

TITLE III—OPERATION AND MAINTENANCE

Subtitle A—Authorization of Appropriations

Authorization of appropriations (sec. 301)

The committee recommends a provision that would authorize the appropriations for operation and maintenance activities at the levels identified in section 4301 of division D of this Act.

Subtitle B—Energy and the Environment

Modified reporting requirement related to installations energy management (sec. 302)

The committee recommends a provision that would amend subsection (a) of section 2925 of title 10, United States Code, by significantly reducing the contents of the Department of Defense's Annual Energy Management Report.

Additionally, the committee clarifies that the intent for reporting of all commercial utility outages caused by threats and hazards should include all four categories of utility service: electrical, potable water, wastewater, and natural gas. Accordingly, the committee believes the Department should appropriately revise the data collection template's instructions to capture such disruptions and outages.

Report on efforts to reduce high energy cost at military installations (sec. 303)

The committee recommends a provision that would require the Under Secretary of Defense for Acquisition, Technology, and Logistics, in consultation with the assistant secretaries responsible for energy installations and environment for the military services and the Defense Logistics Agency, to conduct an assessment of the efforts to achieve cost savings at military installations with high energy costs.

Utility data management for military facilities (sec. 304)

The committee recommends a provision that recognizes the importance of energy management for improving resiliency and achieving the Department of Defense's Federal energy reduction goals. Therefore, to reduce energy costs, the committee directs the Department of Defense, in consultation with the Department of Energy, to develop a pilot program to investigate the utilization of utility data management services to perform utility bill aggregation, analysis, third-party payment, storage and distribution.

Of the amounts to be appropriated for Operation and Maintenance, Navy for SAG BSIT, Enterprise Information, the Secretary of Defense is authorized to transfer funds for the purposes of the pilot program.

Linear LED lamps (sec. 305)

The committee recommends a provision that would amend section 2–4.1.1.2 of the Department of Defense’s Unified Facilities Criteria to allow linear light emitting diode lamps for facilities and installation retrofits. The committee notes that these fixtures may consume less energy, improve safety, realize life-cycle cost savings, and provide a return on investment.

Subtitle C—Logistics and Sustainment

Deployment prioritization and readiness of Army units (sec. 311)

The committee recommends a provision, as requested by the Department of Defense, that would amend chapter 1003 of title 10, United States Code, and would revise the Army’s deployability rating system and the manner in which the Army is required to track prioritization of deployable units.

The committee notes this provision would require the Secretary of the Army to maintain a readiness rating system for units of all components of the Army that provides an accurate assessment of the deployability of a unit and those shortfalls of a unit that require additional resources.

Revision of guidance related to corrosion control and prevention executives (sec. 312)

The committee recommends a provision that would require the Undersecretary of Defense for Acquisition, Technology, and Logistics, in coordination with the Director of Corrosion Policy and Oversight, to revise the corrosion-related guidance to clearly define specific roles of the corrosion control and prevention executives of the military departments.

Repair, recapitalization, and certification of dry docks at Naval shipyards (sec. 313)

The committee recommends a provision that would allow savings derived from foreign currency fluctuations to be made available for the repair, recapitalization, and certification of dry docks at Naval Shipyards.

Subtitle D—Reports

Modifications to Quarterly Readiness Report to Congress (sec. 321)

The committee recommends a provision that would amend section 482 of title 10, United States Code, to further streamline the Quarterly Readiness Report to Congress (QRRC).

The committee remains very concerned that the QRRC’s delivery to Congress lacks timeliness, remains hampered by parallel processes, and contains overlapping assessments which are then collec-

tively hindered by unnecessarily prolonged approval processes within the Department of Defense.

Accordingly, the committee directs the Department to separate and alternate semi-annual assessments with semi-annual reports on remedial actions and recovery models in the next QRRC. The committee also strongly urges the Department to remove the senior readiness fora summaries in Annex A in order to avoid duplication. Additionally, the committee directs the Department to reduce duplication of the content currently provided in Annexes B and C of the QRRC, to the maximum extent practicable.

The committee remains unsatisfied with the content reported in Annex F—Risk assessment of dependence on contractor support—as required by section 482(g) of title 10 United States Code. The committee strongly urges the Department to significantly improve the reporting quality in the next iteration of the QRRC.

Lastly, because the content of Annex G—Cannibalization rates report—is unclassified, the provision would require the Department to provide Annex G to the congressional defense committees in a separate unclassified report containing the information collected pursuant to section 117(c)(7) of title 10, United States Code.

Report on HH-60G sustainment and Combat Rescue Helicopter (CRH) program (sec. 322)

The committee recommends a provision that would require the Secretary of Defense to submit to the congressional defense committees that sets forth a plan to modernize, sustain training, and provide depot maintenance for all components of the HH-60 helicopter fleet.

Subtitle E—Other Matters

Repurposing and reuse of surplus military firearms (sec. 331)

The committee recommends a provision that would transfer excess firearms to Rock Island Arsenal to be repurposed for military use as determined by the Secretary of the Army.

Additionally, the provision would allow for the transfer of M-1 Garand rifles and caliber .22 rimfire rifles currently in the Navy and Marine Corps inventory at Defense Distribution Center, Annis-ton, or Naval Surface Warfare Center, Crane to be used as awards for competitors in marksmanship competitions that are held by the Navy or the Marine Corps.

Limitation on development and fielding of new camouflage and utility uniforms (sec. 332)

The committee recommends a provision that would prohibit the obligation or expenditure of funds for the development or fielding of new camouflage or utility uniforms or families of uniforms until one year after the Secretary of Defense notifies the congressional defense committees.

The committee notes that the Joint Clothing and Textiles Governance Board that is charged with developing policies related to combat uniforms has only met four times since 2010. The committee remains concerned that a lack of guidance has led to confu-

sion amongst the services with how to ensure the best technology is integrated into all uniforms while maintaining compliance with existing Department of Defense policies. The committee understands that different operational environments will require different materials to provide protection from different threats.

Hazard assessments related to new construction of obstructions on military installations (sec. 333)

The committee recommends a provision that would amend Section 358 of the National Defense Authorization Act for fiscal year 2011 (Public Law 111–383) to ensure that due diligence and proper assessment is given so energy projects do not interfere with operational training of the military services.

Plan for modernized Air Force dedicated adversary air training enterprise (sec. 334)

The committee recommends a provision that would direct the Chief of Staff of the Air Force to submit to the Committees on Armed Services of the Senate and the House of Representatives, not later than March 3, 2017, a resource ready and executable plan for developing and emplacing a modernized dedicated adversary air training enterprise to support the full spectrum air combat readiness of the United States Air Force.

The committee is concerned that although the Air Force has not been seriously challenged by an adversary that has caused significant friendly losses in air warfare for over four decades, technological advances, increased defense spending, and more aggressive military posturing by contemporary potential adversaries bring that concern back to the forefront. The Air Force’s experience over Southeast Asia during the Vietnam conflict catalyzed a wholesale change in strategy, doctrine, and training, but not before suffering significant losses at the hands of an enemy initially perceived as substantially less capable.

The committee recalls that in response to this undesirable circumstance, the Air Force emplaced a robust training regimen of advanced dissimilar air combat training, large force employment exercises such as RED FLAG and COPE THUNDER, and perhaps most importantly, an institutional commitment to fielding a dedicated air adversary training capability in the form of a full fighter wing equivalent of 72 aircraft in aggressor adversary air training units. This training capability remained in place from the early 1970s until the end of the 1980s, when defense budget pressures drove a 92 percent reduction in dedicated adversary air training assets from their peak level.

The committee believes these dedicated adversary air training assets undoubtedly contributed to the eventual defeat of the Union of Soviet Socialist Republics, and also played a significant part in training Air Force units who subsequently dominated Saddam Hussein’s air force in the first Gulf War. However, 25 years of continuous combat operations, divestment of over 60 percent of combat aircraft squadrons, and constantly declining defense budgets have combined with resurgent and emergent nation-state threats to necessitate a reexamination of how the Air Force will maximize train-

ing and readiness as necessary pillars of its fifth generation-enabled force into the future.

Independent study to review and assess the effectiveness of the Air Force Ready Aircrew Program (sec. 335)

The committee recommends a provision that would direct the Secretary of the Air Force to commission an independent review and assessment of the assumptions underlying the Air Force's annual continuation training requirements, and the efficacy of the overall Ready Aircrew Program in the management of Air Force's aircrew training requirements. The provision would also direct the Comptroller General of the United States to assess the matters contained in the Secretary's report on the independent review and assessment.

The Air Force has raised concerns regarding training shortfalls for both fourth and fifth generation combat aircraft aircrews against the annual continuation training requirements established in their Ready Aircrew Program (RAP). RAP defines the required individual training events, proficiency levels, and the appropriate mix and quantities of live training sorties and simulator missions for combat air forces. A number of factors have contributed to existing training shortfalls, including operations tempo, maintenance personnel levels, aging aircraft, limited and obsolete range infrastructure, and nonavailability of training support assets, such as dedicated adversary air training aircraft, among other factors. Additionally, the Air Force's reduced number of combat squadrons, and the reduced numbers of primary assigned aircraft to most of the remaining squadrons, combine to provide fewer cockpit positions to absorb and train new pilots to experienced proficiency levels. Finally, ongoing combat operations, the future fielding of large numbers of F-35As, and a potential A-10 fleet divestment further exacerbate these training challenges.

The committee is also concerned with assumptions underlying the annual training requirements that have not been adjusted in recent years to ensure that aircrews are training for the full range of core Air Force missions. For example, the Air Force has historically established annual training requirements for experienced or inexperienced aircrews based on whether a combat aircrew has achieved 500 flying hours in a primary aircraft. However, some new aircrew personnel can quickly meet the experienced flying hour level through operational deployments, even though the type of deployed flying operations may not represent the required experience across the full range of core missions.

Mitigation of risks posed by certain window coverings with accessible cords in military housing units in which children reside (sec. 336)

The committee recommends a provision that would direct the Secretary of Defense to remove and replace window coverings with accessible cords from military housing units in which children under the age of 9 reside and require housing contractors to phase out window coverings with accessible cords.

Tactical explosive detection dogs (sec. 337)

The committee recommends a provision that would amend section 2583 of title 10, United States Code, to require all new contracts involving tactical explosive detection dogs (TEDD) to include a provision that would transfer the TEDD to the 341st Training Squadron after the end of their useful service life and reclassify them as military animals to follow the adoption procedures set forth by section 2583.

STARBASE Program (sec. 338)

The committee recommends a provision that would continue funding for the STARBASE Program by up to \$25.0 million for SAG 4GT3 Civil Military Programs in Operation and Maintenance, Defense-Wide for fiscal year 2017. The committee believes the STARBASE Program is a highly effective program that improves the knowledge and skills of students in kindergarten through 12th grades in science, technology, engineering, and mathematics.

Access to Department of Defense Installations for drivers of vehicles of online transportation network companies (sec. 339)

The committee recommends a provision that would require the secretary of defense to establish policies, terms, and conditions under which online transportation networks and their drivers shall be permitted access to military installations to serve base personnel.

Women's military service memorials and museums (sec. 340)

The committee recommends a provision that would authorize the Secretary of Defense to provide not more than \$5.0 million for the acquisition, installation, and maintenance of exhibits, facilities, historical displays, and programs at military service memorials and museums that highlight the role of women in the military.

The committee notes that a funding offset of \$5.0 million is derived from the Army's plan to accelerate the opening of another museum from fiscal year 2022 to fiscal year 2019. Accordingly, the committee recommends a decrease of \$5.0 million to SAG 435 Other Service Support within the Operations and Maintenance, Army budget request.

Budget Items**Army, Army Reserve, and Army National Guard readiness unfunded priorities increases**

The budget request included \$33.8 billion in Operation and Maintenance, Army (OMA), of which \$791.5 million was for SAG 111 Maneuver Units, \$1.3 billion was for SAG 116 Aviation Assets, \$1.0 billion was for SAG 123 Land Forces Depot Maintenance, \$336.3 million was for SAG 211 Strategic Mobility, \$902.8 million was for SAG 322 Flight Training, and \$778.7 million was for SAG 423 Logistics Support Activities.

The budget request also included \$2.6 billion in Operation and Maintenance, Army Reserve (OMAR), of which \$491.7 million was for SAG 113 Echelons Above Brigade and \$347.4 million was for

SAG 121 Force Readiness Operations Support. The budget request also included \$6.8 billion for Operation and Maintenance, Army National Guard (OMARNG), of which \$708.2 million was for SAG 111 Maneuver Units, \$37.1 million was for SAG 121 Force Readiness Operations Support, and \$219.9 million for SAG 123 Land Forces Depot Maintenance.

The committee notes that, within the Army's unfunded priorities list, the Chief of Staff of the Army has identified specific amounts in these readiness accounts that could help accelerate readiness recovery. The committee notes that these recommended increases will help restore the Army Prepositioned Stock Sustainment (APS) program in support of the European Reassurance Initiative and increase throughput for depot work. Additionally, this increase will help defray lodging costs for enlisted soldiers who sometimes must travel hundreds of miles for reserve duty. Lastly, the Chief of Staff of the Army testified before the committee that home station training for the Army National Guard to prepare for additional Combat Training Center rotations was one of his top unfunded readiness priorities.

Accordingly, the committee recommends the following increases: \$50.0 million for SAG 111 Maneuver Units; \$68.0 million was for SAG 116 Aviation Assets; \$19.4 million for SAG 123 Land Forces Depot Maintenance; \$25.0 million for SAG 211 Strategic Mobility for APS; \$36.6 million for SAG 322 Flight Training; and \$4.0 million for SAG 423 Logistics Support Activities in OMA; \$46.0 million for SAG 113 Echelons Above Brigade for Lodging in Kind and Home Station Training and \$0.3 million for Force Readiness Operations Support for range improvements in OMAR; and \$70.0 million for SAG 111 Maneuver Units for Home Station Training; \$2.4 million for SAG 121 Land Forces Operations Support; and \$54.6 million for SAG 123 Land Forces Depot Maintenance in OMARNG.

Facilities, Sustainment, Restoration, and Modernization increases

The budget request included \$33.8 billion in Operation and Maintenance, Army (OMA), of which \$2.2 billion was for SAG 132 Facilities, Sustainment, Restoration & Modernization. The budget request also included \$2.7 billion in Operation and Maintenance, Army Reserve (OMAR), of which \$214.9 million was for SAG 132 Facilities, Sustainment, Restoration & Modernization. The budget request also included \$6.8 billion in Operation and Maintenance, Army National Guard (OMARNG), of which \$676.4 million was for SAG 132 Facilities, Sustainment, Restoration & Modernization.

