITARIAN ASSISTANCE	**109,900**		**109,900**
	TOTAL OVERSEAS HUMANITARIAN, DISASTER, AND CIVIC AID	**109,900**		**109,900**

	COOPERATIVE THREAT REDUCTION ACCOUNT			
	COOPERATIVE THREAT REDUCTION			
010	COOPERATIVE THREAT REDUCTION	238,490	135,200	373,690
	Restoration of funding		[135,200]	
	SUBTOTAL COOPERATIVE THREAT REDUCTION	**238,490**	**135,200**	**373,690**
	TOTAL COOPERATIVE THREAT REDUCTION ACCOUNT	**238,490**	**135,200**	**373,690**
	ENVIRONMENTAL RESTORATION			
	DEPARTMENT OF THE ARMY			
050	ENVIRONMENTAL RESTORATION, ARMY	207,518		207,518
	SUBTOTAL DEPARTMENT OF THE ARMY	**207,518**		**207,518**
	DEPARTMENT OF THE NAVY			
060	ENVIRONMENTAL RESTORATION, NAVY	335,932		335,932
	SUBTOTAL DEPARTMENT OF THE NAVY	**335,932**		**335,932**
	DEPARTMENT OF THE AIR FORCE			
070	ENVIRONMENTAL RESTORATION, AIR FORCE	303,926		303,926
	SUBTOTAL DEPARTMENT OF THE AIR FORCE	**303,926**		**303,926**
	DEFENSE-WIDE			
080	ENVIRONMENTAL RESTORATION, DEFENSE	9,105		9,105
	SUBTOTAL DEFENSE-WIDE	**9,105**		**9,105**
	DEFENSE-WIDE			
090	ENVIRONMENTAL RESTORATION FORMERLY USED SITES	216,587	50,000	266,587
	Military Munitions Response Program		[50,000]	
	SUBTOTAL DEFENSE-WIDE	**216,587**	**50,000**	**266,587**
	TOTAL ENVIRONMENTAL RESTORATION	**1,073,068**	**50,000**	**1,123,068**

SEC. 4301. OPERATION AND MAINTENANCE
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	UNDISTRIBUTED			
010	UNDISTRIBUTED		–1,455,870	–1,455,870
	Excessive standard price for fuel		[–1,455,870]	
	SUBTOTAL UNDISTRIBUTED		**–1,455,870**	**–1,455,870**
	TOTAL UNDISTRIBUTED		**–1,455,870**	**–1,455,870**
	TOTAL OPERATION & MAINTENANCE	**196,630,496**	**–2,777,425**	**193,853,071**

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS.

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	OPERATION & MAINTENANCE, ARMY			
	OPERATING FORCES			
010	MANEUVER UNITS	4,114,001	–325,000	3,789,001
	Drawdown from Operation Freedom's Sentinel		[–75,000]	
	Unjustified funding for Dynamic Force Employment		[–250,000]	
030	ECHELONS ABOVE BRIGADE	32,811		32,811
040	THEATER LEVEL ASSETS	2,542,760	–440,000	2,102,760
	Drawdown from Operation Freedom's Sentinel		[–440,000]	
050	LAND FORCES OPERATIONS SUPPORT	162,557	–40,000	122,557
	Drawdown from Operation Freedom's Sentinel		[–40,000]	
060	AVIATION ASSETS	204,396	–24,824	179,572
	Drawdown from Operation Freedom's Sentinel		[–24,824]	
070	FORCE READINESS OPERATIONS SUPPORT	5,716,734	–1,000,000	4,716,734
	Drawdown from Operation Freedom's Sentinel		[–1,000,000]	
080	LAND FORCES SYSTEMS READINESS	180,048	–40,000	140,048
	Drawdown from Operation Freedom's Sentinel		[–40,000]	
090	LAND FORCES DEPOT MAINTENANCE	81,125		81,125
100	BASE OPERATIONS SUPPORT	219,029		219,029
110	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	301,017		301,017
130	ADDITIONAL ACTIVITIES	966,649	–184,000	782,649
	Drawdown from Operation Freedom's Sentinel		[–184,000]	
140	COMMANDER'S EMERGENCY RESPONSE PROGRAM	2,500		2,500
150	RESET	403,796	400,000	803,796
	Retrograde from Operation Freedom's Sentinel		[400,000]	

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
160	US AFRICA COMMAND	100,422		100,422
170	US EUROPEAN COMMAND	120,043		120,043
200	CYBERSPACE ACTIVITIES—CYBERSPACE OPERATIONS	98,461		98,461
210	CYBERSPACE ACTIVITIES—CYBERSECURITY	21,256		21,256
	SUBTOTAL OPERATING FORCES	**15,267,605**	**–1,653,824**	**13,613,781**
	MOBILIZATION			
230	ARMY PREPOSITIONED STOCKS	103,052		103,052
	SUBTOTAL MOBILIZATION	**103,052**		**103,052**
	TRAINING AND RECRUITING			
290	SPECIALIZED SKILL TRAINING	89,943		89,943
320	TRAINING SUPPORT	2,550		2,550
	SUBTOTAL TRAINING AND RECRUITING	**92,493**		**92,493**
	ADMIN & SRVWIDE ACTIVITIES			
390	SERVICEWIDE TRANSPORTATION	521,090	300,000	821,090
	Retrograde from Operation Freedom's Sentinel		[300,000]	
400	CENTRAL SUPPLY ACTIVITIES	43,897		43,897
410	LOGISTIC SUPPORT ACTIVITIES	68,423		68,423
420	AMMUNITION MANAGEMENT	29,162		29,162
440	SERVICEWIDE COMMUNICATIONS	11,447		11,447
470	OTHER SERVICE SUPPORT	5,839		5,839
490	REAL ESTATE MANAGEMENT	48,782		48,782
510	INTERNATIONAL MILITARY HEADQUARTERS	50,000		50,000
565	CLASSIFIED PROGRAMS	895,964		895,964
	SUBTOTAL ADMIN & SRVWIDE ACTIVITIES	**1,674,604**	**300,000**	**1,974,604**

	TOTAL OPERATION & MAINTENANCE, ARMY	**17,137,754**	**–1,353,824**	**15,783,930**
	OPERATION & MAINTENANCE, ARMY RES			
	OPERATING FORCES			
020	ECHELONS ABOVE BRIGADE	17,193		17,193
060	FORCE READINESS OPERATIONS SUPPORT	440		440
090	BASE OPERATIONS SUPPORT	15,766		15,766
	SUBTOTAL OPERATING FORCES	**33,399**		**33,399**
	TOTAL OPERATION & MAINTENANCE, ARMY RES	**33,399**		**33,399**
	OPERATION & MAINTENANCE, ARNG			
	OPERATING FORCES			
010	MANEUVER UNITS	25,746		25,746
020	MODULAR SUPPORT BRIGADES	40		40
030	ECHELONS ABOVE BRIGADE	983		983
040	THEATER LEVEL ASSETS	22		22
060	AVIATION ASSETS	20,624		20,624
070	FORCE READINESS OPERATIONS SUPPORT	7,914		7,914
100	BASE OPERATIONS SUPPORT	24,417		24,417
	SUBTOTAL OPERATING FORCES	**79,746**		**79,746**
	ADMIN & SRVWD ACTIVITIES			
170	SERVICEWIDE COMMUNICATIONS	46		46
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**46**		**46**
	TOTAL OPERATION & MAINTENANCE, ARNG	**79,792**		**79,792**
	AFGHANISTAN SECURITY FORCES FUND			
	AFGHAN NATIONAL ARMY			
010	SUSTAINMENT	1,065,932		1,065,932

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
020	INFRASTRUCTURE	64,501		64,501
030	EQUIPMENT AND TRANSPORTATION	47,854		47,854
040	TRAINING AND OPERATIONS	56,780		56,780
	SUBTOTAL AFGHAN NATIONAL ARMY	**1,235,067**		**1,235,067**
	AFGHAN NATIONAL POLICE			
050	SUSTAINMENT	434,500		434,500
060	INFRASTRUCTURE	448		448
070	EQUIPMENT AND TRANSPORTATION	108,231		108,231
080	TRAINING AND OPERATIONS	58,993		58,993
	SUBTOTAL AFGHAN NATIONAL POLICE	**602,172**		**602,172**
	AFGHAN AIR FORCE			
090	SUSTAINMENT	534,102		534,102
100	INFRASTRUCTURE	9,532		9,532
110	EQUIPMENT AND TRANSPORTATION	58,487		58,487
120	TRAINING AND OPERATIONS	233,803		233,803
	SUBTOTAL AFGHAN AIR FORCE	**835,924**		**835,924**
	AFGHAN SPECIAL SECURITY FORCES			
	UNDISTRIBUTED			
130	SUSTAINMENT	680,024		680,024
140	INFRASTRUCTURE	2,532		2,532
150	EQUIPMENT AND TRANSPORTATION	486,808		486,808
160	TRAINING AND OPERATIONS	173,085		173,085
	SUBTOTAL AFGHAN SPECIAL SECURITY FORCES	**1,342,449**		**1,342,449**

170	UNDISTRIBUTED		–500,000	–500,000
	Insufficient justification		[–500,000]	
	SUBTOTAL UNDISTRIBUTED		**–500,000**	**–500,000**
	TOTAL AFGHANISTAN SECURITY FORCES FUND	**4,015,612**	**–500,000**	**3,515,612**
	COUNTER ISIS TRAIN AND EQUIP FUND (CTEF)			
	COUNTER ISIS TRAIN AND EQUIP FUND (CTEF)			
010	IRAQ	645,000	–145,000	500,000
	Program decrease		[–145,000]	
020	SYRIA	200,000		200,000
	SUBTOTAL COUNTER ISIS TRAIN AND EQUIP FUND (CTEF)	**845,000**	**–145,000**	**700,000**
	TOTAL COUNTER ISIS TRAIN AND EQUIP FUND (CTEF)	**845,000**	**–145,000**	**700,000**
	OPERATION & MAINTENANCE, NAVY			
	OPERATING FORCES			
010	MISSION AND OTHER FLIGHT OPERATIONS	382,062	378,794	760,856
	Transfer from base		[378,794]	
030	AVIATION TECHNICAL DATA & ENGINEERING SERVICES	832		832
040	AIR OPERATIONS AND SAFETY SUPPORT	17,840		17,840
050	AIR SYSTEMS SUPPORT	210,692		210,692
060	AIRCRAFT DEPOT MAINTENANCE	170,580		170,580
070	AIRCRAFT DEPOT OPERATIONS SUPPORT	5,854		5,854
080	AVIATION LOGISTICS	33,707		33,707
090	MISSION AND OTHER SHIP OPERATIONS	5,817,696		5,817,696
100	SHIP OPERATIONS SUPPORT & TRAINING	20,741		20,741
110	SHIP DEPOT MAINTENANCE	2,072,470		2,072,470
130	COMBAT COMMUNICATIONS AND ELECTRONIC WARFARE	59,254		59,254
140	SPACE SYSTEMS AND SURVEILLANCE	18,000		18,000
150	WARFARE TACTICS	17,324		17,324
160	OPERATIONAL METEOROLOGY AND OCEANOGRAPHY	22,581		22,581

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
170	COMBAT SUPPORT FORCES	772,441	550,000	1,322,441
	Transfer from base		[550,000]	
180	EQUIPMENT MAINTENANCE AND DEPOT OPERATIONS SUPPORT	5,788		5,788
200	COMBATANT COMMANDERS DIRECT MISSION SUPPORT	24,800		24,800
220	CYBERSPACE ACTIVITIES	369		369
240	WEAPONS MAINTENANCE	567,247		567,247
250	OTHER WEAPON SYSTEMS SUPPORT	12,571		12,571
270	SUSTAINMENT, RESTORATION AND MODERNIZATION	70,041		70,041
280	BASE OPERATING SUPPORT	218,792		218,792
	SUBTOTAL OPERATING FORCES	**10,521,682**	**928,794**	**11,450,476**
	MOBILIZATION			
320	EXPEDITIONARY HEALTH SERVICES SYSTEMS	22,589		22,589
	SUBTOTAL MOBILIZATION	**22,589**		**22,589**
	TRAINING AND RECRUITING			
370	SPECIALIZED SKILL TRAINING	53,204		53,204
	SUBTOTAL TRAINING AND RECRUITING	**53,204**		**53,204**
	ADMIN & SRVWD ACTIVITIES			
440	ADMINISTRATION	9,983		9,983
460	MILITARY MANPOWER AND PERSONNEL MANAGEMENT	7,805		7,805
480	SERVICEWIDE TRANSPORTATION	72,097		72,097
510	ACQUISITION, LOGISTICS, AND OVERSIGHT	11,354		11,354
520	INVESTIGATIVE AND SECURITY SERVICES	1,591		1,591
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**102,830**		**102,830**

	TOTAL OPERATION & MAINTENANCE, NAVY	**10,700,305**	**928,794**	**11,629,099**
	OPERATION & MAINTENANCE, MARINE CORPS			
	OPERATING FORCES			
010	OPERATIONAL FORCES	727,989	400,000	1,127,989
	Transfer from base		[400,000]	
020	FIELD LOGISTICS	195,001		195,001
030	DEPOT MAINTENANCE	55,183		55,183
050	CYBERSPACE ACTIVITIES	10,000		10,000
070	BASE OPERATING SUPPORT	24,569		24,569
	SUBTOTAL OPERATING FORCES	**1,012,742**	**400,000**	**1,412,742**
	TRAINING AND RECRUITING			
120	TRAINING SUPPORT	28,458		28,458
	SUBTOTAL TRAINING AND RECRUITING	**28,458**		**28,458**
	ADMIN & SRVWD ACTIVITIES			
160	SERVICEWIDE TRANSPORTATION	61,400		61,400
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**61,400**		**61,400**
	TOTAL OPERATION & MAINTENANCE, MARINE CORPS	**1,102,600**	**400,000**	**1,502,600**
	OPERATION & MAINTENANCE, NAVY RES			
	OPERATING FORCES			
020	INTERMEDIATE MAINTENANCE	522		522
030	AIRCRAFT DEPOT MAINTENANCE	11,861		11,861
080	COMBAT SUPPORT FORCES	9,109		9,109
	SUBTOTAL OPERATING FORCES	**21,492**		**21,492**
	TOTAL OPERATION & MAINTENANCE, NAVY RES	**21,492**		**21,492**
	OPERATION & MAINTENANCE, MC RESERVE			

