

TITLE III—OPERATION AND MAINTENANCE

ITEMS OF SPECIAL INTEREST

ENERGY ISSUES

Energy Efficiency Improvements for Shelters and Hard Containers

The committee notes that Department of Defense use of shelters, hard containers, and mobile units plays an integral role in overseas deployment. Many of these units are climate controlled in diverse and austere environments across the world in support of our Armed Services, often at great financial cost. The committee notes that use of shelters and hard containers requires cost avoidance, energy efficiency and sustainability.

Accordingly, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by February 1, 2020, on the development of energy efficient shelters and hard containers. At a minimum, the report shall contain the following:

- (1) A discussion of the utility, viability, cost-effectiveness, and environmental benefit of energy efficiency improvements for shelters;

(2) The viability of including mobile insulation systems to standard Department of Defense shelters and hard containers with heating or cooling systems;

(3) A discussion of other cost-saving, efficiency enhancing technologies;

(4) The potential for cost savings through reduced environmental control system costs; and

(5) Energy consumption and energy loss data from field tests of current shelters.

Enhancing Installation Energy Resiliency through Renewable Energy

The committee notes that the Department of Defense has a goal of 25 percent renewable energy for military facilities and institutions by 2025. The committee further notes that renewable energy can be an important element of ensuring energy resiliency and mission assurance at Department of Defense installations, and to that end some services have already exceeded the 25 percent goal in pursuit of enhanced energy resiliency. The committee encourages the Secretary of Defense to procure, construct, operate, maintain, test, and upgrade independent energy resilient systems for critical energy requirements on its military installations.

Additionally, the committee directs the Secretary of Defense to provide a report to the Senate Committee on Armed Services and the House Committee on Armed Services by February 1, 2020, on the following:

(1) the Department's progress towards meeting the 25 percent goal by military service, the feasibility of increasing this goal as a means of enhancing energy resiliency, and the resources that would be required to accomplish a higher goal;

(2) the extent the services share best practices in achieving energy resiliency through renewable energy sources; and

(3) the Department's plans for achieving 100 percent energy resilience for its critical energy loads and the feasibility of achieving this goal by fiscal year 2030. If 2030 is not attainable, the report shall include a projection for when this goal will be attainable.

Fuel Resiliency Issues within the Department of Defense

The committee notes that the Federal Aviation Administration and commercial aviation industry are assessing sustainable alternative fuel options as a means to address fuel cost and energy security challenges. The committee understands that a commercial airline achieved enhanced performance and lower fuel consumption through use of a sustainable fuel blend. If these results can be replicated, sustainable fuel usage will likely increase in commercial aviation. The committee further notes that as these fuel options come into commercial use, military aircraft may encounter them when using commercial airfields either in the course of normal operations or as an emergency divert location. An assessment of sustainable fuel blends for military aviation use will contribute to operational resiliency.

Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment, in coordination with the Director of the Defense Logistics Agency, to provide a report to the

House Committee on Armed Services not later than December 1, 2019, on fuel resiliency and availability worldwide. The report shall include an assessment of the range of fuel formulations in use worldwide, particularly at divert locations where commercially available fuels may differ from military specifications; trends in the commercial aviation fuel market and how they may impact fuel resiliency; and what the Department is doing to ensure that it retains the maximum flexibility to refuel military aircraft worldwide.

Geothermal Revenue Sharing Process Improvements

The committee notes that section 313 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) amended section 2916 of title 10, United States Code, to require that half of the revenue generated by sale of geothermal energy resources be set aside for the installation that is the source of the geothermal energy to use on local energy, water, or military construction projects.

The committee is concerned that the process used by the Navy to distribute these funds to eligible installations is unwieldy and slow. Therefore, the committee directs the Secretary of the Navy to provide a report to the House Committee on Armed Services by December 1, 2019, describing the current process for distributing these funds, a plan to improve the process so that local commanders can rapidly address base-level needs, and the timeline for implementing process improvements.

Maintenance Availability for Destroyers for Hybrid Electric Drive Retrofit

The committee understands that hybrid electric drive (HED) propulsion systems operate with greater efficiency and facilitate greater range and on-station time. Given these benefits, the committee believes the Navy should make maximum use of the HED technology currently in its inventory. Accordingly, the committee directs the Secretary of the Navy to provide a report to the House Committee on Armed Services by September 30, 2019, on the availability of Flight II Arleigh Burke-class destroyers for retrofit with previously procured hybrid electric drive systems. The report shall include a description of upcoming maintenance availability periods that would be of adequate duration to allow for installation of the HED, any additional barriers to installation, and any plans the Department of the Navy has for use of the remaining HED systems that would not involve installation on a naval vessel.

Medium Power Mobile Transformer Substations

The committee is aware of the Department of Defense's continuing interest in grid resiliency as it pertains to military installations. The committee is interested in understanding and determining the military installations with the greatest critical energy requirements and exhibiting the most significant energy resilience vulnerabilities. Therefore, the committee directs the Secretary of Defense to provide a briefing to the House Committee on Armed Services by February 1, 2020, on the ten military installations with the greatest critical energy requirements and their top five installation critical energy vulnerabilities and appropriate mitigation

strategies, strategies to ensure resilience, and mature technologies that enhance capabilities.

Plug-in Hybrids and Electric Vehicles on Department of Defense Installations

The committee believes that military installations could improve resiliency through a network of microgrids supporting hybrid or fully electric administrative vehicles. Further, the committee notes that the majority of government administrative vehicles do not transit large distances, and are therefore ideally suited for plug-in hybrid or fully electric technology. Accordingly, 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 September 30, 2019, on the feasibility of requiring Department of Defense installations to procure plug-in hybrids or fully electric vehicles for the government vehicle fleet and install appropriate microgrids to support charging infrastructure to charge the vehicles.

Report on Department of Defense and NATO Cooperation on Energy Infrastructure

The committee recognizes that energy security in Europe is a critical enabler to United States military readiness in the region. The committee further appreciates that the United States has economic and national security interests in assisting Central and Eastern European countries in achieving energy security through diversification of energy sources and supply routes. To that end, the committee encourages the Secretary of Defense, in coordination with the Secretary of State, to work with our North Atlantic Treaty Organization (NATO) allies and partners to study vulnerabilities from energy instability in Europe and develop ways to mitigate these vulnerabilities. The committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by March 1, 2020, that provides the results of this study. The report shall include at least the following:

- (1) identify and list energy vulnerabilities that impact the military readiness of the United States and its allies in Central and Eastern Europe;
- (2) identify and list vulnerabilities to supply routes that impact the military readiness of the United States and its allies in Central and Eastern Europe;
- (3) assess the Department of Defense's current ability to mitigate and respond to these vulnerabilities;
- (4) identify ways in which the Department can enhance integration and mitigate these vulnerabilities in the future; and
- (5) results of coordination with the Department of State on ways in which diplomatic relationships can be leveraged to provide energy security.

Review of Offshore Energy Development Projects

The committee understands that the Department of Defense has streamlined its process for evaluating energy development projects to include both onshore and offshore energy development under the Military Aviation and Installation Assurance Siting Clearinghouse

(Siting Clearinghouse). The committee applauds this consolidation and believes it will ensure a consistent process for evaluating energy development projects for their potential impacts to military activities. 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 September 30, 2019, on the consolidation of these functions under the Siting Clearinghouse. The briefing should address how offshore projects will be evaluated under the Siting Clearinghouse process, how the Siting Clearinghouse will interact with the Department of Interior when evaluating offshore projects, and whether any legislative changes to section 183a of title 10, United States Code, are required in order to support the Siting Clearinghouse review of offshore projects.

Siting Clearinghouse Process for Wind Energy

The development of wind energy off the Central California coast would provide a reliable renewable energy resource that would enhance energy independence and grid stability. The committee notes that the Department of Defense has traditionally used the Siting Clearinghouse process to provide a timely, transparent, technical, mission-specific and science-based analysis of potential impacts to military operations from proposed domestic energy development. Through this process, the Clearinghouse traditionally looks for impacts on military testing and training operations. However, given the proliferation of offshore wind turbines in the Indo-Pacific theater, wind energy development off the Central California coast could also provide an area to develop tactics, techniques, and procedures for military operations in the vicinity of offshore wind turbines. Therefore, the committee directs the Executive Director of the Department of Defense Siting Clearinghouse to provide an analysis to the House Committee on Armed Services, not later than September 1, 2019, which outlines how the Clearinghouse process will evaluate real-world environments in which the military may need to operate to determine whether offshore wind development is compatible with or may enhance military testing and training operations. The Executive Director shall provide the House Committee on Armed Services with a detailed briefing that includes analysis of the existing California call areas identified by the Bureau of Ocean Energy Management (BOEM), a summary of Department concerns, alternatives being evaluated, and how real-world environments are being considered in the evaluations. In the interim, the Committee directs the Department not to communicate a final position of opposition to offshore wind leasing in any of the three California call areas identified by BOEM.

LOGISTICS AND SUSTAINMENT ISSUES

B-52 Stratofortress power plant sustainment

The Committee understands that technologies exist to achieve increased performance on aircraft engines using an advanced foam wash. Recent tests on military aircraft with the same or similar engines as B-52s using foam cleaning technology have demonstrated the ability to reduce engine temperatures, increase engine performance, reduce engine maintenance costs, increase visual inspection

for maintainers, and save fuel. The Committee strongly encourages the Air Force to evaluate the benefits that can be achieved with advanced engine wash technologies. The Committee also directs the Secretary of the Air Force to provide a brief to the Committee outlining the interim B-52 power plant sustainment program while each aircraft awaits engine replacement.