The budget request included \$39.4 billion in Operation and Maintenance, Navy (OMN), of which \$1.6 billion was for SAG BSM1 Sustainment, Restoration and Modernization. The budget request also included \$927.6 million in Operation and Maintenance, Navy Reserve (OMNR), of which \$27.5 million was for SAG BSMR Sustainment, Restoration and Modernization.

The budget request included \$5.9 billion in Operation and Maintenance, Marine Corps (OMMC), of which \$632.6 million was for SAG BSM1 Sustain, Restoration, & Modernization. The budget request also included \$270.6 million in Operation and Maintenance,

Marine Corps Reserve (OMMCR), of which \$25.4 million was for SAG BSM1 Sustain, Restoration and Modernization.

The budget request included \$37.5 billion in Operation and Maintenance, Air Force (OMAF), of which \$1.6 billion was for SAG 011R Facilities Sustainment, Restoration & Modernization. The budget request also included \$3.1 billion in Operation and Maintenance, Air Force Reserve(OMAFR), of which \$113.4 million was for SAG 011R Facilities Sustainment, Restoration & Modernization. The budget request also included \$6.7 billion in Operation and Maintenance, Air National Guard (OMANG), of which \$245.8 million was for SAG 011R Facilities Sustainment, Restoration & Modernization.

The committee notes that throughout all unfunded requirement lists provided by the individual services, Facilities Sustainment, Restoration & Modernization (FSRM) remained a shortfall for every service. The committee believes FSRM funding is crucial to rebuilding and maintaining readiness.

Accordingly, the committee recommends the following increases: \$354.4 million in OMA for SAG 132 Facilities, Sustainment, Restoration & Modernization; \$21.5 million in OMAR for SAG 132 Facilities, Sustainment, Restoration & Modernization; \$32.1 million in OMARNG for SAG 132 Facilities, Sustainment, Restoration & Modernization; \$160.9 million in OMN for SAG BSM1 Sustainment, Restoration and Modernization; \$5.8 million in OMNR for SAG BSMR Sustainment, Restoration and Modernization; \$39.3 million in OMMC for SAG BSM1 Sustain, Restoration, & Modernization; \$5.5 million in OMMCR for SAG BSM1 Sustain, Restoration and Modernization; \$157.7 million in OMAF for SAG 011R Facilities Sustainment, Restoration & Modernization; \$11.7 million in OMAFR for SAG 011R Facilities Sustainment, Restoration & Modernization; \$14.0 million in OMANG for SAG 011R Facilities Sustainment, Restoration & Modernization.

Army advertising reduction

The budget request included \$33.8 billion in Operation and Maintenance, Army (OMA), of which \$550.6 million was for SAG 331 Recruiting and Advertising.

The committee understands that within the Recruiting and Advertising request was an increase of \$50.8 million, or 27 percent of the budget request, to fund additional marketing and advertising efforts. The committee also understands that the National Commission on the Future of the Army recommended that Congress authorize, and that the Secretary of the Army direct the consolidation of marketing functions under the authority of the Army Marketing Research Group to ensure unity of effort across all three Army components: Regular Army, Army Reserve and Army National Guard. The committee believes the budget request is not in line with that recommendation and believes these funds can be better aligned for other readiness priorities.

Accordingly, the committee recommends a decrease of \$35.0 million in OMA to SAG 331 Recruiting and Advertising.

Army museum reduction

The budget request included \$33.8 billion in Operation and Maintenance, Army (OMA), of which \$1.1 billion million was for SAG 435 Other Service Support.

The committee understands that within the Other Service Support request was an increase of \$29.5 million to accelerate the opening date for the National Museum of the U.S. Army from fiscal year 2022 to fiscal year 2019. The committee notes that the Army has consistently stated that readiness is the service's number one priority. The committee agrees with that statement and believes these funds should be realigned to support higher priority readiness requirements.

Accordingly, the committee recommends a decrease of \$29.5 million in OMA to SAG 435 Other Service Support.

United States Southern Command unfunded priorities increase

The budget request included \$33.8 billion in Operation and Maintenance, Army (OMA), of which \$441.1 million was for SAG 138 Combatant Commands Direct Mission Support.

The committee notes that United States Southern Command (SOUTHCOM) identified intelligence, surveillance, and reconnaissance as an unfunded priority.

Accordingly, the committee recommends an increase in OMA of \$6.7 million for SAG 138 Combatant Commands Direct Mission Support for SOUTHCOM airborne intelligence, surveillance, and reconnaissance.

Printing reductions to active service components and defense-wide

The budget request included \$33.8 billion in Operation and Maintenance, Army (OMA), \$39.4 billion for Operation and Maintenance, Navy (OMN), \$5.9 billion for Operation and Maintenance, Marine Corps (OMMC), \$37.5 billion for Operation and Maintenance, Air Force (OMAF), and \$32.5 billion for Operation and Maintenance, Defense-Wide (OMDW).

The committee notes that readiness is a top priority of the services and the Department of Defense. The committee notes the printing budget for active service components as follows: (1) Army \$228.8 million, (2) Navy \$48.6 million, (3) Marine Corps \$95.5 million, (4) Air Force \$59.6 million, and (5) defense-wide \$9.1 million. The committee believes that the printing budget for the active service components is excessive and portions should be realigned to fund unfunded requirements as requested by the Service Chiefs.

Accordingly, the committee recommends an undistributed reduction to the following: \$34.3 million to OMA, \$7.3 million to OMN, \$14.3 million to OMMC, \$8.9 million to OMAF, and \$1.4 million to OMDW.

Distributed Common Ground System-Army

The budget request included \$33.8 billion for Operation and Maintenance, Army (OMA), of which \$126.9 million was for the Distributed Common Ground Station-Army (DCGS-A).

The committee is aware that the DCGS is a multi-service program that is intended to provide a family of fixed and deployable multi-source ground processing systems that support a range of Air Force, Navy, Marine Corps, and Army intelligence, surveillance, and reconnaissance systems.

The committee notes that DCGS-A is operationally suitable and effective when operating from fixed sites and providing direct support to operational and strategic forces. However, the committee also notes that DCGS-A is not suitable or effective in providing a reliable capability to tactical forces operating in the field. Army Brigade Combat Teams and battalions are required to improvise to overcome unreliable hardware and complex software. Operator knowledge and proficiency is low because of this complexity and unit readiness is negatively impacted.

The committee notes that since 2007 total program cost of DCGS-A has been in excess of \$3.0 billion. Costs to complete the program are estimated to be in excess of an additional \$7.0 billion.

Accordingly, the committee recommends an undistributed decrease in OMA of \$63.0 million for DCGS-A.

Foreign currency fluctuations

The budget request included \$33.8 billion for Operation and Maintenance, Army (OMA), \$39.5 billion for Operation and Maintenance, Navy (OMN), \$6.0 billion for Operation and Maintenance, Marine Corps (OMMC), \$37.5 billion for Operation and Maintenance, Air Force (OMAF), and \$32.6 billion for Operation and Maintenance, Defense-wide (OMDW).

The committee believes that when foreign currency fluctuation (FCF) rates are determined by the Department of Defense, the balance of the FCF funds should be considered, particularly if the balance is close to the cap of \$970.0 million. The Government Accountability Office (GAO) has informed the committee that as of March 2016, the Department does not plan to transfer in any prior year unobligated balances to replenish the account for fiscal year 2016. GAO analysis projects that the Department will experience a net gain in fiscal year 2017 due to favorable foreign exchange rates.

Accordingly, the committee recommends a decrease of: \$59.2 million to OMA, \$14.6 million to OMN, \$2.9 million to OMMC, \$33.5 million to OMAF, and \$10.6 million to OMDW for FCF.

Bulk fuel savings

The budget request included \$33.8 billion for Operation and Maintenance, Army (OMA), \$39.5 billion for Operation and Maintenance, Navy (OMN), \$6.0 billion for Operation and Maintenance, Marine Corps (OMMC), \$37.5 billion for Operation and Maintenance, Air Force (OMAF), and \$32.6 billion for Operation and Maintenance, Defense-wide (OMDW).

The committee understands that as of March 2015, the Department has overstated its projected bulk fuel costs for fiscal year 2017.

Accordingly, the committee recommends the following decreases: \$123.3 million to OMA, \$238.4 million to OMN, \$24.7 million for OMMC, \$394.6 million to OMAF, and \$41.1 million to OMDW for bulk fuel savings.

Army National Guard psychological health increase

The budget request included \$6.8 billion in Operation and Maintenance, Army National Guard (OMARNG), of which \$245.0 million was for SAG 434 Other Personnel Support.

The committee understands that within this request was \$7.4 million for 69 Director of Psychological Health (DPH) positions within the Army National Guard. This level of funding is insufficient to cover the full validated requirement of 157 DPH positions. The committee notes that the Army National Guard has one of the highest rates of suicides in the military and that over 60 percent of those suicides were soldiers who never deployed and are not eligible for behavioral healthcare provided by the Department of Veterans Affairs. For these members of the Army National Guard, the DPH can administer on-site screening, counseling and referral to community resources when needed.

Accordingly, the committee recommends an increase in OMARNG of \$9.5 million to SAG 434 Other Personnel Support.

Army National Guard underexecution reduction

The budget request included \$6.8 billion in Operation and Maintenance, Army National Guard (OMARNG), of which \$245.0 million was for SAG 434 Other Personnel Support.

Based on analysis by the Government Accountability Office, the committee understands this subactivity group has historically underexecuted its appropriated funding.

Accordingly, the committee recommends a decrease in OMARNG of \$5.0 million for SAG 434 Other Personnel Support.

Navy readiness unfunded priorities increases

The budget request included \$39.4 billion for Operation and Maintenance, Navy (OMN), of which \$1.0 billion was for SAG 1A5A Aircraft Depot Maintenance, \$564.7 million was for SAG 1A9A Aviation Logistics, and \$0.0 million was for SAG 4B2E Environmental Programs.

The committee notes that, within the Navy's unfunded priorities list, the Chief of Naval Operations has identified specific amounts in these readiness accounts that could help accelerate readiness recovery. The committee notes that these recommended increases will increase aviation depot maintenance and E-6B and F-35 sustainment capabilities. The committee further notes that these recommended increased will help crucial environmental restoration.

Accordingly, the committee recommends the following increases in OMN: \$34.0 million for SAG 1A5A Aircraft Depot Maintenance, \$16.0 million for SAG 1A9A Aviation Logistics, and \$18.0 million for SAG 4B2E Environmental Programs.

Navy enterprise information reduction

The budget request included \$39.4 billion in Operation and Maintenance, Navy (OMN), of which \$790.7 million was for SAG BSIT Enterprise Information.

Based on analysis by the Government Accountability Office, the committee understands this subactivity group has historically underexecuted its appropriated funding.

Accordingly, the committee recommends a decrease of \$54.3 million to SAG BSIT Enterprise Information due to low execution in prior years.

United States Southern Command unfunded priorities increase in security programs

The budget request included \$33.8 billion in Operation and Maintenance, Army (OMA), of which \$1.1 billion was for SAG 411 Security Programs.

The committee notes that United States Southern Command (SOUTHCOM) identified intelligence, surveillance, and reconnaissance as an unfunded priority.

Accordingly, the committee recommends an increase in OMA of \$6.0 million for SAG 411 Security Programs for SOUTHCOM airborne intelligence, surveillance, and reconnaissance.

Naval History and Heritage Command reduction

The budget request included \$39.4 billion for Operation and Maintenance, Navy (OMN) of which \$285.9 million was for SAG 4A5M Other Personnel Support.

The committee understands that within this request was \$10.0 million for an increase to the Naval History and Heritage Command. The committee believes these funds can be better aligned for other readiness priorities.

Accordingly, the committee recommends a decrease of \$4.0 million to OMN for SAG 4A5M Other Personnel Support.

Marine Corps readiness unfunded priorities increases

The budget request included \$5.9 billion for Operation and Maintenance, Marine Corps (OMMC) of which \$674.6 million was for SAG 1A1A Operational Forces, \$947.4 million was for SAG 1A2A Field Logistics, \$206.7 million was for SAG 1A3A Depot Maintenance, \$632.6 million was for SAG BSM1 Sustain, Restoration & Modernization. The budget request also included \$39.4 billion for Operation and Maintenance, Navy (OMN), of which \$564.7 million was for SAG 1A9A Aviation Logistics.

The committee notes that, within the Marine Corps' unfunded priorities list, the Commandant of the Marine Corps has identified specific amounts in these readiness accounts that could help accelerate readiness recovery. Specifically, the committee understands the Marine Corps has identified exercise program shortfalls, aviation readiness gaps in depot maintenance, enterprise network defense, explosive ordnance disposal mission equipment needs, rifle optics modernization, nano-UAS capabilities, and shortfalls in facilities demolition.

Accordingly, the committee recommends the following increases to OMMC: \$63.7 million for SAG 1A1A Operational Forces, \$28.1 million for SAG 1A2A Field Logistics, \$7.8 million for SAG 1A3A Depot Maintenance, and \$39.2 million for BSM1 Sustainment, Restoration and Maintenance. Additionally, the committee recommends an increase to OMN for \$5.4 million for SAG 1A9A Aviation Logistics.

Air Force, Air Force Reserve, and Air National Guard readiness unfunded priorities increases

The budget request included \$37.5 billion for Operation and Maintenance, Air Force (OMAF), of which \$1.6 billion was for SAG 011C Combat Enhancement Forces, \$7.1 billion was for SAG 011M Depot Maintenance and \$1.5 billion was for SAG 021M Depot Maintenance. The budget request included \$3.1 billion in Operation and Maintenance, Air Force Reserve (OMAFR), of which 230 million was for SAG 011G Mission Support Operations. The budget request also included \$6.7 billion for Operation and Maintenance, Air National Guard (OMANG) of which \$7.0 billion was for SAG 011M Depot Maintenance.

The committee notes that, within the Air Force's unfunded priorities list, the Chief of Staff of the Air Force has identified specific amounts in these readiness accounts that could help accelerate readiness recovery. The committee notes that this recommended increase will improve shortfalls of the HC/HH-60 C4I platform. The committee further notes that this recommended increase will improve Air National Guard depot maintenance efforts.

