

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—Navy Programs

Amendment to cost limitation baseline for CVN-78 class aircraft carrier program (sec. 111)

The committee recommends a provision that would further amend section 122 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364) as amended by section 121(a) of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66) by striking “\$11,498,000,000” and inserting “\$11,398,000,000”. While the lead ship (CVN-78) cost cap remains \$12.9 billion, this change would apply to CVN-79 and subsequent CVN-78 class nuclear aircraft carriers.

The initial CVN-78 class aircraft carrier cost cap was established by the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364), which set the cost cap for the lead ship at \$10.5 billion, plus adjustments for inflation and other factors, and at \$8.1 billion for subsequent CVN-78 class carriers, plus adjustments for inflation and other factors. The cost cap was amended by the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66) to \$12.9 billion and \$11.5 billion, respectively.

While the estimated procurement cost of each of the first three CVN-78 class aircraft carriers increased more than \$2.0 billion since 2008, the Navy has held cost relatively constant over the past three years. The committee is encouraged by the fiscal year 2016 budget request, which indicates the lead ship is on track to deliver in March 2016 at its cost cap and the estimated procurement costs for CVN-79 and CVN-80 are decreasing. From the fiscal year 2015 budget request to the fiscal year 2016 budget request, the estimated procurement costs for CVN-79 and CVN-80 decreased by \$150.0 million and \$402.2 million, respectively.

In recognition of the gains made in controlling the cost of CVN-78 class aircraft carriers and to allow for \$50.0 million of unexpected growth in the CVN-79 procurement cost, the committee recommends reducing the cost cap by \$100.0 million from \$11.5 billion

to \$11.4 billion, plus adjustments for inflation and other factors, for CVN-79 and subsequent aircraft carriers.

Limitation on availability of funds for USS John F. Kennedy (CVN-79) (sec. 112)

The committee recommends a provision that would limit \$100.0 million in Shipbuilding and Conversion, Navy procurement funds for USS *John F. Kennedy* (CVN-79) subject to the submission of a certification regarding full ship shock trials and two reports.

The committee is concerned by the Navy's decision to delay by up to 7 years full ship shock trials on CVN-78 class nuclear aircraft carriers from the lead ship, USS *Gerald R. Ford* (CVN-78), to CVN-79. While the committee understands the Navy is concerned with the cost of the test and potential deployment delay, it is the committee's view that the benefits outweigh these concerns. With the abundance of new technology, including the catapult, arresting gear, and radar, as well as the reliance on electricity rather than steam to power key systems, there continues to be a great deal of risk in this program. Testing CVN-78 will not only improve the design of future carriers, but also reduce the costs associated with retrofitting engineering changes. Even more importantly, the thought that CVN-78 could deploy and potentially fight without this testing would be imprudent and puts sailors at risk. As a result, the committee directs the Secretary of the Navy to certify that the Navy will conduct by not later than September 30, 2017, full ship shock trials on CVN-78.

The committee is also concerned by the cost growth in CVN-78 class aircraft carrier program and the potential for further growth in the future. The committee understands the \$2.4 billion in CVN-78 cost growth is attributable to government furnished equipment, design and engineering changes, and shipbuilder performance. The committee views cost reduction efforts in all three of these areas as essential. As a result, the committee directs the specified report.

The committee views CVN-78 class aircraft carriers as extraordinarily important instruments of U.S. national military power. However, with costs ranging from \$11.5 billion to more than \$13.0 billion, these ships are also extraordinarily expensive, and only one shipbuilder in the world is capable of building these ships. Since the first advance procurement funding for this program was appropriated in fiscal year 2001, each of the first three ships in the class have experienced more than \$2.0 billion in procurement cost growth. In view of the vital importance of aircraft carriers to national defense, the cost per ship, lack of competition, and history of cost overruns, the committee directs a report, which examines potential requirements, capabilities, and alternatives for future development of aircraft carriers that would replace or supplement CVN-78 class aircraft carriers.

