

DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

TITLE I—PROCUREMENT

Subtitle A—Authorization of Appropriations

Authorization of appropriations (sec. 101)

The committee recommends a provision that would authorize the appropriations for procurement activities at the levels identified in section 4101 of division D of this Act.

Subtitle B—Army Programs

Distributed Common Ground System-Army (sec. 111)

The committee is aware that the Distributed Common Ground System (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 United States Air Force, United States Navy and United States Army intelligence, surveillance, and reconnaissance systems. The United States Army system, DCGS-A, is the primary system for posting of data, processing of information, and disseminating intelligence, surveillance and reconnaissance information about the threat, weather, and terrain. The system contributes to visualization and situational awareness, thereby enhancing tactical maneuver, maximizing combat power and enhancing soldiers' ability to operate in an unpredictable and changing environment. DCGS-A is fielded at echelons that range from fixed sites, corps, division, brigade combat team (BCT), and battalion levels. Since 2007 the total program cost is in excess of \$3.0 billion dollars. Costs to complete the program are estimated to be in excess of an additional \$7.0 billion dollars. DCGS-A, Increment 2, intended to correct many identified problems, is in source selection.

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 BCTs and battalions are required to improvise to overcome unreliable hardware and complex software. Operator knowledge and proficiency is low because of this complexity. Unit readiness is adversely impacted.

The committee recommends a provision that would require the Secretary of the Army to take action to improve training of DCGS-A operators and their leaders at division and below echelons. Secondly, the Secretary of the Army should rapidly identify and field

an effective, suitable and survivable solution for division and below tactical units. The Secretary of the Army shall acquire a commercially available off the shelf, non-developmental capability that: meets essential tactical operational requirements for processing, analyzing and displaying intelligence information; is substantially easier for personnel in tactical units to use; and requires less training. The Secretary of the Army may not award any contract or expend any funds for the design, development, procurement, or operation and maintenance of any data architecture, data integration, "cloud" capability, data analysis, or data visualization and workflow capabilities, including various warfighting function-related tools under or contributing to any increment of the distributed common ground system of the Army for tactical units at division or below unless the contract is awarded not later than 180 days after the date of the enactment of this Act and uses procedures relating to the acquisition of commercial items pursuant to part 12 of the Federal Acquisition Regulations (48 CFR 12.000 et seq.), and the contract uses firm fixed-price procedures. In addition, the technology to be acquired will begin initial fielding rapidly after the contract award; achieve Initial Operating Capability (IOC) within 9 months of the contract award; and achieve Full Operating Capability (FOC) within 18 months of the contract award.

Multiyear procurement authority for UH-60M/HH-60M Black Hawk helicopters (sec. 112)

The committee recommends a provision that would allow the Secretary of the Army to enter into a multiyear contract for UH-60M/HH-60M Black Hawk helicopters for fiscal years 2017 through 2021. The proposed multiyear procurement will produce significant savings and facilitate industrial base stability.

The UH-60M/HH-60M Black Hawk is a core aviation program and is approved for full-rate production through the future years defense program. If the proposal is approved, the Army buy will consist of 193 UH-60M aircraft and 75 HH-60M aircraft between fiscal years 2017 and 2021. The Navy is not expected to participate in this multiyear procurement. The request for proposal solicitation was released with a minimum quantity of 36 helicopters per year and a base quantity of 50 helicopters per year with options to increase the maximum quantity to 72 helicopters per year.

Multiyear procurement authority for AH-64E Apache helicopters (sec. 113)

The committee recommends a provision that would allow the Secretary of the Army to enter into a multiyear contract for AH-64E Apache helicopters for fiscal years 2017 through 2021. The proposed multiyear procurement will produce significant savings and facilitate industrial stability.

The AH-64E is a core aviation program and is approved for full-rate production through the current future years defense program. The minimum need for the AH-64E is not expected to decrease during the contemplated multiyear procurement period.

If the proposal is approved, the Army buy will consist of 275 AH-64E Apache helicopters between fiscal years 2017 and 2021. The request for proposal (RFP) was released with a minimum quantity

of 46 per year, with options for remanufactured quantities up to 75 per year. The RFP included new build quantities, as a contract option, of up to 30 per year. In no year would total quantities of remanufactured and new build aircraft exceed 90 per year.

Subtitle C—Navy Programs

Incremental funding for detail design and construction of LHA replacement ship designated LHA-8 (sec. 121)

The committee recommends a provision that would allow the Secretary of the Navy to enter into and incrementally fund a contract for detail design and construction of the LHA Replacement ship, designated LHA-8. Subject to the availability of appropriations, funds for payments under the contract may be provided from amounts authorized to be appropriated for the Department of Defense for Shipbuilding and Conversion, Navy, for fiscal years 2017 and 2018.

Littoral Combat Ship (sec. 122)

The committee recommends a provision that would require an annual report on Littoral Combat Ship (LCS) mission packages, a certification on the acquisition inventory objective of LCS mission packages, a limitation on the use of funds to revise or deviate from revision three of the LCS acquisition strategy, and a repeal of a reporting requirement related to LCS mission modules.

The committee is concerned with the volume and complexity of LCS mission package testing that remains to be completed. Since 2009, the surface package has been delayed by 2 years, the anti-submarine package by 3 years, and the mine countermeasures package by at least 8 years. Significant design, testing, integration, and deployment challenges must be overcome before the promised LCS warfighting capability is realized.

Therefore, the committee directs the Secretary of the Navy to submit a report on LCS mission packages, annually, with the President's budget request. For each mission package and increment therein, the report would include: (1) a description of the current status of and plans for development, production, and sustainment; (2) a description, including dates, for each developmental test, operational test, integrated test, and follow-on test event completed in the preceding fiscal year, forecast to be conducted in the current fiscal year, and in each of the next 5 fiscal years; (3) the planned initial operational capability (IOC) date and a description of the performance level criteria that must be demonstrated to declare IOC; (4) a description of systems that reached IOC in the preceding fiscal year and the performance level demonstrated versus the performance level required; (5) the acquisition inventory objective listed by system; (6) the current locations and quantities of the individual systems listed by city, state, and country; and (7) the planned locations and quantities of systems listed by city, state, and country in each of the next 5 fiscal years.

Since 2007, the committee notes the program of record has required 64 LCS mission packages, including 16 for anti-submarine warfare (ASW), 24 for mine countermeasures (MCM), and 24 for surface warfare (SUW). Several major program changes have oc-

curred since this program of record quantity was established to support 52 LCS, including: a revised acquisition strategy that reduces procurement to 40 ships, the decision to modify at least 12 LCS to a frigate design that includes LCS ASW and SUW mission package systems permanently installed, and a Remote Minehunting System Independent Review Team recommendation to exercise MCM capability from platforms other than LCS. Therefore, the committee recommends the Undersecretary of Defense for Acquisition, Technology, and Logistics recertify the LCS mission package program of record and submit this certification with the President's budget request for fiscal year 2018.

The committee also notes that on March 29, 2016 revision three of the LCS acquisition strategy was approved by Under Secretary of Defense for Acquisition, Technology, and Logistics Frank Kendall. This revision was approved on February 19, 2016 by Assistant Secretary of the Navy (Research, Development & Acquisition) Sean Stackley and supports the President's fiscal year 2017 budget request. This revision plans to continue the procurement of both LCS designs in fiscal year 2017 in preparation for the down select to a single variant and transition to the frigate as early fiscal year 2018, but no later than fiscal year 2019. It also plans to procure LCS/frigate ships through fiscal year 2025 for a total inventory of 40 ships. As the Secretary of Defense testified on March 17, 2016, ". . . we're investing in LCS and frigates because we need the capability they provide, and for missions like minesweeping and anti-submarine warfare, they're expected to be very capable. The department's warfighting analysis called for 40 small surface combatants, so that's how many we're buying . . . While this will somewhat reduce the number of LCS available for presence operations, that need will be met by higher-end ships . . . Under this rebalanced plan, we will still achieve our 308-ship goal within the next five years, and we will be better positioned as a force to effectively deter, and if necessary defeat, even the most advanced potential adversaries." Therefore, the committee requires, should the Secretary of Defense deem changes necessary, that the Secretary submit a waiver justification prior to revising or deviating from revision three of the LCS acquisition strategy. The waiver would be required to include the following related to such revision or deviation: the rationale, a determination that it is in the national security interest, a description of the changes, the resulting acquisition strategy, and independent cost estimates that compare the changes to revision three of the LCS acquisition strategy.

The committee notes section 126(b) of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112-239) requires a quarterly report on LCS mission modules. This reporting requirement is addressed in subsection (a) of this provision. Therefore, the committee recommends striking subsection (b) of section 126 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112-239).

Additionally, the committee recommends initiating or continuing the Joint Capabilities Integration and Development System analysis necessary for future surface combatants, including the LCS replacement. It is essential that a follow-on small combatant be developed and procured starting in the 2020s to replace LCS, which

begins retiring in the early-2030s. The committee believes the analytical assumptions for the follow-on small surface combatant must address the capability and survivability shortfalls of LCS in a high threat environment, including the ability to: attack enemy surface ships at over-the-horizon ranges with multiple salvos, defend nearby noncombatant ships from air and missile threats as an escort, conduct long-duration escort or patrol missions without frequent refueling, and be built to Navy level one survivability design standards.

Certification on ship deliveries (sec. 123)

The committee recommends a provision that would require the Secretary of the Navy to deem ship delivery to occur at the completion of the final phase of construction. The Secretary would be required to submit a certification to the congressional defense committees not later than January 1, 2017 that certifies ship delivery dates have been adjusted, including the ship hull numbers and delivery date adjustments. The adjustments would be reflected in the budget of the President submitted under section 1105(a) of title 31, United States Code, as well as Department of Defense Selected Acquisition Reports.

The committee notes that justification materials, which accompanied the President's fiscal year 2016 and 2017 budgets, as well as Department of Defense Selected Acquisition Reports for the CVN-78 class aircraft carrier program, list the delivery date of USS *John F. Kennedy* (CVN-79) as June 2022. However, the Navy plans to deliver this ship in two phases. Phase I delivery, scheduled to complete in June 2022, will deliver the ship with full propulsion capability, aircraft launch and recovery systems, and safe to sail navigation systems. Phase II delivery, scheduled to complete in September 2024, will add the remaining electronics and ordnance equipment, including the Ship Self-Defense System, weapons systems, and Enterprise Air Search Radar. The committee believes CVN-79 delivery should be deemed to occur at the end of Phase II delivery.

Similarly, the committee understands all three ships in the *Zumwalt*-class will employ a dual delivery approach with hull, mechanical, and electrical (HM&E) systems delivery at the shipbuilder in Maine and combat systems activation in California. In the case of USS *Zumwalt* (DDG-1000), HM&E delivery is scheduled for 2016 and combat systems activation is scheduled for 2018. The committee notes the President's fiscal year 2017 budget lists April 2016 as the delivery date. The committee believes *Zumwalt*-class delivery should be deemed to occur at the completion of the dual delivery approach, following combat systems activation.