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	OPERATING FORCES			
010	OPERATING FORCES	7,627		7,627
040	BASE OPERATING SUPPORT	1,080		1,080
	SUBTOTAL OPERATING FORCES	**8,707**		**8,707**
	TOTAL OPERATION & MAINTENANCE, MC RESERVE	**8,707**		**8,707**
	OPERATION & MAINTENANCE, AIR FORCE			
	OPERATING FORCES			
010	PRIMARY COMBAT FORCES	125,551		125,551
020	COMBAT ENHANCEMENT FORCES	916,538	62,000	978,538
	MQ–9 government owned-contractor operated combat line operations in U.S. Central Command		[62,000]	
030	AIR OPERATIONS TRAINING (OJT, MAINTAIN SKILLS)	93,970		93,970
040	DEPOT PURCHASE EQUIPMENT MAINTENANCE	3,528,059		3,528,059
050	FACILITIES SUSTAINMENT, RESTORATION & MODERNIZATION	147,264		147,264
060	CYBERSPACE SUSTAINMENT	10,842		10,842
070	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	7,187,100		7,187,100
080	FLYING HOUR PROGRAM	2,031,548		2,031,548
090	BASE SUPPORT	1,540,444	–62,000	1,478,444
	Program decrease		[–62,000]	
100	GLOBAL C3I AND EARLY WARNING	13,709		13,709
110	OTHER COMBAT OPS SPT PROGRAMS	345,800	246,330	592,130
	Realignment from Base to OCO		[246,330]	
120	CYBERSPACE ACTIVITIES	17,936		17,936
130	TACTICAL INTEL AND OTHER SPECIAL ACTIVITIES	36,820		36,820
140	LAUNCH FACILITIES	70		70
150	SPACE CONTROL SYSTEMS	1,450		1,450

160	US NORTHCOM/NORAD	725		725
170	US STRATCOM	856		856
180	US CYBERCOM	35,189		35,189
190	US CENTCOM	126,934		126,934
	SUBTOTAL OPERATING FORCES	**16,160,805**	**246,330**	**16,407,135**
	MOBILIZATION			
240	AIRLIFT OPERATIONS	1,271,439	240,000	1,511,439
	Realignment from Base to OCO		[240,000]	
250	MOBILIZATION PREPAREDNESS	120,866		120,866
	SUBTOTAL MOBILIZATION	**1,392,305**	**240,000**	**1,632,305**
	TRAINING AND RECRUITING			
260	OFFICER ACQUISITION	200		200
270	RECRUIT TRAINING	352		352
290	SPECIALIZED SKILL TRAINING	27,010		27,010
300	FLIGHT TRAINING	844		844
310	PROFESSIONAL DEVELOPMENT EDUCATION	1,199		1,199
320	TRAINING SUPPORT	1,320		1,320
	SUBTOTAL TRAINING AND RECRUITING	**30,925**		**30,925**
	ADMIN & SRVWD ACTIVITIES			
380	LOGISTICS OPERATIONS	164,701		164,701
390	TECHNICAL SUPPORT ACTIVITIES	11,782		11,782
400	ADMINISTRATION	3,886		3,886
410	SERVICEWIDE COMMUNICATIONS	355		355
420	OTHER SERVICEWIDE ACTIVITIES	100,831		100,831
450	INTERNATIONAL SUPPORT	29,928		29,928
455	CLASSIFIED PROGRAMS	34,502		34,502
	SUBTOTAL ADMIN & SRVWD ACTIVITIES	**345,985**		**345,985**
	TOTAL OPERATION & MAINTENANCE, AIR FORCE	**17,930,020**	**486,330**	**18,416,350**

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	OPERATION & MAINTENANCE, SPACE FORCE			
	OPERATING FORCES			
020	GLOBAL C3I & EARLY WARNING	227		227
030	SPACE LAUNCH OPERATIONS	321		321
040	SPACE OPERATIONS	15,135		15,135
070	DEPOT MAINTENANCE	18,268		18,268
080	CONTRACTOR LOGISTICS & SYSTEM SUPPORT	43,164		43,164
	SUBTOTAL OPERATING FORCES	**77,115**		**77,115**
	TOTAL OPERATION & MAINTENANCE, SPACE FORCE	**77,115**		**77,115**
	OPERATION & MAINTENANCE, AF RESERVE			
	OPERATING FORCES			
030	DEPOT PURCHASE EQUIPMENT MAINTENANCE	24,408		24,408
060	BASE SUPPORT	5,682		5,682
	SUBTOTAL OPERATING FORCES	**30,090**		**30,090**
	TOTAL OPERATION & MAINTENANCE, AF RESERVE	**30,090**		**30,090**
	OPERATION & MAINTENANCE, ANG			
	OPERATING FORCES			
020	MISSION SUPPORT OPERATIONS	3,739		3,739
030	DEPOT PURCHASE EQUIPMENT MAINTENANCE	61,862		61,862
050	CONTRACTOR LOGISTICS SUPPORT AND SYSTEM SUPPORT	97,108		97,108
060	BASE SUPPORT	12,933		12,933
	SUBTOTAL OPERATING FORCES	**175,642**		**175,642**

	TOTAL OPERATION & MAINTENANCE, ANG	**175,642**		**175,642**
	OPERATION AND MAINTENANCE, DEFENSE-WIDE			
	OPERATING FORCES			
010	JOINT CHIEFS OF STAFF	3,799		3,799
020	JOINT CHIEFS OF STAFF—CE2T2	6,634		6,634
040	SPECIAL OPERATIONS COMMAND COMBAT DEVELOPMENT ACTIVITIES	898,024	–5,000	893,024
	Maritime Support Vessel		[–5,000]	
060	SPECIAL OPERATIONS COMMAND INTELLIGENCE	1,244,553	–30,000	1,214,553
	Program decrease		[–30,000]	
070	SPECIAL OPERATIONS COMMAND MAINTENANCE	354,951		354,951
090	SPECIAL OPERATIONS COMMAND OPERATIONAL SUPPORT	104,535		104,535
100	SPECIAL OPERATIONS COMMAND THEATER FORCES	757,744	–25,000	732,744
	Unjustified growth		[–25,000]	
	SUBTOTAL OPERATING FORCES	**3,370,240**	**–60,000**	**3,310,240**
	ADMIN & SRVWIDE ACTIVITIES			
180	DEFENSE CONTRACT AUDIT AGENCY	1,247		1,247
210	DEFENSE CONTRACT MANAGEMENT AGENCY	21,723		21,723
280	DEFENSE INFORMATION SYSTEMS AGENCY	56,256		56,256
290	DEFENSE INFORMATION SYSTEMS AGENCY—CYBER	3,524		3,524
330	DEFENSE LEGAL SERVICES AGENCY	156,373		156,373
350	DEFENSE MEDIA ACTIVITY	3,555	6,000	9,555
	Stars and Stripes		[6,000]	
370	DEFENSE SECURITY COOPERATION AGENCY	1,557,763	–220,000	1,337,763
	Program increase—security cooperation		[30,000]	
	Transfer to Ukraine Security Assistance		[–250,000]	
410	DEFENSE THREAT REDUCTION AGENCY	297,486		297,486
490	OFFICE OF THE SECRETARY OF DEFENSE	16,984		16,984
530	WASHINGTON HEADQUARTERS SERVICES	1,997		1,997
535	CLASSIFIED PROGRAMS	535,106		535,106

SEC. 4302. OPERATION AND MAINTENANCE FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Line	Item	FY 2021 Request	House Change	House Authorized
	SUBTOTAL ADMIN & SRVWIDE ACTIVITIES	**2,652,014**	**–214,000**	**2,438,014**
	TOTAL OPERATION AND MAINTENANCE, DEFENSE-WIDE	**6,022,254**	**–274,000**	**5,748,254**
	UKRAINE SECURITY ASSISTANCE			
	UKRAINE SECURITY ASSISTANCE			
010	UKRAINE SECURITY ASSISTANCE INITIATIVE		250,000	250,000
	Transfer from Defense Security Cooperation Agency		[250,000]	
	SUBTOTAL UKRAINE SECURITY ASSISTANCE		**250,000**	**250,000**
	TOTAL UKRAINE SECURITY ASSISTANCE		**250,000**	**250,000**
	TOTAL OPERATION & MAINTENANCE	**58,179,782**	**–207,700**	**57,972,082**

TITLE XLIV—MILITARY PERSONNEL

SEC. 4401. MILITARY PERSONNEL.

SEC. 4401. MILITARY PERSONNEL
(In Thousands of Dollars)

Item	FY 2021 Request	House Change	House Authorized
Military Personnel Appropriations	150,524,104		149,384,304
Historical unobligated balances			–924,000
Foreign Currency adjustments			–169,800
Standardization of payment of hazardous duty incentive pay			50,000
Program decrease—Marine Corps			–96,000
Medicare-Eligible Retiree Health Fund Contributions	8,372,741		8,372,741

SEC. 4402. MILITARY PERSONNEL FOR OVERSEAS CONTINGENCY OPERATIONS.

SEC. 4402. MILITARY PERSONNEL FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Item	FY 2021 Request	House Change	House Authorized
Military Personnel Appropriations	4,602,593		4,602,593

TITLE XLV—OTHER AUTHORIZATIONS

SEC. 4501. OTHER AUTHORIZATIONS.

SEC. 4501. OTHER AUTHORIZATIONS
(In Thousands of Dollars)

Item	FY 2021 Request	House Change	House Authorized
WORKING CAPITAL FUND, ARMY			
ARMY ARSENALS INITIATIVE	32,551		32,551
ARMY SUPPLY MANAGEMENT	24,166		24,166
TOTAL WORKING CAPITAL FUND, ARMY	**56,717**		**56,717**
WORKING CAPITAL FUND, AIR FORCE			
WORKING CAPITAL FUND			
WORKING CAPITAL FUND	95,712		95,712
TOTAL WORKING CAPITAL FUND, AIR FORCE	**95,712**		**95,712**
WORKING CAPITAL FUND, DEFENSE-WIDE			
WORKING CAPITAL FUND SUPPORT			
WORKING CAPITAL FUND SUPPORT	49,821		49,821
TOTAL WORKING CAPITAL FUND, DEFENSE-WIDE	**49,821**		**49,821**
WORKING CAPITAL FUND, DECA			
WORKING CAPITAL FUND SUPPORT	1,146,660		1,146,660
TOTAL WORKING CAPITAL FUND, DECA	**1,146,660**		**1,146,660**
NATIONAL DEFENSE SEALIFT FUND			
SEALIFT RECAPITALIZATION		170,000	170,000

SEC. 4501. OTHER AUTHORIZATIONS
(In Thousands of Dollars)

Item	FY 2021 Request	House Change	House Authorized
Accelerate design of a commercial-based sealift ship		[50,000]	
Transfer from OMN–300 for acquisition of four used sealift vessels		[120,000]	
SHIP PREPOSITIONING AND SURGE		314,193	314,193
Transfer from OMN–290		[314,193]	
EXPEDITIONARY HEALTH SERVICES		57,212	57,212
Transfer from OMN–320		[57,212]	
TOTAL NATIONAL DEFENSE SEALIFT FUND		**541,405**	**541,405**
CHEM AGENTS & MUNITIONS DESTRUCTION			
CHEM DEMILITARIZATION—O&M	106,691	–5,000	101,691
Program decrease		[–5,000]	
CHEM DEMILITARIZATION—RDT&E	782,193	–8,000	774,193
Program decrease		[–8,000]	
CHEM DEMILITARIZATION—PROC	616		616
TOTAL CHEM AGENTS & MUNITIONS DESTRUCTION	**889,500**	**–13,000**	**876,500**
DRUG INTERDICTION & CTR-DRUG ACTIVITIES, DEF			
COUNTER-NARCOTICS SUPPORT	546,203		546,203
DRUG DEMAND REDUCTION PROGRAM	123,704		123,704
NATIONAL GUARD COUNTER-DRUG PROGRAM	94,211		94,211
NATIONAL GUARD COUNTER-DRUG SCHOOLS	5,511		5,511
TOTAL DRUG INTERDICTION & CTR-DRUG ACTIVITIES, DEF	**769,629**		**769,629**
OFFICE OF THE INSPECTOR GENERAL			
OFFICE OF THE INSPECTOR GENERAL	368,279	16,257	384,536
Additional oversight of coronavirus relief		[16,257]	
OFFICE OF THE INSPECTOR GENERAL—CYBER			

OFFICE OF THE INSPECTOR GENERAL—CYBER	1,204		1,204
OFFICE OF THE INSPECTOR GENERAL—RDTE	1,098		1,098
OFFICE OF THE INSPECTOR GENERAL—PROCUREMENT	858		858
TOTAL OFFICE OF THE INSPECTOR GENERAL	**371,439**	**16,257**	**387,696**
DEFENSE HEALTH PROGRAM			
IN-HOUSE CARE	9,560,564	5,000	9,565,564
Program decrease		[–31,000]	
Reverse DWR savings from downsizing MTFs		[36,000]	
PRIVATE SECTOR CARE	15,841,887		15,841,887
CONSOLIDATED HEALTH SUPPORT	1,338,269	10,000	1,348,269
Global Emerging Infectious Surveillance Program		[10,000]	
INFORMATION MANAGEMENT	2,039,910		2,039,910
MANAGEMENT ACTIVITIES	330,627		330,627
EDUCATION AND TRAINING	315,691	26,000	341,691
Health Professions Scholarship Program		[10,000]	
Restoring funding for Tri-Service Nursing Research Program within USUHS		[6,000]	
Reverse DWR cuts to USUHS		[10,000]	
BASE OPERATIONS/COMMUNICATIONS	1,922,605	5,000	1,927,605
Medical Surge Partnership Pilot		[5,000]	
R&D RESEARCH	8,913		8,913
R&D EXPLORATRY DEVELOPMENT	73,984		73,984
R&D ADVANCED DEVELOPMENT	225,602		225,602
R&D DEMONSTRATION/VALIDATION	132,331		132,331
R&D ENGINEERING DEVELOPMENT	55,748	15,000	70,748
Freeze-dried platelets		[15,000]	
R&D MANAGEMENT AND SUPPORT	48,672		48,672
R&D CAPABILITIES ENHANCEMENT	17,215		17,215
PROC INITIAL OUTFITTING	22,932		22,932
PROC REPLACEMENT & MODERNIZATION	215,618		215,618
PROC MILITARY HEALTH SYSTEM—DESKTOP TO DATACENTER	70,872		70,872
PROC DOD HEALTHCARE MANAGEMENT SYSTEM MODERNIZATION	308,504		308,504

SEC. 4501. OTHER AUTHORIZATIONS
(In Thousands of Dollars)

Item	FY 2021 Request	House Change	House Authorized
SOFTWARE & DIGITAL TECHNOLOGY PILOT PROGRAMS	160,428		160,428
UNDISTRIBUTED		–9,800	–9,800
Foreign Currency adjustments		[–9,800]	
TOTAL DEFENSE HEALTH PROGRAM	**32,690,372**	**51,200**	**32,741,572**
TOTAL OTHER AUTHORIZATIONS	**36,069,850**	**595,862**	**36,665,712**

SEC. 4502. OTHER AUTHORIZATIONS FOR OVERSEAS CONTINGENCY OPERATIONS.