Limitation on availability of funds for USS Enterprise (CVN-80) (sec. 113)

The committee recommends a provision that would limit \$191.4 million in advance procurement funds for USS *Enterprise* (CVN-80), until the Secretary of the Navy submits a certification and report to the Committees on Armed Services of the Senate and of the

House of Representatives. \$191.4 million is the sum of funding requested for plans (detailed) and basic construction for CVN-80.

The committee is concerned by the \$13.5 billion estimated procurement cost of CVN-80. This cost is \$2.1 billion, or 18 percent greater, than the estimated procurement cost of USS John F. Kennedy (CVN-79). While the committee understands inflation contributes to this cost increase, the committee believes greater savings should be achieved through a stable design and the benefits of industrial base learning curve efficiencies.

As a result, the Secretary of the Navy is directed to submit a certification that the design of CVN-80 will repeat that of CVN-79, with exceptions only as specified, and pursuant to section 114 of this Act. In addition, the Secretary of the Navy is directed to submit a report on the plans costs of CVN-80, including a detailed description and justification of the cost elements.

Modification of CVN-78 class aircraft carrier program (sec. 114)

The committee recommends a provision that would amend subsection (f) of section 122 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364; 120 Stat. 2104), as added by section 121(c) of the National Defense Authorization Act for Fiscal Year 2014 (Public Law 113-66; 127 Stat. 692), by adding a reporting requirement to the USS John F. Kennedy (CVN-79) quarterly report.

The committee is concerned by the continuing substantial plans costs, design changes, and engineering changes associated with the CVN-78 class aircraft carrier program. While non-recurring plans costs are expected for the lead ship in a class, the committee would expect these costs to drop substantially once the class design is complete and the follow-on ships enter construction. The plans cost for the lead ship, USS Gerald R. Ford (CVN-78), amounts to \$3.3 billion, which is 25 percent of the overall ship cost (\$12.9 billion). The plans cost for the next ship, CVN-79, is estimated at \$880.0 million. The committee understands these costs are attributable to detail design and lead yard services, which include: planning, material sourcing, engineering, and program management performed by the shipbuilder.

The committee is also acutely aware of past cost growth and schedule delays associated with design and engineering changes to this program. The committee believes design and engineering changes to this program should be limited to operational necessity, safety, or cost reduction initiatives that meet threshold requirements.

As a result, beginning January 1, 2016, the committee directs the Secretary of the Navy to submit, as part of the CVN-79 quarterly report, a description of new design and engineering changes to CVN-78 class aircraft carriers that exceed \$5.0 million and occurred during the reporting period. The report shall include program or ship cost increases for each design or engineering change and any cost reduction achieved. The Secretary of the Navy and Chief of Naval Operations shall each personally sign (not autopen) this additional reporting requirement. This certification may not be delegated. The certification shall include a determination that each

change serves the national security interests of the United States; cannot be deferred to a future ship due to operational necessity, safety, or substantial cost reduction; and was personally reviewed and endorsed by the Secretary of the Navy and Chief of Naval Operations.

Limitation on availability of funds for Littoral Combat Ship (sec. 115)

The committee recommends a provision that would limit 75 percent of fiscal year 2016 funds for research and development, design, construction, procurement or advance procurement of materials for the upgraded Littoral Combat Ships (LCS), designated as LCS-33 and subsequent, until the Secretary of the Navy submits to the Committees on Armed Services of the Senate and of the House of Representatives: a capabilities based assessment to assess capability gaps and associated capability requirements and risks for the upgraded LCS, an updated capabilities development document for the upgraded LCS, and a report describing the upgraded LCS modernization.

The committee understands that the Secretary of Defense directed the Navy to explore “alternative proposals to procure a capable and lethal small surface combatant, generally consistent with the capabilities of a frigate”. The outcome of this analysis, subsequently approved by the Secretary of Defense, was modifications to the two existing variants of the LCS. The committee recognizes the significant analysis the Navy did accomplish, which is similar to an analysis of alternatives in defense acquisition.