C-17 Sustainment

The committee recognizes the critical capability of the C-17 Globemaster III, which provides strategic and tactical airlift, medical evacuation and aerial deliveries in support of combat and humanitarian missions around the world. The committee further recognizes that the existing sustainment C-17 Globemaster III strategy, which is a performance-based logistics contract, has resulted in consistent mission readiness rates that exceed 80% and fully conforms with the percentage limitations on performance of depot-level maintenance (50/50 requirements) of Section 2466 of Title 10, United States Code.

The committee is aware that at a time when aviation readiness rates on other fleets have been lagging, the Air Force is considering changing the sustainment strategy for C-17. The committee notes that Section 2337 of Title 10, United States Code, requires a periodic review product support arrangement to ensure the arrangements are consistent with the overall product support strategy. The committee understands that the Air Force contracted PricewaterhouseCoopers (PWC) to conduct an independent Product Support Business Case Analysis of the C-17 sustainment strategy and that analysis has been completed and delivered to the Air Force. The committee directs the Secretary of the Air Force to provide the PWC business case analysis on C-17 sustainment to the House Committee on Armed Services no later than June 30, 2019.

The committee further directs the Secretary of the Air Force to provide a briefing to the House Committee on Armed Services no later than July 31, 2019, detailing the Air Force's analysis and decision-making related to changes to C-17 sustainment

Commercial Best Practices for Maintenance and Logistics

The committee notes that commercial industries, such as passenger and cargo airlines, maritime fleets, and retail merchants, must manage international maintenance and supply chain to stay competitive. As a result, private industry seeks to reduce sustainment costs and increase operational availability by implementing innovative solutions to areas such as supply chain management, inventory accountability, workload forecasting, and maintenance practices and procedures. The committee believes many of these industry best practices can and should be leveraged by the Department of Defense to reduce sustainment costs and increase readiness. Therefore, the committee directs the Assistant Secretary of Defense for Sustainment, in coordination with the Secretaries of the military departments, to provide a briefing to the House Committee on Armed Services not later than March 1, 2020, on initiatives to incorporate commercial best practices into weapon system maintenance, inventory accountability, workload forecasting, and supply chain management. The briefing should address specific ex-

amples of commercial partnerships or best practices that have been adopted by the Department of Defense, areas of focus the Department of Defense is looking to industry for lessons learned or best practices, and barriers to implementing commercial best practices in areas of maintenance, inventory management, workload forecasting, and supply chain management.

Comptroller General Report on F-35 Sustainment

The committee recognizes the importance of the F-35 Lightning II program to U.S. national defense and cooperation with foreign allies and partners. The F-35 is replacing a variety of aircraft in the Air Force, Navy, and Marine Corps, representing the future of tactical air for the Department of Defense. The F-35 program is the most ambitious and expensive weapon system in the Department's history, with total life-cycle costs estimated by the Department to be in excess of \$1.0 trillion. While the F-35 brings advanced, fifth-generation aviation capabilities to our military, the program faces sustainment challenges in areas including repair capacity, global spare parts availability and capability, mission capability, and functionality of its Autonomic Logistics Information System. In addition, affordability concerns have led the military services to identify a need to reduce total operation and support costs per aircraft by 43 percent for the Air Force, 24 percent for the Marine Corps, and 5 percent for the Navy.

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 Department's sustainment efforts related to the F-35 to include issues such as:

(1) the status of the F-35 Lightning II aircraft program sustainment strategy.

(2) Department oversight and prime contractor management of key sustainment functions.

(3) the Department's ability to reduce costs or maintain affordability for F-35 fleet sustainment.

(4) other matters regarding F-35 sustainment and affordability that the Comptroller General determines of critical importance to the long-term viability of the program.

The committee directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2020, with the preliminary findings of the Comptroller General's review, with successive reports to follow on March 1, 2021, and March 1, 2022, respectively.

Comptroller General Report on Homeport of U.S. Aircraft Carriers

The committee notes that the Navy's 2018 Strategic Laydown and Dispersal Plan reversed a previous Navy decision to return an aircraft carrier to Naval Station Everett in fiscal year 2019. The Secretary of the Navy has stated the decision was made due to maintenance efficiencies and to minimize the impact to personnel. However, the committee is concerned that the Navy did not make

this decision by fully considering operational impacts, installation capacity, or State and local plans that could mitigate impacts to the maintenance of, and personnel assigned to, the ship.

Therefore, the committee directs the Comptroller General of the United States to submit a report to the House Committee on Armed Services on recent changes to the Navy's west coast aircraft carrier homeporting. The review should address the following:

(1) a description of recent changes to west coast aircraft carrier homeporting plans and the process used to make those changes;

(2) the extent to which the Navy considered fleet dispersal, access to deep water and dredging requirements, man-made or natural restrictions to deployability, encroachment, installation capacity, and previous analyses of west coast aircraft carrier homeporting conducted pursuant to the National Environmental Policy Act (42 U.S.C. 4321);

(3) the degree to which State and local governments were consulted about alterations to previous homeporting plans and potential cost-sharing arrangements; 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, 2020, on the Comptroller General's preliminary findings and present final results in a format and timeframe agreed to at the time of the briefing.

Comptroller General Report on Littoral Combat Ship Operations and Sustainment

The committee notes that 16 of 33 planned littoral combat ships (LCS) have been delivered to the Navy, with at least 15 more under construction or in the pre-production phase. The LCS comprises a growing proportion of the surface fleet, yet the ship has limited operational experience and its mission packages remain behind schedule. In response to program challenges with executing the ships' unique operational and sustainment concepts, the Navy conducted an LCS program review in 2016 and announced fundamental changes to the ships' crewing, maintenance, and other operational concepts. As the Navy implemented these changes, it canceled planned 2018 LCS deployments but has announced three planned LCS deployments for 2019. These deployments will be another opportunity for the Navy to test the feasibility of revisions to its operational and sustainment concepts, even as more LCS enter the fleet.

Given these issues and the vital importance of affordably operating and sustaining the LCS, the committee directs the Comptroller General of the United States to conduct a study of the following topics:

(1) to what extent has the Navy implemented the LCS program changes announced in 2016;

(2) to what extent has the Navy demonstrated that revised LCS operational concepts and sustainment plans are executable; and what, if any, challenges did the Navy have on its initial deployments using this revised concept;

(3) how has the Navy prepared to support and maintain LCS while they are deployed overseas;

(4) what have been the operating and sustainment costs of the LCS program to date, how have these deviated from cost estimates, and to what extent has the Navy updated the LCS cost estimate to include the new operation and support strategy;

(5) what are LCS long-term contracting strategies for ship repair and maintenance and to what extent do they address challenges related to the cost of maintaining the vessels; 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, 2020, on preliminary findings of the Comptroller General's review, and to present final results in a format and timeframe agreed to at the time of briefing.

Comptroller General Report on Ship Repair Capabilities and Capacity

The committee notes the Navy will seek to increase from 289 to 355 ships in order to meet the new National Defense Strategy. However, the committee is concerned that the current configuration and capacity of the U.S. industrial base, as well as maintenance capabilities overseas, may not be well-positioned to support the ship repair capabilities necessary to support a peacetime 355-ship Navy or to be successful in a protracted near-peer naval conflict. Of note, the Navy has consistently struggled to execute regularly scheduled maintenance on time with the size of the fleet it operates today. For example, over two-thirds of all aircraft carrier, submarine, and surface ship maintenance availabilities were completed late in the past 7 years. The Navy has also faced challenges in responding to emergent, unplanned ship maintenance work due to capability and capacity issues. The Navy's Long-Range Plan for the Maintenance and Modernization of Naval Vessels for Fiscal Year 2020 states that maintaining a 355-ship Navy will require a significant increase and upgrade of public and private industrial capability and capacity to meet the Navy's future ship repair needs.

Given these issues, and the critical importance ship repair plays in sustaining Navy readiness during both peacetime and conflict, the committee directs the Comptroller General of the United States to submit a report to the congressional defense committees that addresses the following:

(1) to what extent has the Navy identified the resources and investments necessary to maintain and modernize a 355-ship Navy and ensure sufficient ship repair capabilities and capacity during a near-peer conflict;

(2) to what extent has the Navy identified or assessed challenges or risks in the U.S. ship repair industrial base and/or overseas Navy capacity as part of its planning to maintain a 355-ship Navy and respond to battle-damaged ships during a conflict;

(3) to what extent has the Navy developed plans to mitigate or address those challenges to ensure effective and efficient ship maintenance of a larger fleet and during conflict with a near-peer; and

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

The Comptroller General shall provide a briefing to the House Committee on Armed Services not later than March 1, 2020, on preliminary findings of the Comptroller General's review and shall present final results in a format and timeframe agreed to at the time of the briefing.

Conditions Based Maintenance Plus

The committee is aware the Army, Marine Corps, Navy, and Air Force are each conducting, to differing degrees, pilot initiatives to assess the benefits of using a conditions based maintenance plus (CBM+) maintenance model on weapon systems. With CBM+, maintenance personnel can use algorithms that analyze data collected from onboard sensors or from historic data and maintenance trends to make informed decisions before a part fails. The committee believes that a CBM+ maintenance system can help reduce maintenance workloads, minimize the maintenance downtime of a weapon system, improve the management and response of the supply chain, reduce maintenance costs, and increase overall military readiness. The committee believes CBM+ has potential applications on both legacy weapon systems and new acquisition programs. Therefore, the committee directs the military service chiefs to each provide a briefing to the House Committee on Armed Services not later than November 1, 2019, on the use of conditions based maintenance systems and processes. The briefings should address specific weapon systems that are currently utilizing CBM+ approaches, observations on the impact CBM+ practices have had on the readiness of these weapon systems, plans to expand CBM+ to additional weapon systems, and any barriers to the expansion of CBM+.