Accordingly, the committee recommends an increase of \$2.8 million for SAG 011C Combat Enhancement Forces, \$150.4 million for SAG 011M Depot Maintenance, and \$66.4 million for SAG 021M Depot Maintenance in OMAF and \$29.0 million for SAG 011G Mission Support Operations in OMAFR. The committee also recommends an increase in OMANG of \$43.2 to SAG 011M Depot Maintenance.

Air Force advertising reduction

The budget request included \$37.5 billion in Operation and Maintenance, Air Force (OMAF), of which \$104.7 million was for SAG 033A Recruiting and Advertising.

The committee understands that within the Recruiting and Advertising request was an increase of \$29.2 million to fund additional marketing and advertising efforts. The committees notes this request would more than double the Air Force's advertising budget. The committee believes these funds can be better aligned for other readiness priorities.

Accordingly, the committee recommends a decrease of \$27.0 million in OMAF to SAG 033A Recruiting and Advertising.

Special Operations Command civilian compensation

The budget request included \$5.4 billion in Operations and Maintenance, Defense-wide (OMDW) for U.S. Special Operations Command (SOCOM), of which \$751.8 million is for civilian compensation. The committee notes that the budget request for SOCOM civilian compensation for fiscal year 2017 is \$72.7 million more than what was enacted for fiscal year 2016, which represents an approximately 10 percent increase. The committee recommends a reduction of \$45.3 million to be applied to higher priority requirements.

Defense Logistics Agency Price Comparability Office

The budget request included \$358.0 million in Operation and Maintenance, Defense-Wide for the Defense Logistics Agency

(DLA), of which \$61.4 million was for the Price Comparability program.

The committee recommends a reduction of \$5.8 million in Operation and Maintenance, Defense-Wide for the Defense Logistics Agency (DLA) Price Comparability program which would return the program to its fiscal year 2015 budget level.

Defense Security Cooperation Agency foreign partner engagement programs

The budget request included \$496.8 million in Operation and Maintenance, Defense-Wide (OMDW), for the Defense Security Cooperation Agency, of which \$270.2 million is for the Global Train and Equip Program, \$58.6 million for the Regional Centers, \$21.8 million is for the Wales Initiative Fund/Partnership for Peace, \$26.8 million for the Combating Terrorism Fellowship Program, \$25.6 million for the Defense Institution Reform Initiative, \$9.2 million for the Ministry of Defense Advisors program, \$2.6 million for the Defense Institute of International Legal Studies. The committee recommends a transfer of \$414.8 million to the Security Cooperation Enhancement Fund in Title 14 of this Act.

Funding for impact aid

The budget request included \$2.7 billion in the Operation and Maintenance, Defense-wide (OMDW) for the Office of the Secretary of Defense (SAG 4GTJ) for the operations of the Department of Defense Education Activity. The amount authorized to be appropriated for OMDW includes the following changes from the budget request. The provisions underlying these changes in funding levels are discussed in greater detail in title V of this committee report.

[Changes in millions of dollars]

Impact aid for schools with military dependent students	+25.0
Impact aid for children with severe disabilities	+5.0
Total	+30.0

Office of Economic Adjustment reduction

The budget request included \$32.5 billion for Operation and Maintenance, Defense-wide of which \$155.3 million was for SAG 4GTM Office of Economic Adjustment.

The committee understands that within this request was \$19.2 million for non-defense funding related to a public health lab. The committee notes there is an additional \$13.0 million in prior year funding that has not yet been obligated for this project. The committee notes that with over 1.3 million people visiting Guam from countries with “emerging infections,” the addition of 5,000 marines would have a limited impact. Therefore, the committee encourages the administration to seek funding for any needed civilian lab from appropriate civilian sources.

Accordingly, the committee recommends a decrease of \$32.2 million to SAG 4GTM Office of Economic Adjustment and recommends that the Department seek to reprogram the prior year funds to higher priority requirements.

Defense-wide funding decrease for base realignment and closure planning and support

The budget request included \$32.5 billion for Operation and Maintenance, Defense-wide (OMDW), of which \$1.4 billion was for SAG 4GTN Office of the Secretary of Defense.

The committee understands that \$4.0 million was to be used for base realignment and closure (BRAC) planning and support. The bill recommended by the committee would prohibit the expenditure of funds for a new BRAC round.

Accordingly, the committee recommends a decrease of \$4.0 million in OMDW for SAG 4GTN Office of the Secretary of Defense.

Department of Defense rewards program reduction

The budget request included \$1.4 billion in the Operation and Maintenance, Defense-wide (OMDW) for the Office of the Secretary of Defense (SAG 4GTN), of which \$6.6 million was for the Department of Defense (DOD) rewards program.

The committee continues to be concerned that the DOD rewards program has been hampered by historical under-execution.

Accordingly, the committee recommends a decrease of \$5.0 million to SAG 4GTN for the DOD rewards program.

Funding for Secretary of Defense delivery unit

The budget request included \$32.6 billion for Operation and Maintenance, Defense-wide (OMDW), of which \$1.5 billion was for SAG 4GTN Office of the Secretary of Defense. The committee recommends an increase of \$30.0 million in OMDW to SAG 4GTN Office of the Secretary of Defense for a delivery unit for the Secretary of Defense to bring in professionals with deep experience in management consulting, organization transformation, and data analytics to assist with key reforms and business transformation priorities. The provision underlying this change in funding levels is discussed in greater detail in title IX of this committee report.

National Commission on Military, National, and Public Service

The budget request included \$171.3 billion in Operation and Maintenance.

The committee recommends an undistributed increase of \$15.0 million in Operation and Maintenance that would establish the National Commission on Military, National, and Public Service as an independent commission, which shall remain available until expended. Additional information on this recommended increase can be found in Title X, Subtitle H.

Funding for waiver of long-term temporary duty travel per diem rates

The budget request included \$171.3 billion in Operation and Maintenance. The committee recommends an increase of \$5.0 million in Operations and Maintenance to authorize a waiver of temporary duty travel per diem rates up to the full rate in long-term temporary duty travel activity. The provision underlying this change in funding levels is discussed in greater detail in title XI of this committee report.

Modeling of an Alternative Army Design and Operational Concept

The budget request included \$32.6 billion for Operations and Maintenance, Defense-Wide, of which \$85.7 million was for the Joint Chiefs of Staff (SAG 3PL1). The committee recommends an increase of \$10.0 million to SAG 3PL1 for the modeling of an alternative Army design and operational concept. Additional funding would allow the Secretary of Defense to establish an office to study and evaluate the reconnaissance strike group concept as recommended by the National Commission on the Future of the Army.

Items of Special Interest

Additive manufacturing recommendations

The committee recognizes the advances being made by the Department of Defense (DOD) in the rapidly emerging additive manufacturing (AM), or 3-D printing environment. The committee strongly encourages DOD to more aggressively pursue AM capabilities that are innovative, adaptive, improve readiness, and enables the military services to be more self-sustainable, while developing the ability to qualify and certify AM produced items. The committee commends the Navy, in particular, for its leadership in this area regarding its AM roadmap and recognizing the potential AM could improve DOD capabilities in the areas of on-demand warfighting systems, agile supply chains, expeditionary sustainment, personalized medical care, and energetics. For example, the committee commends the Navy for its testing and flight critical part demonstration of a V-22 nacelle link and fitting.

However, it is clear that industry remains at the forefront, leading the way in AM. While there are multiple nascent efforts in AM, there are unique Navy and Marine Corps challenges such as afloat stabilization, fire hazards, and space constraints that must be addressed to fully realize the benefits of AM for widespread implementation. The committee is aware of the many demonstration and prototyping efforts, but it is still unclear when DOD will implement and more fully benefit from these advances in AM.

The committee understands that DOD may already have some appropriate authorities to enter into public-private partnerships, however, the committee strongly encourages faster AM adoption and learning across DOD, as well as collaboration and opportunities to seek efficiencies as each of the military services make investments in AM. Further, the Government Accountability Office noted in its 2015 report on AM that DOD needs to systematically track and disseminate the results of AM efforts across DOD. As a result, DOD may not have the information it needs to leverage resources and lessons learned from AM efforts and thereby facilitate the adoption of the technology across DOD.

Accordingly, the committee directs the Secretary of Defense to provide a report to the congressional defense committees no later than February 1, 2017. The report should include, but not be limited to: (1) details from each of the military services regarding their current AM efforts to include fiscal years 2016 and 2017 planned and completed demonstrations and prototyping efforts; (2) details regarding joint-development projects and efficiencies achieved

through intra-service collaboration; (3) details regarding AM qualification and certification efforts for materials, processes and components; (4) a recommendation regarding the expanded use of Working Capital Funded pilot programs, potential changes to public-private partnerships within the defense industrial base, or any other potential changes in law that could enable DOD to better demonstrate and execute AM end use component fabrication.

Addressing unacceptable conditions at al Udeid Air Base

The committee remains concerned by reports that servicemembers have been exposed to unacceptable living conditions, including black mold, in latrines and living quarters at al Udeid Air Base in Qatar.

The committee continues to believe that all servicemembers deserve safe and healthy living conditions.

The committee understands that the Air Force is implementing a four-point plan to maintain, repair, renovate, and replace substandard facilities at al Udeid Air Base. The committee expects the Air Force to keep the committee updated on its efforts at al Udeid Air Base and to address any remaining problematic living conditions across United States Central Command, including at al Udeid, without delay.

Advertising activities among the military service components

The committee understands that as part of its efforts to meet yearly military recruitment goals, the Department of Defense (DOD) requested almost \$575.0 million for fiscal year 2017. The committee notes that preliminary findings from the Government Accountability Office (GAO) indicate that DOD has taken steps to coordinate some advertising activities among the military service components, but it has not developed a formal process for coordination and addressing inefficiencies to ensure information sharing among the services. The GAO found examples of possible unnecessary duplication, overlap, and fragmentation that may result from the absence of coordination. For example, the Air Force has three advertising programs that contract with three advertising agencies, but officials could not provide a rationale for requiring separate programs.

The committee also notes that the GAO found the military service components vary in their ability to determine whether their activities are generating leads for potential recruits. For example, while the Marine Corps has developed a framework to assess the effectiveness of its advertising including leads generated from advertising activities at the local level, Army officials stated they do not have reliable data to evaluate whether locally executed advertising activities are generating leads, and the Army National Guard does not require state units to report on the performance of their advertising activities. The committee concurs with the GAO finding that without fully measuring advertising performance, especially at the local levels, DOD may be unable to ensure advertising dollars are used efficiently and effectively to help meet recruiting goals.

Additionally, the committee remains concerned that some military service components are paying sport teams to provide recognition ceremonies for service members—a practice later deemed unacceptable by DOD—suggest that the absence of DOD oversight may have contributed to some activities of questionable appropriateness. Without a Department-wide policy that clearly defines its oversight role, DOD lacks reasonable assurance that advertising is carried out in an effective and appropriate manner.

Accordingly, the committee directs the Secretary of Defense, in consultation with officials from the military service components and the Joint Advertising Market Research Studies office, to develop a formal process for coordination on crosscutting issues to facilitate more effective use of advertising resources. As part of this process, the Secretary shall review existing advertising programs to identify opportunities to reduce unnecessary duplication, overlap, and fragmentation and obtain potential efficiencies. The Secretary shall also clearly define DOD's role in overseeing the advertising activities of military service components, clarify issues related to sports related advertising and marketing, and outline procedures that should guide the components' advertising activities for other types of advertising, such as concerts or other event advertising and digital advertising.

Additionally, the committee directs the secretaries of the military departments to review and ensure that each military service component fully measures advertising performance. This review shall include both the identification of measurable goals in advertising plans and contracts, and ensure that the military service components have access to the necessary performance data to determine the effectiveness of their advertising for lead generation activities.

The above mentioned formal process and review should be prepared in a report to the Committees on Armed Services of the Senate and the House of Representatives no later than March 1, 2017.

Army Foundry Military Intelligence Program

The committee urges the Army to use the Army Foundry Military Intelligence Training Program for maximum training effect. Army Regulation 350–32 states that “Foundry enables Army intelligence personnel to sustain intelligence skills pertinent to their unit's mission, to improve their individual and collective technical and analytical skills, and to receive required accreditation and certification training to successfully execute intelligence missions in support of the unit's mission.” The appropriated funds for this account are limited and intended to support this vital training of soldiers.

The Committee directs the Secretary of the Army to review and certify to Congress that Foundry Military Intelligence Training Program funds are being used for the purposes outlined in Army Regulation 350–32. The secretary's report is to be sent to the committee within 180 days of the enactment of this bill.

Army requirements for footwear technology

The committee understands that the Army procures a wide range of footwear products that incorporate expanded polytetrafluoroethylene (ePTFE) membrane technology. The committee further

understands that Army product description documents, currently used in footwear Requests For Proposals seek to achieve a small set of capabilities that are subsequently addressed with 35-year-old ePTFE technology.

The committee is aware that ePTFE technology, other new membrane technologies, and associated laminates have advanced significantly over the years and can address current Army requirements and future Army needs, while achieving enhanced and diverse sets of capabilities, comfort, and performance.

Accordingly, the committee directs the Secretary of the Army to submit a report to the Committees on Armed Services of the Senate and the House of Representatives no later than December 15, 2016. This report shall provide a detailed review to include evaluation and testing outcomes, of new ePTFE membrane, laminates, and other membrane technologies that can meet current requirements and address a wider set of current and future Army footwear capability needs and objectives. In addition, this report shall also suggest potential revisions to current requirements and associated footwear product descriptions that could expand access to these new technology advancements.

Assessment of Navy and Marine Corps training requirements

The committee notes that the Navy and Marine Corps will continue to confront an increasingly complex security environment that will demand a wide range of missions, such as defeating terrorist organizations in the Middle East and responding to worldwide humanitarian crises. The committee understands that to meet these evolving challenges, the services have developed plans to synchronize training and deployment schedules to improve readiness and are reemphasizing training for core skills that degraded during a decade of counterinsurgency operations.

The committee is concerned, however, that factors such as equipment availability due to maintenance delays and access to training ranges can affect the services' ability to conduct training for their core capability areas. The committee is further concerned that the military services continue to face an environment of uncertain and constrained budgetary resources for the foreseeable future.

The committee notes, for example, in fiscal year 2013, the Department of Defense's operation and maintenance accounts, specifically those which fund the military services' training programs, were reduced by approximately \$20.0 billion under the spending caps agreed to in the Budget Control Act of 2011 (Public Law 112-25). Due to these reductions, the services curtailed some training or reduced the number of larger training exercises.