However, the committee is concerned by the absence of analysis to identify the specific capability gaps and mission needs that the Navy is seeking to address, which would have been appropriate prior the Secretary of Defense’s initial tasking. Without this analysis, it is unclear why the capabilities of the current LCS are inadequate and if the proposed modifications will be sufficient to address a defined warfighting gap. In addition, given the significant proposed changes to the LCS, the committee believes an updated capabilities development document is warranted and understands the Navy is pursuing this action.

Finally, the committee believes this modernization of the LCS class needs to be pursued in a comprehensive and analytically-derived manner, particularly because these ships are planned to be in service until 2050. Large surface combatants, submarines, and tactical aircraft follow documented, proven modernization processes to outpace the advances of potential adversaries. Most relevant for the LCS is the advanced capability build process for large surface combatants, which is based on a naval capabilities document. The 14 sections of this document are listed in the recommended provision.

Therefore, this provision would direct the Navy to deliver a capabilities based assessment, an updated capabilities development document certified by the Joint Requirements Oversight Council, and a report on LCS modernization.

Extension and modification of limitation on availability of funds for Littoral Combat Ship (sec. 116)

The committee recommends a provision that would amend section 123 of the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291) by extending the limitation on funds for LCS–25 and LCS–26 until pre-existing requirements are met and would additionally require the Navy to provide to the congressional defense committees the following: an acquisition strategy for LCS–25 through LCS–32; a LCS mission module acquisition strategy; a plan to outfit Flight 0 and Flight 0+ Littoral Combat Ships with capabilities identified for the upgraded Littoral Combat Ship; and a current test and evaluation master plan for the Littoral Combat Ship mission modules.

The committee believes the additional requirements are in keeping with defense acquisition policies and best practices. The committee is concerned that the introduction of an upgraded LCS, beginning with LCS–33, will further complicate configuration management of the LCS seaframes and mission modules. Opportunistic modifications or “backfits” of existing LCS with some, but not all, of these upgraded capabilities are another source of concern. The committee needs clarity on the LCS seaframe acquisition strategy, requirement for mission modules in light of the upgraded LCS decision, cost and schedule of the Navy’s plan to modify or “backfit” existing LCS, and how the Navy will achieve developmental and operational testing for each component and mission module.

Construction of additional *Arleigh Burke* destroyer (sec. 117)

The committee recommends a provision that would allow the Secretary of the Navy to enter into a contract beginning with the fiscal year 2016 program year for the procurement of one *Arleigh Burke*-class destroyer in addition to the ten DDG–51s in the fiscal year 2013 through 2017 multiyear procurement contract or for one DDG–51 in fiscal year 2018. The Secretary may employ incremental funding for such procurement.

Additional funding and incremental funding authority would help relieve pressure on the shipbuilding budget as funding requirements grow for the *Ohio*-class replacement program over the next several years. As a result, the committee recommends incremental funding authority for 1 *Arleigh Burke*-class destroyer in addition to the 10 DDG–51s in the fiscal year 2013–2017 multiyear procurement contract or for a DDG–51 in fiscal year 2018.

Fleet replenishment oiler program (sec. 118)

The committee recommends a provision that would grant the Secretary of the Navy contracting authority to procure up to six fleet replenishment oilers (T–AO(X)). This new ship class is a non-developmental recapitalization program based on existing commercial technology and standards. The ship design is considered to be low risk by the Navy, with the design scheduled to be complete prior to the start of construction on the lead ship. This provision would generate an estimated \$45.0 million in savings per ship compared to annual procurement cost estimates. In addition, the provi-

sion would provide a long-term commitment to the shipbuilder and vendors, which would enable workforce stability and planning efficiency.