SEC. 4502. OTHER AUTHORIZATIONS FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Item	FY 2021 Request	House Change	House Authorized
WORKING CAPITAL FUND, ARMY			
ARMY ARSENALS INITIATIVE			
ARMY SUPPLY MANAGEMENT	20,090		20,090
TOTAL WORKING CAPITAL FUND, ARMY	**20,090**		**20,090**
OFFICE OF THE INSPECTOR GENERAL			
OFFICE OF THE INSPECTOR GENERAL	24,069		24,069
TOTAL OFFICE OF THE INSPECTOR GENERAL	**24,069**		**24,069**
DEFENSE HEALTH PROGRAM			
IN-HOUSE CARE	65,072		65,072
PRIVATE SECTOR CARE	296,828		296,828
CONSOLIDATED HEALTH SUPPORT	3,198		3,198
TOTAL DEFENSE HEALTH PROGRAM	**365,098**		**365,098**
TOTAL OTHER AUTHORIZATIONS	**409,257**		**409,257**

TITLE XLVI—MILITARY CONSTRUCTION

SEC. 4601. MILITARY CONSTRUCTION.

SEC. 4601. MILITARY CONSTRUCTION
(In Thousands of Dollars)

Account	State/ Country	Installation	Project Title	FY 2021 Request	House Change	House Agreement
Army	ALASKA	Fort Wainwright	Child Development Center	0	32,500	32,500
Army	ALASKA	Fort Wainwright	Unaccompanied Enlisted Personnel Housing	0	59,000	59,000
Army	ARIZONA	Yuma Proving Ground	Ready Building	14,000		14,000
Army	COLORADO	Fort Carson, Colorado	Physical Fitness Facility	28,000		28,000
Army	GEORGIA	Fort Gillem	Forensic Laboratory	71,000		71,000
Army	GEORGIA	Fort Gordon	Adv Individual Training Barracks Cplx, Ph3	80,000		80,000
Army	HAWAII	Fort Shafter	Child Development Center—School Age	0	26,000	26,000
Army	HAWAII	Schofield Barracks	Child Development Center	0	39,000	39,000
Army	HAWAII	Wheeler Army Air Field	Aircraft Maintenance Hangar	89,000		89,000
Army	LOUISIANA	Fort Polk, Louisiana	Information Systems Facility	25,000		25,000
Army	OKLAHOMA	McAlester AAP	Ammunition Demolition Shop	35,000		35,000
Army	PENNSYLVANIA	Carlisle Barracks	General Instruction Building, Incr2	38,000	–38,000	0
Army	SOUTH CAROLINA	Fort Jackson	Trainee Barracks Complex 3, Ph2	0	7,000	7,000
Army	VIRGINIA	Humphreys Engineer Center	Training Support Facility	51,000		51,000
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Host Nation Support	39,000		39,000
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning and Design	129,436	–60,000	69,436
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	50,900		50,900
Military Construction, Army Total				650,336	65,500	715,836
Navy	ARIZONA	Yuma	Bachelor Enlisted Quarters Replacement	0	59,600	59,600
Navy	BAHRAIN ISLAND	SW Asia	Ship to Shore Utility Services	68,340		68,340
Navy	CALIFORNIA	Camp Pendleton, California	1st MARDIV Operations Complex	68,530		68,530

Navy	CALIFORNIA	Camp Pendleton, California	I MEF Consolidated Information Center (Inc)	37,000		37,000
Navy	CALIFORNIA	Lemoore	F–35C Hangar 6 Phase 2 (Mod 3/4)	128,070	–30,000	98,070
Navy	CALIFORNIA	Lemoore	F–35C Simulator Facility & Electrical Upgrade	59,150		59,150
Navy	CALIFORNIA	San Diego	Pier 6 Replacement	128,500	–30,000	98,500
Navy	CALIFORNIA	Twentynine Palms, California	Wastewater Treatment Plant	76,500		76,500
Navy	GREECE	Souda Bay	Communication Center	50,180		50,180
Navy	GUAM	Andersen AFB	Ordnance Operations Admin	21,280		21,280
Navy	GUAM	Joint Region Marianas	Bachelor Enlisted Quarters H (Inc)	80,000	–80,000	0
Navy	GUAM	Joint Region Marianas	Base Warehouse	55,410		55,410
Navy	GUAM	Joint Region Marianas	Central Fuel Station	35,950		35,950
Navy	GUAM	Joint Region Marianas	Central Issue Facility	45,290		45,290
Navy	GUAM	Joint Region Marianas	Combined EOD Facility	37,600		37,600
Navy	GUAM	Joint Region Marianas	DAR Bridge Improvements	40,180		40,180
Navy	GUAM	Joint Region Marianas	DAR Road Strengthening	70,760		70,760
Navy	GUAM	Joint Region Marianas	Distribution Warehouse	77,930		77,930
Navy	GUAM	Joint Region Marianas	Individual Combat Skills Training	17,430		17,430
Navy	GUAM	Joint Region Marianas	Joint Communication Upgrade	166,000	–144,000	22,000
Navy	HAWAII	Joint Base Pearl Harbor-Hickam	Waterfront Improve, Wharves S1,S11–13,S20–21	48,990		48,990
Navy	HAWAII	Joint Base Pearl Harbor-Hickam	Waterfront Improvements Wharves S8–S10	65,910		65,910
Navy	JAPAN	Yokosuka	Pier 5 (Berths 2 and 3) (Inc)	74,692	–74,692	0
Navy	MAINE	Kittery	Multi-Mission Drydock #1 Exten., Ph 1 (Inc)	160,000		160,000
Navy	NEVADA	Fallon	Range Training Complex, Phase 1	29,040		29,040
Navy	NORTH CAROLINA	Camp Lejeune, North Carolina	II MEF Operations Center Replacement (Inc)	20,000		20,000
Navy	SPAIN	Rota	MH–60r Squadron Support Facilities	60,110		60,110
Navy	VIRGINIA	Norfolk	E–2D Training Facility	30,400		30,400
Navy	VIRGINIA	Norfolk	MH60 & CMV–22B Corrosion Control & Paint Fac	17,671		17,671
Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design	165,710	–5,000	160,710
Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design—Indo-Pacific Command Posture Initiatives.	0	5,000	5,000
Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	38,983		38,983
Military Construction, Navy Total				1,975,606	–299,092	1,676,514

SEC. 4601. MILITARY CONSTRUCTION
(In Thousands of Dollars)

Account	State/ Country	Installation	Project Title	FY 2021 Request	House Change	House Agreement
AF	CALIFORNIA	Edwards AFB	Flight Test Engineering Laboratory Complex	0	40,000	40,000
AF	COLORADO	Schriever AFB	Consolidated Space Operations Facility, Inc 2	88,000		88,000
AF	FLORIDA	Eglin	Advanced Munitions Technology Complex	0	35,000	35,000
AF	GUAM	Joint Region Marianas	Stand Off Weapons Complex, MSA 2	56,000		56,000
AF	ILLINOIS	Scott	Add/Alter Consolidated Communications Facility	0	3,000	3,000
AF	MARIANA ISLANDS	Tinian	Airfield Development Phase 1, Inc 2	20,000	–20,000	0
AF	MARIANA ISLANDS	Tinian	Fuel Tanks With Pipeline & Hydrant Sys, Inc 2	7,000	–7,000	0
AF	MARIANA ISLANDS	Tinian	Parking Apron, Inc 2	15,000	–15,000	0
AF	MARYLAND	Joint Base Andrews	Consolidated Communications Center	0	13,000	13,000
AF	MONTANA	Malmstrom AFB	Weapons Storage & Maintenance Facility, Inc 2	25,000	–25,000	0
AF	NEW JERSEY	Joint Base McGuire-Dix-Lakehurst	Munitions Storage Area	22,000		22,000
AF	QATAR	Al Udeid, Qatar	Cargo Marshalling Yard	26,000		26,000
AF	TEXAS	Joint Base San Antonio	BMT Recruit Dormitory 8, Inc 2	36,000		36,000
AF	TEXAS	Joint Base San Antonio	T-X ADAL Ground Based Trng Sys Sim	19,500		19,500
AF	UTAH	Hill AFB	GBSD Mission Integration Facility, Inc 2	68,000		68,000
AF	VIRGINIA	Joint Base Langley-Eustis	Access Control Point Main Gate With Land Acq	19,500		19,500
AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design	296,532	–146,883	149,649
AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design—Indo-Pacific Command Posture Initiatives.	0	5,000	5,000
AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	68,600		68,600
AF	WYOMING	FE Warren	Weapons Storage Facility	0	12,000	12,000
Military Construction, Air Force Total				767,132	–105,883	661,249
Def-Wide	ALABAMA	Anniston Army Depot	Demilitarization Facility	18,000		18,000
Def-Wide	ALABAMA	Fort Rucker	Construct 10mw Generation & Microgrid	0	24,000	24,000
Def-Wide	ALASKA	Fort Greely	Communications Center	48,000		48,000

Def-Wide	ARIZONA	Fort Huachuca	Laboratory Building	33,728		33,728
Def-Wide	ARIZONA	Yuma	SOF Hangar	49,500		49,500
Def-Wide	ARKANSAS	Fort Smith ANG	PV Arrays and Battery Storage	0	2,600	2,600
Def-Wide	CALIFORNIA	Beale AFB	Bulk Fuel Tank	22,800		22,800
Def-Wide	CALIFORNIA	Marine Corps Air Combat Center / Twenty Nine Palms	Install 10 Mw Battery Energy Storage for Various Buildings.	11,646		11,646
Def-Wide	CALIFORNIA	Military Ocean Terminal	Military Oceal Terminal Concord Microgrid	29,000		29,000
Def-Wide	CALIFORNIA	NAWS China Lake	Solar Energy Storage System	0	8,950	8,950
Def-Wide	CALIFORNIA	NSA Monterey	Cogeneration Plant at B236	10,540		10,540
Def-Wide	COLORADO	Fort Carson, Colorado	SOF Tactical Equipment Maintenance Facility	15,600		15,600
Def-Wide	CONUS UNSPECIFIED	CONUS Unspecified	Training Target Structure	14,400		14,400
Def-Wide	DISTRICT OF COLUMBIA	Joint Base Anacostia Bolling	Industrial Controls System Modernization	0	8,749	8,749
Def-Wide	DISTRICT OF COLUMBIA	Joint Base Anacostia Bolling	Industrial Controls System Modernization	10,343		10,343
Def-Wide	DISTRICT OF COLUMBIA	Joint Base Anacostia Bolling	PV Carports	0	25,221	25,221
Def-Wide	FLORIDA	Hurlburt Field	SOF Combat Aircraft Parking Apron-North	38,310		38,310
Def-Wide	FLORIDA	Hurlburt Field	SOF Special Tactics Ops Facility (23 STS)	44,810		44,810
Def-Wide	GEORGIA	Fort Benning	Construct 4.8mw Generation & Microgrid	0	17,000	17,000
Def-Wide	GERMANY	Rhine Ordnance Barracks	Medical Center Replacement Inc 9	200,000		200,000
Def-Wide	ITALY	NSA Naples	Smart Grid—NSA Naples	3,490		3,490
Def-Wide	JAPAN	Def Fuel Support Point Tsurumi	Fuel Wharf	49,500		49,500
Def-Wide	JAPAN	Yokosuka	Kinnick High School Inc	30,000	–30,000	0
Def-Wide	KENTUCKY	Fort Knox	Van Voorhis Elementary School	69,310		69,310
Def-Wide	MARYLAND	Bethesda Naval Hospital	MEDCEN Addition/Alteration Incr 4	180,000	–80,000	100,000
Def-Wide	MARYLAND	Fort Meade	NSAW Recapitalize Building #3 Inc	250,000		250,000
Def-Wide	MARYLAND	NSA Bethesda	Nsab–16 Replace Chillers 3 Through 9	0	13,840	13,840
Def-Wide	MARYLAND	NSA South Potomac	CBIRF/IHEODTD/Housing Potable Water	18,460		18,460
Def-Wide	MISSOURI	Fort Leonard Wood	Hospital Replacement Inc 3	40,000		40,000
Def-Wide	MISSOURI	St Louis	Next NGA West (N2W) Complex Phase 2 Inc	119,000		119,000
Def-Wide	MISSOURI	Whiteman AFB	Install 10 Mw Combined Heat and Power Plant	17,310		17,310
Def-Wide	NEVADA	Creech AFB	Central Standby Generators	32,000		32,000
Def-Wide	NEW MEXICO	Kirtland AFB	Administrative Building	46,600		46,600
Def-Wide	NORTH CAROLINA	Fort Bragg	SOF Group Headquarters	53,100		53,100

SEC. 4601. MILITARY CONSTRUCTION
(In Thousands of Dollars)