The committee is concerned the variance in the Navy's definition of ship delivery may obscure oversight of the program's schedule, including whether or not a project has breached its threshold delivery date. The committee is also concerned Navy ships are being delivered in various degrees of completion and then, after a period of availabilities and shakedown, possibly several years later, the ship is delivered to the fleet for operations. CVN-79 and the *Zumwalt*-class programs illustrate this practice.

Therefore, the committee also directs the Comptroller General of the United States to submit a report, not later than March 1, 2017, that includes analysis and recommendations regarding the Navy's process for fully delivering ships from the time the Navy takes custody of the vessel until the vessels are fully complete and ready for operations. This review should examine the Navy's cost and schedule milestones throughout this process and how these milestones are reported to decision makers and oversight agencies. The review should also propose a common definition and criteria for Navy ship deliveries, including the associated dates.

Limitation on the use of sole source shipbuilding contracts (sec. 124)

The committee recommends a provision that would prohibit funds from being used to enter into or prepare to enter into sole source contracts for one or more Joint High Speed Vessels (JHSV) or Expeditionary Fast Transports (EPF) unless the Secretary of the Navy submits to the congressional defense committees a certification and a report.

The committee notes appropriations have been made in the past 2 years for JHSVs (now called EPFs) that were not requested by the President's budget or authorized by a National Defense Authorization Act. Since 2011, the Navy requirement for EPFs has been 10 ships. In 2013, this requirement was met with the procurement of the tenth EPF and the Navy planned to shut down the production line. Without an authorization or request in the President's budget, procurement of an eleventh EPF at a cost of \$200.0 million was inserted in the Department of Defense Appropriations Act for Fiscal Year 2015 (Public Law 113-235). Again without an authorization or request in the President's budget, a twelfth EPF was inserted at a cost of \$225.0 million in the Department of Defense Appropriations Act for Fiscal Year 2016 (Public Law 114-113). Both of these EPFs were awarded to a single shipbuilder with no competition on a sole source contract.

Therefore, this provision would require the Secretary of the Navy to submit a certification that, beginning with the EPF designated EPF 11, a sole source contract for one or more EPFs: (1) is in the national security interest of the United States; (2) will not result in exceeding the requirement for the ship class, as delineated in the most recent Navy Force Structure Assessment that currently stands at 308 ships, including 10 EPFs; (3) will use a fixed price contract; (4) will include a fair and reasonable contract price as determined at the discretion of the Service Acquisition Executive; and (5) will provide for government purpose data rights of the ship design.

In addition, the Secretary of the Navy would also be required to submit a report that includes: (1) the basis for awarding a non-competitive sole source contract and (2) a description of courses of action to achieve competitive ship or component-level contract awards in the future, should additional ships in the class be procured, including for each such course of action, a notional implementation schedule and associated cost savings, as compared to a sole source award.

Limitation on availability of funds for the Advanced Arresting Gear program (sec. 125)

The committee recommends a provision that would restrict the obligation or expenditure of amounts authorized to be appropriated by this Act or otherwise made available for fiscal year 2017 for research and development, design, procurement, or advanced procurement of materials for the Advanced Arresting Gear (AAG) to be installed on USS *Enterprise* (CVN-80) until the Secretary of Defense submits to the congressional defense committees the report required under section 2433a(c)(2) of title 10, United States Code, commonly referred to as a Nunn-McCurdy certification, for the AAG program.

The provision would also direct the Secretary of Defense to deem the 2009 AAG acquisition program baseline as the original baseline estimate and to execute the requirements of sections 2433 and 2433a of title 10, United States Code, as though the Department had submitted a Selected Acquisition Report with this baseline estimate included. This subsection provides clarity on the original baseline estimate, which is a necessary element of a Nunn-McCurdy review.

The committee remains concerned with the current cost, schedule, and performance of the AAG program, which is on the critical path for the Navy's newest aircraft carrier, USS *Gerald R. Ford* (CVN-78). The committee finds the AAG program has exceeded the program acquisition unit cost (PAUC) critical cost growth thresholds as prescribed in section 2433 of title 10, United States Code.

In 2009, the Navy reported what the committee understands to have been the last AAG acquisition program baseline (APB), which estimated AAG costs of: \$331.0 million for development, \$145.0 million for procurement, and a program acquisition unit cost of \$123.0 million.

In 2013, the program breached the major defense acquisition program (MDAP) threshold at which time the program should have been re-designated as an MDAP with a new APB. However, the Department did not take these actions. According to the Government Accountability Office (GAO), AAG breached the MDAP development threshold by November 2013 with estimated costs of: at least \$480.0 million for development, \$503 million for procurement, and a program acquisition unit cost of \$246.0 million. Although the Navy re-designated AAG as an MDAP (ACAT 1C) in July 2015, the Navy still has not updated the APB or begun submitting Selected Acquisition Reports.

In February 2016, the President's budget request for fiscal year 2017 estimated AAG costs of: \$927.0 million for development, and \$483.0 million for procurement, from which the committee calculated a program acquisition unit cost of \$353.0 million.

In April 2016, Navy officials provided the committee with an update, estimating AAG costs of: \$1.3 billion for development, from which the committee calculated a program acquisition unit cost of \$446.0 million.

For the purposes of this provision, the committee considers the 2009 APB to constitute the original baseline estimate and the November 2013 GAO reporting to constitute the current baseline estimate. As a result, through February 2016, the committee finds the

program acquisition unit cost has risen \$230.0 million, or 186 percent compared to the original baseline estimate, and \$107.0 million, or 43 percent, compared to the current baseline estimate. Based on both percentage increases, the committee finds the AAG program has exceeded the PAUC critical cost growth thresholds as prescribed in section 2433 of title 10, United States Code, warranting a Nunn-McCurdy review.

The committee is also concerned by other elements of the AAG program.

First, the system development and demonstration contract schedule for delivery has more than quadrupled in length, while the AAG promised capability has yet to materialize.

Second, a critical element of the Navy's business case for AAG was an ability to land the next generation of aircraft, both heavier and lighter than those in service today. A more sensitive braking system—featuring a water twister to absorb 70 percent of the force—would recover these new aircraft safely and with less unnecessary stress. Facing persistent delays in software development, the committee notes that in February 2016, the Navy authorized an easing of these requirements to: (1) meet just the legacy Mark 7 operating envelope, (2) eliminate the requirement to backfit *Nimitz*-class carriers with AAG, and (3) redefine what constitutes initial operational capability for AAG.

Third, the committee understands a fatigue life review of the water twister is on-going and may result in the need for a significant re-design of components in order to meet the requirement for a service life of 25 years, which Navy officials acknowledge it cannot currently meet. The Navy has already procured AAG systems for the first two *Ford*-class ships, which will require additional effort and cost to re-design and fix.

Fourth, the committee is concerned by the 18-month delay to redesignate AAG as an MDAP and the continued delay updating the APB and issuing Selected Acquisition Reports.

Fifth, delays at the AAG land-based test site and with software development for recovering the full range of carrier air wing aircraft are unacceptable. In September 2015, Navy officials informed the committee that aircraft would be landing at the test site by the end of 2015. As of April 2016, this event has yet to occur.

Sixth, as the Director of Operational Test and Evaluation has noted in his annual reports, the reliability data the Navy is collecting is still not sufficient to determine if the mean time between failures will be acceptable. Additionally, the committee is concerned that high cycle testing—which is necessary to understand system performance under more realistic operational tempo—will not occur at the land-based test site until fiscal year 2018.

Seventh, the committee understands that in January 2015 the Navy considered using the legacy Mark 7 arresting gear for USS *John F. Kennedy* (CVN-79) instead of AAG, but decided to continue with AAG, in part because the installation of the Mark 7 was estimated to cost \$87.0 million more than AAG. This appears to be a shortsighted decision given the extraordinary and continuing development delays and cost growth, including more than \$500.0 million since this decision was made in February 2015.

The committee believes the Navy must pause and reconsider the way ahead, including the best business case, for the arresting gear on CVN-79 and CVN-80, and notes the Navy has already begun such a review. The committee believes returning to a variant of the Mark 7 arresting gear is a viable option that should be considered. The committee encourages the Navy to maximize competition and ensure government data rights of AAG, as well as of any other arresting gear that may be pursued.

Therefore, the committee directs the Secretary of Defense to conduct a reassessment of the AAG program, in accordance with sections 2433 and 2433a of title 10, United States Code.

Limitation on procurement of USS *John F. Kennedy* (CVN-79) and USS *Enterprise* (CVN-80) (sec. 126)

The committee recommends a provision that would limit more than 25 percent of funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2017 for advance procurement or procurement of USS *John F. Kennedy* (CVN-79) or USS *Enterprise* (CVN-80) from being obligated or expended until the Secretary of the Navy and Chief of Naval Operations submit a report to the congressional defense committees.

The committee notes the progress that has been made in controlling the cost of the Ford-class aircraft carrier program. In fiscal year 2008, the cost estimate of CVN-78 was \$10.5 billion, CVN-79 was \$9.2 billion, and CVN-80 was \$10.7 billion. In fiscal year 2015, these estimates had risen to \$12.9 billion, \$11.5 billion, and \$13.9 billion, respectively. In the fiscal year 2017 budget request, the estimates stood at \$12.9 billion, \$11.4 billion, and \$12.9 billion, respectively.

The Navy has largely attributed the progress made in arresting cost growth to “design for affordability” initiatives, which will improve efficiency and cost effectiveness in aircraft carrier construction. These initiatives require an investment of tens of millions of dollars to yield savings in excess of one billion dollars. The committee expects these initiatives to yield the projected savings and believes the Navy and industrial base are capable of achieving greater savings through these initiatives coupled with increased savings from: the *Ford*-class learning curve, CVN-80 repeating the design of CVN-79, and increased competition. To this end, the committee supported a series of provisions in the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) that required reports on cost reduction opportunities for CVN-79 and CVN-80 (sec. 128), alternatives for the future development of aircraft carriers (sec. 128), and independent studies of fleet platform architectures (sec. 1067). The committee expects the Navy to leverage these reports in identifying further cost reduction options for aircraft carriers.

Therefore, the committee directs the Secretary of the Navy and Chief of Naval Operations to submit a report no later than December 1, 2016 that provides alternatives to achieve a CVN-80 procurement end cost of \$12.0 billion. In addition, the report shall describe all applicable CVN-80 alternatives that could be applied to CVN-79 to enable an \$11.0 billion procurement end cost. The provision also requires the Secretary of the Navy and Chief of Naval

Operations to provide annual progress reports compared to these end cost goals with the President's budget request.