Reporting requirement for *Ohio*-class replacement submarine program (sec. 119)

The committee recommends a provision that would require the Secretary of Defense to submit *Ohio*-class replacement submarine cost tracking information, together with annual budget justification materials. While the first *Ohio*-class replacement submarine is not planned to be authorized until fiscal year 2021, the national importance of this program and significant cost will continue to merit close oversight by the congressional defense committees. In response to a committee request, the Navy provided the committee an information paper dated February 3, 2015 with the following elements in fiscal year 2010 dollars and then-year dollars: lead ship end cost (with plans), lead ship end cost (less plans), lead ship non-recurring engineering cost, average follow-on ship (hulls 2–12) cost, operations and sustainment cost per hull per year, Office of the Under Secretary of Defense for Acquisition, Technology, and Logistics (OSD AT&L) average follow-on ship (hulls 2–12) affordability target, and OSD AT&L operations & sustainment cost per hull per year affordability target (including disposal). The committee recommends this format continue to be used to enable cost visibility, direct comparison of cost elements, and year-on-year trend analysis.

Subtitle C—Air Force Programs

Limitations on retirement of B-1, B-2, and B-52 bomber aircraft (sec. 131)

The committee recommends a provision that would limit the retirement of B-1, B-2, or B-52 bomber aircraft to be retired during a fiscal year prior to initial operational capability (IOC) of the Long Range Strike Bomber (LRS-B) unless the Secretary of Defense certifies, in the materials submitted in support of the budget of the President for that fiscal year as submitted to Congress, that:

- (1) the retirement of the aircraft is required to reallocate funding and manpower resources to enable LRS-B to reach IOC and full operational capability (FOC); and
- (2) the Secretary has concluded that retirements of B-1, B-2, and B-52 bomber aircraft in the near-term will not detrimentally affect operational capability.

The committee acknowledges the need to recapitalize the Air Force's bomber fleet with the LRS-B and recognizes the need for a carefully phased retirement of legacy bomber aircraft to facilitate this transition as LRS-B approaches IOC.

Limitation on retirement of Air Force fighter aircraft (sec. 132)

The committee recommends a provision that would amend section 8062 of title 10, United States Code, by adding a new subsection requiring the Secretary of the Air Force to maintain a minimum total active inventory of 1,950 fighter aircraft, within which

the Secretary must also maintain a minimum of 1,116 fighter aircraft as primary mission aircraft inventory (combat-coded).

The provision would also provide additional limitations on fighter retirements by requiring the Secretary of the Air Force to certify to the defense committees that:

(1) the retirement of such fighter aircraft will not increase the operational risk of meeting the National Defense Strategy; and

(2) the retirement of such aircraft will not reduce the total fighter force structure below 1,950 fighter aircraft or primary mission aircraft inventory below 1,116 and would require a report setting forth the following:

(a) The rationale for the retirement of existing fighter aircraft and an operational analysis of replacement fighter aircraft that demonstrates performance of the designated mission at an equal or greater level of effectiveness as the retiring aircraft;

(b) An assessment of the implications for the Air Force, the Air National Guard, and the Air Force Reserve of the force mix ratio of fighter aircraft; and

(c) Such other matters relating to the retirement of fighter aircraft as the Secretary considers appropriate.

Lastly, the provision would also require a report at least 90 days prior to the date on which a fighter aircraft is retired that includes the following:

(1) A list of each aircraft in the inventory of fighter aircraft, including for each such aircraft:

(a) the mission design series type;

(b) the variant; and

(c) the assigned unit and military installation where such aircraft is based.

(2) A list of each fighter aircraft proposed for retirement, including for each such aircraft:

(a) the mission design series type;

(b) the variant; and

(c) the assigned unit and military installation where such aircraft is based.

(3) A list of each unit affected by a proposed retirement listed under (2) above and how such unit is affected.

(4) For each military installation and unit listed under (2)(c) above, changes, if any, to the designed operational capability (DOC) statement of the unit as a result of a proposed retirement.

(5) Any anticipated changes in manpower authorizations as a result of a proposed retirement listed under (2) above.

The committee understands the Air Force determined through extensive analysis that a force structure of 1,200 primary mission aircraft and 2,000 total aircraft is required to execute the National Defense Strategy with increased operational risk. Subsequently, based on the 2012 Defense Strategic Guidance and fiscal constraints, analysis showed the Air Force could decrease fighter force structure by approximately 100 additional aircraft; however, at an even higher level of risk.