Account	State/ Country	Installation	Project Title	FY 2021 Request	House Change	House Agreement
Def-Wide	NORTH CAROLINA	Fort Bragg	SOF Military Working Dog Facility	17,700		17,700
Def-Wide	NORTH CAROLINA	Fort Bragg	SOF Operations Facility	43,000		43,000
Def-Wide	NORTH CAROLINA	Fort Bragg	SOTF Chilled Water Upgrade	0	6,100	6,100
Def-Wide	OHIO	Wright-Patterson AFB	Construct Intelligence Facility Central Utility Plant	0	35,000	35,000
Def-Wide	OHIO	Wright-Patterson AFB	Hydrant Fuel System	23,500		23,500
Def-Wide	TENNESSEE	Memphis ANG	PV Arrays and Battery Storage	0	4,780	4,780
Def-Wide	TEXAS	Fort Hood, Texas	Fuel Facilities	32,700		32,700
Def-Wide	VIRGINIA	Joint Expeditionary Base Little Creek—Story	SOF Dcs Operations Fac. and Command Center	54,500		54,500
Def-Wide	VIRGINIA	Joint Expeditionary Base Little Creek—Story	SOF NSWG–2 Nswtg Css Facilities	58,000		58,000
Def-Wide	VIRGINIA	NMC Portsmouth / Portsmouth	Retrofit Air Handling Units From Constant Volume Reheat to Variable Air Volume.	611		611
Def-Wide	VIRGINIA	Wallops Island	Wallops Generation and Distribution Resiliency Improvements.	9,100		9,100
Def-Wide	WASHINGTON	Joint Base Lewis-McChord	Fuel Facilities (Lewis Main)	10,900		10,900
Def-Wide	WASHINGTON	Joint Base Lewis-McChord	Fuel Facilities (Lewis North)	10,900		10,900
Def-Wide	WASHINGTON	Manchester	Bulk Fuel Storage Tanks Phase 1	82,000		82,000
Def-Wide	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	ERCIP Design	14,250	10,000	24,250
Def-Wide	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Exercise Related Minor Construction	5,840		5,840
Def-Wide	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning and Design	48,696		48,696
Def-Wide	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	53,620		53,620
Def-Wide	WORLDWIDE UNSPECIFIED	Various Worldwide Locations	Planning and Design	97,030		97,030
Def-Wide	WORLDWIDE UNSPECIFIED	Various Worldwide Locations	Unspecified Minor Construction	9,726		9,726
Military Construction, Defense-Wide Total				2,027,520	46,240	2,073,760

NATO	WORLDWIDE UNSPECIFIED	Nato Security Investment Program	NATO Security Investment Program	173,030		173,030
NATO Security Investment Program Total				173,030	0	173,030
Army NG	ARIZONA	Tucson	National Guard Readiness Center	18,100		18,100
Army NG	COLORADO	Peterson AFB	National Guard Readiness Center	15,000		15,000
Army NG	INDIANA	Shelbyville	National Guard/Reserve Center Building Add/Al	12,000		12,000
Army NG	KENTUCKY	Frankfort	National Guard/Reserve Center Building	15,000		15,000
Army NG	MISSISSIPPI	Brandon	National Guard Vehicle Maintenance Shop	10,400		10,400
Army NG	NEBRASKA	North Platte	National Guard Vehicle Maintenance Shop	9,300		9,300
Army NG	NEW JERSEY	Joint Base McGuire-Dix-Lakehurst	National Guard Readiness Center	15,000		15,000
Army NG	OHIO	Columbus	National Guard Readiness Center	15,000		15,000
Army NG	OREGON	Hermiston	Enlisted Barracks, Transient Training	9,300	15,735	25,035
Army NG	PUERTO RICO	Fort Allen	National Guard Readiness Center	37,000		37,000
Army NG	SOUTH CAROLINA	Joint Base Charleston	National Guard Readiness Center	15,000		15,000
Army NG	TENNESSEE	McMinnville	National Guard Readiness Center	11,200		11,200
Army NG	TEXAS	Fort Worth	Aircraft Maintenance Hangar Addition/Alt	6,000		6,000
Army NG	TEXAS	Fort Worth	National Guard Vehicle Maintenance Shop	7,800		7,800
Army NG	UTAH	Nephi	National Guard Readiness Center	12,000		12,000
Army NG	VIRGIN ISLANDS	St. Croix	Army Aviation Support Facility (Aasf)	28,000		28,000
Army NG	VIRGIN ISLANDS	St. Croix	CST Ready Building	11,400		11,400
Army NG	WISCONSIN	Appleton	National Guard Readiness Center Add/Alt	11,600		11,600
Army NG	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning and Design	29,593		29,593
Army NG	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	32,744		32,744
Military Construction, Army National Guard Total				321,437	15,735	337,172
Army Res	FLORIDA	Gainesville	ECS TEMF/Warehouse	36,000		36,000
Army Res	MASSACHUSETTS	Devens Reserve Forces Training Area	Automated Multipurpose Machine Gun Range	8,700		8,700
Army Res	NORTH CAROLINA	Asheville	Army Reserve Center/Land	24,000		24,000
Army Res	WISCONSIN	Fort McCoy	Scout Reconnaissance Range	14,600		14,600

SEC. 4601. MILITARY CONSTRUCTION
(In Thousands of Dollars)

Account	State/ Country	Installation	Project Title	FY 2021 Request	House Change	House Agreement
Army Res	WISCONSIN	Fort McCoy	Transient Trainee Barracks	0	2,500	2,500
Army Res	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning and Design	1,218		1,218
Army Res	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	3,819		3,819
Military Construction, Army Reserve Total				88,337	2,500	90,837
N/MC Res	MARYLAND	Reisterstown	Reserve Training Center, Camp Fretterd, MD	39,500		39,500
N/MC Res	UTAH	Hill AFB	Naval Operational Support Center	25,010		25,010
N/MC Res	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	MCNR Minor Construction	3,000		3,000
N/MC Res	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	MCNR Planning & Design	3,485		3,485
Military Construction, Naval Reserve Total				70,995	0	70,995
Air NG	ALABAMA	Montgomery Regional Airport (ANG) Base	F–35 Simulator Facility	11,600		11,600
Air NG	GUAM	Joint Region Marianas	Space Control Facility #5	20,000		20,000
Air NG	MARYLAND	Joint Base Andrews	F–16 Mission Training Center	9,400		9,400
Air NG	TEXAS	Joint Base San Antonio	F–16 Mission Training Center	10,800		10,800
Air NG	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	9,000		9,000
Air NG	WORLDWIDE UNSPECIFIED	Various Worldwide Locations	Planning and Design	3,414		3,414
Military Construction, Air National Guard Total				64,214	0	64,214
AF Res	TEXAS	Fort Worth	F–35A Simulator Facility	14,200		14,200
AF Res	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design	3,270		3,270
AF Res	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Unspecified Minor Construction	5,647		5,647
Military Construction, Air Force Reserve Total				23,117	0	23,117
FH Con Army	ITALY	Vicenza	Family Housing New Construction	84,100		84,100
FH Con Army	KWAJALEIN	Kwajalein Atoll	Family Housing Replacement Construction	32,000		32,000

FH Con Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Family Housing P & D	3,300		3,300
Family Housing Construction, Army Total				119,400	0	119,400
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Furnishings	18,004		18,004
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Housing Privitization Support	37,948	25,000	62,948
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Leasing	123,841		123,841
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Maintenance	97,789		97,789
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Management	39,716		39,716
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Miscellaneous	526		526
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Services	8,135		8,135
FH Ops Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Utilities	41,183		41,183
Family Housing Operation And Maintenance, Army Total				367,142	25,000	392,142
FH Con Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Construction Improvements	37,043		37,043
FH Con Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design	3,128		3,128
FH Con Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	USMC DPRI/Guam Planning and Design	2,726		2,726
Family Housing Construction, Navy And Marine Corps Total				42,897	0	42,897
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Furnishings	17,977		17,977
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Housing Privatization Support	53,700	25,000	78,700
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Leasing	62,658		62,658
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Maintenance	85,630	25,000	110,630
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Management	51,006		51,006
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Miscellaneous	350		350
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Services	16,743		16,743
FH Ops Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Utilities	58,429		58,429
Family Housing Operation And Maintenance, Navy And Marine Corps Total				346,493	50,000	396,493
FH Con AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Construction Improvements	94,245		94,245
FH Con AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design	2,969		2,969
Family Housing Construction, Air Force Total				97,214	0	97,214

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Account	State/ Country	Installation	Project Title	FY 2021 Request	House Change	House Agreement
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Furnishings	25,805		25,805
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Housing Privatization	23,175		23,175
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Leasing	9,318		9,318
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Maintenance	140,666	25,000	165,666
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Management	64,732	35,000	99,732
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Miscellaneous	2,184		2,184
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Services	7,968		7,968
FH Ops AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Utilities	43,173		43,173
Family Housing Operation And Maintenance, Air Force Total				317,021	60,000	377,021
FH Ops DW	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Furnishings	727		727
FH Ops DW	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Leasing	49,856		49,856
FH Ops DW	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Maintenance	32		32
FH Ops DW	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Utilities	4,113		4,113
Family Housing Operation And Maintenance, Defense-Wide Total				54,728	0	54,728
FHIF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Administrative Expenses—FHIF	5,897		5,897
DOD Family Housing Improvement Fund Total				5,897	0	5,897
UHIF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Administrative Expenses—UHIF	600		600
Unaccompanied Housing Improvement Fund Total				600	0	600
BRAC—Air Force	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	DOD BRAC Activities—Air Force	109,222		109,222
BRAC—Army	WORLDWIDE UNSPECIFIED	Base Realignment & Closure, Army	Base Realignment and Closure	66,060	40,000	106,060
BRAC—Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Base Realignment & Closure	125,165	100,000	225,165

Base Realignment and Closure—Total	300,447	140,000	440,447
Total, Military Construction	**7,813,563**		**7,813,563**

SEC. 4602. MILITARY CONSTRUCTION FOR OVERSEAS CONTINGENCY OPERATIONS.

SEC. 4602. MILITARY CONSTRUCTION FOR OVERSEAS CONTINGENCY OPERATIONS
(In Thousands of Dollars)

Account	State/ Country	Installation	Project Title	FY 2021 Request	House Change	House Agreement
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	EDI: Minor Construction	3,970		3,970
Army	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	EDI: Planning and Design	11,903		11,903
	Military Construction, Army Total			15,873	0	15,873
Navy	SPAIN	Rota	EDI: EOD Boat Shop	31,760		31,760
Navy	SPAIN	Rota	EDI: Expeditionary Maintenance Facility	27,470		27,470
Navy	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	Planning & Design	10,790		10,790
	Military Construction, Navy Total			70,020	0	70,020
AF	GERMANY	Ramstein	EDI: Rapid Airfield Damage Repair Storage	36,345		36,345
AF	GERMANY	Spangdahlem AB	EDI: Rapid Airfield Damage Repair Storage	25,824		25,824
AF	ROMANIA	Campia Turzii	EDI: Dangerous Cargo Pad	11,000		11,000
AF	ROMANIA	Campia Turzii	EDI: ECAOS DABS-FEV Storage Complex	68,000		68,000
AF	ROMANIA	Campia Turzii	EDI: Parking Apron	19,500		19,500
AF	ROMANIA	Campia Turzii	EDI: POL Increase Capacity	32,000		32,000
AF	WORLDWIDE UNSPECIFIED	Unspecified Worldwide Locations	EDI: Unspecified Minor Military Construction	16,400		16,400
AF	WORLDWIDE UNSPECIFIED	Various Worldwide Locations	EDI: Planning & Design	54,800		54,800
	Military Construction, Air Force Total			263,869	0	263,869

Total, Military Construction	349,762	0	349,762

TITLE XLVII—DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS.

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS
(In Thousands of Dollars)

Program	FY 2021 Request	House Change	House Authorized
Discretionary Summary By Appropriation			
Energy And Water Development, And Related Agencies			
Appropriation Summary:			
Energy Programs			
Nuclear Energy	137,800		137,800
Atomic Energy Defense Activities			
National nuclear security administration:			
Weapons activities	15,602,000	0	15,602,000
Defense nuclear nonproliferation	2,031,000	80,000	2,111,000
Naval reactors	1,684,000	0	1,684,000
Federal salaries and expenses	454,000	0	454,000
Total, National nuclear security administration	**19,771,000**	**80,000**	**19,851,000**
Environmental and other defense activities:			
Defense environmental cleanup	4,983,608	790,100	5,773,708
Other defense activities	1,054,727	–155,438	899,289
Total, Environmental & other defense activities	**6,038,335**	**634,662**	**6,672,997**
Total, Atomic Energy Defense Activities	**25,809,335**	**714,662**	**26,523,997**

Total, Discretionary Funding	**25,947,135**	**714,662**	**26,661,797**
Nuclear Energy			
Idaho sitewide safeguards and security	137,800		137,800
Total, Nuclear Energy	**137,800**	**0**	**137,800**
Stockpile Management			
Stockpile Major Modernization			
B61–12 Life extension program	815,710		815,710
W88 Alt 370	256,922		256,922
W80–4 Life extension program	1,000,314		1,000,314
W87–1 Modification Program	541,000		541,000
W93	53,000		53,000
Total, Stockpile Major Modernization	**2,666,946**	**0**	**2,666,946**
Stockpile services			
Production Operations	568,941		568,941
Stockpile Sustainment	998,357		998,357
Weapons Dismantlement and Disposition	50,000		50,000
Subtotal, Stockpile Services	**1,617,298**	**0**	**1,617,298**
Total, Stockpile Management	**4,284,244**	**0**	**4,284,244**
Weapons Activities			
Production Modernization			
Primary Capability Modernization			
Plutonium Modernization			
Los Alamos Plutonium Modernization			
Los Alamos Plutonium Operations	610,599		610,599
21–D–512 Plutonium Pit Production Project, LANL	226,000		226,000
Subtotal, Los Alamos Plutonium Modernization	**836,599**	**0**	**836,599**
Savannah River Plutonium Modernization			
Savannah River Plutonium Operations	200,000		200,000

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS
(In Thousands of Dollars)

Program	FY 2021 Request	House Change	House Authorized
21–D–511 Savannah River Plutonium Processing Facility, SRS	241,896		241,896
Subtotal, Savannah River Plutonium Modernization	**441,896**	**0**	**441,896**
Enterprise Plutonium Support	90,782		90,782
Total, Plutonium Modernization	**1,369,277**	**0**	**1,369,277**
High Explosives and Energetics	67,370		67,370
Total, Primary Capability Modernization	**1,436,647**	**0**	**1,436,647**
Secondary Capability Modernization	457,004		457,004
Tritium and Domestic Uranium Enrichment	457,112		457,112
Non-Nuclear Capability Modernization	107,137		107,137
Total, Production Modernization	**2,457,900**	**0**	**2,457,900**
Stockpile Research, Technology, and Engineering			
Assessment Science	773,111		773,111
Engineering and Integrated Assessments	337,404		337,404
Inertial Confinement Fusion	554,725		554,725
Advanced Simulation and Computing	732,014		732,014
Weapon Technology and Manufacturing Maturation	297,965		297,965
Academic Programs	86,912		86,912
Total, Stockpile Research, Technology, and Engineering	**2,782,131**	**0**	**2,782,131**
Infrastructure and Operations			
Operations of facilities	1,014,000		1,014,000
Safety and environmental operations	165,354		165,354
Maintenance and repair of facilities	792,000		792,000
Recapitalization:			
Infrastructure and safety	670,000		670,000