Limitation on availability of funds for Tactical Combat Training System Increment II (sec. 127)

The committee recommends a provision that would limit the obligation or expenditure of 25 percent of the funds for the Tactical Combat Training System (TCTS) Increment II program until 60 days after the Secretary of the Navy submits the report on the TCTS II program required by section 235 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92).

Subtitle D—Air Force Programs

Extension of prohibition on availability of funds for retirement of A-10 aircraft (sec. 141)

The committee recommends a provision that would amend section 142 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) by extending the prohibition on obligation or expenditure of funds to retire or prepare to retire A-10 aircraft until the Secretary of the Air Force and Chief of Staff of the Air Force submit a report to the congressional defense committees describing their views on the results of the F-35A initial operational test and evaluation (IOT&E). The provision would direct the Director of Operational Test and Evaluation to provide a report to the congressional defense committees that includes the results and findings of the F-35A IOT&E, and also ensures the inclusion of comparison tests and evaluation of the F-35A and A-10C in conducting close air support, combat search and rescue, and airborne forward air controller missions. The provision would also require submission of a plan by the Secretary and Chief of Staff for addressing deficiencies and corrective actions identified in the report, and short- and long-term strategies for preserving the Air Force's capability to conduct the close air support, combat search and rescue, and airborne forward air controller missions. Finally, the provision would direct the Comptroller General of the United States to assess the conclusions and assertions contained in the Secretary's and Chief of Staff's report on the F-35A IOT&E.

The committee understands the F-35A is scheduled to complete IOT&E by fiscal year 2019. The committee is concerned that while the Secretary of Defense announced on February 2, 2016, that the A-10 would be replaced "with F-35 Joint Strike Fighters on a squadron-by-squadron basis," the Air Force has announced its intention to start retiring A-10 aircraft in fiscal year 2018 even before the F-35A would complete IOT&E, and certainly before the F-35A could be certified as a viable replacement capability for the A-10 in its assigned missions.

To ensure realism under combat conditions, the committee directs the A-10C and F-35A comparative testing required under this provision to include, as a minimum, both pre-planned and emergency divert missions to address effectiveness in realistic, complex ground firefight scenarios. These scenarios must include simulated enemy forces in close proximity to friendly forces, where the pilot is required to visually identify the target and friendly

forces in day and night conditions; armored targets; scenarios requiring continuous weapons delivery, command and control, extended time over target, and simulated collateral damage restrictions; deception scenarios with degraded visual environments; low-altitude employment, including “shows of force” and strafe; survivability from simulated direct hits by small arms fire, light anti-aircraft artillery, and man-portable air defense systems; scenarios in which simulated aircraft systems are damaged or degraded; scenarios conducted without joint tactical air controller or higher headquarters control to test close air support aircraft suitability for airborne forward air controller de-confliction of fires; and scenarios including joint fires coordination and timing, including Joint Air Attack Team attacks with Department of the Army aviation assets and artillery de-confliction.

Combat search and rescue missions must compare effectiveness in the rescue mission commander role, coordinating all aspects of an extended combat search and rescue mission, and including as a minimum: locating, identifying, and protecting isolated personnel with continuous firepower, controlling other fighters as airborne forward air controller, coordinating electronic attack, intelligence, surveillance and reconnaissance, aerial refueling, command and control, and rescue platform escort.

Additionally, the committee expects the Secretary of the Air Force to provide the report required by section 142 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114–92), due by September 30, 2016, and based on that report, the committee may take further action on options for authorizing an A–10 replacement program.

Limitation on availability of funds for destruction of A–10 aircraft in storage status (sec. 142)

The committee recommends a provision that would limit the availability of fiscal year 2017 funds for the purpose of scrapping, destroying, or otherwise disposing of any A–10 aircraft in any storage status in the Aerospace Maintenance and Regeneration Group (AMARG) that have serviceable wings or other components that could be used to prevent total active inventory A–10 aircraft from being permanently removed from flyable status due to unserviceable wings or other components.

The provision would also specify a notification requirement, and would require the Secretary of the Air Force to submit, with the fiscal year 2018 budget submission, and implement, a plan to prevent any total active inventory A–10 aircraft from being permanently removed from flyable status for unserviceable wings or any other required component over the course of the future years defense plan.

Repeal of the requirement to preserve certain retired C–5 aircraft (sec. 143)

The committee recommends a provision that would repeal the requirement in Section 141 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112–239) for the Secretary of the Air Force to continue to preserve C–5 aircraft, which were retired by the Air Force during a period in which the total inventory

of strategic airlift aircraft was less than 301, in a storage condition that would allow recall of such aircraft to future service in the Air Force Reserve, Air National Guard, or active force structure.

The committee recognizes that 27 C-5A aircraft are being inducted into or currently maintained in Type 1000 recallable storage. This type of preservation is costly and prevents the cost-effective reuse of needed C-5 parts, especially parts with diminishing manufacturing sources, necessary to sustain the total active inventory C-5 fleet.

Repeal of requirement to preserve F-117 aircraft in recallable condition (sec. 144)

The committee recommends a provision that would repeal the requirement in section 136 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364) to maintain F-117A aircraft in a condition that would allow recall of that aircraft to future service.

The committee recognizes that since this legislation was originally enacted, all F-22A program of record aircraft have been fielded, the Marine Corps has declared initial operational capability (IOC) of the F-35B fighter, and the Air Force is expected to declare IOC of the F-35A aircraft within its planned window of August to December 2016.

Limitation on availability of funds for EC-130H Compass Call recapitalization program (sec. 145)

The committee recommends a provision that would limit the availability of funds for an EC-130H Compass Call recapitalization program unless the Air Force conducts a full and open competition for the replacement aircraft.

The Senate report accompanying S. 2410 (S. Rpt. 113-176) of the Carl Levin National Defense Authorization Act for Fiscal Year 2015 (S. 2410) required the Secretary of the Air Force to develop and submit a plan to replace, modernize, or rehost the current Compass Call capabilities. Subsequently, section 143 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) required a plan for how the Air Force would recapitalize the capability requirement of the EC-130H Compass Call mission in the future, whether through a replacement program or by integrating such capabilities onto an existing platform.

The committee is encouraged that the Air Force has submitted a plan. The plan appears to support the Air Force's conclusions, as well as provide aircraft mission availability to the combatant commanders at rates at least equal to the current capability.

However, the committee is concerned by a significant shift in policy direction. In fiscal years 2015 and 2016, the Air Force felt compelled to quickly divest half of the EC-130H fleet with no plan for replacing that lost capability. This year, the Air Force proposed a plan that assumes replacing EC-130H capability is urgent, and that urgency does not allow enough time to conduct a full and open competition for the replacement platform.

The committee believes the Air Force's proposal to recapitalize the EC-130H Compass Call aircraft using a sole source purchase of ten business class aircraft would not give us any confidence that

the Air Force is achieving the maximum value for the American taxpayer. Additionally, allowing this sole source award to proceed could potentially prejudice source selections for other Air Force recapitalization programs, such as the program to replace the Joint Surveillance and Target Attack Radar System (JSTARS) aircraft.

Limitation on availability of funds for Joint Surveillance Target Attack Radar System (JSTARS) recapitalization program (sec. 146)

The committee recommends a provision that would limit the availability of fiscal year 2017 and beyond funds for the Joint Surveillance Target Attack Radar System (JSTARS) recapitalization program unless the contract for engineering and manufacturing development (EMD) uses a firm fixed price contract structure.

The committee believes a fixed price development and production contract structure is more appropriate for this program than a cost plus/incentive fee contract, as the program's aim is to integrate mission systems onto a commercial derivative aircraft, similarly to the KC-46A tanker recapitalization program.

The committee recognizes the JSTARS recapitalization program offers significant advantages: decreased logistics footprint, reduced sustainment costs, increased operational flexibility, and extended operations into anti-access/area denial environments. However, the committee does not believe the divestment of any E-8C aircraft prior to the JSTARS recapitalization program entering into low rate initial production is a prudent course of action toward meeting combatant commander warfighting requirements. The committee understands the Air Force is currently conducting a study, expected to be completed in March 2017, to determine the extent of fatigue damage or other structural integrity issues with the E-8C fleet.

The committee is also concerned with the ambiguity of the Acquisition Decision Memorandum, published on March 23, 2016, that states the Air Force should maintain a goal of 20 percent space, weight, power, and cooling (SWAP-C) margin through Milestone B to mitigate technical risk. This ambiguous requirement could have the effect of limiting industry competition and reducing the number of eligible aircraft solutions prior to a down-select decision for the EMD phase.

Therefore, the committee directs the Secretary of the Air Force, not later than December 1, 2016, to provide a report to the Committees on Armed Services of the Senate and House of Representatives that includes options to accelerate the JSTARS recapitalization program initial operational capability (IOC) to (1) fiscal year 2022, and (2) fiscal year 2023; and full operational capability (FOC) by fiscal years 2024 and 2025 respectively, along with the funding plan needed to support accelerating the program for both IOC and FOC options; an analysis concerning the option of transferring the JSTARS recapitalization program to an Air Force program office that can execute a rapid acquisition program; a clarification of the 20 percent SWAP-C margin and how it will be applied to source selection criteria; and an interim update on the study examining E-8C fatigue damage and structural integrity.

Subtitle E—Defense-Wide, Joint, and Multiservice Matters
Report to Congress on independent study of future mix of aircraft platforms for the Armed Forces (sec. 151)

The committee recommends a provision that would direct the Secretary of Defense to obtain an independent study on the future mix of aircraft platforms for the Armed Forces.

The committee is concerned that with many significant defense modernization programs scheduled to peak simultaneously in the middle of the next decade, informed strategic choices must be made on how the nation's resources will be applied to meet 21st century challenges. These strategic choices will include decisions on an optimized force mix of long-range versus medium/short-range intelligence, surveillance, and reconnaissance and/or strike platforms; manned versus unmanned platforms; observability characteristics; land-based versus sea-based; advanced or upgraded fourth-generation platforms of proven design; next generation air superiority capabilities; and promising, game-changing, advanced technology innovations.

Limitation on availability of funds for destruction of certain cluster munitions and report on Department of Defense policy and cluster munitions (sec. 152)

The committee recommends a provision that would limit the funds available for the destruction of cluster munitions until the Secretary of Defense submits a report on the Department's policy on and plan for cluster munitions. The committee notes that pursuant to the Department of Defense 2008 Policy on Cluster Munitions and Unintended Harm to Civilians, the military services and combatant commands, after December 31, 2018 will no longer use cluster munitions which result in more than one percent unexploded ordnance. Additionally, cluster munitions sold or transferred by the Department after 2018 must meet this requirement. As a result, the Department is facing a situation that if not addressed immediately, will have significant—and negative—operational and budgetary consequences. The committee is aware that the Department of Defense is demilitarizing its legacy mechanical and contact-fuzed weapons while relying on policy compliant sensor-fuzed munitions to meet specific requirements within Pacific Command, European Command, and Central Command areas of operation. The committee has learned that certain munitions that must be removed from DOD inventories can be refurbished and upgraded to comply with policy requirements at a significant cost savings compared to the procurement of new systems.