The committee acknowledges that the original F-35 procurement plan projected 516 F-35A variants to be delivered by fiscal year 2016, but schedule delays and subsequent re-baselining of the program now projects only 103 F-35A aircraft delivered by fiscal year 2016. This occurred simultaneously with the Air Force retiring over 400 fighter aircraft in the period since fiscal year 2010. These factors result in a fighter aircraft shortfall that will gradually improve as the F-35A procurement rate increases.

The Air Force currently fields 54 fighter squadrons in fiscal year 2015. The proposed fiscal year 2016 retirement of an additional five A-10 combat squadrons would reduce the total to 49 fighter squadrons. Of the 49 squadrons remaining in fiscal year 2016, the Air Force estimates less than half would be fully combat mission ready. Therefore, the committee has proposed a provision elsewhere in this act prohibiting the retirement of additional A-10 aircraft. The limitation on total aircraft numbers proposed by the committee in the provision would allow the Air Force to stand down one 24 primary assigned aircraft squadron at Hill Air Force Base in fiscal year 2016, in order to transition the people and resources of the squadron to the F-35A aircraft.

The committee believes further reductions in fighter force capacity, in light of ongoing and anticipated operations in Iraq and Syria against the Islamic State of Iraq and the Levant, coupled with a potential delay of force withdrawals from Afghanistan, poses excessive risk to the Air Force's ability to execute the National Defense Strategy, causes remaining fighter squadrons to deploy more frequently, and drives even lower readiness rates across the combat air forces. The committee expects the Air Force to execute the fiscal year program in accordance with the spirit and intent of this provision.

Limitation on availability of funds for F-35A aircraft procurement (sec. 133)

The committee recommends a provision that would limit the availability of fiscal year 2016 funds for F-35A procurement to not more than \$4.3 billion until the Secretary of Defense certifies to the congressional defense committees that F-35A aircraft delivered in fiscal year 2018 will have full combat capability with currently planned Block 3F hardware, software, and weapons carriage.

The committee acknowledges that in light of increasing potential adversary capabilities and growing anti-access/area denial threat environments around the globe, the requirement for a robust fifth generation fighter capability is a necessary element for our combatant commanders' continued ability to execute their warfighting responsibilities. The committee also acknowledges the F-35 Joint Strike Fighter program represents our only in-production fifth generation fighter aircraft and is a crucial capability that cannot be understated. The committee encourages the Secretary to exhibit increased management oversight of this critical program to ensure compliance with cost, schedule, and performance objectives.

The committee is concerned, however, that the 57 percent increase in F-35A production to 44 aircraft in the budget request, over the fiscal year 2015 level of 28 aircraft, presents an increased risk of cost growth and schedule delays. The ongoing System Devel-

opment and Demonstration (SDD) phase is now approximately 65 percent complete, and continues development, testing, and evaluation concurrently with production. Any further software development delays or test and evaluation deficiency discoveries and deferrals could incur increased retrofit costs for delivered aircraft, and delay required capabilities to the warfighter.

Prohibition on retirement of A-10 aircraft (sec. 134)

The committee recommends a provision that would prohibit the use of any funds during fiscal year 2016 to retire, prepare to retire, or place in storage any A-10 aircraft. The provision would also require the Secretary of the Air Force to maintain a minimum of 171 A-10 aircraft in primary mission aircraft inventory (combat-coded) status. The committee directs the Secretary of the Air Force to commission an independent entity outside the Department of Defense to conduct an assessment of the required capabilities and mission platform to replace the A-10 aircraft. The committee expects the Air Force to execute the fiscal year program in accordance with the spirit of this provision.

The committee believes that the Air Force is proposing the retirement of the A-10 fleet purely on the basis of the fiscal environment and not on grounds of the ability of the combat air forces to effectively meet the requirements of the combatant commanders and defense strategy. The committee also believes that with the A-10 fleet currently engaged in operations against the Islamic State of Iraq and the Levant (ISIL), providing a theater security package in Europe to assure our allies and partners, and continuing rotational deployment operations to Afghanistan, divesting this capability at this time incurs unacceptable risk in the capacity and readiness of the combat air forces without a suitable replacement available.