The committee is aware that some targeted investments have been made since fiscal year 2013 to improve training readiness, but remains concerned about the Navy and Marine Corps' ability to balance training investments with available resources. As a result, the committee believes the services will need to fundamentally reexamine the requirements for training their forces and explore whether they can achieve additional efficiencies or cost savings in their training approaches, such as by increasing reliance on virtual or simulator technologies to meet some training tasks.

Accordingly, the committee directs the Comptroller General of the United States to evaluate the extent to which the Navy and Marine Corps have: (1) processes that establish requirements and resource needs to train forces for core capability areas; (2) conducted training for core capability areas and identified any factors that limit this; and (3) integrated the use of virtual training to prepare forces for the full range of military operations.

The committee further directs the Comptroller General of the United States to brief the Senate Committee on Armed Services not later than February 15, 2017, on preliminary findings of the Comptroller General's evaluation with a final report to be completed by April 1, 2017.

Assessment on duplication and inefficiencies within the Defense Logistics Agency and United States Transportation Command

The committee notes that the Defense Logistics Agency (DLA) provides the military services with a full spectrum of logistics services, including the storage and distribution of consumable items, such as spare parts, fuel, and construction material, across the world. Additionally, DLA aims to position inventory to meet customer needs in a timely manner through its network of distribution warehouses while ensuring that the efficiency of its transportation network, which is also referred to as supply alignment.

The committee also notes that the U.S. Transportation Command (TRANSCOM) provides air, land, and sea transportation for DOD and is the manager of the DOD Transportation System, which relies on military and commercial resources to support DOD's transportation needs. In particular, TRANSCOM manages the Defense Transportation Coordination Initiative program, which is focused on improving the efficiency of transportation and distribution of freight through a commercial partnership with a world-class logistics provider.

The committee believes that while DLA and TRANSCOM have different missions in support of the warfighter, there may be efficiencies that could be created reorganizing or consolidating the two agencies. Additionally, the committee is concerned that some of the functions that currently reside with either organization may be better suited for the service-level functions.

Accordingly, the committee directs the Secretary of Defense to direct an assessment of the Defense Logistics Agency and the United States Transportation Command conducted by an independent, non-governmental entity that has recognized credentials and expertise in business operations and military affairs appropriate for this assessment. The assessment should include but not be limited to: (1) DLA's use of TRANSCOM's Defense Transportation Coordination Initiative program; (2) DLA's efforts to improve supply alignment and TRANSCOM's role in DLA's efforts; (3) DLA's and TRANSCOM's efforts to identify and implement transportation and distribution efficiencies; (4) the role of the individual services in the identified functions of DLA and TRANSCOM and whether there would be any efficiencies gained by moving any functions from DLA and TRANSCOM to the services; (5) identification of senior flag officer positions no longer required at DLA and TRANSCOM due to

consolidation and delegation of functions; (6) recommendation regarding future need for TRANSCOM to remain a combatant command due to consolidation and delegation of functions; and (7) any other recommendations on ways that a reorganization, or consolidation of these entities could improve efficiencies including the shifting of any functions out of either organization back to the military services.

The committee further directs that a briefing on preliminary findings be given to the Committees on Armed Services of the Senate and the House of Representatives not later than December 15, 2016, with the final report to be delivered in conjunction with the annual budget submission for fiscal year 2018.

Battery standardization plan

The committee notes that in 2014, the Army conducted a study that determined the Army communications-electronics (CE) battery list had over 200 batteries on it and estimated the net gain would average five new batteries each year. The committee is aware that the Army is developing a formal requirement for battery modernization and interface standardization that seeks to standardize soldier-worn CE batteries down to six battery components. The committee understands this would be the foundation of an Army standard family of batteries.

The committee remains supportive of the efforts of the Army and the other military services to improve soldier-worn CE batteries and increase combat capability. However, the committee is concerned that soldier-worn technology modernization should also maximize inventory efficiencies reducing logistical inefficiencies as CE and soldier-worn batteries continue to proliferate. The committee also believes this is an issue across all of the military services.

Accordingly, the committee directs the Secretary of Defense to provide a plan to the congressional defense committees no later than March 31, 2017 on: (1) How the Department of Defense (DOD) will develop formal requirements for battery modernization and interface standardization that seek to minimize the inventory of batteries and battery components; (2) Leveraging commercial innovation and products; (3) Using the products of research and development efforts in DOD, the Department of Energy, and the commercial sector; and (4) Working with DOD research and development programs to support efforts of standardization.

Civil Air Patrol (CAP)

The Committee notes the Air Force's fiscal year 2017 budget request does not fully fund the CAP's fiscal year 2017 requirement for \$30.24 million in Operations and Maintenance, only funding at 85 percent of the requirement. The committee is concerned this lack of funding will greatly degrade CAP's ability to conduct state and local emergency response and counter-drug missions. Additionally, reduced funding may also adversely impact thousands of community youth programs and eliminate crucial aircraft and national communications upgrades.

Therefore, the committee directs the Commander, Air Education and Training Command to submit a report and provide a briefing

to this committee, no later than 180 days after the enactment of this Act, to present historical funding trends for the CAP, and assess the CAP's current mission shortfalls due to funding gaps.

Clarification of the Department of Defense's authority to perform environmental response actions on other agency's lands in the case of aircraft crashes

The Committee notes that Section 2691 of title 10, United States Code, currently allows a military department to restore the lands of another federal agency damaged by an aircraft crash, when there is a pre-existing land use agreement with the other agency. Additionally, even absent such agreement, the 1986 law creating the Defense Environmental Restoration Program (DERP), 10 U.S.C. 2700 et. seq., authorizes the Department of Defense (DOD) to perform environmental response actions at property under the jurisdiction of another federal agency if such property is contaminated by the crash of a DOD aircraft.

Clarification on the importance of operation and maintenance savings

The committee recognizes that, in addition to energy savings, the military services should consider funding sources for Energy Savings Performance Contracts (ESPC) to include energy and project-related operation and maintenance (O&M) savings, which are both equally permitted under the ESPC statute. Therefore, O&M savings should not be limited by the administration or an agency, and should be utilized to improve resiliency and achieve Federal energy reduction goals.

Comprehensive review of the Army sustainable readiness model

The committee notes that the Army is redesigning its process for generating forces with a goal of having units that are able to sustain a desired level of readiness over longer periods of time when not deployed on a given mission, called the sustainable readiness model (SRM). The committee understands that the SRM will rotate forces through a cycle of deployments over time, just as the Army did under the previous force generation concept, the Army force generation process (ARFORGEN). However, unlike ARFORGEN, the committee understands that SRM will have a tiered aspect that will ensure that some capabilities and unit types will be resourced to a higher readiness level than others. The committee notes that the Army's objective is to have 66 percent of the active component force in a Category 1 or 2 ready status at any moment in time to rapidly respond to a major contingency, however, the Army has not yet determined exact readiness goals for the Army National Guard and Army Reserve.

The Chief of Staff of the Army has directed that the SRM be implemented by fiscal year 2017. The committee is concerned that implementing SRM will require fundamental shifts in how the Army organizes, trains, equips, and manages the force. Among other things, the Army will need to ensure that a unit's collective training events, command changes, and personnel rotations are well synchronized, and that units returning from deployment do not suf-

fer significant and abrupt personnel transfers that prevent them from redeploying on short notice to meet unforeseen demands. Over the next 12 months, the Army also will need to establish and codify the roles, responsibilities, and processes for coordinating these force management actions across the total Army, and for making the resource allocation decisions needed to implement SRM as the Army intends.

To inform committee oversight of the Army's plan to fundamentally restructure its force generation process, the committee directs the Comptroller General of the United States to conduct a comprehensive review of the Army's SRM force generation concept. The assessment that supports this review should compare and contrast SRM with ARFORGEN, including similarities and differences in the goals, objectives, resource requirements, and supporting force management processes. Additionally, the review shall provide the Comptroller General's assessment on the Army's goals, plans, and progress for implementing sustainable readiness, including: (1) The Army's governance of the transition to and implementation of the SRM concept; (2) the readiness goals and resources required to sustain readiness; (3) potential changes to the Army's processes for manning, equipping, and training forces in order to support Sustainable Readiness; and (4) any other aspects of the sustainable readiness concept the Comptroller General deems significant.

The committee directs that the Comptroller General should provide a briefing of preliminary findings of the review to congressional defense committees by February 15, 2017, followed by one or more reports no later than April 1, 2017.

Comptroller General review of emerging contaminants on military installations

Defense operations at military bases often require the use of hazardous materials, including solvents and corrosives; fuels, paint strippers and thinners; metals such as lead, cadmium, and chromium; and unique military substances such as nerve agents and unexploded ordinance, the release of which has resulted in environmental contamination. One of the primary purposes of the Defense Environmental Restoration Program (DERP) is to help protect the life, health, and safety of military service members and their families by among other things, the ongoing process of detecting the discharge of environmental contaminants when they occur and the associated environmental remediation as needed. It is especially important to protect installation drinking water systems and supplies from contamination.

A class of unregulated drinking water contaminants exists that either lack human health standards or have an evolving science and regulatory status, which raises questions about how this class of contaminants is tested for and managed on military installations, including whether the military services are being consistent in their approaches to this. The use and releases of these emerging contaminants raises concerns about the ability of the military services to ensure a safe and healthful work environment on or near installations. Such contaminants have been tested for and found from time to time on some installations. For example, the Department of Defense (DOD) has been testing for RDX, a white crys-

talline solid used in explosives and demolition blocks. Moreover, DOD has detected perchlorate in groundwater and drinking water samples taken at an installation whose missions included launching rockets. Once a release has been confirmed, environmental remediation activities may be needed to respond to the release, offer a structure for cleanup, and protect public health.

A key concern of the committee is the need to ensure that DOD maintains installation mission capability and a safe and healthful environment on military installations. For this reason, the committee directs the Comptroller General of the United States to conduct a review of DOD's program to effectively manage emerging contaminants in sources of drinking water to protect readiness, people, and the environment. The Comptroller General is further directed to provide a report by April 10, 2017 or a briefing by that date with a final report as soon as practicable thereafter to the congressional defense committees. At a minimum, the study should answer the following questions:

(1) To what extent have DoD and its components issued and effectively implemented guidance to ensure adequate control, detection and remediation in the event that emerging contaminants are released to the environment?

(2) What is known about the effectiveness of DoD's and its components' programs to protect public health and the environment from emerging contaminants in such areas as installation drinking water systems and supplies?

(3) Have the military departments adopted and implemented consistent policies and procedures?

(4) To what extent are DoD and its service components using guidelines, policies, and advisories established by the Environmental Protection Agency, the Centers for Disease Control and other federal agencies regarding emergent containments. What challenges do they face when interpreting and applying such resources?

(5) What is the current status of drinking water infrastructure across military installations?

Comptroller General review of F-22A global force posture

The committee is concerned the proliferation of increasingly capable integrated air defense systems (IADS) by emerging and re-emerging potential adversaries have created regions where fourth-generation airborne systems likely cannot operate. Additionally, potential adversary air-to-air capabilities are rapidly approaching parity with, and in some cases, surpassing, the capabilities of U.S. and allied fourth generation fighter aircraft.

Based on these factors, the committee is concerned the global force posture of America's only currently fielded and fully operational fifth-generation fighter, the F-22A, may not be optimized to deter, and if necessary, quickly defeat any potential adversary hostile actions in a variety of regions around the globe.

Therefore, the committee directs the Comptroller General of the United States to submit to the Committees on Armed Services of the Senate and the House of Representatives a report setting forth the results of a study conducted by the Comptroller General, with preliminary observations due no later than March 3, 2017 and a

final report to follow. The review, assessment, and recommendations by the Comptroller General should include, but are not limited to:

- (1) Most efficient and combat effective F-22A squadron size in numbers of primary assigned aircraft and deployable unit type code packages;
- (2) Optimal ratio in the F-22A fleet of primary mission aircraft inventory to backup aircraft inventory and attrition reserve aircraft;
- (3) Consideration of small fleet size characteristics and constraints;
- (4) Optimal ratio of overseas versus continental United States (CONUS) stationed F-22A units;
- (5) Optimal locations for overseas regional and CONUS stationing of F-22A units to provide most effective presentation of fifth-generation airborne forces to regional combatant commanders;
- (6) Consideration of F-22A global force posture in anticipation of increased fielding of F-35 Joint Strike Fighter aircraft; and
- (7) Other information such that the Comptroller General considers appropriate to include in the report.

Cyber implementation at the combat training centers

The committee recognizes and is strongly encouraged by the cyber training support to corps and below (CSCB) pilot program implemented through the cyber opposing forces support during every Joint Readiness Training Center and National Training Center rotation. The committee understands that the CSCB pilot prepares combat training centers (CTC) to execute cyberspace operations and is intended to inform Army-wide doctrine, organization, training, materiel, leadership and education, personnel, and facilities development. The committee further understands that any future changes in the cyber force will be informed through the CSCB pilot, subsequent lessons learned, and the 2016 CTC Program Comprehensive Review, which will conduct an analysis for increased contested cyberspace activity at the CTCs.

Cybersecurity guidelines for micro-grids

The committee directs the Secretary of Defense to report to the congressional defense committees no later than March 30, 2017 on established cybersecurity guidelines for micro-grids and installation energy and utility systems. The guidelines should recognize that installation energy managers may not currently have the expertise to identify and mitigate cybersecurity threats and that cybersecurity managers tasked with maintaining the functionality of the electricity grid may not have the expertise to be able to provide solutions required to maintain the functionality of a micro-grid or installation. The report should be unclassified, but may contain a classified annex as deemed appropriate.

Defense Logistics Agency overhead costs

The committee notes the Defense Logistics Agency (DLA) sources and provides nearly every consumable item used by our military

forces worldwide. The committee also notes the Department of Defense (DOD) uses the defense-wide working capital fund to cover DOD's costs for providing services and purchasing commodities under three DLA activity groups: supply chain management, energy management, and document services. The committee understands the defense-wide working capital fund is reimbursed through DLA's sale of commodities and services to the military services and other customers, such as other federal agencies and foreign military sales. The committee further understands that DLA incorporates overhead costs into the reimbursement rates it charges its customers, which DLA uses to offset facilities sustainment, restoration, and modernization; transportation; storage, and other costs.