Contracted Aerial Refueling Aircraft

The committee is aware that the Department of the Navy utilizes the contracted air services program to provide contractor-owned, contractor-operated aerial refueling in support of Navy pilot initial qualification, recurring pilot training, operational test and evaluation, and cross-country and overwater refueling services. The Commander of U.S. Transportation Command testified that the Air Force's aerial refueling fleet is "the most stressed capability in terms of sufficiency." The committee is also aware that as many as 30,000 hours of aerial refueling missions are not being supported annually. Given the current demands placed on the Air Force's aerial refueling fleet, as well as the readiness rates associated with those aircraft, the committee believes the options to complement the Air Force's current and planned organic aerial refueling fleet should be assessed.

Therefore, the committee directs the Secretary of the Air Force, in coordination with the Commander of U.S. Transportation Command, to provide a report to the House Committee on Armed Services not later than March 1, 2020, assessing the feasibility, affordability, and advisability of expanding the use of contractor-operated aerial refueling aircraft to support Air Force receiver requirements. The assessment should consider the types of refueling missions that would be appropriate for support by a contractor-operated aircraft.

Corrosion Control and Prevention

The committee recognizes that corrosion negatively affects military equipment and infrastructure, can lead to the reduced availability or capability of weapon systems, and creates safety hazards for military personnel. According to a study conducted for the Department of Defense, the estimated annual cost of the impact of corrosion is \$20.6 billion on the Department of Defense. To help prevent corrosion, the military services have invested in the research and development of innovative coatings that can be applied to weapon systems to increase the durability and operational capability of the weapon system while reducing the cost and amount of time required to maintain these weapon systems. In addition to developing and utilizing innovative coatings, the committee believes the military services should ensure that sufficient training on the application of such coatings is available for military and civilian personnel involved in weapon systems sustainment at the installation and depot level. Therefore, the committee directs the Assistant Secretary of Defense for Sustainment to provide a report to the House Committee on Armed Services not later than November 1, 2019 that assesses the current capability and capacity of its workforce to perform corrosion prevention and control, to include the application of preventative coatings. The report should address any identified training shortfalls, to include whether there is a need to establish a center focused on training and research related to the development and application of paint and coatings.

Optimized Fleet Response Plan

The committee notes that the Navy began a multi-year process of implementing the Optimized Fleet Response Plan (OFRP) in November 2014. The stated goal of OFRP was to maximize the availability of Navy ships for operations while ensuring adequate time for maintenance and training while providing an appropriate and predictable operational tempo for Navy personnel. As directed in the committee report accompanying the National Defense Authorization Act for Fiscal Year 2016 (H. Rept. 114–102), the Comptroller General reviewed matters related to OFRP and, while noting it was too early to assess the overall effectiveness, did note that there were signs of challenges with implementation and execution of OFRP. Since the Comptroller General's report in 2016, the committee notes the Navy has experienced delays in the schedule of ship maintenance availabilities, implemented a number of changes following the release of the Navy's Comprehensive Review of Surface Force Incidents and the Navy's Strategic Readiness Review, and is responding to the Dynamic Force Employment requirements of the 2018 National Defense Strategy. Therefore, the committee directs the Comptroller General of the United States to conduct an updated assessment of the Navy's Optimized Fleet Response Plan (OFRP), to include:

- (1) an analysis of the extent to which the Navy has been successful in achieving the goals it established under OFRP in terms of maintenance completion and timeliness, training certifications, personnel fit/fill rates, operational availability, and others;

(2) the impact that the performance of OFRP on ship maintenance and training have had on the carrier air wings maintenance, training, and readiness;

(3) how assumptions about operational availability and costs under OFRP are affecting the Navy's force structure assessment; and

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

The committee directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2020, with the preliminary findings of the Comptroller General's review, with the report to follow at a date to be determined at the time of the briefing.

Planning, Programming, and Budgeting for Sustainment

After several years of civilian and military leaders of the Department of Defense raising concerns about the readiness of the Armed Forces, the Congress passed a 2-year budget agreement that provided additional resources for the Department of Defense. Despite the readiness challenges raised, and additional resources provided, the committee is concerned that the Department failed to sufficiently plan, program, or budget for key readiness-enabling accounts that provide for the sustainment of weapon systems and equipment. For example, the budget request for fiscal year 2020 provides for only 82 percent of the Marine Corps ground depot requirement, 92 percent of the Navy ship depot maintenance requirement, and 90 percent of the Air Force weapon systems sustainment requirement. The committee is concerned that the military departments frequently state the accounts are funded to their "maximum executable rate" without being able to provide supporting analysis or describe what actions need to be taken to increase the execution rates. While the committee recognizes the need to invest in modernization and new weapon systems in support of long-term readiness, such investments must be appropriately balanced with the sustainment accounts that maintain and improve the materiel condition of today's weapon systems and equipment. Without sufficient investment in the sustainment accounts, the near-term readiness of the Department will continue to be challenged.

Therefore, the committee directs the Secretaries of the military departments to each provide a report to the House Committee on Armed Services not later than February 1, 2020, that provides a detailed plan for the planning, programming, budgeting, and execution of funding that support the sustainment of weapon systems and equipment. The reports should describe how the military departments calculate their sustainment requirements, how the maximum executable sustainment funding level is calculated, barriers to increasing sustainment execution, and actions being taken to improve the planning, programming, budgeting, and execution of accounts that support the sustainment of weapon systems and equipment.

Report on the National Guard's Equipment Reimbursement Policies

In accordance with National Guard Regulations, State Adjutant General have the authority to use federal equipment during State Active Duty (SAD) missions, and the United States Property and Fiscal Officers have the responsibility to seek reimbursement for the use of that equipment. Comptrollers who have received these reimbursements from the states had been depositing them in three different ways: to current fiscal year operation and maintenance accounts of the National Guard, to the operation and maintenance accounts of the National Guard for the fiscal year during which the SAD mission took place, and to the General Fund of the U.S. Treasury. The committee is aware of a recent legal interpretation and updated policy guidance that requires all reimbursements to be deposited in the General Fund of the U.S. Treasury. The committee is concerned that this new policy may adversely impact maintenance and sustainment of equipment used for SAD missions.

The committee understands that the Chief of the National Guard Bureau has been working with the State Adjutant Generals to identify potential legislative changes that may be necessary to allow reimbursements to be retained and utilized by the National Guard. Therefore, the committee directs the Chief of the National Guard Bureau to provide a report to the House Committee on Armed Services, not later than March 1, 2020. At minimum, the report should provide details on the amount of reimbursements for SAD missions deposited to the U.S. Treasury in fiscal year 2019 and, if required, a legislative proposal that would ensure reimbursed funds could be utilized for the maintenance and sustainment of equipment utilized in SAD missions.

READINESS ISSUES

Allocation of Excess Property for Wildfire Fighting

The Committee is supportive of Department of Defense programs that transfer surplus and excess military equipment to federal, state, and local agencies with responsibilities for combating wildfires and emergency services. As the threat of wildfires increases, the Firefighter Property Program (FFP) and the Federal Excess Personal Property Program (FEPP) provide first responders with critical firefighting and emergency service resources.

Wildfire risks are not evenly distributed, and the Committee is supportive of ensuring that communities with the greatest need and threat of wildfire have equitable access to Department of Defense surplus property.

Therefore, the Committee directs the Secretary of Defense, acting through the Director of the Defense Logistics Agency, in coordination with the Secretary of Agriculture, acting through the Chief of the United States Forest Service, to develop an assessment of FFP and FEPP implementation, training, best practices, and equipment distribution taking into account need and risk. Further, the Secretary of Defense acting through the Director of the Defense Logistics Agency, shall provide a report on its findings and any recommendations to more efficiently increase firefighting and emergency service capabilities to the Committees on Armed Services

and Agriculture of the U.S. House of Representatives, no later than 180 days after the date of enactment of this Act.

ARMY URBAN TRAINING

The committee remains concerned that the Department of Defense is not prepared to operate in complex, densely populated urban cities which are the likely terrain of future major conflict. The committee supports the Department's ongoing efforts, but questions whether the Army has prioritized this challenge. Specifically, the committee believes the Army should establish two entities to address this gap. First, the Army should establish an Army urban warfare center dedicated to the study and research of urbanization, mega-cities, urban warfare, and military operations in dense urban environments.

Second, the Army should construct an urban warfare training center that focuses on advanced skills to fight, survive, and win in urban operating environments at the brigade level and higher. This training facility would address the challenges associated with vertical, subterranean, and dense urban terrain, and the inclusion and integration of joint and interagency enablers.

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, 2019, on the Army's plan to prepare and train for high-intensity conflicts in dense urban warfare. The briefing should include:

- (1) how the Army plans and prepares doctrine for urban warfare, including any plans to establish an urban warfare center;
- (2) an updated overview of a plan and timeline to construct an urban warfare training center for dense urban warfare at the brigade level and higher; and
- (3) an identification of costs associated with the construction of an urban warfare training center.

Assessment of Air Combat Maneuvering Instrumentation and Collision Awareness Systems

The committee understands that despite numerous safety procedures designed for safe, effective training—such as assignment of different block altitudes, low altitude training rules, and dive recovery rules—the majority of midair collisions and terrain crashes involving combat aircraft occur during training exercises, not combat operations. These mishaps have repeatedly and tragically resulted in losses of life and aircraft. To mitigate the current risk for midair collision and controlled flight into terrain during air combat training, the committee encourages the Air Force, Navy, and Marine Corps officials to consider a collision awareness system that can leverage existing infrastructure and systems that would allow range training officers and pilots to receive notifications in the event a potential midair or terrain crash is assessed.

Therefore, the committee directs the Secretaries of the Air Force and Navy, not later than November 29, 2019, to provide to the congressional defense committees a report of the utilization of air combat maneuvering instrumentation systems for these purposes. This report shall include detailed analyses on the costs, benefits, and feasibility of building out this capability on air combat maneuver

instrumentation equipment on all combat aircraft as the basis for a collision awareness system at all relevant training ranges.