Additionally, in fiscal year 2015 the Air Force implemented the move of 18 A-10s to backup aircraft inventory status, reducing all but two of the A-10 fleet's combat squadrons to 18 primary assigned aircraft each.

Specifically, the Secretary of the Air Force should ensure that the Air Force does not close or consolidate A-10 units, make changes to standard sustainment processes, or reduce A-10 pilot training or A-10 flying hours disproportionately to reductions applied to pilots or flying hours for other Air Force aircraft. Additionally, the provision would require the Secretary of the Air Force to ensure that the Air Force maintains a minimum of 171 A-10 aircraft designated as primary mission aircraft inventory (PMAI) to retain viable combat squadron sizes through sufficient primary assigned aircraft.

The committee also recommends an increase of \$279.7 million for Operation and Maintenance, Air Force; \$16.2 million for Research, Development, Test and Evaluation, Air Force; and \$38.5 million for Procurement of Ammunition, Air Force.

The committee recommends no increase in Air Force military personnel accounts. The Air Force is encouraged to find the billets necessary to fill A-10 and F-35 manpower authorizations from within the 2,200 billets reduced from its management headquarters and its 6,000 billet increase request authorized in title IV of this Act. The committee expects that the Secretary and Chief of Staff

of the Air Force will use some of the thousands of military positions freed up in the 4-year, 30 percent reduction of headquarter and defense agency staffs to recruit the necessary maintenance personnel for these aircraft. The committee believes that combat capability, not headquarter staffs, should be the priority of the service leaders.

Prohibition on availability of funds for retirement of EC-130H Compass Call aircraft (sec. 135)

The committee recommends a provision that would prohibit the use of any funds during fiscal year 2016 to retire, prepare to retire, or place in storage any EC-130H Compass Call aircraft. The committee believes that the Air Force is proposing the retirement of EC-130H Compass Call aircraft purely on the basis of the fiscal environment and not on grounds of the ability of the Air Force to meet effectively the requirements of the combatant commanders and the national defense strategy.

The EC-130H Compass Call provides an unparalleled capability for our combatant commanders to disrupt enemy command and control communications and limit adversary coordination essential for enemy force management. As a manned platform, Compass Call is able to operate independently in a degraded communications environment. The Compass Call is also flexible since the crew includes electronic warfare officers and linguists who can make real-time decisions in the execution of electronic warfare.

The committee was concerned with the Air Force's fiscal year 2015 budget proposal to retire half the EC-130H fleet beginning in fiscal year 2016. The Senate report accompanying S. 2410 (S. Rept. 113-176) of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) directed the Air Force to develop a plan, including milestones and resource requirements, to replace, modernize, or re-host the current Compass Call capabilities.

In the Air Force's report transmitted to the committee by the Under Secretary of the Air Force in September 2014, the Air Force stated, ". . . budget realities have forced the Air Force to extreme measures to cut costs and yet attempt to maintain capabilities. The decision to reduce the Compass Call fleet by nearly half after [fiscal year 2015] is one of those extreme measures . . ."

Additionally, the Air Force stated, "This decision is not without risk, in that the Air Force will NOT be able to meet combatant commander operations plan capacity requirements, however, it is made fully informed of those risks. Because of this, alternatives to ensure capabilities will not be lost to combatant commanders will be analyzed, assessed, and selected in a disciplined, rigorous fashion, with answers expected no later than [fiscal year 2017]."

The committee believes the Air Force response in the report indicates it has not yet sufficiently identified, through studies and analysis, how it will continue to provide the required capability and capacity to meet combatant commander requirements for this segment of the airborne electronic attack mission at acceptable risk, and will not gain insight through observations and conclusions until at least fiscal year 2017. Additionally, the Air Force has placed the restoration of the EC-130H Compass Call fleet on its

fiscal year 2016 unfunded priority list received by the committee in March 2015.