The committee is interested in the potential for improving DLA's overhead cost estimates, which could, in turn, contribute to more accurate budget estimates and potential savings.

Accordingly, the committee directs the Comptroller General of the United States to evaluate: (1) the nature and size of DLA activities financed by overhead costs reimbursed through the defense-wide working capital fund; (2) how DLA calculates overhead costs for the commodities and services it manages through the defense-wide working capital fund; (3) how DLA's estimated overhead costs have compared to actual costs since fiscal year 2009, and factors that have contributed to any differences; and (4) the options, if any, DLA has considered in adjusting its approach to determining overhead costs in light of any differences between estimated and actual overhead costs.

The committee further directs the Comptroller General of the United States to brief the Senate Armed Services Committee not later than March 15, 2017, on preliminary findings of the evaluation with a final report to be due by June 30, 2017.

Defining readiness and interoperability for commercial carriers

The committee notes that the National Airlift Policy (NAP) was established to ensure that military and commercial air carrier resources are able to meet defense mobilization and deployment requirements. The committee further notes that section 5 of the NAP states, "Consistent with the requirement to maintain the proficiency and operational readiness of organic military airlift, the Department of Defense (DOD) shall establish appropriate levels for peacetime cargo airlift augmentation in order to promote the effectiveness of the Civil Reserve Air Fleet (CRAF) and provide training within the military airlift system." The committee further notes that section 9517 of title 10, United States Code, states, "[I]t is the policy of the United States to maintain the readiness and interoperability of Civil Reserve Air Fleet carriers by providing appropriate levels of peacetime airlift augmentation to maintain networks and infrastructure, exercise the system, and interface effectively within the military airlift system."

The committee is concerned, however, that there is no clear definition of what constitutes "readiness" or "interoperability" in regard to commercial carriers. The committee understands that this has led to misunderstandings about how best to promote the effec-

tiveness of the CRAF and what constitutes training within the military airlift system. The committee also recognizes that the absence of definitions has resulted in different assessments of what level of commercial augmentation is sufficient to meet DOD's readiness and interoperability requirements. The committee notes that according to DOD's Report, as mandated by the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), commercial augmentation levels will remain well above the minimum required for readiness and interoperability for the foreseeable future. The committee believes, however, a definition of readiness and interoperability, with associated metrics, would help determine if the level of commercial augmentation is achieving the intent of the National Airlift Policy and title 10. The committee notes this will provide a more realistic assessment of the ability of commercial carriers to operate within the military airlift system.

Accordingly, the committee directs the Secretary of Defense to develop definitions of readiness and interoperability for CRAF and suitable metrics to determine that readiness and interoperability are achieved, to include an explanation of the weighting of ground based activities, as specified in the "Level of Readiness of CRAF Carriers", and engagements versus level of commercial aircraft activity at DOD aerial ports. In determining those definitions, the committee directs the Department to consult with its CRAF partners through its semi-annual meetings and other forums.

Additionally, the committee directs the Department to include those definitions and metrics in the next "Level of Readiness of CRAF Carriers" report to Congress due concurrently with the submission of the President's budget for fiscal year 2018.

Demilitarization of conventional munitions

The committee notes that at current funding levels, the stockpile of conventional munitions awaiting demilitarization is projected to grow from approximately 480,000 tons to more than 700,000 tons by 2021.

The committee notes that in light of current budget constraints, coupled with an increased emphasis on training within all of the military services, destruction or sale of these munitions should be a last resort. The committee further notes that even though the stockpile awaiting to be demilitarized is growing, it is concerning that procurement of some munitions continues to rise. The committee believes that procedures for how these munitions are classified as suitable for use or that they must be demilitarized could lead to cost savings and increased military readiness. In addition, the Government Accountability Office noted in its 2016 annual report on fragmentation, overlap, and duplication that DOD could potentially reduce its storage, demilitarization, and disposal costs by hundreds of thousands of dollars by transferring excess serviceable conventional ammunition, including small arms ammunition, to federal, state, and local government agencies.

Accordingly, the committee directs the Secretary of the Army to submit an assessment to the Committees on Armed Services of the Senate and the House of Representatives no later than February 1, 2017. The assessment shall include: (1) a review of the requirements for how excess munitions are utilized for operational or

training purposes prior to being classified for demilitarization and any recommendations for how to improve this process to reduce both the stockpile and new procurement costs; (2) options for reducing risk, enhancing efficiency, and achieving cost reductions, such as maximizing the proximity of demilitarization operations to demilitarization asset storage locations in order to minimize cost and risk associated with transportation; and (3) a parallel timeline for how procurement of munitions and the demilitarization of munitions will continue until the stockpile is below 50,000 tons.

The committee further encourages the Secretary to leverage expertise from industry and academia to advance affordable demilitarization technologies.

Department of Defense transportation protective services

The committee notes that as a result of the Government Accountability Office (GAO) review of the policies and procedures used by the Department of Defense (DOD) in the handling of hazardous material shipments, the National Defense Authorization Act for Fiscal Year 2015 directed U.S. Transportation Command (USTRANSCOM) to submit a report that examines the data limitations of the Department of Transportation Federal Motor Carrier Safety Administration's (FMCSA) Safety and Accountability Program and report on what changes, if any, should be made to the process used by DOD to determine hazardous material carrier eligibility and evaluate performance of carriers within the Transportation Protective Service (TPS).

Accordingly, based on the GAO review and USTRANSCOM report, the committee directs the Commander of USTRANSCOM to provide a report to the Congressional Defense and Commerce Committees no later than November 1, 2016. The report should include a review and updates to the existing plan, as required, to ensure that USTRANSCOM has a comprehensive program that evaluates the safety of commercial carriers and their ability to move DOD hazardous TPS cargo. Additionally, the report should include USTRANSCOM's strategy and timeline for developing and implementing ways to incentivize carrier safety performance. Finally, the committee encourages USTRANSCOM continue to coordinate with the Department of Transportation on proven safety technologies for inclusion in future requirements for carriers transporting the most sensitive or extremely dangerous cargo.

Department of Defense weapon system sustainment strategy

The committee notes that one of the Department of Defense's (DOD) most pressing concerns continues to be the readiness of its weapon systems and the cost to sustain readiness. The Department spends billions of dollars each year to sustain its weapon systems. The Weapon Systems Acquisition Reform Act of 2009 directed a Government Accountability Office (GAO) review of the growth in operating and support costs of major weapon systems. The GAO found that the Department did not have key information to manage life-cycle costs. The committee believes that the development of a sustainment strategy that includes goals, performance measures, and key initiatives could help to improve the efficiency and effectiveness of sustaining DOD weapon systems.

Accordingly, the committee directs the Secretary of Defense to submit a report on the strategy for weapon system sustainment to the congressional defense committees in the House and Senate no later than January 2, 2017. The strategy should cover the entire logistics lifecycle from production through battlefield use, retrograde and organic repair or modification, or disposal. The strategy will include at a minimum the following elements: (1) key sustainment principles and their inclusion at every step of the acquisition processes; (2) product support; (3) supply chain integration; (4) asset visibility; (5) data rights; (6) software sustainment; (7) sustainment engineering; (8) private and public maintenance, repair, and overhaul; (9) nuclear sustainment; (10) war reserve material; (11) distribution; and (12) operational contracting.

Department of Defense's use of executive agents

The committee notes that the Department of Defense has various management approaches that it uses to improve efficiency in its programs and activities. For example, the committee is aware that the Secretary of Defense has designated executive agents across the Department to provide defined levels of support for operational missions, or administrative or other designated activities that involve two or more Department components. The committee is also aware that prior work by the Government Accountability Office (GAO) found that the Department had opportunities to improve executive agent management efforts for foreign language support. The committee believes that given the Department's use of executive agents for numerous programs and activities, additional opportunities may exist to gain further efficiencies in areas outside of the GAO's previous review.

Accordingly, the committee directs the Comptroller General of the United States to evaluate the Department's use of executive agents, to include an assessment of the following: (1) A description of the types of programs and activities for which DOD has established executive agents; (2) The Department's use of executive agents to focus its resources in specific areas in order to maximize fragmentation, unnecessary overlap, or duplication; (3) The Department's evaluation of the performance of its executive agents' efforts for effectiveness and efficiency in meeting program needs; (4) Additional opportunities for the Department to gain further efficiencies in executive agent management efforts; (5) Identification of specific statutory, regulatory, practice, resource allocation, or cultural impediments to the most effective and efficient use of executive agents as a management practice by the Department; and (6) Identification of best practices in the use of executive agents.

The committee directs the Comptroller General to brief the Senate Committee on Armed Services not later than March 15, 2017, on preliminary findings of the evaluation with a final report to follow by June 30, 2017.

Development and procurement of combat personal protective equipment for different body types

The committee believes the expanding role of women in combat positions provides an opportunity to improve the personal protective equipment (PPE), organizational clothing, and individual

equipment (OCIE) for both male and female warfighters to ensure the best fit to gain a tactical advantage through increased maneuverability. The committee recognizes the advances made to date regarding weight reduction in PPE and OCIE, and further believes that the Department should continue to seek to take advantage of the best technology available to reduce PPE and OCIE weight for all servicemembers.

The committee notes that the Department has often acquired individual equipment such as boots, helmets, combat clothing, and body armor for soldiers, sailors, airmen, and marines in a piecemeal manner. The committee encourages the services to consider appropriately addressing the unique needs of both male and female service members through a comprehensive acquisition strategy that seeks to improve OCIE and PPE through an integrated combat ensemble designed to meet validated operational requirements.

The committee understands that on June 26, 2015, the Under Secretary of Defense for Acquisition, Logistics, and Technology provided guidance to the services to take immediate steps to ensure that combat equipment is properly designed and fitted for female servicemembers. The committee also understands that the services are conducting anthropometric studies on their male and female servicemembers that will help each service properly outfit and equip their respective servicemembers.

Accordingly, the committee directs the Secretary of Defense, in coordination with the service chiefs, to submit a report no later than February 1, 2017 to the Committees on Armed Services of the Senate and the House of Representatives. The report shall include: (1) an acquisition strategy, by service branch, for the PPE and OCIE needs of both male and female service members; (2) the Department's plan to provide improved PPE and OCIE developed for all service members to meet validated operational requirements; and (3) any plans for budgeting, development, and procurement of female-specific equipment needs, validated through the requirements process, including helmets, clothing, and body armor. The report may be classified, or for official use only, as deemed appropriate by the Secretary, but if classified should include an unclassified executive summary.

Encouraging the use of the Innovative Readiness Training (IRT) program

The committee is aware of the readiness challenges facing the Armed Forces due to the constraints put forth by sequestration. Additionally, the committee is aware of the Innovative Readiness Training (IRT) program, which contributes to military readiness and provides realistic training in a joint environment for National Guard, Reserve, and Active-Duty members, preparing them to serve during a national crisis at home or abroad.

Examples of IRT activities include, but are not limited to, constructing rural roads and airplane runways, small building and warehouse construction in remote areas; transportation of medical supplies, and military readiness training in the areas of engineering, health care and transportation for under-served communities.

The committee understands the IRT program offers complex and challenging training opportunities for domestic and international

crises. The committee is also aware that states that utilize the IRT program include Alabama, Alaska, Arizona, Arkansas, California, Colorado, Florida, Hawaii, Indiana, Kentucky, Louisiana, Maine, Mississippi, Missouri, Montana, Nebraska, New Mexico, New York, North Dakota, Ohio, South Dakota, and Texas.

The committee strongly encourages the Department of Defense to continue to fully utilize IRT programs that provide hands-on and mission-essential training and that are available to active, reserve and National Guard forces.

Energy resiliency metrics

The committee remains interested in the capability of the Department of Defense (DOD) to assign a value to energy resiliency and mission assurance for its installations. The committee believes that having appropriate energy resiliency and mission assurance metrics could enable DOD and installation commanders to document the value of energy security to better inform infrastructure investment decisions. The committee is concerned that the Department and the military services may not currently or consistently evaluate the impact of energy disruptions and outages on its facilities and installations. For example, current methods by which utility disruptions and outages are tracked and evaluated by DOD may not account for costs associated with loss of mission capability. The committee is also concerned that energy resiliency and mission assurance evaluations and planning may vary within each military service as well as across DOD. Additionally, a consistent valuation methodology could encourage industry to develop new business models and third party financing mechanisms to help DOD achieve greater energy resiliency and mission assurance on its installations.

Accordingly, the committee directs the Secretary of Defense to report to the congressional defense committees no later than March 30, 2017 with established metrics to evaluate the costs, risks, and benefits associated with energy resiliency and mission assurance against energy supply disruptions on military facilities and installations. The metrics should take into account financial and operational costs and risks associated with sustained losses of power resulting from natural or man-made disasters or attacks that impact military installations.

Enhanced transparency in Department of Defense fuel rate pricing

The committee is encouraged that in response to concerns raised by the Government Accountability Office (GAO) the Department of Defense (DOD) has adjusted its methodology for determining the fiscal year 2017 fuel rate price by basing it on the Gas and Oil price index included in the Administration's economic assumptions and incorporating relevant data on actual fuel prices prevailing during the most recent fiscal year. The committee notes that the GAO's November 2015 report, however, highlighted the fact that the Department still had not fully documented its process for selecting a methodology for estimating its fuel rate pricing. In order to account for real-time changes in the world-wide fuel market, the committee believes the Department should retain reasonable flexi-

bility in determining and applying an appropriate methodology underlying the estimate of the next fiscal year's fuel rate price.

The committee remains concerned about the quality and transparency of information available to Congressional decision makers and Department fuel customers concerning the methodology selected each year and its application to relevant data used in estimating fuel rate prices for the next fiscal year. A well-documented methodology allows decision makers and other stakeholders to understand and evaluate the Department's budget requests and make informed decisions concerning annual funding levels. The committee notes the Department's budget justification materials for fiscal year 2017 do not specify the process by which the Department evaluated any methodological options for developing its fuel rate pricing.

Therefore, the committee directs the Secretary of Defense to submit detailed guidance to the congressional defense committee no later than February 1, 2017 on how DOD will take steps to develop and implement a process for the annual review and selection and application of an appropriate methodology for estimating fuel rate prices for the next fiscal. The detailed guidance should also include the process for the identification of an appropriate methodology to assess the accuracy of estimated fuel rate prices as compared with actual fuel prices for the most recent fiscal year, and the establishment of a detailed process for the annual development of estimated fuel rates prices for the next fiscal year, to include requiring documentation of the rationale for using one methodology over another for estimating the next fiscal year's fuel rate price, including the limitations and assumptions of underlying data and establishing a timeline for developing annual estimated fuel rate prices for the next fiscal year.