Cold Weather Organizational Clothing and Individual Equipment

The committee commends the Army for taking necessary steps to improve and modernize cold weather organizational clothing and individual equipment (OCIE) such as glove systems and handwear to provide soldiers with a distinct combat advantage. The committee is concerned that current procurement timelines are too lengthy and will prevent cold weather units from receiving the most effective cold weather items in a timely manner. Such delay could negatively impact both the readiness and lethality of the Army's cold weather combat units. Therefore, the committee encourages the Secretary of the Army to review these acquisition timelines and take steps to make cold weather OCIE items, including handwear, available to all eligible soldiers as soon as possible through the programs of record. Further, the committee supports efforts by the services to support a strong domestic industrial base to ensure that innovative and cost-effective cold weather OCIE items are available now and in the future.

Comptroller General Assessment of Surface Fleet Manning, Workload, and Training

The committee notes the Navy has taken steps to improve shipboard manning and decrease sailor fatigue and workload after the loss of life from ship collisions in 2017. The Navy has reevaluated shipboard and in-port workload, updated surface fleet manpower requirements, established minimum thresholds for filling billets with sailors ("fill") possessing the appropriate skills ("fit"), and directed the implementation of watchbills and shipboard routines to combat fatigue. However, the committee is concerned that manning difficulties and cultural resistance may hinder full implementation of these initiatives. While the Navy is attempting to improve manning and fatigue management, it is simultaneously implementing the Ready Relevant Learning (RRL) initiative, meant to provide sailors with more timely and targeted training. The committee remains concerned about RRL's implementation across the fleet and its efficacy in preparing sailors to execute their workload, especially as the Navy grows the size of the surface fleet.

Therefore, the committee directs the Comptroller General of the United States to submit a report to the House Committee on Armed Services not later than December 1, 2020, and to provide a briefing on preliminary findings not later than April 1, 2020, addressing the following:

(1) to what extent is the Navy meeting manning fit and fill goals for sea duty;

(2) actions the Navy is taking to mitigate any manning fit and fill shortfalls and when shortfalls are projected to be addressed;

(3) how manning guidance and implementation in the surface community differs from that of the aviation and submarine communities and from Federal guidelines for other professions;

(4) whether the Navy is positioned for a significant manpower increase based on an increase to a 355-ship Navy and to what extent

the Navy's training pipelines are being resourced to accommodate the increased demand;

(5) to what extent circadian rhythm watchbills and shipboard routines have been implemented in the surface fleet, factors that impede full implementation, and actions the Navy has taken to mitigate these factors;

(6) the measures of effectiveness for RRL training and the effect the RRL approach has on fleet readiness; and

(7) how RRL is affecting the qualifications of sailors when they arrive at their first duty assignment as part of the Forward Deployed Naval Forces, and how ship manning affects the successful implementation of this training approach.

Comptroller General Report on Army Rail Capability

The committee notes that in 2012, the Army proposed a force design update that would provide the rail capabilities required for the contemporary operational environment. This force design was approved by the Army Training and Doctrine Command's Army Capabilities Integration Center and thereby created the Army Reserve Expeditionary Railway Center.

The committee notes that the Expeditionary Railway Center's mission is to provide rail network capability and infrastructure assessments; perform rail mode feasibility studies; provide advice on the employment of rail capabilities; perform and track railway rolling stock capability assessments; and perform and assist with rail planning in support of military strategic and operational requirements.

In order to determine whether these actions have resulted in an improvement to the Department of Defense's rail capabilities, 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 by December 1, 2020, explaining to what extent the Army, through the Expeditionary Railway Center, has assessed current rail capabilities and addressed any identified gaps; if the Army's 2012 force design update and the Expeditionary Railway Center have been successful in meeting combatant command requirements; and how existing mechanisms inform Army and Department decision makers about the ability of the Department's rail system to meet combatant command needs.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by March 1, 2020, on the Comptroller General's preliminary findings.

Comptroller General Report on Navy Collective Training for High-End Combat Missions

The committee notes that the 2018 National Defense Strategy stated that, in order to prepare for long-term strategic competition, the U.S. military must train to "high-end combat missions" alongside allies in bilateral and multinational exercises. However, as the Government Accountability Office testified in 2018, the Navy has focused recent efforts on training up to existing standards and certifications in order to rebuild readiness. Meanwhile, foreign militaries have been improving the scope, complexity, and realism of their training. As a result, the committee recognizes that U.S.

Navy training and exercises need sufficient realism in order to match our near-peer competitors and provide the readiness and capabilities needed to succeed in a high-end fight. Accordingly, the committee directs the Comptroller General of the United States to conduct a study addressing:

(1) the extent to which the Navy's training standards have been updated or changed to portray realistic scenarios, as based on current intelligence;

(2) the extent to which Navy training and exercises incorporate current and future threats, including cyber attacks, electronic warfare, new acoustic sensors, and unmanned underwater vehicles;

(3) the extent to which current warfare certifications and training readiness data provide an accurate portrayal of the Navy's readiness to perform in high-end combat missions; and

(4) 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, 2020, on preliminary findings of the Comptroller General's review, with the report to follow at a date to be determined at the time of the briefing.

Comptroller General's Report on the Army's Use of Global Combat Support System

The committee notes that logistics is a key combat support area and a critical enabler underpinning U.S. military power. The Army manages tactical logistics with the Global Combat Support System-Army (GCSS-Army), which replaces several separate legacy information systems used to manage logistics support activities at the Army tactical unit level. Once fully fielded, GCSS-Army will manage billions of dollars in assets on an annual basis and will have more than 150,000 users. In April 2015, the Government Accountability Office reviewed the early implementation of GCSS-Army at selected units and found that it was generally meeting their logistics requirements. At that time, however, very few tactical units had the full system capability and the units were not deployed when using the system. The Army was expecting to fully field GCSS-Army to its tactical units by September 2017, but this did not occur.

Given this limited field experience to date, the committee directs the Comptroller General of the United States to submit a report to the House Committee on Armed Services by June 1, 2020, explaining the following:

(1) how tactical units manage and track logistics support activities using GCSS-Army when deployed in a military operation,

(2) to what extent the Army has tested and evaluated the use of GCSS-Army for logistics support during military operations, and

(3) to what extent is GCSS-Army able to provide geographic combatant commanders and other military leaders a common operating picture of logistics support during military operations.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services by March 1, 2020, on the Comptroller General's preliminary findings.

Corrosion Mitigation for Tactical Aircraft

While the U.S. military updated aircraft cleaning and corrosion control requirements to mitigate corrosion and maintain aircraft readiness, the committee understands that the U.S. Army may not be currently performing recommended rinsing procedures at certain locations due to lack of appropriate equipment at those locations. The committee also notes that lack of rinse equipment can present greater challenges in austere environments where sand, dirt, and salt can cause significant damage to aircraft and components and where the lack of infrastructure and water resources also poses challenges. Noting the significant costs associated with airframe corrosion, the committee believes the use of commercial, off-the-shelf (COTS) tactical rinse systems may provide a quick return on investment.

Therefore, the committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services no later than September 27, 2019, on the potential for wider fielding of COTS tactical rinse systems for taxi-through fixed and rotary wing aircraft. This briefing shall include a detailed description of evaluations of such rinse systems to date, a list of locations that currently lack such rinse systems, whether there is a plan for using fielding additional capabilities to address corrosion prevention and control for taxi-through aircraft, and the potential for a program of record for this capability.

Department of Defense Fire and Emergency Services Reductions

The committee commends the Office of the Assistant Secretary of Defense for Sustainment for its efforts to achieve cost savings and provide military installations with the necessary services in the event of an emergency. However, the committee is concerned that the planned reductions in fire and emergency services go too far in its reduction of appropriate response personnel. As the reductions in services proceed, the committee encourages the Office of the Assistant Secretary of Defense for Sustainment to ensure that there is an appropriate number of fire and emergency personnel to provide adequate response protection at military installations. Therefore, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by December 1, 2019 on the effects of currently planned reductions to fire and emergency services as it pertains to providing adequate fire and emergency response protection at military installations.

Hearing Protection Measures

The committee notes that despite the widespread availability of ear protection equipment across the Department of Defense, service members continue to experience hearing loss attributed to their military service. The committee believes that the Department of Defense should adopt a more innovative approach to prevent hearing loss.

Therefore, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by January 1, 2020, on current hearing protection measures in use during combat and training and the effectiveness of these devices for a range of combat, combat support, and administrative specialties.

The report should also compare hearing for service members upon entry into the military services to the end of the first term of service and compare discharged members receiving service-connected benefits for hearing loss. This report should also include recommendations for innovative safe technologies that could be used to deter hearing loss or improve hearing through training and combat.

Live, Virtual, and Constructive Training

The committee continues to recognize the important role that Live, Virtual, and Constructive (LVC) and game-based (LVC-G) systems can play to improve military capabilities and readiness for missions in contested environments. While the Army, Marine Corps, Navy, and Air Force each have various programs and initiatives to leverage LVC and LVC-G systems, the committee is concerned the services lack clear investment strategies or plans to scale the use of LVC and LVC-G systems to improve and sustain military readiness. Therefore, the committee directs the Secretaries of the military departments to provide a briefing to the House Committee on Armed Services not later than November 1, 2019, on the military services' investment strategies and plans to scale the use of LVC and LVC-G systems. In addition, the briefing should address efforts to use LVC and LVC-G systems to enhance joint and multinational training and readiness and how LVC and LVC-G training will be assessed within the Defense Readiness Reporting System.