The committee has received testimony from multiple senior military leaders that critical munitions shortfalls are a top priority and of concern. The committee strongly supports efforts to limit harm to innocent civilians from area munitions, and is concerned that approximately one-half of the U.S. Air Force's inventory of available area weapons will not meet the Department's standard of less than one percent failure rate once the 2008 policy comes into effect on January 1, 2019. The committee directs the Department to make all necessary efforts to ensure that our warfighters are not deprived of a critical combat capability on January 1, 2019.

Therefore, the committee directs the Secretary of Defense, not later than March 1, 2017, to provide the congressional defense committees a report on the Department's policy and plans for cluster munitions.

Medium altitude intelligence, surveillance, and reconnaissance aircraft (sec. 153)

The committee notes that U.S. Special Operations Command (SOCOM) is currently funding operations for a total of eight service-provided, but contractor-operated (also known as "GOCO") manned intelligence, surveillance, and reconnaissance (ISR) aircraft that are currently supporting counterterrorism operations overseas. The committee understands that two of these aircraft have reached the end of their service life and are scheduled to be replaced by two similar DHC-8 contractor-owned, contractor-operated (COCO) Medium Altitude Intelligence, Surveillance, and Reconnaissance (MAISR) aircraft during fiscal year 2016. The fiscal year 2017 budget request for SOCOM includes \$22.0 million in Procurement, Defense-wide, Overseas Contingency Operations, for the acquisition of these two MAISR aircraft to enable them to be operated as GOCO aircraft. The committee also understands that a SOCOM analysis has determined that the cost avoidance of acquiring versus leasing the aircraft is approximately \$1.3 million per month with a break even return on investment of approximately 11 months.

The committee recognizes the continuing shortfall in the availability of ISR aircraft to support counterterrorism operations overseas. However, the committee is concerned with the piecemeal acquisition of ISR aircraft that do not clearly align with the SOCOM's ISR Roadmap and do not contribute to the fielding of a long-term manned MAISR solution to meet requirements. The committee believes that acquisition of manned ISR aircraft should be based upon the results of the SOCOM "Next Generation Manned ISR Analysis of Alternatives" study scheduled to begin in July 2016.

Therefore, the committee recommends a provision that would prohibit the obligation or expenditure of MAISR funds for the acquisition of MAISR aircraft in fiscal year 2017 until the Assistant Secretary of Defense for Special Operations and Low Intensity Conflict, in consultation with the Commander of SOCOM, provides the congressional defense committees with a report on the manned ISR requirements of the command and how such an acquisition aligns with the SOCOM ISR Roadmap.

Budget Items

ARMY

Survivability Counter Measures

The budget request included \$9.6 million in line item AZ3507 of Aircraft Procurement, Army (APA) for Survivability Counter Measures. The committee recommends an increase of \$26.0 million in APA for aircraft Survivability Counter Measures. Additional fund-

ing for APS was included in the Chief of Staff of the Army's unfunded priority list.

Stryker upgrades

The budget request included \$444.6 million in line item G85200 of Procurement of Wheeled and Tracked Combat Vehicles, Army (W&TCV) for Stryker upgrades. The committee notes some funds are early to need for fiscal year 2017. The committee recommends a decrease of \$11.0 million in W&TCV for Stryker upgrades.

M1 Abrams Tank (Modification)

The budget request included \$480.2 million in line item GA0700 of Procurement of Wheeled and Tracked Combat Vehicles, Army (W&TCV) for M1 Abrams Tank (Modification). The committee recommends an increase of \$82.0 million in W&TCV for the procurement and integration of active protection systems (APS). Additional funding for APS was included in the Chief of Staff of the Army's unfunded priority list.

M1 Abrams Tank (Modification)

The budget request included \$480.2 million in line item GA0700 of Procurement of Wheeled and Tracked Combat Vehicles, Army (W&TCV) for M1 Abrams Tank (Modification). The committee recommends an increase of \$58.0 million in W&TCV for the M1 Abrams Tank industrial base improvement.

Army Budget request realignment M4 Carbine Modification

The budget request included \$29.8 million in Procurement of Wheeled and Tracked Combat Vehicles, Army (W&TCV). The committee notes other priorities in the FY 2017 budget. The committee recommends a decrease of \$1.0 million in W&TCV.

Army Budget request realignment Hand Gun

The budget request included \$0.0 million in Procurement of Wheeled and Tracked Combat Vehicles, Army (W&TCV) for the Hand Gun. The committee recommends an increase of \$1.0 million in W&TCV.

Army ammunition reduction

The budget request included \$1.5 billion for Procurement of Ammunition, Army (PAA). Within that amount, \$40.3 million was for LIN 0132E00700 CTG, 5.56MM, All Types; \$39.2 million was for LIN 0612E02000 CTG, 7.62MM, All Types; \$5.1 million was for LIN 1450EA3000 CTG, Handgun, All Types; \$46.6 million was for LIN 1722E08000 CTG, .50 Cal, All Types; \$7.7 million was for LIN 2650E08200 CTG, 25MM, All Types; \$118.1 million was for LIN 3222ER8001 CTG, 40MM, All Types; \$120.6 million was for LIN 1120E22203 Cartridges, Tank, 105MM and 120MM, All Types; \$64.8 million was for LIN 0530E1510 Artillery Cartridges, 75MM & 105MM, All Types; \$6.1 million was for LIN 1430E91901 Non-Lethal Ammunition, All Types; \$10.0 million was for LIN 2624EA0055 Items Less Than \$5.0 Million (AMMO); and \$17.2 million was for LIN 4370EA0575 Ammunition Peculiar Equipment.

The committee understands portions of these requests are ahead of need based on analysis by the Government Accountability Office. The committee believes these funds can be better aligned for other readiness priorities.

Accordingly, the committee recommends decreases to the following: \$2.6 million to LIN 0132E00700 CTG, 5.56MM, All Types; \$0.3 million to LIN 0612E02000 CTG, 7.62MM, All Types; \$1.3 million to LIN 1450EA3000 CTG, Handgun, All Types; \$4.7 million to 1722E08000 CTG, .50 Cal, All Types; \$1.3 million to LIN 2650E08200 CTG, 25MM, All Types; \$6.3 million to LIN 3222ER8001 CTG, 40MM, All Types; \$2.8 million to LIN 1120E22203 Cartridges, Tank, 105MM and 120MM, All Types; \$4.0 million to LIN 0530E1510 Artillery Cartridges, 75MM & 105MM, All Types; \$0.2 million to LIN 1430E91901 Non-Lethal Ammunition, All Types; \$0.5 million to LIN 2624EA0055 Items Less Than \$5.0 Million (AMMO); and \$3.7 million to LIN 4370EA0575 Ammunition Peculiar Equipment.

High Mobility Multi-Purpose Vehicle

The budget request included \$00.0 million in Procurement of Wheeled and Tracked Combat Vehicles, Army (W&TCV) for the High Mobility Multi-Purpose Vehicle. The committee recommends an increase of \$21 million in OPA for the High Mobility Multi-Purpose Vehicle.

Modification of in Service Equipment

The budget request included \$219.5 million in line item number DA0924 of Other Procurement, Army (OPA), for Modification of In-Service Equipment. The committee notes other priorities in the budget for fiscal year 2017. The committee recommends a decrease of \$12.0 million in OPA for Modification of In-Service Equipment.

Warfighter Information Network-Tactical

The budget request included \$437.2 million in line item number BW7100 of Other Procurement, Army (OPA), for Warfighter Information Network-Tactical (WIN-T). The committee notes an early to need requirement in the budget for fiscal year 2017. The committee recommends a decrease of \$100.0 million in OPA for WIN-T.

Distributed Common Ground System-Army (Military Intelligence Program)

The budget request included \$275.5 million in line item BZ7316 of Other Procurement, Army (OPA), for Distributed Common Ground System-Army (DCGS-A). The committee notes the program has changing tactical requirements for fiscal year 2017. Therefore the committee recommends a decrease of \$93.0 million in OPA for DCGS-A.

Light Weight Counter Mortar Radar

The budget request included \$99.9 million in line item B05201 of Other Procurement, Army (OPA), for Light Weight Counter Mortar Radar (LCMR). The committee notes unjustified growth in the budget for fiscal year 2017. The committee recommends a decrease of \$12.5 million in OPA for LCMR.

Modification of In-Service Equipment (Lightweight Laser Designator Rangefinder)

The budget request included \$28.1 million in line item KA3100 of Other Procurement, Army (OPA), for Modification of In-Service Equipment (Lightweight Laser Designator Rangefinder). The committee notes unjustified growth in the budget for fiscal year 2017. The committee recommends a decrease of \$6.5 million in OPA for Modification of In-Service Equipment (Lightweight Laser Designator Rangefinder).

Counterfire Radars

The budget request included \$314.5 million in line item BA5500 of Other Procurement, Army (OPA), for Counterfire Radars. The committee recommends smoothing the production profile in the budget for fiscal year 2017. The committee recommends a decrease of \$36.0 million in OPA for Counterfire Radars.

Maneuver Control System

The budget request included \$151.3 million in line item BA9320 of Other Procurement, Army (OPA), for Maneuver Control System (MCS). The committee notes an unjustified increase in the budget for fiscal year 2017. The committee recommends a decrease of \$27.0 million in OPA for MCSs.

Automated Data Processing Equipment

The budget request included \$108.0 in Other Procurement, Army (CPA) for automated data processing equipment. The committee notes higher priorities in the budget for fiscal year 2017. The committee recommends a reduction of \$9.4 million in OPA for automated data processing equipment.

Army Contract Writing System

The budget request included \$1.0 million in Other Procurement Army (OPA) for Army Contract Writing System. The committee is concerned that the Army is planning to spend over \$200.0 million on software to write contracts.

The committee recommends a reduction of \$1.0 million in OPA for Army Contract Writing System. The committee urges the Army to analyze lower cost alternatives for this business function.

Distribution Systems, Petroleum and Water

The budget request included \$42.7 million in line item MA6000 in Other Procurement, Army (OPA), for Distribution Systems, Petroleum and Water. The committee notes higher priorities in the budget for fiscal year 2017. The committee recommends a decrease of \$10 million in OPA for Distribution Systems, Petroleum and Water.

Mobile Maintenance Equipment Systems

The budget request included \$37.3 million in line item G05301 of Other Procurement, Army (OPA), for Mobile Maintenance Equipment Systems. The committee notes an unjustified increase in the budget for fiscal year 2017. The committee recommends a decrease

of \$5.0 million in OPA for Mobile Maintenance Equipment Systems.