Capability based investments	149,117		149,117
Planning for Programmatic Construction (Pre-CD–1)	84,787		84,787
Total, Recapitalization	**903,904**	**0**	**903,904**
Construction:			
21–D–510 HE Synthesis, Formulation, and Production, PX	31,000		31,000
19–D–670 138kV Power Transmission System Replacement, NNSS	59,000		59,000
18–D–690 Lithium Processing Facility, Y–12	109,405		109,405
18–D–620 Exascale Computing Facility Modernization Project, LLNL	29,200		29,200
18–D–650 Tritium Finishing Facility, SRS	27,000		27,000
17–D–640, U1a Complex Enhancements Project, NNSS	160,600		160,600
15–D–612 Emergency Operations Center, LLNL	27,000		27,000
15–D–611 Emergency Operations Center, SNL	36,000		36,000
15–D–302, TA–55 Reinvestments Project, Phase 3, LANL	30,000		30,000
15–D–301, HE Science & Engineering Facility, PX	43,000		43,000
07–D–220-04 Transuranic Liquid Waste Facility, LANL	36,687		36,687
06–D–141 Uranium processing facility Y–12, Oak Ridge, TN	750,000		750,000
04–D–125 Chemistry and Metallurgy Research Replacement Project, LANL	169,427		169,427
Total, Construction	**1,508,319**	**0**	**1,508,319**
Total, Infrastructure and operations	**4,383,577**	**0**	**4,383,577**
Secure transportation asset			
Operations and equipment	266,390		266,390
Program direction	123,684		123,684
Total, Secure transportation asset	**390,074**	**0**	**390,074**
Defense Nuclear Security			
Operations and maintenance	815,895		815,895
Construction:			
17–D–710 West end protected area reduction project, Y–12	11,000		11,000
Total, Defense nuclear security	**826,895**	**0**	**826,895**

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS
(In Thousands of Dollars)

Program	FY 2021 Request	House Change	House Authorized
Information technology and cybersecurity	375,511		375,511
Legacy contractor pensions	101,668		101,668
Total, Weapons Activities	**15,602,000**	**0**	**15,602,000**
Defense Nuclear Nonproliferation			
Defense Nuclear Nonproliferation Programs			
Global material security			
International nuclear security	66,391		66,391
Domestic radiological security	101,000	30,000	131,000
Container breach in Seattle, WA		[30,000]	
International radiological security	73,340		73,340
Nuclear smuggling detection and deterrence	159,749		159,749
Total, Global material security	**400,480**	**30,000**	**430,480**
Material management and minimization			
HEU reactor conversion	170,000		170,000
Nuclear material removal	40,000		40,000
Material disposition	190,711		190,711
Total, Material management & minimization	**400,711**	**0**	**400,711**
Nonproliferation and arms control	138,708		138,708
National Technical Nuclear Forensics R&D	40,000		40,000
Defense nuclear nonproliferation R&D			

Proliferation Detection	235,220	30,000	265,220
Nuclear verification and detection, next-gen technologies		[30,000]	
Nuclear Detonation Detection	236,531		236,531
Nonproliferation Stewardship Program	59,900		59,900
LEU Research and Development	0	20,000	20,000
LEU R&D for Naval Pressurized Water Reactors		[20,000]	
Total, Defense nuclear nonproliferation R&D	**531,651**	**50,000**	**581,651**
Nonproliferation Construction:			
18–D–150 Surplus Plutonium Disposition Project, SRS	148,589		148,589
Total, Nonproliferation construction	**148,589**	**0**	**148,589**
Total, Defense Nuclear Nonproliferation Programs	**1,660,139**	**80,000**	**1,740,139**
Legacy contractor pensions	14,348		14,348
Nuclear counterterrorism and incident response program	377,513		377,513
Use of Prior Year Balances	–21,000		–21,000
Total, Defense Nuclear Nonproliferation	**2,031,000**	**80,000**	**2,111,000**
Naval Reactors			
Naval reactors development	590,306		590,306
Columbia-Class reactor systems development	64,700		64,700
S8G Prototype refueling	135,000		135,000
Naval reactors operations and infrastructure	506,294		506,294
Construction:			
21–D–530 KL Steam and Condensate Upgrades	4,000		4,000
14–D–901 Spent fuel handling recapitalization project, NRF	330,000		330,000
Total, Construction	**334,000**	**0**	**334,000**
Program direction	53,700		53,700
Total, Naval Reactors	**1,684,000**	**0**	**1,684,000**

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS
(In Thousands of Dollars)

Program	FY 2021 Request	House Change	House Authorized
Federal Salaries And Expenses			
Program direction	454,000		454,000
Total, Office Of The Administrator	**454,000**	**0**	**454,000**
Defense Environmental Cleanup			
Closure sites:			
Closure sites administration	4,987		4,987
Richland:			
River corridor and other cleanup operations	54,949	181,000	235,949
Program restoration		[181,000]	
Central plateau remediation	498,335	160,000	658,335
Program restoration		[160,000]	
Richland community and regulatory support	2,500	7,600	10,100
Program restoration		[7,600]	
Total, Hanford site	**555,784**	**348,600**	**904,384**
Office of River Protection:			
Waste Treatment Immobilization Plant Commissioning	50,000		50,000
Rad liquid tank waste stabilization and disposition	597,757		597,757
Tank farm activities	0	180,000	180,000
Program restoration		[180,000]	
Construction:			
18–D–16 Waste treatment and immobilization plant—LBL/Direct feed LAW	609,924	170,000	779,924
Program restoration		[170,000]	
Total, Construction	**609,924**	**170,000**	**779,924**

Total, Office of River Protection	**1,257,681**	**350,000**	**1,607,681**
Idaho National Laboratory:			
Idaho cleanup and waste disposition	257,554		257,554
Idaho community and regulatory support	2,400		2,400
Total, Idaho National Laboratory	**259,954**	**0**	**259,954**
NNSA sites and Nevada off-sites			
Lawrence Livermore National Laboratory	1,764		1,764
Nuclear facility D & D			
Separations Process Research Unit	15,000		15,000
Nevada	60,737		60,737
Sandia National Laboratories	4,860		4,860
Los Alamos National Laboratory	120,000	45,000	165,000
Program increase		[45,000]	
Total, NNSA sites and Nevada off-sites	**202,361**	**45,000**	**247,361**
Oak Ridge Reservation:			
OR Nuclear facility D & D	109,077	0	109,077
Total, OR Nuclear facility D & D	**109,077**	**0**	**109,077**
U233 Disposition Program	45,000		45,000
OR cleanup and disposition	58,000		58,000
Construction:			
17–D–401 On-site waste disposal facility	22,380		22,380
14–D–403 Outfall 200 Mercury Treatment Facility	20,500		20,500
Total, Construction	**42,880**	**0**	**42,880**
Total, OR cleanup and waste disposition	**145,880**	**0**	**145,880**
OR community & regulatory support	4,930		4,930
OR technology development and deployment	3,000		3,000
Total, Oak Ridge Reservation	**262,887**	**0**	**262,887**

SEC. 4701. DEPARTMENT OF ENERGY NATIONAL SECURITY PROGRAMS
(In Thousands of Dollars)

Program	FY 2021 Request	House Change	House Authorized
Savannah River Sites:			
Savannah River risk management operations			
Savannah River risk management operations	455,122	40,000	495,122
H-Canyon not placed into stand-by condition		[40,000]	
Total, risk management operations	**455,122**	**40,000**	**495,122**
SR community and regulatory support	4,989	6,500	11,489
Secure payment in lieu of taxes funding		[6,500]	
Radioactive liquid tank waste stabilization and disposition	970,332		970,332
Construction:			
20-D–402 Advanced Manufacturing Collaborative Facility (AMC)	25,000		25,000
18–D–402 Saltstone Disposal Unit #8/9	65,500		65,500
17–D–402 Saltstone Disposal Unit #7	10,716		10,716
Total, Construction	**101,216**	**0**	**101,216**
Total, Savannah River site	**1,531,659**	**46,500**	**1,578,159**
Waste Isolation Pilot Plant			
Waste Isolation Pilot Plant	323,260		323,260
Construction:			
15–D–412 Utility Saft	50,000		50,000
21–D–401 Hoisting Capability Project	10,000		10,000
Total, Construction	**60,000**	**0**	**60,000**
Total, Waste Isolation Pilot Plant	**383,260**	**0**	**383,260**
Program direction	275,285		275,285
Program support	12,979		12,979

Technology development	25,000		25,000
Safeguards and Security			
Safeguards and Security	320,771		320,771
Total, Safeguards and Security	**320,771**	**0**	**320,771**
Prior year balances credited	–109,000		–109,000
Total, Defense Environmental Cleanup	**4,983,608**	**790,100**	**5,773,708**
Other Defense Activities			
Environment, health, safety and security			
Environment, health, safety and security	134,320		134,320
Program direction	75,368		75,368
Total, Environment, Health, safety and security	**209,688**	**0**	**209,688**
Independent enterprise assessments			
Independent enterprise assessments	26,949		26,949
Program direction	54,635		54,635
Total, Independent enterprise assessments	**81,584**	**0**	**81,584**
Specialized security activities	258,411		258,411
Office of Legacy Management			
Legacy management	293,873	–155,438	138,435
Rejection of proposed transfer		[–155,438]	
Program direction	23,120		23,120
Total, Office of Legacy Management	**316,993**	**–155,438**	**161,555**
Defense related administrative support	183,789		183,789
Office of hearings and appeals	4,262		4,262
Subtotal, Other defense activities	**1,054,727**	**–155,438**	**899,289**
Total, Other Defense Activities	**1,054,727**	**–155,438**	**899,289**

DIVISION E—NATIONAL ARTIFICIAL INTELLIGENCE INITIATIVE ACT OF 2020

Section 5001—Short Title

This section would establish the title of Division E as the "National Artificial Intelligence Initiative Act of 2020."

Section 5002—Findings

This section would highlight the opportunities posed by artificial intelligence systems and the challenges faced by both the public and private sectors in ethically developing and deploying safe and trustworthy artificial intelligence systems.

Section 5003—Definitions

This section would define terms used in division E, the National Artificial Intelligence Initiative Act of 2020.

TITLE I—NATIONAL ARTIFICIAL INTELLIGENCE INITIATIVE

LEGISLATIVE PROVISIONS

Section 5101—National Artificial Intelligence Initiative

This section would establish a National Artificial Intelligence Initiative and describe the purposes and the range of activities to be supported under the Initiative, including support for research and development, education, and training.

Section 5102—National Artificial Intelligence Initiative Office

This section would establish an office within the Office of Science and Technology Policy to support the initiative, including by supporting interagency coordination and conducting public outreach.

Section 5103—Coordination by Interagency Committee

This section would direct the Director of the Office of Science and Technology Policy to establish or designate an Interagency Committee to oversee the Initiative, develop and update a strategic plan for the Initiative every three years, and submit to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate not later than 90 days after the submission of the President's annual budget request beginning in fiscal year 2022, an annual coordinated interagency budget proposal and an assessment of progress in implementing the strategic plan.

Section 5104—National Artificial Intelligence Advisory Committee

This section would direct the Department of Energy to establish or designate a National Artificial Intelligence Advisory Committee of non-Federal members to provide advice on the Initiative. This section would require the Advisory Committee to submit a report

to the President, the Committee on Science, Space, and Technology of the House of Representatives, and the Committee on Commerce, Science, and Transportation of the Senate not later than 1 year after the date of the enactment of this Act, and not less frequently than once every 3 years thereafter on their findings and recommendations.

Section 5105—National Academies Artificial Intelligence Impact Study on Workforce

This section would direct the National Science Foundation to fund a study by the National Academies of Sciences, Engineering, and Medicine not later than 90 days after the date of the enactment of this Act to study the workforce impacts of artificial intelligence systems and provide recommendations to better understand those impacts. This section would require the National Academies of Sciences, Engineering, and Medicine, not later than 2 years after the date of the enactment of this Act, to submit a report to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate containing the findings and recommendations of the study, and to make a copy of the report publicly available.

Section 5106—GAO Report on Computational Needs

This section would direct the Comptroller General of the United States to produce a report not later than 1 year after enactment of the Act to assess the composition of computing resources supported by the Federal government and evaluate future computational needs.

Section 5107—National AI Research Resource Task Force

This section would direct the National Science Foundation to establish a National Artificial Intelligence Research Resource Task Force to investigate and propose a roadmap to establish a national artificial intelligence research resource. This section would require the task force to submit an initial report to Congress and the President not later than 12 months after enactment and final report to Congress and the President not later than 18 months after enactment on its findings.

Section 5108—Sense of Congress

This section would state the Sense of Congress that the Federal government should use this Initiative to maximize the benefits of artificial intelligence while preventing the creation of systems that behave in ways that cause harm.

TITLE II—NATIONAL ARTIFICIAL INTELLIGENCE RESEARCH INSTITUTES

LEGISLATIVE PROVISIONS

Section 5201—National Artificial Intelligence Research Institutes

This section would require the National Science Foundation to create and coordinate a network of artificial intelligence research institutes, each focused on an economic or social sector, or on a cross-cutting artificial intelligence challenge. This section enables all agencies to competitively award financial assistance to establish research institutes, as well as coordinate and accept funds from other agencies. Grants would be for a length of 5 years and could be renewed.

TITLE III—NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY ARTIFICIAL INTELLIGENCE ACTIVITIES

LEGISLATIVE PROVISIONS

Section 5301—National Institute of Standards and Technology Activities

This section would direct the National Institute of Standards and Technology to conduct artificial intelligence measurement research activities, establish a risk assessment framework for assessing the trustworthiness of artificial intelligence systems not later than 2 years after enactment, and develop best practices for data sharing and documentation to support artificial intelligence research not later than 1 year after enactment.

TITLE IV—NATIONAL SCIENCE FOUNDATION ARTIFICIAL INTELLIGENCE ACTIVITIES

LEGISLATIVE PROVISIONS

Section 5401—Artificial Intelligence Research and Education

This section would direct the National Science Foundation to establish a program to fund research and education activities for artificial intelligence systems and related fields and develop an obligation for an ethics statement for all research proposals. Education activities include artificial intelligence related fellowships, traineeships, scholarships, and artificial intelligence centers of excellence. This section would amend sections 1862n–1(i)(5) and 1862(i) of title 42, United States Code.