Minimal-Notice Examinations of Naval Vessels and Associated Manpower Requirements

The committee notes that naval vessel examinations are critical for assessing the material readiness of the U.S. Navy fleet. In order to provide a more accurate representation of the material condition of each vessel without the benefit of dedicated inspection preparation, section 322 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115-232) required that examinations of naval vessels be conducted on a minimal-notice basis. The committee is aware that the Navy is undertaking a phased implementation of this requirement that aims to achieve 100 percent minimal notice by late 2019. The committee therefore directs the President of the Navy's Board of Inspection and Survey to provide a briefing to the House Committee on Armed Services by March 1, 2020, on the results and lessons learned from its implementation of minimal-notice examinations. In addition, the committee is aware of a potential shortfall in the number of inspectors available to meet the Navy's new examination requirements and directs the President of the Board of Inspection and Survey to provide a briefing to the House Committee on Armed Services by March 1, 2020, on the results of its upcoming Shore Manpower Requirements Determination.

Mission Capability Rating Assessment

On September 17, 2018, the Secretary of Defense issued a memorandum to the Secretaries of the military departments directing they achieve a minimum of 80 percent mission capability rates and

reduce operating and sustainment costs for F-35, F-22, F-16, and F-18 aircraft by the end of fiscal year 2019. In addition, the memorandum directed the military departments to “set and pursue aggressive targets for other enduring fixed- and rotary-wing aviation assets.” The committee supports the military departments’ efforts to improve the mission capability rates of aviation assets and reduce the operating and sustainment costs of such assets. The committee seeks to understand the lessons learned from this initiative and how the improved readiness levels can be sustained and applied to other components of the Armed Forces.

Therefore, the committee directs the Secretaries of the military departments to each provide a briefing to the House Committee on Armed Services, not later than November 1, 2019, on the results of their efforts to meet the directive outlined in the September 2018 memorandum. The briefing should address specific actions taken to meet the 80 percent mission capability objective for each of the aircraft identified, the framework for sustaining an appropriate mission capability rating for each of the aircraft going forward, and plans to expand the mission capability initiative to other weapons systems that operate in the air, land, and sea domains.

NAVY READINESS ASSESSMENT TEAMS

The committee is aware that the Navy leverages Engineering Readiness Assessment Teams (ERATs) and Combat Systems Readiness Assessment Teams (CSRATs) to provide periodic material condition assessments and training assistance to the Navy’s surface forces in the Atlantic and Pacific Fleets. Conducting approximately 150 ship visits per year, ERATs help improve technical knowledge, operational understanding, and operational performance of the crews aboard Navy surface ships. The Navy has identified ERATs as an integral component of the Optimized Fleet Response Plan training cycle and the committee believes ERATs help enhance unit readiness.

The committee is concerned about differences in the contracting process for the ERAT and CSRAT programs. Of particular concern is the lack of a uniform, standard, and consistent funding source and the lack of an integrated program management construct to unify the ERAT and CSRAT requirements, management, and execution across both the Atlantic and Pacific Fleets. This, coupled with the use of a non-Navy contract vehicle, has further contributed to decline in execution of both ERAT and CSRAT requirements. The committee believes the Navy should seek ways to improve the coordination, administration, and execution of these programs.

The committee is aware that Navy Surface Forces Atlantic is in the process of adjusting its acquisition strategy for the delivery of ERAT services. As these adjustments are made, the committee will continue to closely monitor these changes, as well as the management and funding of the ERAT and CSRAT programs, to ensure the ERAT and CSRAT programs continue to efficiently and effectively support the readiness of the Navy’s surface ships.

Northern Strike Exercise Funding

The committee notes that the Northern Strike exercise is one of the largest Reserve Component exercises supported by the Department of Defense. This annual event develops full-spectrum combat readiness of National Guard, Active Component, and coalition partner units through realistic, joint live-fire training with an emphasis on joint and coalition force cooperation. The committee recognizes that the Northern Strike exercise has over 5,000 participants from all military services and military units from the United Kingdom, Germany, Poland, Hungary, Estonia, Lithuania, and Latvia. However, the committee is concerned that the Department of Defense has inconsistently programmed funding for this annual event. Accordingly, the committee directs the Chief, National Guard Bureau to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by December 1, 2019, that provides the following:

- (1) the annual cost of the Northern Strike exercise broken out by account over the last 5 years;
- (2) the number and countries of foreign partner participants over the last 5 years;
- (3) the number of military personnel by service and component over 5 years broken out by service; and
- (4) the anticipated funding for future exercises in the Future Years Defense Program.

Report on Security Clearance Processing

The Committee is concerned with the persistent backlog of security clearance applications and the impact that has on our national security apparatus' ability to effectively recruit and retain high-quality professionals. In 2018, the Government Accountability Office added the government-wide personnel security clearance process to their High-Risk List, which identifies federal areas in need of urgent reforms to address significant challenges. Pursuant to Executive Order 13869, the responsibility for background investigations functions has been transferred to the DoD, which combines the Defense Security Service, the Consolidated Adjudication Facility, the National Background Investigative Bureau, and several other components under the newly renamed Defense Counterintelligence and Security Agency. Consistent with this transfer of authority, the committee directs the Secretary of Defense to submit a report to the congressional defense committees not later than 180 days after the enactment of this Act detailing the scope of both the investigative and adjudicative backlog, how cases are disposed of (whether adjudicated or otherwise disposed of some other way), current staffing levels at DSCA, and what reforms are being put in place to reduce these backlogs while ensuring a high-quality security clearance process.

Use of Funds Provided for the Defense Community Infrastructure Program

The committee believes the Defense Community Infrastructure Pilot Program (DCIP) authorized by section 2861 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115-232) can be a powerful tool for the long-term

sustainment and resiliency of defense installations. However, the committee is concerned that the Department of Defense has yet to issue a policy, guidance, or other documents regarding the use of this new authority.

Therefore, the committee directs the Under Secretary of Defense for Acquisition and Sustainment, in coordination with the Director of the Office of Economic Adjustment, to provide a report to the House Committee on Armed Services not later than February 1, 2020, on the Department's implementation of DCIP. The report should address how the DCIP program will be structured, policy guidance that has been issued for the management of the program, how projects will compete and be selected for funding, a description of projects that have been selected, and a timeline for the award and completion of such projects.

Utilization of Recycled Products in Military Clothing Items

The committee commends the Department of Defense on its most recent update to its internal instruction on the implementation of a sustainable procurement program for recycled content products. In line with the Department's internal instruction, and in the committee report accompanying the National Defense Authorization Act for Fiscal Year 2012 (S. Rept. 112–26), the Secretary of Defense was required to submit a report to the Committees on Armed Services of the Senate and the House of Representatives on the utilization of recycled products in military clothing items. That report cited four military clothing items made from recycled materials at the time, including the Protective Combat Uniform for the Special Forces, the Third Generation Extended Cold Weather Clothing System, Underwear, and the Army Fleece Jacket. Given the amount of clothing items in the Department of Defense and prevalence of recycled content products, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by March 1, 2020, on the feasibility of incorporating additional recycled content products into these clothing items and other environmental protection clothing items currently being utilized by service members.

Value of Energy and Logistics Informed Exercises

The committee notes that logistics play a critical role in the success of military operations. Unfortunately, logistics, specifically fuel and energy resource availability, are routinely “assumed out” of military exercises, diminishing the value of those opportunities to identify critical gaps in our logistics plan. Additionally, the Department of Defense can do more to protect logistics information from adversaries. Therefore the committee encourages the Department of Defense to conduct realistic war games and exercises that accurately reflect the potential threats and limitations of the joint logistics enterprise and encourages continued investment in its logistics enterprise as an enabler of power projection and sustainment operations against strategic competitors.

Women, Peace and Security Strategy in Military Training

The committee recognizes that the Women, Peace and Security Strategy Act of 2017 (Public Law 115–68) required that relevant

personnel receive training, as appropriate, in conflict prevention, peace processes, mitigation, resolution, and security initiatives that specifically addresses the importance of meaningful participation by women, gender considerations and meaningful participation by women, and effective strategies and best practices for ensuring meaningful participation by women. Therefore, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services, not later than March 1, 2020, on how the Department is complying with the requirements of Public Law 115–68 and how the required training is incorporated into pre-deployment training for units and military personnel deploying overseas.

OTHER MATTERS

Aircraft Noise Mitigation

The committee is concerned that decisions made by the military departments with respect to basing and operating military aircraft may have adverse noise impacts on the private property and municipal properties such as schools that are located in close proximity to military installations and auxiliary military airfields at which tactical aircraft are based and train. The committee is concerned that, while these impacts are considered during required environmental reviews and consultations, the military departments may not be taking sufficient action to mitigate the impacts identified during these reviews and consultations.

Therefore, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services not later than March 1, 2020, on the available programs and authorities to mitigate the effects of military aircraft noise on private residences, schools, and hospitals. The report should address specific programs and authorities that are available for such mitigations, the process used to provide for such mitigations, a list of military installations where such mitigations have been made to private residences or other entities outside the installation within the last 5 years, and a list of military installations where there are currently private residences or other entities being considered for such mitigations in the future.

Alternatives to Burn Pits

The Committee notes the Department's efforts to phase out the use of open burn pits for disposal of waste in contingency locations, unless there is no feasible alternative, and the May 31, 2019 report to Congress that indicated that "no technology or equipment solution has been devised that could eliminate all waste burning requirements for every contingency location." The Committee encourages the Department to accelerate RDT&E for technology or equipment solutions to eliminate the need for open burn pits and to establish a safe, cost-effective, long term solution for toxic waste disposal that can be used in any contingency environment. The Committee directs the Undersecretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services by February 1, 2020, on the Department's assessment of available alternatives to open burn pits, including any

commercially available solutions, RDT&E efforts to develop a feasible alternative for use in contingency environments, any resource constraints for acquisition of a technology or equipment solution to eliminate the need for open burn pits, and a plan of action and timeline for the projected transition to a new technology or equipment solution.