Construction Equipment Engineer Support Companies

The budget request included \$26.7 million in line item M05500 of Other Procurement, Army (OPA), for Construction Equipment Engineer Support Companies (ESP). The committee notes an unjustified increase in the budget for fiscal year 2017. The committee recommends a decrease of \$4.5 million in OPA for Engineer Support Equipment ESP.

Army Watercraft Extended Service Program

The budget request included \$21.9 million in Other Procurement, Army (OPA), for Army Watercraft Extended Service Program. The committee notes higher priorities in the budget for fiscal year 2017. The committee recommends a decrease of \$11 million in Army Watercraft Extended Service Program

Modification of In-Service Equipment (Other Procurement, Army 3)

The budget request included \$67.4 million in line item MA4500 of Other Procurement, Army (OPA), for Modification of In-Service Equipment (Other Procurement, Army 3). The committee notes unjustified growth in the budget for fiscal year 2017. The committee recommends a decrease of \$5.0 million in OPA for Modification of In-Service Equipment (Other Procurement, Army 3).

Navy

F-35B Spares

The budget request included \$1.4 billion in line item number 605 of Aviation Procurement, Navy (APN) for Spares and Repair Parts. The committee notes the Marine Corps is planning on the first operational shipboard deployments of the F-35B in 2018. Adequate spare parts are vital to maintain aircraft readiness and operational availability, particularly while operating at sea. Additional funding is necessary to ensure the deploying L-class ships have sufficient Afloat Spares Packages to support their F-35B detachments. This is a Commandant of the Marine Corps unfunded priority. Therefore, the committee recommends an increase of \$50.8 million to APN, Spares and Repair Parts.

Tomahawk missile

The budget request included \$186.9 million in line item 2101 of Weapons Procurement, Navy (WPN) for procurement of 100 Tomahawk missiles. The Tomahawk remains a vital element of the nation's long range strike capability and will remain so for the foreseeable future. The committee supports the Navy's efforts to modernize the Tomahawk's navigation, communications, and seeker to maintain its advanced capability, but remains concerned about the path forward. The Tomahawk's replacement remains in the earliest of planning stages and its initial operating capability has been pushed back a further 4 to 6 years from 2024 to the 2028-2030 timeframe. Nevertheless, the budget request funds production

below the minimum sustaining rate and seeks to end production of new Tomahawks after fiscal year 2017. The committee is concerned that the Navy's plan presents significant risk in Tomahawk inventory levels and risks an unstable industrial base for the beginning of the recertification and modernization of existing Block IV missiles in 2019.

Therefore, the committee recommends an increase of \$84.2 million in line item 2101 of WPN to maintain production at the minimum sustaining rate of 196 missiles.

AGM-88E Advanced Anti-Radiation Guided Missile

The budget request included \$178.2 million in line item 2327 of Weapons Procurement, Navy (WPN) for the AGM-88E Advanced Anti-Radiation Guided Missile (AARGM). The committee supports the need for a capable anti-radiation guided missile to counter modern integrated air defense systems. However, the committee is concerned with the continued troubles experienced by the AARGM in operational testing. The committee is also concerned about problems with production processes, which led to a recent partial production shutdown.

Therefore, the committee recommends a decrease of \$30.0 million for this program to restore program accountability.

Ordnance support equipment

The budget request included \$59.1 million in line item 2500 of Weapons Procurement, Navy (WPN). The committee recommends an increase of \$7.0 million.

Navy and Marine Corps ammunition reduction

The budget request included \$1.5 billion for Procurement of Ammunition, Navy & Marine Corps (PANMC) of which \$16.7 million was for LIN 1121 120mm, All Types and \$8.5 million was for LIN 1660 Items Less Than \$5 million.

The committee understands portions of these requests are ahead of need based on analysis by the Government Accountability Office. The committee believes these funds can be better aligned for other readiness priorities.

Accordingly, the committee recommends decreases to the following in PANMC: \$4.0 million to LIN 1121 120mm, All Types and \$2.5 million was for LIN 1660 Items Less Than \$5 million.

Arleigh Burke-class destroyers

The budget request included \$3.2 billion in line item 9 of Shipbuilding and Conversion, Navy for procurement of *Arleigh Burke*-class destroyers (DDG-51). The committee notes an additional destroyer was provided for in the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), which included incremental funding authority, and the Department of Defense Appropriations Act for Fiscal Year 2016 (Public Law 114-113), which included \$1.0 billion in funding. The committee further notes an additional \$433.0 million is required to fully fund this additional destroyer. Therefore, the committee recommends an increase of \$49.8 million to this program to provide the next increment of funding for the additional fiscal year 2016 *Arleigh Burke*-class destroyer.

Littoral Combat Ship

The budget request included \$1.1 billion in line item 11 of Shipbuilding and Conversion, Navy for procurement of two Littoral Combat Ships. The committee notes unjustified unit cost growth in the other cost (\$24.0 million) and other electronics (\$4.0 million) categories, which increased without justification despite a quantity reduction compared to fiscal year 2016. Therefore, the committee recommends a decrease of \$28.0 million in procurement for this program.

Amphibious ship replacement LX(R)

The budget request included no funding in line item 13 of Shipbuilding and Conversion, Navy for advance procurement of the amphibious ship replacement LX(R), which is expected to functionally replace LSD-41 and LSD-49 class ships. The committee supports accelerating the construction of LX(R) class ships, provided the ships are competitively awarded. Therefore, the committee recommends an increase of \$50.0 million for this program.

Destroyer modernization

The budget request included \$367.8 million in line item 9 of Other Procurement, Navy for DDG modernization. The committee notes the Navy's DDG modernization program increases the fleet's Ballistic Missile Defense (BMD) and Naval Integrated Fire Control—Counter Air (NIFC-CA) capacity, which improves the U.S. ability to pace high-end adversary weapons systems. One additional BMD/NIFC-CA modernization was a Chief of Naval Operations' unfunded priority. Therefore, the committee recommends an increase of \$65.0 million to this program.

LCS common mission modules equipment

The budget request included \$27.8 million in line item 36 of Other Procurement, Navy for LCS common mission modules equipment. This line item contains \$12.2 million for mission bay training devices—MCM, which includes \$3.7 million for training and support items associated with the remote minehunting system that was cancelled in 2016. Therefore, the committee recommends a decrease of \$3.7 million for this program.

Surveillance towed array sensor system

The budget request included \$36.1 million in line item 51 of Other Procurement, Navy for the surveillance towed array sensor system (SURTASS). The committee notes an additional SURTASS array will increase operational availability of ready spares to outfit Pacific Fleet assets. This was a Chief of Naval Operations' unfunded priority. Therefore, the committee recommends an increase of \$10.0 million to this program.

Surface electronic warfare improvement program

The budget request included \$274.9 million in line item 53 of Other Procurement, Navy for AN/SLQ-32. The committee notes the Surface Electronic Warfare Improvement Program (SEWIP) Block III provides for upgraded electromagnetic sensing and electronic attack capabilities for surface ships. Procuring one additional unit

will increase fiscal year 2017 procurement from two to three systems, providing increased shipborne electronic attack and counter-targeting capabilities. This was a Chief of Naval Operations' unfunded priority. Therefore, the committee recommends an increase of \$23.0 million to this program.

Minesweeping system replacement

The budget request included \$56.7 million in line item 62 of Other Procurement, Navy for the minesweeping system replacement. Navy officials have stated systems procured in this line item are used for Littoral Combat Ship (LCS) training. In fiscal year 2017, the request for this line item includes \$20.5 million for two Knifefish systems and \$4.0 million for two Unmanned Influence Sweep System trainers. The committee notes fiscal year 2017 is the first year of procurement for Knifefish and the Unmanned Influence Sweep System in LCS mine countermeasures mission modules line item 1601, and that the system will undergo developmental test and evaluation to verify it meets all technical requirements in fiscal year 2017. Therefore, the committee recommends a decrease of \$24.5 million for this program due to procurement ahead of need.

Air Force

UH-1N helicopter replacement program

The budget request included \$18.3 million in Aircraft Procurement, Air Force (APAF), for the UH-1N helicopter replacement program. This program is intended to replace the over four decade-old helicopters currently in use for rapid security response team missions on the Air Force's intercontinental ballistic missile fields. These aircraft are growing increasingly unreliable due to approaching the end of their service lives, are more costly to maintain, and do not meet the minimum requirements necessary for the missile field security mission.

The committee believes the Air Force's proposed approach to procure HH-60 helicopters from the U.S. Army's current multi-year procurement contract, under The Economy Act of 1932, Title 31, United States Code, sections 1535 and 1536, represents the most prudent method to rapidly field the necessary capability, leverages the Air Force's existing organic depot maintenance and supply chain for their current HH-60 and future Combat Rescue Helicopter fleets, avoids costly and lengthy development and testing of a completely new and different aircraft, and decreases both Army and Air Force aircraft procurement unit costs through economic order of quantity.

Therefore, the committee recommends an increase of \$302.3 million in APAF for the procurement of eight HH-60 Blackhawk aircraft and initial spares and support equipment.

Fourth generation fighter capability upgrades

The budget request included \$97.3 million in Line Item F01600 of Aircraft Procurement, Air Force (APAF) for F-16 capability upgrades. Due to Air Force plans to field fourth generation fighters for a longer than expected period of time while awaiting deliveries in significant numbers of F-35A replacements, these aircraft must

be upgraded with systems that will make them more operationally effective and survivable in the threat environments of the early to mid-2020 decade.

Therefore, the committee recommends an increase of \$48.3 million for F-16 multi-mission computer and Multi-functional Information Distribution System—Joint Tactical Radio System (MIDS—JTRS), an increase of \$12.0 million for F-16 active missile warning system, an increase of \$23.0 million for F-16 digital radar warning system, and an increase of \$5.0 million for F-16 anti-jam global positioning system (GPS) upgrades. The committee recommends a total increase of \$88.3 million in Line Item F01600 of APAF for these Chief of Staff of the Air Force fiscal year 2017 unfunded requirement list items.

Budget request realignments

The Air Force requested that the committee make several realignments in their budget to correct various errors in their submission of the Aircraft Procurement, Air Force (APAF) and Other Procurement, Air Force (OPAF) documentation. The table below reflects these adjustments:

Changes to Correct Submission Errors

(in millions)

Item	Account	Line Item	Amount Quantity
HC-130J	APAF	6	+1
MQ-9	APAF	15	-\$87.0
Initial Spares (MQ-9)	APAF	61	+\$87.0
Initial Spares (EC-130H)	APAF	61	-\$25.6
Compass Call Mods	APAF	45	+\$25.6
AFNET	OPAF	40	-\$5.1
Intel Comm Equipment	OPAF	15	+\$5.1

Defense Wide

Mentor Protégé reduction

The budget request included \$4.6 billion in LIN 30 Procurement, Defense-Wide, (PDW) of which \$29.2 million was for Major Equipment, OSD.