Lastly, the committee will continue to monitor the Department's efforts and may direct further action if the process for determining fuel pricing does not achieve greater transparency.

Examination and recommendations regarding reimbursement process major range test base facilities

The committee notes that major range test base facilities (MRTFBs) operate under the reimbursable research, development, test, and environment model of billing for direct costs of service, which is different than at typical operational training ranges. The committee further notes that the Test Resource Management Center of the Office of the Secretary of Defense recently reported to Congress that it has not identified problems with reimbursement procedures for units training at MRTFBs. The committee remains concerned that a number of optimal and potentially lower cost training opportunities are declined by operational training units due to the difficulty of locating funds to reimburse MRTFBs.

Accordingly, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate and the House of Representatives no later than February 1, 2017. The report shall: (1) examine how the reimbursement process for the MRTFBs relate to operational unit payment procedures and (2) include any recommendations for legislative or administrative action to make it easier for operational units to comply with the

MRTFBs reimbursement process, including any recommendations specific to White Sands Missile Range, Utah Test and Training Range, Yuma Proving Ground, and Aberdeen Test Center.

Expanding the number of younger cyber security professionals on Department of Defense contracts

The committee is concerned that current labor category practices on Department of Defense (DOD) contracts may unnecessarily discriminate against younger cyber security professionals. These workers are often the best and brightest workers in the cyber security field but the committee has been informed that they are finding it increasingly difficult to be included on contractor teams to address DOD cyber security needs. This is because in many cases DOD procurement officials are requiring specific tenure requirements for the contracting workforce and younger workers do not have the years of experience required by these labor category requirements.

While the Department rightly desires to have experienced scientists and engineers working on federal contracts, by not including or funding labor categories for students, interns, co-ops, and recent college graduates in the cyber security field it may be eliminating some of the most promising software developers from being considered for work on a DOD contract. The committee believes that Silicon Valley companies would not make such a mistake. Another possible strategy for the Department to pursue would be to forgo specific labor category requirements and write performance specifications that would allow contractors to bring together the best team that they see fit to address the cyber challenge. To inform the committee on the best path forward to address acquisition policy in these situations, the committee directs the Principal Cyber Advisor to the Secretary of Defense to assess current approaches to accessing the next generation of cyber professionals on DOD contracts and brief the committee on how labor categories are being used to contract for cyber security support, an identification of current best practices for cyber support acquisition, and any recommendations necessary to more adequately address the cyber security contracting workforce.

Expansion of Surface Warfare Officer School basic division officer course

The committee notes the strides that have been made in improving training for new surface warfare officers (SWO). From 2004 until the establishment of the basic division officer course (BDOC) in 2012, newly commissioned SWOs reported to their first ships with little to no training. Once aboard their ships, ensigns completed on-the-job training and computer-based training to earn qualifications.

The committee further notes that in contrast, other Navy unrestricted line communities provided and continue to provide new officers with initial training prior to reporting to their first command to achieve basic skills and proficiency (e.g., submariners attend the submarine officers basic course and nuclear training, aviators attend flight training, and SEALs attend Basic Underwater Demolitions/SEAL training). In 2012, the surface warfare commu-

nity launched the basic division officer course to provide an intensive, 8-week course of instruction designed to provide foundational classroom training to newly reported prospective SWOs. The committee notes that shiphandling training at BDOC is conducted exclusively on simulators.

The committee commends the Navy on establishing SWOs BDOC, but believes more should be done. Yard patrol craft have been used at the U.S. Naval Academy for decades to teach navigation, seamanship, and shiphandling to midshipmen. Similar benefits, specifically tailored to the qualifications that new SWOs must attain, could be gained by relocating yard patrol craft to BDOC locations. These benefits provide fundamental skills in an at-sea training environment, including: shiphandling, navigation, radar operation, bridge resource management, seamanship, and maintenance.

Accordingly, the committee strongly encourages the Secretary of the Navy to consider reactivating and relocating three yard patrol craft from Annapolis, Maryland to the SWO School BDOC in Norfolk, Virginia and three yard patrol craft from Annapolis, Maryland to the BDOC in San Diego, California.

Expeditionary equipment and forward operating bases

The committee notes that the Base Camp Integration Lab (BOIL) at Fort Devens, Massachusetts provides the Army with an operational base camp to integrate and evaluate more effective technologies in power generation, shelter, energy management microgrids, and water reuse, which combine into a more effective forward operating base called the Force Provider Expeditionary (FPE) module. These combined BCIL improvements and FPE modules reduce forward operating base fuel consumption by more than 50 percent. The committee believes that by reducing reliance on energy sources and becoming more efficient, the military services become more agile and effective in combat, which reduces the risk to servicemembers' lives, frees up assets to conduct combat missions rather than provide security for resupply convoys, and ultimately saves taxpayer's money.

The committee recognizes and is very encouraged by the Army's FPE modules, as well as similar efforts by the Marine Corps' Expeditionary Energy Office, which focuses on extending the operational reach of the Marine Air Ground Task Force.

Additionally, the committee recognizes and is very encouraged by the Air Force's Forward Operating Base of the Future located at the Basic Expeditionary Airmen Skills Training (BEAST) site—including Basic Expeditionary Airfield Resources (BEAR). The committee continues to believe that the Department of Defense has a critical requirement to leverage technologies that will enhance combat capability and may deliver energy efficient returns on investment. For example, one retrofitted zone of the BEAST site will reduce the energy footprint by 85 percent. Additionally, the medium shelters procured through the BEAR program reduce heat and air conditioning requirements by at least 35 percent.

The committee understands that the Army has deployed FPE modules to Afghanistan, Iraq, and Africa in support of the Ebola response during Operation United Assistance. The committee is

also encouraged by collaborative efforts that have occurred between the Army FPE and Air Force BEAR to share lessons learned. The committee notes that the Army currently has 232 FPE modules in its inventory, with 21 currently deployed to Iraq, seven in Afghanistan, one in Cameroon, and many others at prepositioned stocks around the globe.

However, the committee is concerned that it appears more effective and efficient base camp technologies are not widely known assets across the military departments.

Accordingly, the committee directs the Secretary of Defense to prepare a report or briefing to the committee no later than February 1, 2017 detailing how the military services can broaden the use of FPE modules, BEAR, and Marine Corps expeditionary energy systems, including any plans to modify unit tables of equipment or programs of record to include FPE modules, BEAR, and Marine Corps expeditionary energy systems.

Flame resistant uniforms

The committee understands that the military services continue to evaluate emerging flame resistant technologies that may have the potential to provide a more cost-effective level of protection to a wider range of service members. The committee also understands that the Army and the Marine Corps have conducted a study to evaluate commercial flame resistant applications that could be more affordable, provide enhanced protective qualities, are more breathable, and are more durable when compared to current flame resistant uniforms.

Accordingly, the committee directs the Secretary of the Army and the Commandant of the Marine Corps to provide an assessment to the Committees on Armed Services of the Senate and the House of Representatives by February 1, 2017 that outlines developmental efforts to date, assesses technology readiness, and describes future efforts to appropriately resource and equip flame resistant protective postures for military personnel. Additionally, the committee strongly encourages both services to review and consider any necessary and appropriate updates to personal protective equipment requirements to include potentially equipping flame resistant protective postures based on the threat and operating environment.

Foreign language training report

The committee notes the importance of foreign language proficiency to ensure military readiness objectives are met by the numerous defense agencies and military services, including the intelligence community. The committee notes that in the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), the committee directed the Secretary of Defense to submit a report that identifies the capability gaps in advanced foreign language proficiency within the military services and other relevant U.S. federal government agencies that support Department of Defense and military operations. The committee notes that the Department has not met the mandated deadline for this report.

To avoid possibly legislating on this matter without the Department's input, the committee directs the Department to submit the

report as mandated in the National Defense Authorization Act for Fiscal Year 2016 as soon as possible.

Impacts to the defense industrial base from carryover reductions

The committee notes that depot maintenance carryover consists of funded orders that are not completed by the end of the fiscal year, which is frequently the result of the Department of Defense (DOD) receiving appropriations from Congress late in a fiscal year, often with not enough time to execute scheduled work. Cuts to carryover in the operation and maintenance (O&M) accounts have a disproportionately negative impact on production orders, systems, and the defense industrial base workforce. Reductions to carryover in O&M increase depot rates by reducing future workload and ultimately decreases the military services and customer buying power. In an era of unstable budget certainty and frequently late appropriations, having an appropriate amount of carryover on-hand can provide a continuous and effective means of production across fiscal years in the event of a continuing resolution. The committee notes that excessive carryover, as determined by specified service-range limits, should not be construed as appropriate carryover. Rather, appropriate carryover is the amount that falls between the high and low thresholds.

The committee remains very concerned that indiscriminate cuts to carryover directly correlates to the loss of work at DOD depots, shipyards, and air logistics centers, which in turn negatively impacts units and the warfighter.

At a time when readiness cannot afford to take unnecessary cuts, appropriation reductions to carryover in Army O&M within the Consolidated Appropriations Act, 2016 (Public Law 114–113) resulted in a plethora of negative operational impacts to warfighter readiness: (1) the loss of approximately 332,000 direct labor hours prevented the overhaul and repair of two M1 Abrams tanks, 24 Stryker vehicles, 12 Paladin systems, 13 M777A2 medium howitzers, 24 M119A2 towed howitzers, seven M113 vehicles, 13 M88 recovery vehicles, over 2,000 individual and crew served weapons, approximately 3,000 gas masks, eight M9ACE earthmovers, and reduced combat vehicle evaluations prior to induction to depot maintenance at Anniston Army Depot and Pine Bluff Arsenal (for gas masks); (2) the loss of approximately 197,000 direct labor hours prevented the repair and overhaul of two MH–60H Special Operations aircraft, two UH–60 Blackhawk helicopters, and one AH–64D aircraft at Corpus Christi Army Depot; (3) the loss of approximately 164,000 direct labor hours prevented the inspection, repair, and overhaul of 42 systems, to include PATRIOT missile re-certifications and overhaul of PATRIOT sub-systems and 46 programs that support the repair of high mobility artillery rocket system and 13 forklifts at Letterkenny Army Depot; and (4) the loss of approximately 504,000 direct labor hours prevented the inspection, repair, and overhaul of eight AN/TPQ–37 fire finder radar systems, three AN/TRC–70 tropospheric scatter microwave radio terminals, 20 AN/TRC–190 line-of-sight multi-channel radio terminals, 154 AN/ASM–146/147/189/190 Avionics and electronics shop vans, 145 standard integrated command post system shelters, a variety of

communications security equipment supporting strategic and tactical command environments, 12 strategic satellite communications terminals, and field support for the Guardrail system at Tobyhanna Army Depot.

The result of the Consolidated Appropriations Act cuts to Army O&M for carryover meant that equipment that needed repairs to fill unit shortages did not occur for the following Army, Army Reserve, and Army National Guard units in North Carolina, Texas, Mississippi, Indiana, Hawaii, New York, Kentucky, Illinois, Louisiana, Oregon, Minnesota, Pennsylvania, Tennessee, California, Kansas, Georgia, Colorado, Washington, Germany, South Korea, Kuwait, and Southwest Asia.

Additionally, a \$24.0 million cut to Navy O&M in the Consolidated Appropriations Act, 2016 for carryover negatively impacted the operational readiness of our Marines by preventing the depot maintenance of: 18 MRAP CAT IIs, 7 M1A1 tanks, 226 .50 caliber machine guns, 2 medium tactical vehicle replacements, 11 scout sniper scopes, 2 mine clearing blades, 7 radios, 2 generators, 1 communication system, and 1 tactical water purification system at a cost of approximately 71,000 direct labor hours at Albany, Georgia and Barstow, California. These reductions also had the expected effect of reducing the depot workforce by 44 positions.

Accordingly, the committee remains strongly against unnecessary carryover cuts to O&M accounts as they directly attribute to reduced workload for the defense industrial base and negatively impact warfighter readiness at a time where readiness should remain Congress' top priority.

Installation security

The committee notes that in the 15 years since 9/11, the services have taken different approaches to vetting and screening individuals that require access to military installations. Despite insider events like those at the Washington Navy Yard and Fort Hood, the Department of Defense (DOD) and the services continue to work internally to develop and deploy credentialing and physical access control systems (PACS), while at the same time often using commercial systems that meet all stated requirements at little or no cost to the Department. In some instances, installations that have not contracted with commercial providers are not scanning credentials at all because internally developed DOD systems are not working properly, are still in development, and are very expensive to deploy by the services and to maintain by base commanders. Today, there are dozens of military installations that are not scanning credentials, leaving these facilities vulnerable to a range of risks. This situation is indefensible especially when the services have years of experience successfully using commercial credentialing and PACS systems. The Army's current plan for its Automated Installation Entry (AIE II+) PACS system would have full deployment at Army garrisons by 2022—21 years post 9/11. By contrast the U.S. Coast Guard has already deployed a commercial enterprise based credentialing and PACS system at 12 stations with each installation taking less than 5 weeks. The committee strongly believes the Secretary of Defense and the services need to update DOD policy and guidance concerning internally developed

credentialing and PACS efforts to ensure that commercial systems are being utilized to the fullest extent possible.

Item unique identification implementation and verification

The committee continues to monitor the Department of Defense's (DOD) strategy for improving asset tracking and in-transit visibility. The committee supports the Department's goal of enhancing asset visibility through item unique identification (IUID), automatic identification technology (AIT), and automatic identification and data capture (AIDC) processes. However, the committee remains concerned with the Department's level of compliance with its own policy. Specifically, the committee remains concerned that DOD continues to lack a plan and timeline to adopt, implement, and verify its revised policy IUID, AIT, and AIDC across the Department and the defense industrial base.

Accordingly, 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 no later than November 1, 2016 on its new policies, timelines, procedures, staff training, and equipment to ensure contract compliance with the IUID policy for all items that require unique item level traceability at any time in their life cycle, to support counterfeit material risk reduction, and to provide for systematic assessment and accuracy of IUID marks as set forth by DOD Instruction 8320.04.