Aqueous Film Forming Foam Training

The committee notes that while there has been significant policy guidance issued from headquarters related to perfluorooctane sulfonate (PFOS) and perfluorooctanoic acid (PFOA), it is unclear whether there is adequate training of individuals who are in regular contact with aqueous film forming foam (AFFF) about the potential dangers associated with PFOS and PFOA. The committee encourages the military services to ensure that service members are aware of the potential hazards related to AFFF and are aware of best practices for its use, maintenance, and disposal.

Authorities Available to the Department of Defense for Tribal Mitigation

The committee notes that there are many situations in which military training or construction activities impact tribal lands, cultural properties, or tribal treaty rights. The committee further observes that consultation between the service action proponent and the impacted tribe is required by law. While consultation on these impacts often occurs in parallel to environmental planning under the National Environmental Policy Act (Public Law 91–190), impacts to tribes and the potential mitigation of those impacts goes beyond the scope of environmental mitigation. The committee notes that environmental authorities and funding mechanisms such as the Sikes Act (Public Law 86–797) are one tool for addressing these impacts, but should not limit the Department of Defense from using other authorities or mechanism to mitigate impacts.

The committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by January 31, 2020, on the authorities available to the Department and military services to address tribal mitigation and funding mechanisms for those mitigations. The report shall include analysis on whether the existence of a treaty with the United States changes the authorities available, and if so describe the differences.

Best Practices for Cleanup and Disposal of PFOS- and PFOA-Contaminated Groundwater, Soils, and Filters and Gaps That Require Further Study

The committee notes that the class of man-made chemicals known as per- and polyfluoroalkyl substances have presented particular challenges with respect to cleanup and disposal. The committee further notes that as the Department of Defense transitions from cutting off exposure to perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) to cleanup actions under the Comprehensive Environmental Response, Compensation, and Liability Act, the Department must conduct these actions in a manner that is effective in protecting human health and the environment.

The committee understands that further research and study are required to develop disposal methodologies beyond high-heat incineration, which is the only known way to dispose of PFOS- and PFOA-contaminated materials. The committee notes that this method of disposal presents concerns about whether the chemicals are adequately broken down and about the production of hydrogen fluorine gas as a by-product of that incineration.

Accordingly, the committee directs the Under Secretary of Defense for Acquisition and Sustainment to provide a briefing to the House Committee on Armed Services by November 1, 2019, on the Department's understanding of best practices for the cleanup and disposal of PFOS- and PFOA-contaminated soils, and disposal of spent filters and Aqueous Film Forming Foam. The briefing should include a discussion of current research on these chemicals being conducted by the Strategic Environmental Research and Development Program or Environmental Security Technology Certification Program and what areas require additional research.

Chase Aircraft at NASA Armstrong Flight Research Center

The Committee is increasingly concerned about the availability of chase aircraft at NASA Armstrong Flight Research Center, which provides total flight safety during developmental and operational tests of various experimental aircraft, to include the new generation of highly maneuverable Unmanned Aerial Vehicles (UAV). As a regular provider of direct support to Air Force and Navy test missions, the Committee believes the Center is critical to helping the U.S. military maintain its technological superiority. The Committee understands the Navy is unable to provide F/A-18F models to the Center due to fleet requirements, but remains concerned that without replacement chase planes, the Center will lose all capability to support the high transonic and supersonic research required by the majority of current and projected Department of Defense projects dedicated to maintaining national security. Accordingly, the Committee directs the Secretary of the Navy to submit a report to the House Committee on Armed Services, not later than 90 days after enactment of this Act, on the feasibility of transferring two low-time serviceable F/A-18, either D, E, or F models, to the NASA Armstrong Flight Research Center that do not jeopardize the operational needs of the Navy, nor are reaching the end of their useful life based on logistics supportability criteria and flying hours. The report should include:

- (1) The feasibility of transferring two F/A-18 aircraft to NASA;
- (2) The proposed timeline for delivery;
- (3) The minimum number of remaining flight hours of each aircraft to be transferred and their sustainability requirements; and,
- (4) The radar capabilities, centerline and wing station stores management system, and advanced targeting forward looking infrared equipment of such aircraft.

Climate Impacts on Installation Resiliency

The committee notes that section 335 of the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115-91) required the Department of Defense to report on the impacts of climate change to the Department. The committee notes that this re-

port was spurred by multiple statements by senior Department of Defense officials characterizing climate as a national security issue that would increase instability around the world. The committee further notes that the report was focused on facilitating effective preparation and planning to enhance military installation climate resiliency. To that end, the Department was required to submit a report that included the following:

- (1) a list of the 10 most vulnerable military installations within each service based on the effects of sea-level rise, flooding, drought, desertification, wildfires, and thawing permafrost;
- (2) an overview of the mitigations that may be necessary to increase installation resiliency; and
- (3) an estimate of the cost of these mitigations.

The committee notes that in January 2019, the Department submitted the report. While the committee commends the Department for unequivocally stating that the majority of its installations assessed in the report are vulnerable to climate and weather impacts, the committee is disappointed that the Department failed to adequately respond to the three requirements above. The deficiencies of this report are particularly acute in light of the extreme weather events that caused billions of dollars in damage to military installations in 2018. The committee notes that data suggests that new and renovated buildings that included extreme weather mitigation measures generally fared better during Hurricanes Florence and Michael, providing an unfortunate real-world illustration of the benefits of planning for military installation climate resiliency. These events have also provided data from which services can extrapolate an estimated cost for mitigation and create more accurate methodologies for setting facility standards.

To that end, the committee directs the Secretaries of the military departments each to provide a report to the House Committee on Armed Services by December 1, 2020, that shall include the following:

- (1) the total plant replacement value of each installation in the service's inventory;
- (2) the plant replacement value of buildings in the 100-year floodplain that have not been mitigated to address flood risk, by installation and State;
- (3) the plant replacement value of buildings with roofs that do not meet current building codes listed by installation and State;
- (4) the plant replacement value of buildings in coastal and hurricane-prone areas that are currently in a poor or failing condition, listed by installation and State;
- (5) a description of how the extreme weather events of 2018 have impacted the decision to continue to defer facility sustainment projects;
- (6) if the service's methodology has changed, a description of how it has changed; and
- (7) any additional investment as a percentage of plant replacement value that would be required to adequately address climate resiliency. If the Department has failed to meet the industry standard for investment in facilities of 2 percent of plant replacement value, the calculation shall include both the investment to achieve the industry standard, and any additional that would be required to address climate resiliency.

Defense Personal Property Program

The committee is aware that many military families have experienced poor service in the movement of their household goods during recent moving seasons. The movement of military families is a complex system, administered by U.S. Transportation Command (TRANSCOM) in coordination with the military services. The committee believes the Department of Defense's management of this system must improve and recognizes that TRANSCOM's proposed solution relies on the pending Global Household Goods Contract (GHC). Given the importance of the GHC and the large share of military moves in the domestic market, the committee believes that stakeholders must have adequate time to thoughtfully review and comment on the draft request for proposals (RFP). Accordingly, the committee encourages the commander of TRANSCOM to extend the comment period for the draft GHC RFP to allow at least 60 days for comments and delay the release of the final RFP until August 15, 2019. Finally, the committee directs the Secretaries of the military departments to provide a report to the House Committee on Armed Services by December 1, 2019, on the Secretaries' plans to improve installation-level relocation services to military families.

Feasibility of Using Non-Fluorinated Fire Fighting Foam in Training

The committee is aware of the adverse health impacts related to perfluorooctane sulfonate and perfluorooctanoic acid and believes the Department of Defense should minimize the use of these chemicals wherever possible. While the committee understands that certain emergency situations may still require use of these foams, the committee is concerned about the continued use of fluorinated fire-fighting foams for non-emergency purposes such as training. The committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by February 1, 2020, on the feasibility of using non-fluorinated foam for firefighter training. The report shall include cost estimates related to instituting the use of fluorine-free foams for training.

Health Impact to Service Members from Live-Fire Small Arms Training Ranges

The committee remains concerned that short- and long-term health impacts to service members are not adequately assessed when the Department of Defense considers technologies that would mitigate operational safety, environmental, and health concerns on live-fire small arms training ranges. These hazards include bullet ricochets, toxins from bullets and projectiles leeching into the natural water system, and hearing loss from excessive noise.

The committee remains concerned that the Department of Defense focuses too heavily on initial investment costs, which fails to recognize the long-term health impact to service members. The committee urges the Secretary of Defense and the Secretaries of the military departments to consider the totality of human, environmental, and equipment costs when assessing the best technologies available to mitigate environmental impacts and health impacts generated at live-fire small arms training ranges.

Information Processing Efficiency

The committee observes that the Department of Defense is inconsistent in application of modern web-based tools and urges all departmental organizations to migrate to more user-friendly systems. For that reason, the committee supports the Defense Logistics Agency (DLA) efforts to modernize its internal and external digital services. The committee believes the modernization effort with regard to forms and workflow will enable the DLA to improve its service and internal workflows. Therefore, the committee encourages the Department of Defense to expand this program, focusing on those requirements that have the most significant impact on mission enhancement and that most effectively modernize Department of Defense services. This effort should include modernizing forms, an overlooked ubiquitous inefficiency in information processing.

Kirtland Air Force Base Fuel Spill Remediation

The committee is aware of the efforts of the Air Force to clean up the extensive, years-long fuel spill at Kirtland Air Force Base, New Mexico, but the committee is concerned that the Air Force has not adequately engaged with local stakeholders on their plans and progress for remediation of the spill. Accordingly, the committee directs the Secretary of the Air Force to provide a report to the House Committee on Armed Services by December 1, 2019, on the environmental remediation of the fuel spill at Kirtland Air Force Base. The report shall contain a section on the progress made to remediate contaminated soil and groundwater, and detail the Air Force plans for fiscal year 2020 remediation actions. In addition, the report shall contain an engagement plan for coordination with the local water utility authority, applicable State environmental agencies, and surrounding communities on Air Force remediation activities.