The committee understands that within this request was \$23.1 million for the Mentor Protégé program. The committee's analysis of this program indicates that a number of firms participating in the program as Protégés have received, in some cases significant, federal contract awards prior to the establishment of their Mentor-Protégé agreements.

The committee notes that in the Joint Explanatory Statement accompanying the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92), the conferees required the Secretary of Defense to submit a report not later than February 23, 2016 on changes to program policy and metrics that would ensure the program meets the goal of enhancing the defense supplier base in the most effective and efficient manner. The committee notes this re-

port has not been submitted in accordance with the law, leaving concerns to the ongoing validity of this program.

Accordingly, the committee recommends a decrease of \$23.1 million in LIN 30 PDW for Major Equipment, OSD.

MH-60M training loss replacement

The budget request included \$150.4 million in Procurement, Defense-wide (PDW), Line 42, for rotary wing upgrades and sustainment. In August 2015, a U.S. Special Operations Command (SOCOM) MH-60M helicopter sustained heavy damage during an overseas training exercise and the aircraft was subsequently designated as a training loss. Accordingly, the committee recommends an increase of \$18.6 million for special operations-peculiar modifications to one UH-60 provided to SOCOM by the Department of the Army for the replacement of the overseas training loss.

MQ-9 Unmanned Aerial Vehicle

The budget request included \$10.6 million in Procurement, Defense-wide (PDW), Line 51, for the acquisition and support of special operations-unique mission kits for the Medium Altitude Long Endurance Tactical (MALET) MQ-9 Unmanned Aerial Vehicle (UAV). U.S. Special Operations Command (SOCOM) is responsible for the rapid development and acquisition of special operations capabilities to, among other things, effectively carry out operations against terrorist networks while avoiding collateral damage.

The committee understands that the budget request only partially addresses technology gaps identified by SOCOM on its fleet of MQ-9 UAVs. Therefore, the committee recommends an additional \$14.8 million in PDW for the MQ-9 UAV.

The committee strongly supports SOCOM's efforts to accelerate fielding of advanced weapons, sensors, and emerging technologies on its fleet of MQ-9 UAVs. The committee has authorized additional funds above the budget request in each of the last 4 years to enhance these efforts and understands that SOCOM has successfully developed and acquired a number of new capabilities, including improved weapon effectiveness, target location and tracking, image resolution, and video transmission during that time. The committee expects SOCOM to update the committee periodically on its procurement efforts under the MALET MQ-9 UAV program.

AC-130J A-kit procurement

The budget request included \$213.1 million in Procurement, Defense-wide (PDW), Line 53, to field precision strike package kits for AC-130J aircraft. As a result of a decision to integrate the 105mm gun on the AC-130J, U.S. Special Operations Command has requested a transfer of \$13.1 million designated for precision strike package kits to PDW, Line 54, for AC-130J A-kit procurement. Accordingly, the committee recommends a transfer of this amount.

Items of Special Interest

Aegis radar improvements

The U.S. Navy has 84 destroyers and cruisers in the fleet equipped with the Aegis Weapon System, which includes the AN/

SPY-1 multifunction phased-array radar. The AN/SPY-1 is based on vacuum electronic device components, such as cross-field amplifiers, travelling wave tube transmitters, and microwave vacuum tubes.

The committee understands newer, more efficient transmitters may be available that provide significant performance advantages, including: very low out-of-band emission, very low phase noise, reduced clutter, increased range, and greater electronic warfare capabilities.

Therefore, the committee directs the Secretary of the Navy to submit to the Committees on Armed Services of the Senate and House of Representatives not later than 120 days after the date of enactment of this Act, a report on AN/SPY-1 operational availability and sustainment challenges across the DDG-51 and CG-47 classes. The report shall also include the cost and benefits of options to address AN/SPY-1 obsolescence challenges, including the potential use of newer, more efficient transmitters.

Airborne Signals Intelligence Payload

The committee is concerned the Air Force is not fully implementing the tenets of the Department of Defense's Better Buying Power and the acquisition reform principles enacted in the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) with regard to the Airborne Signals Intelligence Payload (ASIP) program.

The committee is concerned the Air Force may be overstating integration risks which result in excessive life cycle costs in pursuing an ASIP program design, resulting in late-to-need upgrades in response to user requirements, and may not fully capitalize on commercially available, mature technology that an open competition would deliver.

The committee expects the Air Force to engage in a full and open competition for ASIP Increment 2B to achieve improved capability for combatant commanders at a lower cost.

Army Modular Handgun System (MHS)

The committee is concerned that the Army's effort to buy a new modular handgun system has taken more than 10 years and produced a more than 350-page requirements document.

The committee is pleased that the Army finally released a request for proposal on August 28, 2015, and has now received multiple proposals from industry.

The committee supports an effort to accelerate the procurement of a low cost weapon system that meets Army requirements and that is potentially a commercial off-the shelf and non-developmental item.

The committee recommends the Army rapidly and competitively acquire a handgun by leveraging new acquisition authorities as detailed in the National Defense Authorization Act of Fiscal Year 2016 (Public Law 114-92). The committee further recommends pursuing a firm fixed price contract in accordance with the Federal Acquisition Regulations part 12.

B-21 supply chain

The committee directs the Secretary of the Air Force to provide a classified report to the congressional defense committees on foreign supply chain risk in the B-21 program. The report must be submitted with the President's Fiscal Year 2018 budget request and shall include, at a minimum:

- (1) a description of any engineering or design activities performed outside the United States;
- (2) a comprehensive list of sub-assemblies, components, or parts that are being built, or will be built or assembled outside the United States;
- (3) an assessment of supply chain risk related to work performed on the B-21 outside the United States, including, but not limited to, risks associated with supply interruption; counterfeit, suspect-counterfeit or nonconforming parts or quality assurance; and
- (4) a description of actions taken by the Air Force to mitigate supply chain risks posed by work performed on the B-21 outside the United States.

B-52 radar replacement program

In the fiscal year 2017 budget request, the Air Force is proposing to replace the B-52 mechanically-steered radar system, which dates to the 1960s, with a program considered a new start. In prior years, in reports directed by the Senate report accompanying S. 3254 (S. Rept. 112-173) of the National Defense Authorization Act for Fiscal Year 2013 and the Senate report accompanying S. 1197 (S. Rept. 113-44) of the National Defense Authorization Act for Fiscal Year 2014, the Air Force continued to maintain such mechanically steered radars could be sustained through 2040.

While the committee is pleased the Air Force is considering a replacement for the B-52 radar system, the committee directs the Secretary of the Air Force to report to the congressional defense committees, not later than February 28, 2017, on the outcome of the analysis of alternatives that will be conducted to initiate this program, and how it differs from the prior analysis of alternatives conducted in 2011.

In addition, as part of this report the committee directs the Secretary of the Air Force to report to the congressional defense committees on the system degradation of the existing B-52 radar system and the AGM-86 Air-Launched Cruise Missile in terms of weapon accuracy throughout the expected service life of the AGM-86.

C-130 engine enhancements

The committee recognizes energy usage, specifically fuel consumption by the Air Force, continues to represent an overwhelming portion of Air Force operations and maintenance costs. To find ways to reduce fuel costs, the Air Force commissioned a study in 2006, funded industry research and development, and began an Engine Enhancement Program. These efforts result in increased service life and fuel economy of the T56 engine, and improved operational performance of the C-130H aircraft, to include increased cargo capacity and range, as well as reduced takeoff distances.

Congress authorized and appropriated funding to procure and install T56 3.5 engine upgrades in previous fiscal years. The committee notes the T56 3.5 Engine Enhancement Program is included in the Air National Guard's 2015 Weapons Systems Modernization Priorities as a "significant major item shortage."

The committee strongly encourages the Air Force to continue ongoing testing of the T56 3.5 engine upgrade and other C-130 propulsion system improvements to demonstrate capability improvements and fuel savings, and ultimately achieve reduced operations and sustainment costs.

Comptroller General of the United States assessment of Department of Defense F-35 deployment planning efforts

The committee recognizes the importance of the F-35 Lightning II program to our national defense. The F-35 will replace a variety of combat aircraft in the Air Force, Navy, and Marine Corps, representing the future of tactical air for the Department of Defense (DOD). In July 2015, the Marine Corps declared initial operating capability for the F-35B. The Marine Corps plans to deploy its first squadron of aircraft to Marine Corps Air Station Iwakuni (Japan) in 2017 as a permanent change of station for VMFA-121. This will signal the first operational deployment of both the F-35B aircraft platform and its associated Autonomic Logistics Information System (ALIS), and will provide an opportunity to prove operational concepts not only for the Marine Corps, but for the Air Force and Navy as well. Additionally, VMFA-121 is due to deploy aboard ship in 2018, the F-35's first operational shipboard deployment. As the Marine Corps prepares to deploy the F-35B, opportunities also exist for DOD and the services to reexamine aircraft affordability and make adjustments as needed. The F-35 program is critical to the future of tactical air for the Armed Forces and DOD will need to operate and deploy the F-35 on a widespread basis in the coming years while managing costs.

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 1, 2017 and a final report to follow, to review the DOD's ongoing F-35B deployment planning efforts. This review should include:

- (1) The extent to which DOD has developed plans to support its initial F-35 deployment to Marine Corps Air Station Iwakuni, including those related to personnel, aircraft support equipment, base infrastructure, ALIS integration, logistics, and spare parts;
- (2) The extent to which the Marine Corps' initial F-35B deployment to Marine Corps Air Station Iwakuni will enable U.S. Pacific Command to meet its operational requirements;
- (3) The challenges the F-35B program faces with its initial deployment to Marine Corps Air Station Iwakuni, and the extent to which DOD plans to measure success, challenges, and share lessons learned with the Air Force and Navy; and
- (4) The extent to which DOD has developed plans to support its initial F-35 deployment aboard ship, including those re-

lated to personnel, aircraft support equipment, ship modifications (including communication and data links), ALIS integration, logistics, and spare parts.

DDG-51 destroyer production gap

The committee is concerned a production gap may occur between the current DDG-51 multi-year procurement contract, which concludes with the procurement of two ships in fiscal year 2017, and the follow-on contract scheduled to begin in fiscal year 2018. The committee notes a previous production gap in this program resulted in increased costs for both construction shipyards, as well as the broader vendor base. The committee urges the Secretary of the Navy to prevent a DDG-51 production gap to the maximum extent practicable.

Therefore, the committee directs the Secretary of the Navy to submit a report to the Committees on Armed Services of the Senate and House of Representatives with the fiscal year 2018 budget request that provides a plan to prevent a DDG-51 production gap or, should the Secretary be unable to prevent a gap, provide mitigation options.