Joint-Military Service approach to prepositioning

The committee notes that in section 321 of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66), Congress directed the Department of Defense (DOD) to submit to the congressional defense committees a plan for implementing a prepositioning strategic policy that establishes a coordinated joint-military service approach for DOD's prepositioned stock programs, in order to maximize efficiencies across the department, not later than 120 days after the date of the Act—that is, by April 24, 2014. However, DOD has not yet developed the required strategy or implementation plan, as directed; instead, DOD has informed the committees that it would develop Department-wide guidance in the form of a DOD directive for managing DOD's prepositioned stock programs before developing an implementation plan, which it would submit within 120 days after the DOD directive had been approved. However, DOD has not identified a timeline for completing the directive and meeting the requirements of section 321 of the National Defense Authorization Act for Fiscal Year 2014.

As early as May 2011, GAO recommended that DOD develop a department-wide strategy on prepositioned stocks and that it strengthen joint oversight of its prepositioned stock programs to integrate and synchronize at a DOD-wide level the services' prepositioned stock programs, in order to maximize efficiency in managing prepositioning across the department and to reduce potentially unnecessary duplication.

The committee remains concerned about DOD's lack of progress in developing a prepositioned stock strategy and implementation plan.

Accordingly, the committee directs the Secretary of Defense to submit to the congressional defense committees no later than September 1, 2016 a timeline by which it will complete the Department-wide directive and implementation plan, and to include in the timeline the major steps DOD plans to take in implementing the plan, with target dates for accomplishing each of them that can be used to monitor progress and report results.

Modernization of emergency power generation

The committee notes that the emergency power generation systems frequently used in Army National Guard armories can be plagued by unreliable operation in addition to high operation and maintenance costs. The committee notes that the Army has plans and programs in place to address the operational requirements, technological opportunities, and industrial base challenges associated with the strategic goal of a net zero energy, water, and waste policy.

Accordingly, the committee directs the Secretary of Defense to report to the congressional defense committees no later than March 1, 2017 with a comprehensive strategy, including a development and implementation plan, that replaces or improves emergency power generation readiness, reduces system maintenance, and improves fuel flexibility to ensure the sustainability of all Department emergency power generation systems in operation.

National Test and Training Range Improvements

The committee is aware of the critical role our national assets of test and training ranges play in providing full-spectrum readiness critical for all of our Services, and large live training exercises as one of the key components to this training.

National test and training ranges such as the Joint Pacific Alaska Range Complex (JPARC), Pacific Missile Range Facility, Nevada Test and Training Range (NTTR), Utah Test and Training Range (UTTR), China Lake Complex, White Sands Missile Range (WSMR), the National Training Center (NTC), Eglin Gulf Test and Training Range (EGTTR), as well as other United States-based ranges, are critical to hosting realistic service, joint, and coalition large force training exercises such as RED FLAG, RED FLAG–Alaska, Northern Edge, Army Network Integration Evaluation, and other large force training exercises. The committee also recognizes the need for secure and modern range complexes to host coalition and international partner training exercises.

Additionally, the committee recognizes the critical importance of expansive and tactically relevant training ranges that contain high fidelity air-to-air, surface-to-air, surface-to-surface, subsurface, and command, control, communication, computers, intelligence, surveillance, reconnaissance, and cyber assets to simulate anticipated threat environments for the coming decades.

Therefore, the committee directs the Secretary of Defense, in coordination with the Service Secretaries, to develop a strategic plan for identifying requirements and priorities, resourcing for national test and training range infrastructure improvements and addressing encroachment mitigation. The Committee directs the Secretary to provide both a written plan and briefing to the congressional de-

fense committees no later than 180 days following the enactment of this Act.

New Hampshire water contamination

As the committee noted in the National Defense Authorization Act for Fiscal Year (FY) 2016 Report (114–29), the Air Force in coordination with the Environmental Protection Agency (EPA), the New Hampshire Department of Environmental Services (NHDES), and the City of Portsmouth—discovered the presence of perfluorochemicals (PFCs) in the Haven Well in Portsmouth, New Hampshire. On August 3, 2015, the EPA issued a final order directing the Air Force to clean up the contamination at the Haven Well. According to the order, the Air Force has caused or contributed to the presence of the chemicals in the well in Portsmouth due to the Air Force’s use of fire-fighting foam at the former Pease Air Force Base.

Research has associated exposure to these chemicals to adverse health effects including but not limited to increased cholesterol, increased blood pressure, liver damage and possibly cancer. Portsmouth residents who believe they were at risk of exposure have requested tests to check their blood serum levels of PFCs.

The PFC contamination detected at the Haven Well has also been detected at the Harrison and Smith wells. The Air Force has committed to using the best available technology to treat the water at the wells and return it to safe drinking water levels.

While unrelated to the contamination at Pease, the committee notes that an increasing number of communities across New Hampshire have reportedly identified the presence of perfluorooctanoic acid (PFOA) and that potential health effects of using water contaminated by PFOA remain unknown. According to reports, levels of PFOA have been detected in the public and private water supplies in the communities of Merrimack, Litchfield, Bedford, Londonderry, and Dover. Public and private wells in these communities are being tested by the NHDES. The EPA has identified PFOA as an “emerging contaminant” and in 2009, the Agency issued a provisional health advisory for drinking water of 400 ppt for PFOA.

The committee believes the Air Force should work collaboratively with NHDES and EPA to share lessons learned from Haven Well. No later than September 1, 2016, the Air Force should provide the committee with: (1) an update on the Haven well cleanup; (2) an update on the Air Force’s efforts to identify and notify all affected or impacted by the contamination; (3) an assessment of the Air Force’s role, if any, in the new contaminations; and (4) a summary of the Air Force’s support, where appropriate, for NHDES and the EPA with respect to the latest contaminations.

Objective training readiness reporting

The committee is aware that some of the military services have efforts underway to establish objective and uniform standards to measure the training readiness of military forces. The committee notes, for example, that the Army is standardizing lists of mission essential tasks for like units below the brigade level and developing objective evaluation criteria that commanders will use to evaluate

unit training against these critical tasks. The committee further notes that according to Army senior leadership, these initiatives will facilitate accurate and uniform readiness evaluations and enable the service to make risk-informed resourcing and force allocation decisions.

The committee notes that these initiatives to more objectively evaluate training readiness may continue the practice of giving commanders the flexibility to subjectively upgrade or downgrade the overall readiness of their units in certain circumstances based on the commander's judgement in light of a mission analysis, among other factors. While recognizing that commanders may require some degree of flexibility in assessing their units' training readiness based on subjective factors, the committee stresses the importance of accurate readiness reporting and encourages all of the military services to define objective and uniform standards to assess training readiness.

Accordingly, the committee further encourages the military services to limit the use of subjective readiness upgrades, which could mask the department's progress transitioning from a force trained to conduct counterinsurgency operations to one trained for a broader range of military operations. The committee will continue to monitor the military services' development of objective and uniform standards to evaluate training readiness and may direct further action, including limiting the use of subjective upgrades, if these standards are not fully utilized in readiness reporting.

Physical security of sensitive conventional ammunition items at Department of Defense and contractor locations

The committee notes that Security Risk Category I (SRCI) ammunition items, including certain man-portable missiles and rockets, are extremely lethal and a potential threat if they were to be used by unauthorized individuals or groups. To help protect these items and minimize the risk of loss or theft, it is critical that the Department of Defense (DOD) have strong physical security measures at DOD and contractor locations.

The committee notes that the Government Accountability Office's February 2015 report on SRCI ammunition items found that enhanced policy and procedures are needed to improve management of sensitive conventional ammunition, specifically the timeliness, completeness, and accuracy of information to maintain full accountability and visibility of SRCI ammunition items.

Accordingly, the committee directs the Comptroller General of the United States to evaluate the extent to which: (1) DOD and the military services, in accordance with policies and procedures, have established and maintained physical security measures at DOD and contractor locations, and (2) these identified physical security measures differ between selected DOD depots and retail locations, as well as at selected contractor locations.

The committee further directs the Comptroller General to brief the Committees on Armed Services of the Senate and the House of Representatives no later than March 30, 2017, on preliminary findings of the Comptroller General's evaluation with a report to follow no later than June 1, 2017.

Public shipyard funding and capital investment to support defense operations

The committee notes that ongoing operational demands for Navy ships remain high and continue to increase, with some key current demands going unmet. The committee recognizes that the Navy is working to maximize the operational availability of the existing fleet and rebuild its warfighting readiness after more than a decade of continued deployments. The Navy has identified shipyard performance—namely the ability to complete maintenance availabilities on time—as one of the key risks to its plans to maximize the availability of the fleet.

The committee notes that any delay in completing a maintenance availability results in lost operational days for Navy ships, which in turn compresses time available for training and reduces ships' operational availability to combatant commanders. Maintenance delays also can lead to unsustainable risk mitigation strategies such as deferring maintenance and extending deployments which can jeopardize reaching ships' service lives and retention of the force.

In the late 1990s, the Navy converted its shipyards from financing under the Navy Working Capital Fund to funding through direct appropriations, referred to as “mission funding”. In 2010, the Government Accountability Office found that the Navy had experienced unfunded shore readiness that contributed to growth in the backlog of capital investments at the shipyards and noted that the average age of facilities and drydocks was 61 and 81 years old, respectively. The ability of the shipyards to meet their mission—keeping the fleet operational—depends on maintaining the shipyards' infrastructure and equipment, and to do this the Navy and the committee need an accurate picture of whether the Navy has the means to accomplish this so the committee can best exercise oversight and make knowledgeable funding decisions.

Accordingly, the committee directs the Comptroller General of the United States to evaluate: (1) the impact, if any, the change from working capital funding to mission funding has had on shipyard capital investment and performance and (2) the extent, if any, the Navy's shipyard planning has addressed its restoration and modernization needs to support operational readiness. The Comptroller General may also include other related matters as deemed appropriate.

The committee further directs the Comptroller General to brief the Committees on Armed Services of the Senate and the House of Representatives no later than March 30, 2017, on preliminary findings of the Comptroller General's evaluation with a report to follow by May 15, 2017.

Rebuilding readiness

The committee notes that due to the consistent high pace of operations coupled with significant downsizing of some of the military services, the past decade has witnessed a disturbing decline in readiness. The Department of Defense (DOD) has stated that rebuilding readiness is one of its overarching priorities and submitted to Congress plans for readiness recovery last year. However, preliminary work from the Government Accountability Office evalu-

ating DOD's efforts to rebuild readiness shows that DOD lacks comprehensive readiness goals or a strategy for achieving those goals.

Therefore, the committee has grown increasingly concerned about the state of military readiness and whether DOD has a viable plan for rebuilding it. To inform its oversight, the committee directs DOD to submit a detailed plan to the congressional defense committees for rebuilding readiness by September 30, 2016. DOD's plan should, at a minimum, include: comprehensive readiness goals and a strategy for achieving the goals; metrics for measuring progress at specific milestones; identification of external factors that may impact recovery plans and potential mitigations; and plans for Department-level oversight of service readiness recovery plans including methods for evaluating the effectiveness of readiness recovery efforts. The committee further directs the Comptroller General of the United States to evaluate DOD's plan for rebuilding readiness and provide a briefing to the Committees on Armed Services by February 1, 2017 on any preliminary findings with a report to the congressional defense committees to follow no later than May 1, 2017.

In evaluating DOD's readiness recovery plan, the Comptroller General should consider the extent to which DOD's plan addresses the root causes of degraded readiness; and he may, at his discretion and in consultation with the committee, provide additional reports that address these root cause issues in more detail. Specifically, he should consider doing a detailed evaluation of different options for approaching readiness and the consequences of each option. In the past, DOD has varied its approach to the way it collects and reports readiness—applying uniform policies and practices across DOD in some cases, while providing the military services and combatant commands wide latitude and flexibility in other cases.

Additionally, DOD has varied: the way it applied plans and scenarios to determine force structure and readiness requirements and the way it has managed personnel tempo in mobilizing and deploying its forces. The different approaches to these, and other, areas can directly affect: readiness requirements, the levels of readiness that are reported, the resultant readiness gaps that need to be filled, and ultimately the funding requirements for the weapons systems, maintenance, personnel, and training that are needed to rebuild readiness.

Report on equipment purchased under sole source contracts

The committee notes that it is important for the Department of Defense (DOD) to utilize competition when procuring services and equipment. The committee further notes that increased competition provides DOD the opportunity to obtain lower prices, better technology, and the ability to review the marketplace should there be a need for multiple sources. Finally, the committee notes the dangers of utilizing sole source contracts when due diligence was not done to assess alternatives in the marketplace.

The committee is concerned that too often DOD has used sole source contracts thus limiting competition from potential suppliers.

Accordingly, the committee directs the Secretary of Defense to submit a report to the Committees on Armed Services of the Senate

and the House of Representatives no later than March 1, 2017. The report should include a list of each contract awarded by the DOD during fiscal years 2011 through 2015 using procedures other than competitive procedures or cases where solicitations resulted in only one responsive bidder for the procurement of equipment, weapons, weapon systems, components, subcomponents, or end-items with a contract value equal to or greater than \$3.0 million. The report shall include for each product listed: (1) an identification of the items purchased under the contract; (2) the rationale for using an exception or waiver to award the contracts using procedures other than competitive procedures; and (3) a list of potential alternative manufacturing sources from the public and private sector that could be developed to establish competition for those items.

Report on M240 Sustainment and the small arms industrial base

The committee appreciates the recent report regarding sustainment of the industrial base for the M240. The committee, however has concerns that the industry was not consulted in the preparation of the sustainment plan.

Accordingly, the committee directs the Assistant Secretary of the Army for Acquisition, Logistics, and Technology to provide a report to the Committees on Armed Services of the Senate and House of Representatives no later than September 30, 2016. With input from industry, the report should include: (1) the Army's sustainment plan for the M240 to include an assessment of the necessity of establishing an M240 recapitalization program. If a recapitalization plan is necessary, the timeline and strategy for establishing such a program should be included; and (2) the Army's plans to ensure the health of the domestic small arms industrial base, including both original and spare parts manufacturers.

Report on non-combat training requirements for Army, Navy, Air Force, and Marine Corps servicemembers

The committee notes the important training servicemembers participate in for both combat and non-combat activities. The committee believes that both types of training are important to develop and maintain not only a lethal, fighting force but also a responsible and professional one. The committee is concerned, however, that at times some non-combat training may be duplicative and take time away from what could be used for critical combat training.