TITLE V—DEPARTMENT OF ENERGY ARTIFICIAL INTELLIGENCE RESEARCH PROGRAM

LEGISLATIVE PROVISIONS

Section 5501—Department of Energy Artificial Intelligence Research Program

This section would direct the Department of Energy to carry out a cross-cutting research and development program for artificial intelligence systems, coordinating across all the relevant offices and programs. It authorizes a range of activities and creates an obligation for an ethics statement for all Department of Energy research proposals.

DEPARTMENT OF DEFENSE AUTHORIZATION REQUEST

The Department of Defense requested legislation, in accordance with the program of the President, as illustrated by the correspondence set out below:

FEBRUARY 14, 2020.

Hon. NANCY PELOSI,
Speaker of the House of Representatives,
Washington, DC.

DEAR MADAM SPEAKER: Enclosed please find a draft of proposed legislation, titled the "National Defense Authorization Act for Fiscal Year 2021", which the Department of Defense requests be enacted during the second session of the 116th Congress.

The purpose of each provision in the proposed bill is stated in the accompanying section-by-section analysis.

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely yours,

ROBERT R. HOOD.

Enclosures: As Stated.

FEBRUARY 28, 2020.

Hon. NANCY PELOSI,
Speaker of the House of Representatives,
Washington, DC.

DEAR MADAM SPEAKER: Enclosed please find additional legislative proposals that the Department of Defense requests be enacted during the second session of the 116th Congress. The purpose of each proposal is stated in the accompanying section-by-section analysis. The Department submits these proposals as a follow-on to the earlier transmittal of our request for enactment of proposed legislation titled the "National Defense Authorization Act for Fiscal Year 2021".

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely yours,

ROBERT R. HOOD.

Enclosures: As Stated.

MARCH 6, 2020.

Hon. NANCY PELOSI,
Speaker of the House of Representatives,
Washington, DC.

DEAR MADAM SPEAKER: Enclosed please find additional legislative proposals that the Department of Defense requests be enacted during the second session of the 116th Congress. The purpose of each proposal is stated in the accompanying section-by-section analysis. The Department submits these proposals as a follow-on to the earlier transmittal of our request for enactment of proposed legislation titled the "National Defense Authorization Act for Fiscal Year 2021".

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely yours,

ROBERT R. HOOD.

Enclosures: As Stated.

April 7, 2020.

Hon. NANCY PELOSI,
Speaker of the House of Representatives,
Washington, DC.

DEAR MADAM SPEAKER: Enclosed please find additional legislative proposals that the Department of Defense requests be enacted during the second session of the 116th Congress. The purpose of each proposal is stated in the accompanying section-by-section analysis. The Department submits these proposals as a follow-on to the earlier transmittal of our request for enactment of proposed legislation titled the "National Defense Authorization Act for Fiscal Year 2021".

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to

the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely yours,

ROBERT R. HOOD.

Enclosures: As Stated.

APRIL 9, 2020.

Hon. NANCY PELOSI,
Speaker of the House of Representatives,
Washington, DC.

DEAR MADAM SPEAKER: Enclosed please find additional legislative proposals that the Department of Defense requests be enacted during the second session of the 116th Congress. The purpose of each proposal is stated in the accompanying section-by-section analysis. The Department submits these proposals as a follow-on to the earlier transmittal of our request for enactment of proposed legislation titled the "National Defense Authorization Act for Fiscal Year 2021".

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely yours,

ROBERT R. HOOD.

Enclosures: As Stated.

APRIL 17, 2020.

Hon. NANCY PELOSI,
Speaker of the House of Representatives,
Washington, DC.

DEAR MADAM SPEAKER: Enclosed please find additional legislative proposals that the Department of Defense requests be enacted during the second session of the 116th Congress. The purpose of each proposal is stated in the accompanying section-by-section analysis. The Department submits these proposals as a follow-on to the earlier transmittal of our request for enactment of proposed legislation titled the "National Defense Authorization Act for Fiscal Year 2021".

The Department is currently working with the Administration on additional legislative initiatives, which the Department hopes to transmit to Congress for its consideration in the coming weeks.

The Office of Management and Budget advises that there is no objection, from the standpoint of the Administration's program, to the presenting of these legislative proposals for your consideration and the consideration of Congress.

Sincerely yours,

ROBERT R. HOOD.

Enclosures: As Stated.

COMMUNICATIONS FROM OTHER COMMITTEES

HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOUSE ADMINISTRATION,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on House Administration.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on House Administration does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

ZOE LOFGREN,
Chairperson.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. ZOE LOFGREN,
Chairperson, Committee on House Administration,
House of Representatives, Washington, DC.

DEAR CHAIRPERSON LOFGREN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on House Administration has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on House Administration is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON AGRICULTURE,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Agriculture.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Agriculture does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

COLLIN C. PETERSON,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. COLLIN C. PETERSON,
Chairman, Committee on Agriculture,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Agriculture has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Agriculture is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON APPROPRIATIONS,
Washington, DC, July 8, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the rule X jurisdiction of the Committee on Appropriations.

In the interest of permitting your Committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this Committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Appropriations does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its rule X jurisdiction. I request that you urge the Speaker to name Members of this Committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

NITA M. LOWEY,
Chairwoman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. NITA M. LOWEY,
Chairwoman, Committee on Appropriations,
House of Representatives, Washington, DC.

DEAR MS. CHAIRWOMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Appropriations has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Appropriations is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON THE BUDGET,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on the Budget.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on the Budget does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

JOHN YARMUTH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. JOHN YARMUTH,
Chairman, Committee on the Budget,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on the Budget has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on the Budget is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON EDUCATION AND LABOR,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning the bill H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation which fall within the Rule X jurisdiction of the Committee on Education and Labor.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Education and Labor does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

ROBERT C. "BOBBY" SCOTT,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

HON. BOBBY SCOTT,
Chairman, Education and Labor,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Education and Labor has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Education and Labor is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC, July 7, 2020.

HON. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I write concerning H.R. 6395, the "National Defense Authorization Act for Fiscal Year 2021." There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Energy and Commerce (Committee).

In recognition of the desire to expedite consideration of H.R. 6395, the Committee agrees to waive this Committee's right to sequential referral. The Committee takes this action with the mutual understanding that we do not waive any jurisdiction over the subject matter contained in this or similar legislation, and that the Committee will be appropriately consulted and involved as this bill or similar legislation moves forward so that we may address any remaining concerns within our jurisdiction. I also request that you support my request to name members of the Committee to any conference committee to consider such provisions.

Finally, I would appreciate the inclusion of this letter in the committee report on H.R. 6395 and into the Congressional Record during floor consideration of the measure.

Sincerely,

FRANK PALLONE, JR.,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

HON. FRANK PALLONE, JR.,
Chairman, Committee on Energy and Commerce House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Energy and Commerce has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Energy and Commerce is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON FINANCIAL SERVICES,
Washington, DC, July 7, 2020.

HON. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I am writing to you concerning the bill H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation which fall within the Rule X jurisdiction of the Committee on Financial Services.

In the interest of permitting your Committee to proceed expeditiously to floor consideration of H.R. 6395, I am willing to waive this Committee's right to sequential referral and forego formal consideration of H.R. 6395 at this time. I do so with the understanding that by waiving consideration of the bill, the Committee on Financial Services does not waive any future jurisdictional claim over the subject matters contained in H.R. 6395 which fall within the Committee's Rule X jurisdiction. I also do so under the mutual understanding that the Committee on Financial Services will be appropriately consulted and involved as this or similar legislation moves forward. The Committee reserves the right to seek appointment of an appropriate number of conferees to any House-Senate conference involving H.R. 6395, and I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the Committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House Floor. Thank you for the cooperative spirit in which you have worked regarding this matter between our respective committees.

Sincerely,

MAXINE WATERS,
Chairwoman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

HON. MAXINE WATERS,
Chairwoman, Committee on Financial Services,
House of Representatives, Washington, DC.

DEAR MS. CHAIRWOMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Financial Services has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Financial Services is not waiving its jurisdiction. Further, this ex-

change of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON FOREIGN AFFAIRS,
Washington, DC, July 7, 2020.

HON. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Foreign Affairs.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Foreign Affairs does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

ELIOT L. ENGEL,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

HON. ELIOT L. ENGEL,
Chairman, Committee on Foreign Affairs,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Foreign Affairs has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Foreign Af-

fairs is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON HOMELAND SECURITY,
Washington, DC, July 7, 2020.

HON. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the "National Defense Authorization Act for Fiscal Year 2021." There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Homeland Security.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of H.R. 6395, the Committee on Homeland Security does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

BENNIE G. THOMPSON,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. BENNIE G. THOMPSON,
Chairman, Committee on Homeland Security,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Homeland Security has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Home-

land Security is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON THE JUDICIARY,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Judiciary Committee.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Judiciary Committee does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

JERROLD NADLER,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. JERROLD NADLER,
Chairman, Committee on the Judiciary,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on the Judiciary has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on the Judiciary

is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON NATURAL RESOURCES,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Natural Resources.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill, the Committee on Natural Resources does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

RAU–AE1L M. GRIJALVA,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. RAU–AE1L GRIJALVA,
Chairman, Committee on Natural Resources,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Natural Resources has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Natural

Resources is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON OVERSIGHT AND REFORM,
Washington, DC, July 8, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation which fall within the Rule X jurisdiction of the Committee on Oversight and Reform.

In the interest of permitting your Committee to proceed expeditiously on this bill, I am willing to waive this Committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill, the Committee on Oversight and Reform does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name Members of this Committee to any conference committee which is named to consider such provisions.

Please place this letter into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective Committees.

Sincerely,

CAROLYN B. MALONEY,
Chairwoman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. CAROLYN B. MALONEY,
Chairman, Committee on Oversight and Reform,
House of Representatives, Washington, DC.

DEAR MS. CHAIRWOMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Oversight and Reform has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Oversight and Reform is not waiving its jurisdiction. Further,

this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
CHAIRMAN.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SCIENCE, SPACE, AND TECHNOLOGY,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Science, Space, and Technology.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Science, Space, and Technology does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

EDDIE BERNICE JOHNSON,
Chairwoman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. EDDIE BERNICE JOHNSON,
Chairwoman, Committee on Science, Space, and Technology,
House of Representatives, Washington, DC.

DEAR MS. CHAIRWOMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Science, Space, and Technology has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Science, Space, and Technology is not waiving its juris-

diction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON SMALL BUSINESS,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Small Business.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Small Business does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

NYDIA M. VELA–AE1ZQUEZ,
Chairwoman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. NYDIA M. VELA–AE1ZQUEZ,
Chairwoman, Committee on Small Business,
House of Representatives, Washington, DC.

DEAR MS. CHAIRWOMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Small Business has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Small Business is not waiving its jurisdiction. Further, this ex-

change of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I write to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Transportation and Infrastructure.

In the interest of permitting your committee to proceed expeditiously to floor consideration, I am willing to waive this committee's right to sequential referral. I do so with the mutual understanding that by waiving consideration of the bill, the Committee on Transportation and Infrastructure does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I also request that you urge the Speaker to name members of this Committee to any conference committee which is named to consider such provisions.

Please place a copy of this letter and your response acknowledging our jurisdictional interest into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter between our respective committees.

Sincerely,

PETER A. DEFAZIO,
Chair.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. PETER DEFAZIO,
Chairman, Committee on Transportation and Infrastructure,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Transportation and Infrastructure has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Transportation and Infrastructure is not waiving its jurisdiction.

Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON VETERANS' AFFAIRS,
Washington, DC, July 7, 2020.

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I am writing to you concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. There are certain provisions in the legislation that fall within the Rule X jurisdiction of the Committee on Veterans' Affairs.

In the interest of permitting your committee to proceed expeditiously to floor consideration of this important bill, I am willing to waive this committee's right to sequential referral. I do so with the understanding that by waiving consideration of the bill the Committee on Veterans' Affairs does not waive any future jurisdictional claim over the subject matters contained in the bill which fall within its Rule X jurisdiction. I request that you urge the Speaker to name members of this committee to any conference committee which is named to consider such provisions.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

MARK TAKANO,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. MARK TAKANO,
Chairman, Committee on Veterans' Affairs,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Committee on Veterans' Affairs has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Committee on Veterans' Af-

fairs is not waiving its jurisdiction. Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

HOUSE OF REPRESENTATIVES,
PERMANENT SELECT COMMITTEE ON INTELLIGENCE,
Washington, DC, July 8, 2020.

Hon. ADAM SMITH
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR CHAIRMAN SMITH: I write in response to your staff's request, and concerning H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. Certain provisions in the legislation fall within the jurisdiction of the Permanent Select Committee on Intelligence (the "Committee"), as established by Rule X of the Rules of the House of Representatives for the 116th Congress.

In the interest of expediting floor consideration of this important bill, I am willing to waive the committee's right to sequential referral. By doing so, the Committee does not waive any future claim over the subjects addressed in the bill which fall within the Committee's jurisdiction. I also request that you urge the Speaker to name members of the Committee to any conference committee on the bill.

Please place this letter into the committee report on H.R. 6395 and into the Congressional Record during consideration of the measure on the House floor. Thank you for the cooperative spirit in which you have worked regarding this matter and others between our respective committees.

Sincerely,

ADAM B. SCHIFF,
Chairman.

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, July 8, 2020.

Hon. ADAM B. SCHIFF,
Chairman, Permanent Select Committee on Intelligence,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: Thank you for your letter regarding H.R. 6395, the National Defense Authorization Act for Fiscal Year 2021. I agree that the Permanent Select Committee on Intelligence has valid jurisdictional claims to certain provisions in this important legislation, and I am most appreciative of your decision not to request a referral in the interest of expediting consideration of the bill. I agree that by foregoing a sequential referral, the Permanent Select Committee on Intelligence is not waiving its jurisdiction.

Further, this exchange of letters will be included in the committee report on the bill.

Sincerely,

ADAM SMITH,
Chairman.

CONGRESSIONAL BUDGET OFFICE ESTIMATE

In compliance with clause 3(c)(3) of rule XIII of the House of Representatives, the cost estimate prepared by the Congressional Budget Office and submitted pursuant to section 402 of the Congressional Budget Act of 1974 is as follows:

CONGRESSIONAL BUDGET OFFICE PRELIMINARY COST ESTIMATE

JULY 8, 2020.

Re: Direct Spending and Revenue Effects of H.R. 6395, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021

Hon. ADAM SMITH,
Chairman, Committee on Armed Services,
House of Representatives, Washington, DC.