Department of Defense report on improvements to the munitions requirements process

The committee remains concerned about the state of the Department of Defense's munitions inventories. Years of budgetary neglect and high levels of operational use have stretched inventories in some critical munitions to dangerously low levels. While the committee supports the Department's renewed focus on procuring munitions in higher quantities, the committee remains concerned the Department's munitions requirements process remains inadequate to ensure inventories are managed without repeated descents into crisis. The committee understands the Department has made changes to the requirements process, improving the frequency and fidelity of required asset estimates. However, the committee remains concerned the process still does not adequately account for either activities short of major combat operations, such as current actions against Islamic State, nor transfers of munitions to our allies, which is an important element in support of our national military and diplomatic efforts.

Therefore, the committee directs the Secretary of Defense to provide a report to the Armed Services Committees of the Senate and House of Representatives, within 180 days of the enactment of this Act, on ways to improve the munitions requirements process, with particular emphasis on better accounting for actions short of major combat operations and transfers of munitions to our allied partners.

The required report should be classified but shall include an unclassified executive summary.

E-3 Airborne Warning and Control System (AWACS) fleet Block 40/45 upgrade

The committee fully supports the ongoing efforts by the Air Force to upgrade its fleet of E-3 Airborne Warning and Control System

(AWACS) aircraft and strongly encourages the Air Force to fully fund the Block 40/45 upgrade on its entire fleet of AWACS.

EA-18G Growler requirement

As electronic warfare technologies and capabilities proliferate throughout the globe, to allies, partners, and potential adversaries alike, the committee believes airborne electronic attack will be increasingly vital to our joint warfighting force. Currently, the EA-18G Growler is the nation's premier airborne electronic attack (AEA) aircraft and will soon be the only tactical AEA aircraft platform. During a March 2016 hearing before the Senate Appropriations Committee, Chief of Naval Operations, Admiral John Richardson, stated that the current buy of 160 EA-18G Growlers was sufficient to do "the Navy's part" of electronic warfare, but the Department was undergoing a process to study the need for Growlers to support the entire joint force. The committee believes the requirement for Growlers will not diminish, and will likely increase, as the Growler community continues to expand the tactics and concepts of operations of the aircraft's electronic surveillance and electronic attack capabilities and the Next Generation Jammer begins to enter the fleet in the early 2020s.

Therefore, the committee directs the Secretary of Defense to submit a report, within 180 days following the enactment of this Act, to either revalidate the current requirement for the EA-18G Growler total program of record quantity or identify a new requirement for the total number of EA-18G aircraft the Department would ultimately procure. The report should include the relevant portions of the defense strategy, critical assumptions, priorities, and force sizing construct used to revalidate the current requirement. If a new requirement is identified, the report should include the overarching plan for fielding complementary weapons systems to meet combatant commander objectives.

The required report may be classified, but must include an unclassified executive summary.

Enhanced tactical mobility for infantry brigade combat teams

The committee is concerned about the 82nd Airborne Division's urgent need for enhanced tactical mobility for infantry brigade combat teams outlined in the operational needs statement of March 2014. This statement was approved by XVIII (Airborne) Corps and subsequently by U.S. Army Forces Command. The committee strongly encourages the Army to rapidly acquire these vehicles using new authorities granted in the National Defense Authorization Act of Fiscal Year 2016 (Public Law 114-92).

F-16 mission training centers

The committee recognizes the ability to execute decisive air warfare requires realistic training. Various types of required real-world training activities are seldom conducted at Air National Guard bases due to limited availability of assets (i.e., lack of availability of dedicated adversary aircraft, realistic low level airspace for low altitude intercepts or engagements, and supersonic ranges). This lack of real-world training capability can be offset with modem and

up to-date live, virtual, and constructive technologies available today.

The committee fully supports and encourages Air Force and Air National Guard efforts to field additional F-16 block 40/50 Mission Training Centers (MTC) that remotely connect to virtual networks to perform enterprise-wide training and mission rehearsal across diverse geographical locations. Additional MTC locations would provide Air National Guard aircrews the necessary continuity of training between live and virtual scenarios required to attain and sustain full combat mission readiness while reducing operations tempo, flying hour, and travel costs.

High Mobility Multipurpose Wheeled Vehicle (HMMWV) ambulance

The committee recognizes the critical medical ground evacuation mission role filled by the High Mobility Multipurpose Wheeled Vehicle (HMMWV) ambulance. The committee is concerned that the Army's current fleet of HMMWV ambulances in the active component is exceeding the expected useful life of the vehicle. Therefore, the committee directs the Army to develop a plan to deliver the next generation M997 A3 HMMWV ambulances focused on enhanced reliability and crew protection to accomplish their life-saving mission.

The committee supports the Army's ongoing requirement to maintain a HMMWV ambulance fleet capable of meeting the continued and varied mission roles for both the active and reserve components. The committee is aware of the successful effort underway to modernize the HMMWV ambulance fleet for the Army National Guard and Army Reserve through the procurement of state-of-the-art HMMWV ambulances. The committee believes this model warrants consideration in order to field the maximum quantity of vehicles as expeditiously as possible.

Munitions availability

The committee notes that from August 2014 to December 2015, the U.S. military dropped \$1.3 billion in smart bombs and other guided munitions on ISIL targets in Iraq and Syria. The Air Force alone has fired more than 20,000 missiles and bombs against ISIL. This has resulted in a shortage of precision guided munitions. The Air Force, Navy and Marine Corps have all voiced concerns about having insufficient munitions to meet requirements. In testimony before the House Armed Services Committee earlier this year, the Commander of U.S. Forces Korea confirmed that "[W]e must maintain an adequate quantity of critical munitions to ensure alliance supremacy in the early days of conflict on the Peninsula. This requirement is further amplified by the approaching loss of cluster munitions due to shelf life expiration and the impending ban." High operational tempo has exacerbated what was already a critical situation. The committee is concerned by the fact the munitions industrial base has been strained to replenish previously depleted stocks, let alone keep up with current demand.

Therefore, prior to submission of the Fiscal Year 2018 budget, the Department of Defense will submit a written plan and provide a report to the congressional defense committees in the House and

Senate on their plan to ensure sufficient munitions are funded, sustained and procured to meet planned Combat Commander requirements as well as existing and emerging contingency operational requirements. This plan should take into consideration emerging weapon systems, new technologies, replenishment of expended munition stockpiles, and the required removal of munitions due to age or capability, and upgrade and refurbishment of existing munitions.

Navy maritime security barriers

As noted in the Senate report (S. Rept. 114–49) accompanying the National Defense Authorization Act for Fiscal Year 2016 (S. 1376), the committee believes that the department must seek to continually improve force protection measures and that security at Navy shipyards and bases depends not only on land-based security measures, but also on effective maritime barriers.

As the Commander of Navy Installations Command, Vice Admiral Dixon Smith, testified on April 5, 2016, current Navy maritime security barriers do “not meet the requirement for high-speed boats that could be used for a terrorist attack.”

The committee understands the Navy is testing next generation maritime security barriers and notes Admiral Smith testified these barriers will have a better ability to stop vessels.

The committee further understands that next generation maritime barriers may also provide improved protection against low profile surface threats, better ability to withstand multiple coordinated attacks, and better ability to endure environmental extremes.

Therefore, the committee directs the Secretary of the Navy to submit a report to the Committees on Armed Services of the Senate and House of Representatives with the department’s fiscal year 2018 budget request containing options to improve protection for Navy ships, shipyards, bases, equipment, and personnel, including the role that next generation maritime barriers could play in improving that protection.

Ohio-class replacement submarine program

The committee understands the Navy plans to use a cost-plus contracting strategy for the design of the *Ohio*-class replacement program and potentially for procurement of the lead submarine in the class. The committee believes the Navy and contractors will have sufficient time between the first contract award of procurement funds in fiscal year 2017 and the fiscal year 2028 delivery of the lead submarine to reassess the lead submarine contracting strategy. The committee recommends the Navy transition to fixed price contracts for this program as quickly as possible, including modifying the lead submarine contract, because maintaining cost and schedule are vital to ensuring the first *Ohio*-class replacement submarine meets its U.S. Strategic Command requirement to conduct its first patrol in 2031.

Therefore, the Secretary of the Navy is directed to submit a report with the President’s budget for fiscal year 2018 to the congressional defense committees on how and when the Navy plans to

transition to fixed price contracts for this program, including options to modify the lead submarine procurement contract.

Paladin Integrated Management (PIM)

The committee continues to support the Paladin Integrated Management (PIM) upgrade to the M109A6 Paladin, the primary indirect fire weapons platform in the US Army's Armored Brigade Combat Teams (ABCT). The PIM program upgrades both the M109A6 Paladin howitzer and its companion ammunition resupply vehicle, the M992 Field Artillery Ammunition Support Vehicle (FAASV). PIM incorporates many new survivability enhancements to greatly increase the force protection levels of the crewmembers. The PIM program is critical to the US Army. It significantly improves force protection and survivability and reduces logistics burden for the Armored Brigade Combat team field artillery Soldiers.

Patriot Product Improvement

The committee notes that the Army has requested \$49.5 million for the Patriot Product Improvement program. On July 21, 2015, General Mark A. Milley, USA, Chief of Staff of the Army, testified that, "Patriot plays a key role in not only acquiring and then destroying incoming fixed-wing aircraft, but also in intercepting and destroying incoming missiles. So Patriot is a very, very key system to the air defense of our allies and our own soldiers on the ground." The committee believes that our service members should have the best available air and missile defense capabilities. The committee understands that the Patriot Product Improvement program would provide required material upgrades to incorporate lessons learned, enhance joint force interoperability, and improve performance to address emerging threats. The committee supports the Army's request for Patriot Product Improvement funding.

Radiation detection technology

The Committee is encouraged that the Army National Guard recently placed an order to help fill a shortfall in modern radiation detection devices. The committee is concerned, however, that shortfalls in fielding the most current radiation detection devices, specifically personal dosimeters, continue to exist, and most notably within the Army. To ensure our troops and domestic homeland first responders are provided with the best possible protection to monitor against nuclear exposure, the Committee strongly encourages the Department to expedite and complete the fielding of modern radiation detection equipment, specifically personal dosimeters, across the force.

Report on disposition options for previously modified C-130H Avionics Modernization Program (AMP) aircraft

The committee is encouraged by the Air Force's progress in the restructured C-130H Avionics Modernization Program (AMP) Increments 1 and 2. The Air Force appears to have a solid path forward for AMP Increment 1 to upgrade all C-130H aircraft with safety upgrades, as well as airspace access compliance modifications by the deadline of January 1, 2020. The committee is also encouraged by the planned acceleration of the AMP Increment 2

phase well before the previously anticipated fiscal year 2042 completion date, moving estimated fleet completion forward to fiscal year 2028.