Military Munitions Response Program (MMRP)

The committee notes that in 2014, DOD established goals to implement Interim Risk Management (IRM) at Formerly Used Defense Sites (FUDS) Military Munitions Response Program (MMRP) sites but the program has struggled to reach its goals. The committee further notes that the management challenges facing MMRP have been longstanding dating back to at least 2010, when the Government Accountability Office (GAO) issued a report which found that the Department had not established clear criteria for prioritizing its work or established clear performance goals for work done at FUDS. Most concerning, the GAO expressed concern about DOD recording sites as “complete” in cases where the Department took no action at the site, which could be misleading to the Committee and the public. Therefore, the committee directs the Comptroller General to conduct a review and provide a report to the House Armed Services Committee by June 1, 2020 that examines the following:

- (1) the management of the MMRP program including its staffing and funding levels,
- (2) progress DOD has made in cleaning up munitions response sites,

- (3) resources allocation across MMRP sites in the last 5 years;
- (4) program priorities for the next five years, and
- (5) MMRP protocols for communicating with stakeholders and the public.

National Guard Unit Equipped Flying Squadrons

The committee recognizes that the Air National Guard enterprise is based on established Capstone Principles that notionally set the foundational framework for mission allocation in the 54 states and territories. One of those Capstone Principles is to allocate at least one unit-equipped wing and flying squadron to each state. New Mexico is one of three states—New Mexico, Virginia, and Washington—that have an operational flying mission, but due to the classic associate construct they lack ownership of aircraft. The committee therefore directs the Secretary of the Air Force, in consultation with the Chief of the National Guard Bureau, to report back to the committee by December 15, 2019 to present additional options for achieving an operational flying mission in each state.

Reducing Costs Associated with Single-use Plastics

The Committee notes the growing costs associated with the recycling and disposal of single-use plastics, and particularly single-use plastic water bottles. The Committee directs the Assistant Secretary of Defense for Sustainment to provide a briefing to the House Committee on Armed Services by February 1, 2020, on efforts and opportunities to reduce expenditures on, and waste from, single-use plastics, with a focus on single-use plastic water bottles. The briefing should address—

- (1) Costs associated with the procurement and disposal of single-use plastics;
- (2) Current and planned efforts to reduce procurement and disposal of single-use plastics, and estimated cost and waste savings from such efforts, to include any public information campaigns; and
- (3) Additional opportunities to avoid costs and waste from single-use plastics, and estimated cost and waste savings from such efforts.

Removal of Unexploded Ordnance on Tribal Lands

The committee is concerned that unexploded ordnance endangers Indian Reservations. There are millions of acres of land previously used by Department of Defense that still contain unexploded ordnance. In many cases, these lands are on current Indian Reservations. Accordingly, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by February 1, 2020, on the state of unexploded ordnance on Indian Reservations, including:

- (1) a catalogue of lands on Indian Reservations which contain unexploded ordnance,
- (2) historical and current efforts to remove unexploded ordnance from these lands,
- (3) the estimated cost of finishing the removal of unexploded ordnance from Indian Reservations, and
- (4) the feasibility of entering into agreements with non-government entities through the Indian Incentive Program through the

Department of Defense to remove unexploded ordnance on Indian Reservations.

Report on Fiscal Impacts of Intergovernmental Service Agreements

The committee is aware that many military installations have entered into Intergovernmental Service Agreements (IGSA). These IGSA's allow the Department of Defense and State or Local Governments to provide, receive, or share installation support services. The committee is also aware that many of these IGSA's have resulted in millions of dollars in cost savings to DoD. The savings realized by these agreements are not returned to the installation that has used them to reduce costs. Therefore, the committee directs the Secretary of Defense to submit a report to the House Committee on Armed Services by December 31, 2019, on the actual cost savings realized by IGSA's, the feasibility of returning a portion of the savings realized from IGSA's back to the installations, and the overall fiscal impact to the services of IGSA's.

Report on Phytoremediation to Clear Heavy Metal Contaminants

The committee directs the Secretary of Defense to submit a report to Congress before May 1, 2020 on the use of plants that have hyperaccumulatory and phytoremediation capabilities to clear contaminants from or related to heavy metal contamination, including but not limited to arsenic, lead, mercury, copper, chromium, and nickel, and other related toxic areas, including for contaminants in soil, water, and air.

Report on the Feasibility and Cost of Net-Zero Greenhouse Emissions and Implementing H. Res. 109, the Green New Deal

The Committee acknowledges that renewable energy sources only account for approximately 17 percent of domestic energy production, with wind accounting for less than 7 percent and solar accounting for less than 2 percent. The Committee also notes the Green New Deal, H. Res. 109 in 116th Congress, purports to require the United States to achieve net-zero greenhouse gas emissions through a ten-year national mobilization. Some who support this course of action, namely the Green Party, recommend achieving the goals of the Green New Deal by cutting the military budget in half, returning all members of the Armed Forces who are deployed or stationed overseas to the United States, and closing all of the more than 800 United States military installations around the world. The Committee believes implementing the Green New Deal would be devastating to the military readiness of the United States and the ability of the Government of the United States to protect the homeland.

The Committee affirms energy security and diversity are vital to national security, and that it is in the Nation's best interest for the Department of Defense to maximize the use of renewable energy sources, and that an effort to achieve net-zero greenhouse gas emissions would have a negative effect on the preparedness of the Armed Forces.

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 within 180 days after the date of the en-

actment of this Act which provides the following: an assessment of the technical feasibility of the Department of Defense achieving net-zero greenhouse emissions by the date that is ten years after the date of the enactment of this Act; the cost of the Department of Defense achieving net-zero greenhouse emissions by the date that is ten years after the date of the enactment of this Act; an assessment of the effects the effort to achieve net-zero greenhouse emissions by the date that is ten years after the date of the enactment of this Act would have on the requirements for major service acquisition programs an assessment of the ability of the Department to implement the national defense strategy if required to achieve net-zero greenhouse emissions by the date that is ten years after the date of the enactment of this Act; how the implementation of the proposed Green New Deal would affect military readiness; the cost of closing all of the more than 800 overseas military installations; and how complying with the Green New Deal would affect the current threat environment and the ability of the Department of Defense to protect the homeland.

Survey to Locate and Identify the Remains of Native American Children Buried at Carlisle Barracks

The committee commends the Department of the Army for its work to identify, exhume, and return to their respective families the remains of Native American children buried at Carlisle Barracks, Pennsylvania. However, the committee notes that given the tragic legacy of Carlisle Indian Industrial School, more work is required. Accordingly, the committee directs the Secretary of the Army to provide a report to the House Committee on Armed Services by January 1, 2020, that provides a plan for conducting a comprehensive survey of the land at Carlisle Barracks for remains of Native American children and the repatriation of those children. The report shall include at a minimum information on how the Department can achieve the following:

(1) conducting a comprehensive survey of the cemetery and surrounding land at Carlisle Barracks to identify the number of whole sets of remains; the number of partial sets of remains; the location of the remains, including how the sets of remains match with existing headstones; and groups of remains containing two or more individuals;

(2) establishing a process to facilitate coordination with other relevant Federal agencies and tribes to ensure that the survey, exhumation, identification of remains and repatriation of remains, as appropriate and desired, to the family is handled in a culturally appropriate manner;

(3) establishing a process to work with tribes to determine the appropriate measures to be taken for remains of children whose family or relatives have not been found, including options for repatriating those remains to the appropriate tribe;

(4) establishing a process to work with tribes to determine what, if any, actions should be taken for remains that are unidentifiable; and

(5) working with tribes and relevant Federal agencies to establish other actions that can be taken to recognize the tragic history of the Carlisle Indian Industrial School at Carlisle Barracks.

Tijuana Sewage Runoff Impact to Readiness

The committee notes that sewage runoff from Tijuana can cause unhealthy conditions off the coast of southern California whose waters are routinely used for military training. When scheduled training corresponds with sewage spills or discharges, military personnel may be exposed to untreated sewage with consequences to their health. Accordingly, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by February 1, 2020, on the readiness impacts of Tijuana sewage runoff in waters adjacent to military installations. The briefing shall address whether spills, discharges, and debris in the Tijuana River have any impact on the national security interests of the United States. The briefing must also address what steps should be taken to resolve or mitigate the impacts from these releases. Further, the Secretary of the Navy shall make every effort to coordinate the briefing with the Department of State, the Environmental Protection Agency, the Department of Homeland Security (to include U.S. Customs and Border Patrol and the U.S. Coast Guard), the International Boundary and Water Commission, the Department of the Interior, San Diego County, and the San Diego Association of Governments.

Water Security under Sustainable Groundwater Management Act

The committee notes that the State of California enacted the Sustainable Groundwater Management Act (SGMA) in 2014. This California law requires communities whose groundwater resources are challenged to prepare and provide a Groundwater Sustainability Plan (GSP) by January 2020, for basins defined as medium- or high-priority. Under the law, medium- and high-priority basins must be managed consistently with their sustainable yield by 2040, though an extension is possible. The committee notes that three Navy installations are located in high-priority basins and that one Navy and three Air Force installations are located in medium-priority basins. These seven Department of Defense installations must work with their local communities in developing sustainable groundwater plans for their respective basins. The committee is concerned that the Department does not have a coordinated approach to meeting these new water sustainability requirements.

Therefore, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by October 1, 2019, that provides the Department's plan to address its response to the requirements of SGMA; a description of how the Navy and Air Force bases in California are working with local communities to achieve compliance with this law in a manner that does not impact the installation missions; the Department of Defense, Navy, and Air Force offices responsible for ensuring compliance; and the estimated cost of complying with the SGMA.