DEAR MR. CHAIRMAN: The Congressional Budget Office has completed an estimate of the direct spending and revenue effects of H.R. 6395, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, as ordered reported by the House Committee on Armed Services on July 1, 2020. This estimate is based on the Committee Print 116–57 that was posted to the website of the House Committee on Rules on July 7, 2020. Enacting the bill would have an insignificant effect on net direct spending and revenues, CBO estimates. Our complete cost estimate of H.R. 6395, including a discussion of discretionary authorizations, will be provided shortly.

Section 1101 would provide 12 weeks of paid leave to employees of several federally funded agencies following the birth, adoption, or foster placement of a child. Those changes would increase costs by allowing employees to use paid leave in situations where they are currently using unpaid leave, or by allowing employees who currently use paid annual and sick leave in those situations to instead defer that leave for use at a later date. Employees who accrue more unused sick leave would receive higher federal pensions if they retire. However, because relatively few employees who would use that leave will be eligible to retire before 2031, those additional payments would increase direct spending by less than $500,000 over the 2021–2030 period, CBO estimates.

Several other provisions in H.R. 6395 would affect net direct spending by between −$500,000 and $500,000 each year and in total over the 2021–2030 period, generally because very few people would be affected, or because the proposals would allow the Department of Defense to collect and spend new receipts so that the net effect would be small. Sections 229 and 531 would increase the amount of fines and penalties collected by the government. Those

fines and penalties, which are classified as revenues, would total less than $500,000 over the next 10 years, CBO estimates. Section 548 would increase such fines and penalties for some service members and decrease them for others; we estimate that the net effect of those changes would be insignificant.

Because the bill would affect direct spending and revenues, statutory pay-as-you-go procedures apply.

CBO estimates that enacting H.R. 6395 would not increase on-budget deficits by more than $5 billion in any of the four consecutive 10-year periods beginning in 2031.

If you wish further details on this estimate, we will be pleased to provide them. The CBO staff contact is Matt Schmit.

Sincerely,

PHILLIP L. SWAGEL,
Director.

STATEMENT REQUIRED BY THE CONGRESSIONAL BUDGET ACT

Pursuant to clause (3)(c)(2) of rule XIII of the Rules of the House of Representatives, and section 308(a) of the Congressional Budget Act of 1974 (Public Law 93–344):

(1) this legislation does not provide budget authority subject to an allocation made pursuant to section 302(b) of Public Law 93–344;

(2) the Congressional Budget Office (CBO) Estimate included in this report pursuant to clause (3)(c)(3) of rule XIII of the Rules of the House of Representatives contains CBO's projection of how this legislation will affect the levels of budget authority, budget outlays, revenues, and tax expenditures for fiscal year 2021 and for the ensuing 5 fiscal years; and

(3) the CBO Estimate does not identify any new budget authority for assistance to state and local governments by this measure at the time that this report was filed.

COMMITTEE COST ESTIMATE

Pursuant to clause 3(d)(2)(B) of rule XIII of the Rules of the House of Representatives, the Congressional Budget Office estimate included in this report satisfies the requirement for the committee to include an estimate by the committee of the costs incurred in carrying out this bill.

ADVISORY OF EARMARKS

The committee finds that H.R. 6395, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, as reported, does not contain any congressional earmarks, limited tax benefits, or limited tariff benefits as defined in clause 9 of rule XXI of the Rules of the House of Representatives.

OVERSIGHT FINDINGS

With respect to clause 3(c)(1) of rule XIII of the Rules of the House of Representatives, this legislation results from hearings and other oversight activities conducted by the committee pursuant

to clause 2(b)(1) of rule X. The findings are reflected in the body of this report.

GENERAL PERFORMANCE GOALS AND OBJECTIVES

With respect to clause 3(c)(4) of rule XIII of the Rules of the House of Representatives, the general goals and objectives of H.R. 6395 are to maintain the national defense, to prepare the United States to meet current and future challenges to the national defense, and to accomplish each of those goals and objectives in a fiscally responsible manner.

The bill provides $662.6 billion to support base national defense requirements, a number consistent with the Bipartisan Budget Act of 2019 (Public Law 116–37). It also includes an additional $69.0 billion of Overseas Contingency Operations. The bill includes funding to provide a 3 percent pay raise for service members, to invest in key maintenance and readiness areas, and to modernize the force to deter potential adversaries.

The bill continues the longstanding work of the Committee on Armed Services to provide U.S. military forces with sufficient resources to maintain the national defense, and it fulfills the committee's duties under Article I, Section 8, of the Constitution.

STATEMENT OF FEDERAL MANDATES

The committee adopts as its own the estimate of Federal mandates prepared by the Director of the Congressional Budget Office pursuant to section 423 of the Unfunded Mandates Reform Act.

FEDERAL ADVISORY COMMITTEE STATEMENT

Consistent with the requirements of section 5(b) of the Federal Advisory Committee Act, the committee finds that the functions of the proposed advisory committee authorized in the bill are not currently being performed, nor could they be performed, by one or more agencies, an advisory committee already in existence, or by enlarging the mandate of an existing advisory committee.

APPLICABILITY TO THE LEGISLATIVE BRANCH

The committee finds that section 1101 of H.R. 6395 relates to the terms and conditions of employment or access to public services or accommodations within the meaning of section 102(b)(3) of the Congressional Accountability Act (Public Law 104–1).

Section 1101 of the bill makes technical corrections related to paid parental leave for Federal employees. It amends the Congressional Accountability Act to clarify, consistent with these technical corrections, that paid parental leave is provided in addition to any accrued leave provided by employing offices of the legislative branch.

DUPLICATION OF FEDERAL PROGRAMS

Pursuant to clause 3(c)(5) of rule XIII, no provision of H.R. 6395 establishes or reauthorizes a program of the Federal Government known to be duplicative of another Federal program, a program that was included in any report from the Government Account-

ability Office to Congress pursuant to section 21 of Public Law 111–139, or a program related to a program identified in the most recent Catalog of Federal Domestic Assistance.

COMMITTEE VOTES

In accordance with clause 3(b) of rule XIII of the Rules of the House of Representatives, record votes were taken with respect to the committee's consideration of H.R. 6395. The record of these votes is contained in the following pages.

The committee ordered H.R. 6395 to be reported to the House with a favorable recommendation by a vote of 56–0 a quorum being present.

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 1

H.R. 6395

On Cooper Log 266—Requires an independent cost estimate of the Savannah River Plutonium Processing Facility and a subsequent report by the Secretary of Energy and certification by the STRATCOM commander.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop		x	
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler		x	
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon		x	
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell		x	
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**31**	**25**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 2

H.R. 6395

On Thornberry Log 643 (Perfecting Amendment to Brown Log 6r1)—Extending the timeframe for renaming Department of Defense property.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith		x		Mr. Thornberry	x		
Mrs. Davis		x		Mr. Wilson	x		
Mr. Langevin		x		Mr. Bishop	x		
Mr. Larsen		x		Mr. Turner	x		
Mr. Cooper		x		Mr. Rogers	x		
Mr. Courtney		x		Mr. Conaway	x		
Mr. Garamendi		x		Mr. Lamborn	x		
Ms. Speier		x		Mr. Wittman	x		
Ms. Gabbard		x		Mrs. Hartzler	x		
Mr. Norcross		x		Mr. Scott	x		
Mr. Gallego		x		Mr. Brooks	x		
Mr. Moulton		x		Mr. Cook	x		
Mr. Carbajal		x		Mr. Byrne	x		
Mr. Brown		x		Mr. Graves	x		
Mr. Khanna		x		Ms. Stefanik	x		
Mr. Keating		x		Dr. DesJarlais	x		
Mr. Vela		x		Dr. Abraham	x		
Mr. Kim		x		Mr. Kelly	x		
Ms. Horn		x		Mr. Gallagher			
Mr. Cisneros		x		Mr. Gaetz		x	
Ms. Houlahan		x		Mr. Bacon		x	
Mr. Crow		x		Mr. Banks	x		
Ms. Torres Small		x		Ms. Cheney	x		
Ms. Slotkin		x		Mr. Mitchell	x		
Ms. Sherrill		x		Mr. Bergman	x		
Ms. Escobar		x		Mr. Waltz	x		
Ms. Haaland		x					
Mr. Golden		x					
Mrs. Trahan		x					
Mrs. Luria		x					
Mr. Brindisi		x					
Roll Call Vote Total:	**23**	**33**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 3

H.R. 6395

On Gallego Log 453—Limitation on reducing number of troops in Germany or Europe or divesting from infrastructure in Europe.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry	x		
Mrs. Davis	x			Mr. Wilson	x		
Mr. Langevin	x			Mr. Bishop	x		
Mr. Larsen	x			Mr. Turner	x		
Mr. Cooper	x			Mr. Rogers	x		
Mr. Courtney	x			Mr. Conaway	x		
Mr. Garamendi	x			Mr. Lamborn	x		
Ms. Speier	x			Mr. Wittman	x		
Ms. Gabbard	x			Mrs. Hartzler	x		
Mr. Norcross	x			Mr. Scott	x		
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook	x		
Mr. Carbajal	x			Mr. Byrne	x		
Mr. Brown	x			Mr. Graves	x		
Mr. Khanna		x		Ms. Stefanik	x		
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon	x		
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney	x		
Ms. Slotkin	x			Mr. Mitchell	x		
Ms. Sherrill	x			Mr. Bergman	x		
Ms. Escobar	x			Mr. Waltz	x		
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**49**	**7**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 4

H.R. 6395

On Slotkin Log 9—Requires the Department of Defense to adhere to the most stringent standard in each location when conducting PFAS or PFOA remediation or removal.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop		x	
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler		x	
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon		x	
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell		x	
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**31**	**25**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 5

H.R. 6395

On Norcross Log 73—Prohibits any funds from being used to strip employees of the DOD of their collective bargaining rights.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop	x		
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers	x		
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler		x	
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook	x		
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon		x	
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell		x	
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**34**	**22**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 6

H.R. 6395

On Brown Log 6r1—Requires the Secretary of Defense to rename any Department of Defense property currently named after a person who served in the political or military leadership of any armed rebellion against the United States.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop		x	
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler		x	
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon	x		
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell	x		
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**33**	**23**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 7

H.R. 6395

On Sherrill Log 515—Requires the consent of the chief executives of both the sending state and the receiving state should the President deploy National Guard members without activating Title 10.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop		x	
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard		x		Mrs. Hartzler		x	
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon		x	
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell		x	
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**30**	**26**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 8

H.R. 6395

On Speier Log 227r1—Establishing a pilot program on prosecution of special victim offenses committed by attendees of military service academies.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop		x	
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler	x		
Mr. Norcross	x			Mr. Scott	x		
Mr. Gallego	x			Mr. Brooks	x		
Mr. Moulton	x			Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais	x		
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon		x	
Mr. Crow	x			Mr. Banks	x		
Ms. Torres Small	x			Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell	x		
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz	x		
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**38**	**18**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 9

H.R. 6395

On Khanna Log 547r1—Reduces the Ground Based Strategic Deterrent program to FY20 levels and redirects the FY21 $1 billion increase to the Pandemic Preparedness and Resilience National Security Fund.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis		x		Mr. Wilson		x	
Mr. Langevin		x		Mr. Bishop		x	
Mr. Larsen		x		Mr. Turner		x	
Mr. Cooper		x		Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier		x		Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler		x	
Mr. Norcross		x		Mr. Scott		x	
Mr. Gallego		x		Mr. Brooks		x	
Mr. Moulton		x		Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown		x		Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela		x		Dr. Abraham		x	
Mr. Kim		x		Mr. Kelly		x	
Ms. Horn		x		Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan		x		Mr. Bacon		x	
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small		x		Ms. Cheney		x	
Ms. Slotkin		x		Mr. Mitchell		x	
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland		x					
Mr. Golden		x					
Mrs. Trahan	x						
Mrs. Luria		x					
Mr. Brindisi		x					
Roll Call Vote Total:	**12**	**44**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 10

H.R. 6395

On Crow Log 461r1—Requires certain certifications and reports prior to any drawdown of U.S. personnel in Afghanistan.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry	x		
Mrs. Davis	x			Mr. Wilson	x		
Mr. Langevin	x			Mr. Bishop	x		
Mr. Larsen	x			Mr. Turner	x		
Mr. Cooper	x			Mr. Rogers	x		
Mr. Courtney	x			Mr. Conaway	x		
Mr. Garamendi	x			Mr. Lamborn	x		
Ms. Speier	x			Mr. Wittman	x		
Ms. Gabbard		x		Mrs. Hartzler	x		
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook	x		
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown		x		Mr. Graves	x		
Mr. Khanna		x		Ms. Stefanik	x		
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon	x		
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney	x		
Ms. Slotkin	x			Mr. Mitchell	x		
Ms. Sherrill	x			Mr. Bergman	x		
Ms. Escobar	x			Mr. Waltz	x		
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**45**	**11**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 11

H.R. 6395

On Escobar Log 443r1—Requires conditions for invocation of the Insurrection Act.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop		x	
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler		x	
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn		x		Mr. Gallagher			
Mr. Cisneros		x		Mr. Gaetz		x	
Ms. Houlahan	x			Mr. Bacon		x	
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small		x		Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell		x	
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland	x						
Mr. Golden		x					
Mrs. Trahan	x						
Mrs. Luria		x					
Mr. Brindisi		x					
Roll Call Vote Total:	**25**	**31**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 12

H.R. 6395

On Khanna Log 438r4—Prevents funds from being used to support Saudi-led coalition's operations against the Houthis in Yemen.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry		x	
Mrs. Davis	x			Mr. Wilson		x	
Mr. Langevin	x			Mr. Bishop		x	
Mr. Larsen	x			Mr. Turner		x	
Mr. Cooper	x			Mr. Rogers		x	
Mr. Courtney	x			Mr. Conaway		x	
Mr. Garamendi	x			Mr. Lamborn		x	
Ms. Speier	x			Mr. Wittman		x	
Ms. Gabbard	x			Mrs. Hartzler		x	
Mr. Norcross	x			Mr. Scott		x	
Mr. Gallego	x			Mr. Brooks		x	
Mr. Moulton	x			Mr. Cook		x	
Mr. Carbajal	x			Mr. Byrne		x	
Mr. Brown	x			Mr. Graves		x	
Mr. Khanna	x			Ms. Stefanik		x	
Mr. Keating	x			Dr. DesJarlais		x	
Mr. Vela	x			Dr. Abraham		x	
Mr. Kim	x			Mr. Kelly		x	
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz	x		
Ms. Houlahan	x			Mr. Bacon		x	
Mr. Crow	x			Mr. Banks		x	
Ms. Torres Small	x			Ms. Cheney		x	
Ms. Slotkin	x			Mr. Mitchell		x	
Ms. Sherrill	x			Mr. Bergman		x	
Ms. Escobar	x			Mr. Waltz		x	
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria		x					
Mr. Brindisi	x						
Roll Call Vote Total:	**31**	**25**	**0**				

COMMITTEE ON ARMED SERVICES

ROLL CALL VOTE NO. 13

H.R. 6395

On the Motion to Report the Bill Favorably to the House, As Amended.