The committee is concerned with the funding and manpower resources required to maintain the five previously modified C-130H AMP aircraft at their current location. The committee understands that again modifying the previously modified C-130H AMP aircraft into the restructured AMP Increments 1 and 2 configuration is likely cost-prohibitive.

Therefore, the committee directs the Secretary of the Air Force to provide a report to the Committees on Armed Services of the Senate and the House of Representatives, not later than December 1, 2016, on:

- (1) The anticipated annual resource requirements for fiscal year 2017 and beyond to maintain the aircraft in their current status and location;
- (2) Potential options, including feasibility and costs, for declaring the five aircraft as excess to military requirements and;
 - (a) opportunities for transfer to other government agencies;
 - (b) foreign military sales;
 - (c) sales to private entities; or (d) any combination of the options in subparagraphs (2)(a), (2)(b), and (2)(c);
- (3) Other disposition options.

Review of Army salutes, honors, and visits of courtesy in relation to use of 75MM blank rounds

The committee strongly concurs with the Chief of Staff of the Army's readiness guidance for calendar year 2016-2017 that, "readiness is #1 . . . and there is no other #1." The committee is also concerned that in the current fiscal environment, the Army may be expending and stockpiling 75MM blank rounds for ceremonial purposes, when those resources could be used to fund more urgent readiness priorities. The committee recognizes and understands that this policy is in accordance with Army Regulation 600-25 "Salutes, Honors, and Visits of Courtesy" issued on September 24, 2004.

Accordingly, the committee directs the Secretary of the Army to review Army Regulation 600-25 in regard to the use of 75MM blanks and provide an assessment and any recommended changes to that regulation to the Committees on Armed Services of the Senate and the House of Representatives by February 1, 2017.

Shipbuilding guarantees

The committee is concerned with the efficacy of the Navy's use of guarantees in its shipbuilding contracts. In March 2016, the Government Accountability Office (GAO) found that as a result of the Navy's contract type and terms, the government is paying shipbuilders profit to repair defects that were determined to be the shipbuilders' responsibility. The GAO recommended several actions aimed at improving the use of guarantees in Navy shipbuilding, including limiting profit for the correction of shipbuilder responsible defects.

The committee understands the Navy agreed to study the issues in the GAO report and publish a complete response coordinated with the Office of the Secretary of Defense by September 30, 2016. The committee directs the Secretary of the Navy to provide the congressional defense committees the complete response at the same time this study is provided to the GAO. Further, as recommend by the GAO, in arrangements where the shipbuilder is paid to correct defects, the committee directs the Secretary of the Navy to structure contract terms such that shipbuilders do not earn profit for correcting construction deficiencies following delivery that are determined to be the shipbuilder's responsibility.

Unmet COCOM Cruise Missile Defense Requirement

On March 10, 2016, Commander of U.S. Northern Command and North American Aerospace Defense Command Admiral William Gortney testified before the committee that the operational exercise of the Joint Land Attack Cruise Missile Defense Elevated Netted Sensor System (JLENS) "has been an opportunity for us to see how well JLENS can fit into the existing Integrated Air Defense System (IADS) of the National Capitol Region (NCR)." Furthermore, he stated that, "the JLENS system shows great promise in defense of the NCR," particularly in detecting cruise missile threats.

The committee notes that certain adversaries are advancing their capability to deploy cruise missiles against the United States. The committee believes that technologies should be employed above the horizon to detect such cruise missile threats to the homeland. The committee is aware that the JLENS system could fill a sensitive capability gap within a layered missile defense architecture.

Therefore, the committee directs the Secretary of Defense, in coordination with the Commander of U.S. Northern Command, to submit to the congressional defense committees no later than September 30, 2016, a plan for meeting this capability gap for the NCR. This plan should consider such options as restarting and completing the JLENS operational exercise, including at alternative sites.

USAF Eagle Vision program

The committee is aware the Air Force's Eagle Vision program is a deployable ground station for collecting commercial, unclassified and releasable satellite imagery. It provides timely, flexible, and tailored products and services to warfighters and our domestic first responders. Eagle Vision excels in military operations, contingency operations, foreign humanitarian assistance, operational planning, and exercise support as well as playing a major role in disaster response world-wide, with a particular focus on responses here in the United States for events such as hurricanes and floods. In 2014 and 2015, the Eagle Vision program directly supported more than 85 disaster relief efforts, and since its inception has deployed over 40 times in support of major operations. However, the committee is concerned the Air Force has continually failed to address Eagle Vision program funding shortfalls, putting the system's critical operational capabilities at risk year after year.

Therefore, not later than 60 days following the enactment of this Act, the Committee directs the Secretary of the Air Force to submit

a report to the congressional defense committees on the current funding status of the Eagle Vision program, the effects decreased funding levels will have on the Eagle Vision System's capabilities to support domestic disaster relief operations, the funding plans for the future, as well as the long-term plan for the continued use of the Eagle Vision system.

V-22 defensive weapon system

The capabilities of the V-22 tiltrotor aircraft has led to significant demand for the aircraft within the U.S. military. The V-22 may be limited in certain circumstances where a lack of on-board defensive weapons and the absence of armed escorts could result in situations with too much risk resulting from employing the aircraft.

At various times, Marine Corps and Special Operations Command officials have expressed a desire for providing better armament for their respective versions of the V-22. However, the committee is unaware of any formal requirement for such a capability. With the increasing usage of these aircraft, it is important for the committee to understand whether there is such a need, and, if there is, how the Department of Defense intends to fill that need.

To support this effort, the committee directs the Commandant of the Marine Corps and Commander, U.S. Special Operations Command (USSOCOM) to report to the congressional defense committees on: (1) requirements that may be identified by the Marine Corps and USSOCOM; and (2) how the Department of Defense intends to meet those requirements. The Commandant and Commander, USSOCOM should submit that report no later than the submission of the President's budget request for fiscal year 2018.

Virginia-class submarines

The committee recognizes the need for more fast attack submarines and supports Navy's plan to build two *Virginia*-class submarines per year with inclusion of the Virginia Payload Module beginning in fiscal year 2019. The committee is concerned that the President's fiscal year 2017 budget request includes only one *Virginia*-class submarine procurement in fiscal year 2021.

The committee commends the performance of the *Virginia*-class submarine program and supports the Navy's budget request for \$3.2 billion in procurement and \$1.8 billion in advanced procurement for this program in fiscal year 2017. The committee notes that on April 6, 2016, Assistant Secretary of the Navy for Research, Development, and Acquisition Sean Stackley testified, "The *Virginia*-class submarine program has delivered the last eight ships on budget and ahead of schedule."

The Navy currently has a validated requirement for 48 attack submarines, which was established in 2006. The committee believes that much has changed in the global security environment since 2006 and supports the Navy's effort to develop an updated requirement for attack submarines.

While the Navy currently has a fleet of 53 attack submarines, as Admiral John Richardson testified on March 15, 2016, the Navy is only "able to meet about 50 to 60 percent of combatant commander demands right now" for attack submarines. During the committee's

hearing on the posture of U.S. Pacific Command, Admiral Harry Harris, Jr. affirmed that fact when he observed that *Virginia*-class ships are “the best thing we have” and that he “cannot get enough of them fast enough” for his theater of operations.

Due to the retirement of *Los Angeles*-class submarines, the committee notes that the number of attack submarines in the fleet will decline by 23 percent to 41 submarines in 2029. The committee is concerned that the declining size of the attack submarine fleet, combined with a more challenging security environment and growing demand for the unique capabilities that attack submarines provide, will create additional national security risks.

The committee was encouraged by the March 15, 2016 testimony of the Secretary of the Navy and the Chief of Naval Operations, as well as the April 6, 2016 testimony of Secretary Stackley and Vice Admiral Joseph Mulloy, who expressed a desire to procure two *Virginia*-class submarines in 2021 to mitigate the future attack submarine shortfall and highlighted an ongoing review into whether or not the Navy will accrue sufficient savings in the *Ohio*-class replacement and *Virginia*-class submarine programs to enable procurement of a second *Virginia*-class submarine in fiscal year 2021.

The committee supports the efforts of Navy officials to pursue procurement of a second *Virginia*-class submarine in fiscal year 2021, if the Navy can demonstrate the submarine industrial base will have the production and workforce capacity necessary to procure a second attack submarine in fiscal year 2021 without negatively impacting the *Ohio*-class replacement and *Virginia*-class submarine programs.

The committee believes that it is important to provide the industrial base with advance notice of changes in the *Virginia*-class submarine procurement profile, which enables the Navy and industrial base to maximize efficiencies, increase savings, and provide the lead time necessary to ensure workforce and production capacity are sufficient for the additional workload.

Warfighter Information Network-Tactical (WIN-T)

The committee is aware that the Army’s Warfighter Information Network-Tactical (WIN-T) is intended to be the foundation for the Army’s tactical network modernization strategy and a critical component of the suite of tactical mission command systems currently being fielded. The Army assesses this program as essential to warfighter communications capabilities and will continue to deliver incremental improvements in command and control superiority over time. WIN-T is to introduce a mobile, self-forming/self-healing network using satellite and terrestrial on-the-move capabilities and high-bandwidth radio systems to keep mobile forces connected, communicating, and synchronized. It has two increments.

WIN-T Increment 1 (Inc 1) provides Networking “At the Halt.” It is the Army’s current tactical network, originally fielded to 222 brigades, division/corps headquarters, and signal battalions. Initial fielding was from 2004–2012. The Inc 1 capability was upgraded to use military satellites, reducing costs to commercial satellite leases. A subsequent upgrade to improve the efficiency of satellite communications and interoperability with other units will be completed in fiscal year 2016.

WIN-T Inc 2 is intended to provide the Army with on-the-move networking capability. The WIN-T Inc 2 network retains capabilities delivered by WIN-T Inc 1. WIN-T Inc 2 employs satellite communications while on-the-move to extend the network in maneuver brigade down to the Company level for the first time. The program is in full rate production. Total WIN-T costs to date are over \$5.7 billion. The current program is intended to spend an additional \$9.0 billion. The total program cost is estimated to be over \$14.0 billion.

Currently the Director of Cost Assessment and Program Evaluation (CAPE) has contracted with an independent entity to conduct a comprehensive assessment of the WIN-T program. CAPE is assessing current and future requirements and capabilities to determine the technological feasibility, achievability, suitability, and survivability of a tactical communications and data network.

The committee has observed many problems with WIN-T, especially in regard to Inc 2. Many problems have been observed in integrating the "upper tactical network" with the "lower tactical network." These problems disrupt connectivity between brigade combat teams and battalions with companies. Integrating WIN-T hardware with armored vehicles has yet to be conclusively determined. It is unclear if the Army has fully defined the requirements for tactical close combat forces at company level. The committee understands that the Army is reassessing the total requirement and determining a new course of action in light of the above noted problems.

The committee encourages the Army in its efforts to repair identified problems and to more carefully redefine its requirements for the WIN-T program.