Water Usage Related to Landscaping

The committee understands that a significant percentage of the Department of Defense's water usage on installations goes to landscaping. Particularly in water constrained or arid environments, the Department should endeavor to mitigate its water use through practices such as use of non-potable or recycled water, use of native

or drought-resistant plants, and ground cover substitutes. The committee further notes that sustainable landscaping practices can provide significant cost avoidance through diminished water consumption.

Accordingly, the committee directs the Secretary of Defense to provide a report to the House Committee on Armed Services by March 1, 2020, on sustainable landscaping practices currently in use, practices that can be implemented to cut water consumption, a list of installations where 30 percent or more of water usage is for landscaping, and a plan for decreasing the percentage of water used for landscaping at these installations and other installations in water constrained geographical locations.

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—Timeline for Clearinghouse Review of Applications for Energy Projects That May Have an Adverse Impact on Military Operations and Readiness

This section would amend section 183a of title 10, United States Code, to allow the Military Aviation and Installation Assurance Clearinghouse 90 days to conduct its preliminary review of applications for an energy project.

Section 312—Authority to Make Final Finding on Designation of Geographic Area of Concern for Purposes of Energy Projects with Adverse Impacts on Military Operations and Readiness

This section would amend section 183a of title 10, United States Code, by changing the list of Department of Defense personnel who can make a final finding on the designation of a geographic area of concern.

Section 313—Authority to Accept Contributions of Funds from Applicants for Energy Projects for Mitigation of Impacts on Military Operations and Readiness

This section would amend section 183a of title 10, United States Code, to accept a voluntary contribution of funds from an applicant for an energy project.

Section 314—Department of Defense Improvement of Previously Conveyed Utility Systems Serving Military Installations

This section would amend section 2688 of title 10, United States Code, by authorizing the use of military construction funding to support improvements to the reliability, resiliency, efficiency, physical security, or cybersecurity of the conveyed utility system.

Section 315—Five-Year Authority for National Guard
Environmental Restoration Projects for Environmental Responses

This section would amend section 2707 of title 10, United States Code, to allow the Chief of the National Guard Bureau to access Defense Environmental Remediation Account funds for the limited purpose of addressing perfluorooctanoic acid and perfluorooctane sulfonate exposure and contamination resulting from National Guard activities in and around National Guard bases. This authority would sunset 5 years after the date of the enactment of this Act.

Section 316—Sale of Electricity from Alternate Energy and
Cogeneration Production Facilities

This section would amend section 2916(b)(3) of title 10, United States Code, to narrow the scope of recipients of funds generated from a geothermal energy resource located on a military installation.

Section 317—Transfer Authority for Funding of Study and Assessment on Health Implications of Per- and Polyfluoroalkyl Substances Contamination in Drinking Water by Agency for Toxic Substances and Disease Registry

This section would amend the National Defense Authorization Act for Fiscal Year 2018 (Public Law 115–91) by extending the transfer authority for funding the study and assessment on health implications of per- and polyfluoroalkyl substances contamination in drinking water by the Agency for Toxic Substances and Disease Registry.

Section 318—Replacement of Fluorinated Aqueous Film-Forming
Foam with Fluorine-Free Fire-Fighting Agent

This section would require the Secretary of the Navy to complete a military specification for a fluorine-free fire fighting agent to be used at all Department of Defense installations not later than January 2025. This provision would ban use of fluorinated foams on military installations by September 2029 or before such date, if possible.

Section 319—Prohibition of Uncontrolled Release of Fluorinated
Aqueous Film-Forming Foam at Military Installations

This section would require the Secretary of Defense to prohibit uncontrolled release of fluorinated Aqueous Film Forming Foam (AFFF) at military installations except in cases of emergency response and limited non-emergency use for training or testing of equipment where complete containment, capture, and proper disposal mechanisms are in place to ensure no AFFF is released into the environment.

Section 320—Prohibition on Use of Fluorinated Aqueous Film
Forming Foam for Training Exercises

This section would prohibit the use of fluorinated aqueous film forming foam for training exercises at military installations.

Section 321—Real-Time Noise-Monitoring Study at Navy and Air Force Installations where Tactical Fighter Aircraft Operate

This section would require the Secretary of the Navy and Secretary of the Air Force to conduct real-time noise monitoring at no fewer than three installations per military department where tactical fighter aircraft operate regularly and noise contours have been developed through noise modeling. The purpose of this monitoring would be to assess the validity of the noise contours developed through virtual analysis and modeling at those installations. In addition, this section would require the Secretary of the Navy and the Secretary of the Air Force to submit a report to the House Committee on Armed Services on the results of the noise monitoring study.

Section 322—Development of Climate Vulnerability and Risk Assessment Tool

This section would direct the Secretary of Defense to develop a climate vulnerability and risk assessment tool to assist in providing standardized risk calculations of climate-related impacts to military facilities and capabilities.

Section 323—Provision of Uncontaminated Water for Agricultural Use on Land Contaminated by PFOS and PFOA Used on Military Installations

This section would authorize the Department of Defense to provide water or water treatment for perfluorooctanesulfonic acid (PFOS) or perfluorooctanoic acid (PFOA) contaminated agricultural water.

SUBTITLE C—LOGISTICS AND SUSTAINMENT

Section 331—Material Readiness Metrics and Objectives

This section would add a new section to chapter 2 of title 10, United States Code, and would require the Secretary of Defense to develop material readiness metrics that would support the National Defense Strategy by requiring product support managers to develop product support strategies to meet material readiness objectives for major weapon systems.

Section 332—Clarification of Authority regarding Use of Working Capital Funds for Unspecified Minor Military Construction Projects Related to Revitalization and Recapitalization of Defense Industrial Base Facilities

This section would amend section 2208(u)(2) of title 10, United States Code, to clarify authority regarding use of working capital funds for unspecified minor military construction projects related to defense industrial base facilities.

Section 333—F-35 Joint Strike Fighter Sustainment

This section would require the Under Secretary of Defense for Acquisition and Sustainment to submit a report on steps being taken to improve the availability and accountability of F-35 parts within the supply chain. In addition, this section would limit funds

available to the Under Secretary until such time as the report is delivered.

Section 334—Report on Strategic Policy for Prepositioned Materiel and Equipment

This section would require the Assistant Secretary of Defense for Sustainment, in coordination with the Joint Staff, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives by March 1, 2020, on the implementation plan for prepositioned materiel and equipment as required by section 321 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113–66).

Section 335—Limitation on Use of Funds for Implementation of Elements of Master Plan for Redevelopment of Former Ship Repair Facility in Guam

This section would continue the limitations established by section 325 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) on expending Department of the Navy funds to modify the Former Ship Repair Facility in Guam except in certain circumstances through fiscal year 2020.

SUBTITLE D—REPORTS

Section 341—Readiness Reporting

This section would amend sections 117 and 482 of title 10, United States Code, to modify the delivery method, timeline, and required elements of the Quarterly Readiness Report to Congress and the Joint Forces Readiness Review.

Section 342—Extension of Deadline for Transition from Service-Specific Defense Readiness Reporting Systems

This section would amend section 358 of the John S. McCain National Defense Authorization Act for Fiscal Year 2019 (Public Law 115–232) to allow the military services to complete the transition to the Defense Readiness Reporting Systems-Strategic by October 1, 2020.

Section 343—Report on Navy Ship Depot Maintenance Budget

This section would require the Secretary of the Navy to submit reports for fiscal years 2021, 2022, and 2023 that provide additional information related to ship and submarine depot maintenance.

Section 344—Report on Runit Dome

This section would require the Secretary of Energy, in coordination with the Administrator of the Environmental Protection Agency and Secretary of Defense, to submit a report on the status of the Runit Dome in the Marshall Islands.

SUBTITLE E—OTHER MATTERS

Section 351—Inclusion of Over-the-Horizon Radars in Early Outreach Procedures

This section would amend section 183a(c)(6) of title 10, United States Code, to include over-the-horizon radar in the coverage of early outreach procedures issues by the Military Aviation and Installation Assurance Siting Clearinghouse.

Section 352—Extension of Authority for Secretary of Defense to Use Department of Defense Reimbursement Rate for Transportation Services Provided to Certain Non-Department of Defense Entities

This section would amend section 2642 of title 10, United States Code, to extend the date that the Secretary of Defense may use the Department of Defense reimbursement rate for military transportation services provided to certain non-Department of Defense entities until October 1, 2024.

Section 353—Expanded Transfer and Adoption of Military Animals

This section would amend section 2583 of title 10, United States Code, to allow for the transfer and adoption of Department of Defense-owned mules and donkeys and provide consistency for use of the word “transfer.”

Section 354—Extension of Authority of Secretary of Transportation to Issue Non-Premium Aviation Insurance

This section would amend section 44310 of title 49, United States Code, to extend the authority of the Secretary of Transportation to issue non-premium aviation insurance until September 30, 2023.

Section 355—Defense Personal Property Program

This section would require the Commander of U.S. Transportation Command (TRANSCOM) to prepare a business case analysis for the proposed award of a Global Household Goods Contract (GHC) for the Defense Personal Property Program. In addition, this section would require that the Secretary of Defense establish an advisory council of outside stakeholders to provide feedback throughout contract execution and advice on recommended modifications to the contract, and would require the council to submit quarterly reports to the congressional defense committees on its activities. This section would also withhold funding for the single move manager contract until 30 days after the Commander of TRANSCOM has provided a briefing to the congressional defense committees on the business case analysis and proposed advisory council.

Section 356—Public Events about Red Hill Bulk Fuel Storage Facility

This section would require the Department of the Navy to hold quarterly events open to the public which provide information and updates on the Red Hill Bulk Fuel Storage Facility.

Section 357—Sense of Congress regarding Innovative Readiness Training Program

This section would express the sense of Congress on the importance of Innovative Readiness Training, particularly to non-contiguous States and territories.

Section 358—Pilot Program on Reduction of Effects of Military Aviation Noise on Private Residences

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 impacted by aviation noise from military installations.