Member	Aye	No	Present	Member	Aye	No	Present
Mr. Smith	x			Mr. Thornberry	x		
Mrs. Davis	x			Mr. Wilson	x		
Mr. Langevin	x			Mr. Bishop	x		
Mr. Larsen	x			Mr. Turner	x		
Mr. Cooper	x			Mr. Rogers	x		
Mr. Courtney	x			Mr. Conaway	x		
Mr. Garamendi	x			Mr. Lamborn	x		
Ms. Speier	x			Mr. Wittman	x		
Ms. Gabbard	x			Mrs. Hartzler	x		
Mr. Norcross	x			Mr. Scott	x		
Mr. Gallego	x			Mr. Brooks	x		
Mr. Moulton	x			Mr. Cook	x		
Mr. Carbajal	x			Mr. Byrne	x		
Mr. Brown	x			Mr. Graves	x		
Mr. Khanna	x			Ms. Stefanik	x		
Mr. Keating	x			Dr. DesJarlais	x		
Mr. Vela	x			Dr. Abraham	x		
Mr. Kim	x			Mr. Kelly	x		
Ms. Horn	x			Mr. Gallagher			
Mr. Cisneros	x			Mr. Gaetz	x		
Ms. Houlahan	x			Mr. Bacon	x		
Mr. Crow	x			Mr. Banks	x		
Ms. Torres Small	x			Ms. Cheney	x		
Ms. Slotkin	x			Mr. Mitchell	x		
Ms. Sherrill	x			Mr. Bergman	x		
Ms. Escobar	x			Mr. Waltz	x		
Ms. Haaland	x						
Mr. Golden	x						
Mrs. Trahan	x						
Mrs. Luria	x						
Mr. Brindisi	x						
Roll Call Vote Total:	**56**	**0**	**0**				

CHANGES IN EXISTING LAW MADE BY THE BILL, AS REPORTED

The committee has taken steps to make available the analysis of changes in existing law made by the bill, as required by clause 3(e) of rule XIII of the Rules of the House of Representatives, and will make the analysis available as soon as possible.

ADDITIONAL VIEW OF DON BACON

I offer these additional views on H.R. 6395:

As a member of the Committee with nearly thirty years of active duty military service, I am deeply committed to the readiness of our military and the care of our servicemembers and military families. It is with these goals in mind that I supported the amendment offered by my colleague and fellow veteran, Mr. Brown of Maryland, requiring the re-designation of military installations named after Confederate military leaders within one year.

Our federal military installations are the homes of our servicemembers and their families, the places where they live and work, and their points of embarkation for deployments around the world. I believe strongly these installations should bear the names of individuals who represent the values which inspired the Declaration of Independence and are enshrined in the Constitution of the United States. The names of our military installations should respect those who currently wear the uniform and inspire future generations of Americans to answer the call.

The very existence of installations named for individuals who rose in rebellion against the United States falls well short of our nation's founding principles. Such names bestow honor on men who took up arms against their countrymen in the Confederate cause and betrayed their sacred oaths. These installations were not named in the aftermath of the Civil War, but the early and mid twentieth century during the heights of segregation and the Jim Crow era. Though our history is rightfully important to us, conferring Confederate names on these installations dishonors the memory of the 360,000 Union soldiers who perished to preserve the Republic.

This is an important matter of jurisdiction for this committee but is also deeply personal for me. My great, great, great grandfather John Bacon was a Virginian who chose to fight in the Union Army. His legacy of service and sacrifice has defined my family for more than 155 years.

I also consider this matter one of simple respect. Today, approximately 40 percent of American military personnel serving on active duty identify as people of color. As a matter of common decency, they deserve better than to be ordered to serve on bases named for those who betrayed their country and waged a brutal war claiming more than 600,000 lives to preserve the hateful institution of slavery. We cannot in good conscience require today's military members to serve our country while billeting them and their families on installations honoring men who so blatantly betrayed the flag under which they serve.

These names are manifestly disrespectfully to a significant percentage of the military population. As a former commander, I believe that what is disrespectful to some is disrespectful of all. Con-

gress now has both an opportunity and an obligation to require the names of our military installations to embody and embrace our best values.

Fortunately, America's storied military history ensures there is no shortage of options to memorialize the qualities of duty, honor, courage and commitment to the nation. The list of potential candidates includes Medal of Honor recipients, victorious military commanders, and legions of humble heroes decorated for valor over the last century.

I am grateful for Mr. Brown's willingness to thoughtfully incorporate feedback and proposals from our colleagues holding opposing viewpoints. While this provision can certainly still be improved, I believe positive progress was made by revising the language to ensure the Secretary of Defense retains authority over the process, limiting the scope to federal property named after Confederate leaders, including provisions allowing input from local communities, and by ensuring exclusions for gravesites and cemeteries.

Some have criticized this amendment as an attempt to erase our history. I disagree. This is a way to acknowledge our history and apply it in a way that respects our values. We can do better. It is time to turn the page and justly embrace the spirit of America's promise.

I commend both Chairman Smith and Ranking Member Thornberry for their leadership on this committee and look forward to working with them further on the Fiscal Year 2021 National Defense Authorization Act.

DON BACON,
Member of Congress.

SUPPLEMENTAL VIEWS OF ANTHONY G. BROWN

I submit this letter as a Supplemental View to the Report by the House Armed Services Committee on H.R. 6395, the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, as amended.

The Department of Defense and the United States Armed Forces have long been at the forefront in advancing diversity and inclusion in our nation. Black soldiers have fought in every war, including the Revolutionary War, the War of 1812, the Civil War, the Spanish-American War, and World Wars I and II. In 1948, soon after World War II, President Harry S. Truman ended racial segregation and discrimination in the military, five years before the Supreme Court's decision in Brown vs. Topeka Board of Education that struck down the legal doctrine "separate, but equal" and ushered in racial integration of American schools. The integration of the military accelerated reforms and the pursuit of equality for African Americans in education, the workforce, and other aspects of society.

The bill is reported out of committee as the Department of Defense marks additional milestones for diversity and inclusion within the military. Last month, General Charles Q. Brown Jr. was confirmed as the first African American service chief, Chief Master Sergeant JoAnne S. Bass was nominated the first female senior enlisted service member, Lt. General Richard M. Clark was nominated to become the United States Air Force Academy's first African American superintendent, and a female National Guard soldier is on track to later this year become the first female Green Beret.

These historic appointments do not mask the work that must be done to ensure that these individuals are the first of many appointments towards a more diverse, representative, and inclusive force. Despite African Americans comprising 20 percent of active duty enlisted members and 13 percent of the general population of the United States, Black service members comprise only 8 percent of the commissioned officers, 5 percent of Army Green Berets, 2 percent of Navy Sea, Air, and Land (SEAL) Teams, less than 2 percent of pilots and navigators for fighter and bomber aircraft, and only 0.6 percent of the Air Force's pararescue jumpers. Of the 41 most senior officers in the military, only two are Black. Only one in five commissioned officers is female and women have never exceeded 27 percent of service academy nominations made by Members of Congress. Similar statistics can be found for Hispanic, American Indian, Asian, and other demographic groups.

The bill requires the boldest systemic changes in decades to the Department of Defense's approach to diversity and inclusion, including requiring that the Chief Diversity Officer report directly to the Secretary of Defense, establishing a Diversity and Inclusion Council, ensuring that diversity and inclusion are included in each National Defense Strategy, creating a comprehensive mentoring

and career development framework, and reforming the membership and process for selection boards for promotion, education, and command. These provisions were recommended by the bipartisan Military Leadership Diversity Commission nearly a decade ago. Additionally, the bill establishes a Special Inspector General to address racial disparities under the Uniform Code of Military Justice. The committee incorporated each of these provisions in a bipartisan fashion without debate, recognizing the need for decisive action to ensure all servicemembers have the opportunity to serve in an inclusive environment and be the best soldier, airman, sailor or Marine that they can be.

The bill provides focused attention on near term actions that can be taken to advance diversity and inclusion. To build a more diverse officer corps, the bill requires additional transparency and accountability through reporting requirements on the ethnic, race, and gender diversity in service academy nominations. To address previously identified barriers to a diverse population of fighter and bomber pilots, the bill creates a pilot program to increase partnerships between military installations and Reserve Officers Training Corps (ROTC) units at Historically Black Colleges and Universities and minority institutions (HBCU/MIs), and provides financial assistance to their members to pursue flight training prior to graduation. The bill acknowledges more can be accomplished on this issue and requires a Federally Funded Research and Development Center to study the barriers to participation of minority servicemembers in the Special Forces and the pilot and navigator military occupational specialties. To build a more diverse civilian national security workforce, the bill creates a National Security Pipeline Program to provide scholarships to students at HBCU/MIs in exchange for service in the government in a national security role. The bill further extends the pipeline for diverse talent by creating a science, technology, engineering, and mathematics grant program within Junior ROTC that includes a preference for Title I schools to ensure the funds are given where they are most needed.

The bill additionally maintains the President's authority to use the Insurrection Act, portions of which were appropriately and necessarily enacted to implement the Fourteenth Amendment guarantee for equal protection. These authorities have been notably utilized by past Presidents to mobilize the military and advance civil rights in the United States by enforcing the desegregation of schools by Brown v. Board of Education of Topeka, Kansas, allowing James H. Meredith to register at the University of Mississippi at Oxford, and protecting civil rights marchers as they made their way from Selma to Montgomery. It is crucial that as this bill advances through Congress, we do not overly restrict the use of these authorities by the President.

The bill most clearly embodies a vision for diversity and inclusion by stating that the Department of Defense will no longer honor the men who fought in the Civil War for slavery and white supremacy. It does so by providing a certain and non-political process to redesignate Department of Defense property that is currently named after leaders who rose in rebellion against the United States and took up arms against their brothers. The covered military installa-

tions were designated not in the aftermath of the Civil War, but in the early to mid-twentieth century during the heights of segregation and the Civil Rights movement. We cannot in good conscience require today's young service women and men to defend our country from America's future enemies while housing and training them and their families on installations honoring traitorous names of leaders who fought to preserve slavery and oppression. The bill will guarantee that another Black child will not have to grow up on Stonewall Jackson Drive, another Black cadet at West Point will not be forced to call Lee Barracks home, and another Black service member will not have to report to duty at Fort Rucker. The bill further guarantees that the Confederate battle flag no longer has any place on any Department of Defense installation. I commend the members of the committee in working in a bipartisan manner to incorporate these long-needed actions in the bill.

In summary, this bill ensures the Department of Defense will have a diverse and inclusive force that is ready to meet our adversaries in all theaters. It will improve justice and fairness in accessions, promotions, assignments, and discipline. I commend Chair Smith and Ranking Member Thornberry for their leadership on this committee and look forward to working with them to further these objectives as the Fiscal Year 2021 National Defense Authorization Act moves through the legislative process. I additionally express a deep appreciation for Ranking Member Thornberry's decades of bipartisan leadership and his lasting contributions to the institution of the Armed Services Committee.

ANTHONY G. BROWN.

MINORITY VIEWS OF THE RANKING MEMBER OF THE HOUSE ARMED SERVICES COMMITTEE ON H.R. 6395, THE NATIONAL DEFENSE AUTHORIZATION ACT FOR 2021

The National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2021 is the product of a bipartisan process and includes several provisions that are crucial to supporting our men and women in uniform and advancing national security. However, there remain some aspects of the bill that require additional work. I look forward to working with the Committee to improve the bill during floor consideration and in conference.

There are several aspects of the bill that have considerable bipartisan support. Importantly, the bill fully funds the President's Budget Request of $740.5B, in accordance with the bipartisan budget agreement. This funding enables many important modernization efforts, while supporting the 3% pay raise our service members deserve and improving military family readiness programs. In addition, the bill contains several provisions that build on past years' effects to reform and modernize the Department of Defense. In many cases, these initiatives lay the foundation for future continued reform. The bill also fully funds nuclear modernization efforts to ensure our nuclear deterrent capability remains safe and reliable. I am heartened that, during markup, an attempt to greatly reduce funding for the Ground Based Strategic Deterrent program was soundly rejected on a bipartisan basis. Finally, I fully support the important provisions that further development of the Department of Defense's pandemic response capabilities and other critical technology, including Artificial Intelligence and biotechnology. Taken together, these provisions lay the foundation for an NDAA that is worthy of our Armed Forces.

There are several provisions that were either included or excluded from the bill that cause me concern. For example, the bill contains a significant reduction to Afghan Security Forces Fund and the Iraq Counter-ISIS Train and Equip Fund at a particularly dangerous time in Afghanistan and Iraq. Stable funding for Afghan and Iraqi security is crucial for the future of the region, and the safety of coalition forces. Also, the restriction on funding for support to the Saudi-led Coalition's operations in Yemen is overly broad and ignores the important distinction between offensive and defensive operations. Finally, an amendment adopted during markup that proposes to restrict the President's authority to send National Guard troops to a state without the consent of the receiving state's governor is dangerous and shortsighted. This provision could potentially restrict current and future Presidents from being able to intervene when the receiving State governor is either unwilling or unable to enforce the law.

Finally, I would like to reiterate my concern with the House Majority's decision to allow for remote participation in committee

hearings and markups, as well as proxy voting in the House. While it is important to note that the House Armed Services Committee was able to establish a quorum based on those physically present during the full committee markup, as we transition to floor consideration, many of my colleagues and I remain troubled by the partisan proxy voting scheme. We are concerned that the legitimacy of the National Defense Authorization Act may be called into question if proxy votes play a decisive role in its passage.

I look forward to continuing our bipartisan efforts to successfully pass the 60th consecutive National Defense Authorization Act.

WILLIAM M. "MAC" THORNBERRY,
Ranking Member.

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