Accordingly, the committee directs the Secretary of Defense, in consultation with the service secretaries, to submit a report to the Committees on Armed Services of the Senate and the House of Representatives no later than November 1, 2016. The report shall include non-combat related training requirements for all components with: 1) A list and description of all non-combat training requirements, divided by each service, to include designation for training that must remain current or is required for pre-deployment; 2) A description of the method required for accomplishing the training; 3) A description of the average amount of time required to complete the training, including the time spent enforcing the training requirements and the required time spent on instructor training, if required; 4) The number of times the training is re-

quired and the duration of time that the training is valid; 5) A description of the applicability of the individual training to the servicemember's primary job performance; 6) A description of the total amount of time a servicemember is required to complete the non-combat training requirements; and 7) An identification and description of any negative impact to primary job performance that is a result of the non-combat training requirements.

The report shall include recommendations for any non-combat training that the Secretary of Defense believes should be eliminated. The report shall be submitted in unclassified form, but may include a classified annex if required.

Report on reset and sustainment of material handling equipment

The committee notes the continued efforts of the military logistics community to provide vital resources for the warfighter. However, the committee is concerned by the lack of a comprehensive and appropriately resourced sustainment strategy for Material Handling Equipment (MHE) and RT240 Rough Terrain Container Handlers (RTCH), despite the Army's inventory of roughly 1 million International Standards Organization, or ISO, containers in Southwest Asia.

The committee believes that the incorporation of state-of-the-art systems that enhance logistical through-put and provide greater item unique identification and in-transit visibility of assets should be considered with the goal of increasing efficiency and reducing fuel requirements. The committee is concerned that if left without an overarching strategy, expeditionary logistics equipment like the RTCH will continue to deteriorate with age.

Accordingly, the committee directs the Secretary of the Army to provide an assessment no later than February 1, 2017. This assessment should include: (1) an inventory of all RTCH (RT240 and DV43), to include the number over 10 years old, and numbers non-mission capable; (2) the readiness rates of these systems and any known block obsolescence issues; (3) any divestment plans of obsolete RTCH equipment within the future years defense program; (4) a comprehensive and appropriately resourced sustainment strategy, beginning in fiscal year 2017, to prevent future capability gaps.

Requirements model for restoration and modernization funds at Department of Defense installations

The committee remains concerned that fiscal constraints as a result of the Budget Control Act of 2011 have unnecessarily hampered vital investments in restoration and modernization (R&M) accounts. Deferred work and existing backlogs of R&M exacerbate the conditions of our installations, which increases risk to the Armed Forces' ability to accomplish their missions, meet quality of life standards, and compounds long-term costs.

Accordingly, the committees directs the Secretary of Defense to develop a model of requirements for R&M funds and provide the congressional defense committees with an initial model to be delivered in conjunction with the budget submission for fiscal year 2018. The R&M model should address both vertical and horizontal infra-

structure and include age of facilities, miles of roads, miles of utilities, and acreage in addition to any other appropriate considerations determined by the Secretary. The R&M model should not rely on prior year funding levels to estimate future requirements. Additionally, the Secretary should pilot the use of the initial model in fiscal years 2017 and 2018, request feedback from installations in each of the services on the accuracy and sufficiency of the model to reflect the diverse needs of all installations, and refine the R&M model as necessary. Lastly, once the R&M model is complete, the Secretary shall submit a written plan to the congressional defense committees detailing how the Department will use the model for funding R&M requirements. The plan should include how each military service will resource the personnel for carrying out the modeled requirements including, but not limited to, contract officer staffing to ensure timely use of the funding provided.

Resiliency through improved utilization of CHP and WHP

The committee strongly supports the U.S. Army's Energy Security & Sustainability strategy and the use of heat recovery technologies, such as combined heat and power (CHP) and waste heat to power (WHP), to improve its current and future capabilities and enhance mission effectiveness. CHP and WHP technologies help make critical infrastructure more resilient, and—when interconnected with energy storage systems or onsite renewable generation assets, through micro-grid and smart grid technologies—can provide standby power during grid outages.

To reduce risks posed by a vulnerable energy grid, and in accordance with Executive Orders 13624 (“Accelerating Investment in Industrial Energy Efficiency”) and 13693 (“Planning for Federal Sustainability in the Next Decade”), the committee encourages the Department of Defense (DOD) to expand deployment of CHP and WHP on military property. The committee also directs the DOD to convene a forum to identify ways to encourage further use of these technologies on military bases to better enhance mission assurance and to leverage the use of existing and new renewable energy generation investments.

Review of Navy Coastal Riverine Forces

The committee notes that the Navy's Coastal Riverine Force operates in harbors, rivers, bays, across the littorals and ashore, conducting maritime security operations ranging from defending high value assets and critical maritime infrastructure to conducting offensive combat operations. The committee understands that in 2012, the Navy merged Riverine Forces and Maritime Expeditionary Security Forces to form the Coastal Riverine Force. The committee further understands that the Coastal Riverine Force is organized into 2 Groups with 7 Squadrons—3 homeported on the west coast and 4 homeported on the east coast—operating more than 100 boats, from 25-foot patrol boats to the new 85-foot Mark VI patrol boat. Coastal Riverine Force units have deployed worldwide in recent years to Korea, Saudi Arabia, Bahrain, and Egypt among other locations.

The committee notes that in January 2016, U.S. sailors aboard two U.S. riverine patrol craft were detained by Iran's Revolutionary

Guard. Footage of the incident aired widely in the media. According to news reports, a subsequent Navy investigation found that several factors may have contributed to the vessels' capture including mechanical problems with one boat's diesel engines and satellite communications gear, and parts shortages, among others. The committee is interested in understanding the factors that contributed to the detention of these sailors, in particular the material condition of the boats and equipment, and steps taken to prevent such incidents in the future.

Accordingly, the committee directs the Comptroller General of the United States to undertake a comprehensive review of the readiness of the Navy's coastal riverine force and to provide a briefing on preliminary observations by February 1, 2017 with a report to follow to the Committees on Armed Services of the Senate and the House of Representatives to address the following elements: (1) what are the current and historical readiness status of the Navy's coastal riverine units including any trends in reported readiness in personnel, material condition of vessels, maintenance, and training and any major areas of deficiencies?; (2) what impact, if any, do the above identified deficiencies have on maintaining needed warfighting capabilities?; (3) to what extent have actions been taken by the Navy to address the above identified deficiencies including the development of any further plans and identification of resource needs to address them?; and (4) any other related matters as deemed appropriate by the Comptroller General.

Software-based foreign language training and sustainment

The committee understands that foreign language training, including the sustainment of foreign language competencies, is an important component of training for many service members and Department of Defense (DOD) civilians.

The committee expects DOD to continue to identify best practices, including for United States Special Operations Command and defense-related intelligence activities, that exploit emerging technology to more effectively integrate software-based training with human instruction to deliver efficient language training and sustainment.

As foreign language training best practices are identified, the committee encourages DOD to explore opportunities to make software-based foreign language training and sustainment available to service members and DOD civilians at the lowest possible overall cost to minimize capability gaps.

Study on power storage capacity requirement

The committee directs the Secretary of Defense to report to the congressional defense committees no later than March 30, 2017 on the costs and benefits associated with requiring 25 percent of National Guard and Reserve facilities to have at least a 21-day on-site power storage capacity to assist with providing support to civil authorities in case of manmade or natural disasters.

Synthetic and simulation training to enhance small arms weapons skills and combat readiness

The committee recognizes that synthetic training systems can enhance small arms weapons skills training effectiveness for U.S. military personnel, while reducing direct and indirect training time and costs. The committee is aware that by leveraging software capabilities, these systems can demonstrate that collection and analysis of trainee performance data can accelerate warfighter training results, while providing resource programmers the ability to assess program fidelity and ensure effective test and evaluation metrics are implemented to achieve successful, cost-wise weapons training results, including live fire proficiency.

For example, the committee is aware that synthetic small arms training systems utilized by Navy commands, including Navy Expeditionary Combat Command and Naval Special Warfare Command, and at U.S. Army and joint training sites, including the Joint Multi-National Training Center under U.S. Army (Europe), can leverage data collection and metric analysis to improve training efficiency and ensure training effectiveness transfers to live fire qualifications and skills sustainment. This capability could allow commanders to maintain and track individual and squad-level training records, provide trend analysis and forecast models to reduce training time and accurately determine live fire transfer readiness, enable customization to train to multiple proficiency levels and hone training as threats evolve, and demonstrate clear and repeated live fire transfer proficiency.

As investments are made in small arms simulator training systems to meet warfighter operational objectives and force protection requirements, the committee strongly encourages all military departments, schools, and commands to appropriately adopt more advanced, innovative small arms weapons and crew served training systems, such as those described above, that are capable of demonstrating consistent and successful live fire transfer and combat readiness in cost efficient and time effective manner.

Additionally, the committee supports the Department of Defense's continued expansion of the full range of simulation training as a cost-effective means by which military units can improve tactical decision-making skills through training in realistic scenarios otherwise only found in combat operations. The committee strongly encourages the Department to continue to ensure the most efficient and effective training programs are available through a combination of both government-owned and operated simulators, as well as simulation support from a dedicated commercial activity capable of providing appropriate hardware and software updates.

Third party financed energy projects

Department of Defense (DOD) installations serve as platforms from which military forces employ and are critical to joint military operations around the world. The committee continues to be strongly supportive of the DOD's efforts to enter into third party financed power purchase agreements (PPAs), which improve combat capability and provide energy resiliency for the military services along with the appropriate stewardship of taxpayer funding. Projects developed using PPAs and third party financing have little to no up-

front cost to DOD, and the committee supports the adage that any project that saves money is money that can otherwise be spent on training and readiness.

The committee recognizes and strongly encourages DOD to pursue PPAs that provide electricity to installations at below market rates for 25–30 years with the capability for islanded operations, ensuring the appropriate inverter functionality is included in the PPA agreement. When possible, the committee also encourages the inclusion of micro-grids for critical assets that enable a more flexible allocation of power on the installation which can also improve resiliency and mission assurance.

For example, the committee notes that in Georgia, the Marine Corps is using a third party financed energy savings performance contract (ESPC) to generate enough renewable Electricity on base, through a biomass steam turbine generator, to support all of Marine Corps Logistics Base Albany's electrical needs. Additionally, the ESPC will include other energy conservation measures such as light emitting diode lighting, boiler retrofits, and a smart grid to allow for automated load shedding, fault location and isolation, and utility islanding in the event of a grid outage at Albany. The committee recognizes and is supportive of the efforts at Marine Corps Logistics Base Albany to maximize the use of resilient energy to achieve net-zero installation status and greater energy security in their mission to support Marine Corps units and the defense industrial base.

Additionally, the committee recognizes and is strongly supportive of the Air Force's Office of Energy Assurance and its plans to design cost-competitive energy projects to enhance resiliency and notably, has successfully reduced energy intensity across installations by over 24 percent since 2013, despite utility prices increasing 29 percent since 2003. The committee also recognizes and is supportive of the micro-grid deployed to the Hawaii Air National Guard Wing to increase energy security for its F-22 alert aircraft. Additionally, the Air Force is developing a 19 megawatt photovoltaic array at Nellis Air Force Base, in addition to a 14 megawatt array that started producing power in 2007. The project enables Nellis with a substation and feeder line that insulates the base and allows continuous operations should the local power grid go down. Lastly, natural gas peaking plants at Tinker Air Force Base and Warner Robins Air Force Base can be islanded and provide the base with energy security during grid outages.

For the Army, the committee is strongly encouraged by and supportive of the Army's largest single renewable energy project to date at Fort Hood, Texas. The project is expected to save the Army at least \$168.0 million over the course of the contract, which is a solar and wind project that will have a capacity of 65 megawatts and will be micro-grid capable to enhance energy security. Other Army projects include a large-scale renewable solar projects at Redstone Arsenal, Anniston Army Depot, and Fort Rucker which represent an 18-fold increase in total solar capacity installed in the state of Alabama. These projects will purchase energy at or below the costs of conventional energy. Additionally, an Army project in Georgia, totaling over 90 megawatts led to a six-fold increase in photovoltaic capacity for the state.

Historically, DOD had frequently taken an approach to improving grid resiliency that entailed placing hundreds of backup diesel generators at the point of load. Instead, the committee strongly encourages DOD to pursue alternative and renewable energy projects which have capability, cost, and reliability benefits that provide additional resiliency and flexibility to route power during grid outages.

Accordingly, the committee continues to strongly encourage DOD to continue to use PPAs and other authorities to take full advantage of private sector financing for renewable energy projects that improve energy resiliency, increase mission assurance, and offer cost savings.

Third party financed energy savings performance contracts

The committee strongly supports and encourages the Department of Defense's (DOD) continued approach of leveraging third party financing mechanisms for large-scale energy projects. The committee has also observed the positive benefits of DOD increasing use of private sector financing and expertise for energy projects that support DOD infrastructure.

In particular, the committee has been encouraged by the Department's continued use of Energy Savings Performance Contracts (ESPCs) which guarantee energy savings to pay for the investment in energy-related equipment.

The committee also recognizes the continued importance of appropriate oversight with respect to third-party financed energy projects. Accordingly, the committee directs the Comptroller General of the United States to report to the congressional defense committees no later than March 30, 2017 with a review of: (1) The extent of the deferred maintenance backlog across DOD buildings and facilities, as well as the quality of life and financial impact of such continued deferral and backlog; (2) The extent to which, if any, the DOD budget is sufficient to address the deferred installation maintenance backlog; (3) The extent to which, if any, DOD would have otherwise been able to address large-scale energy projects without the availability of third-party financing mechanisms; and (4) The total amount of investment and costs DOD has avoided since 2009 by leveraging third-party financing mechanisms compared to if DOD used direct appropriations to acquire large-scale renewable energy projects.

Warfighter technology

The committee is aware of the work being done by the Warfighter Technology directorate in improving the protection, survivability, mobility and combat effectiveness of our Nation's Army. Key to these efforts is continued research in areas of advanced ballistic polymers for body armor, fibers to make uniforms more fire resistant, lightweight structures for advanced shelters are all examples of tangible benefits to the Soldier.

The Committee notes that the FY17 President's Budget decreased funding for the Warfighter Technology Directorate by roughly \$2 million as compared to FY16 levels. In order to ensure the Army remains at the cutting edge of technology in these critical

areas, the Committee urges the Army to ensure that proper resources are available for this research.

The Committee is aware there is a clear need and future requirements to broaden this effort to the development of lightweight multifunctional materials and systems integration in the areas of (1) soldier protection, and (2) expeditionary basing, collective protection, and sustainment.