The committee also notes that while the primary mission electronic warfare capabilities are critical, the EC-130H is not the ideal platform for anti-access/area denial (A2/AD) combat environments, and gaps may continue to exist even with planned platform upgrades.

The committee understands there may be options available to transition Compass Call capabilities to a new platform that can address capability requirements in combatant commander operations plans. The committee is interested in ways the Air Force could potentially use existing and future EC-130H modernization and sustainment funds to begin procurement of a new platform to meet an initial operations capability in 2019, provide full-spectrum electronic attack capabilities against an advanced threat in highly contested environments, and thereby obviate mission capability gaps.

The committee recommends an increase of \$27.3 million for Operation and Maintenance, Air Force and \$28.7 million for Aircraft Procurement, Air Force. The committee recommends no increase for Air Force military personnel accounts and directs the Air Force to examine its existing force structure and reduction of management headquarters military personnel billets to adequately staff the EC-130H fleet at its current operational capability.

Limitation on transfer of C-130 aircraft (sec. 136)

The committee recommends a provision that would place a limitation on all of the funds authorized or appropriated by this Act or otherwise made available for fiscal year 2016 for the Air Force that may be obligated or expended to transfer from one facility of the Department of Defense to another any C-130H aircraft, initiate any C-130 manpower authorization adjustments, retire or prepare to retire any C-130H aircraft, or close any C-130H unit until 90 days after the date on which the Secretary of the Air Force, in consultation with the Secretary of the Army, and after certification by the commanders of the XVIII Airborne Corps, 82nd Airborne Division, and United States Army Special Operations Command, certifies to the committees on Armed Services of the Senate and of the House of Representatives that:

(1) the United States Air Force will maintain dedicated C-130 wings to support the daily training and contingency requirements of the XVIII Airborne Corps, 82nd Airborne Division, and United States Army Special Operations Command at manning levels required to support and operate the number of aircraft that existed as part of the regular and reserve Air Force operations in support of such units as of September 30, 2014; and

(2) failure to maintain such Air Force operations will not adversely impact the daily training requirement of those airborne and special operations units.

Limitation on use of funds for T-1A Jayhawk aircraft (sec. 137)

The committee recommends a provision that would limit all the funds authorized or appropriated by this Act or that otherwise may

be obligated or expended for fiscal year 2016 for avionics modifications to the T-1A Jayhawk aircraft until 30 days after the Secretary of the Air Force submits to the congressional defense committees the report required under section 142 of the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113–291).

Restriction on retirement of the Joint Surveillance Target Attack Radar System (JSTARS), EC-130H Compass Call, and Airborne Early Warning and Control (AWACS) aircraft (sec. 138)

The committee recommends a provision that would restrict the Secretary of the Air Force from retiring any Joint Surveillance Target Attack Radar System (JSTARS), EC-130H Compass Call, and Airborne Early Warning and Control System (AWACS) aircraft until the follow-on replacement aircraft program enters low-rate initial production.

Sense of the Congress regarding the OCONUS basing of the F-35A aircraft (sec. 139)

The committee recommends a provision that would express the sense of Congress regarding basing of the F-35A aircraft outside of the continental United States.

Sense of Congress on F-16 Active Electronically Scanned Array (AESA) radar upgrade (sec. 140)

The committee recommends a provision that would express the sense of the Congress on F-16 Active Electronically Scanned Array (AESA) radar upgrades.

Subtitle D—Defense-Wide, Joint, and Multiservice Matters

Report on Army and Marine Corps modernization plan for small arms (sec. 151)

The committee recommends a provision that would require the Secretaries of the Army and Navy to jointly submit to the Committees on Armed Services of the Senate and House of Representatives a report on the plan of the Army and Marine Corps to modernize small arms.

Budget Items

Army

Common missile warning system

The budget request included \$78.3 million in Aircraft Procurement, Army (APA) for common missile warning system. The committee recommends an increase of \$26.0 million in APA for procurement of common missile warning systems. Additional funding for common missile warning systems was included on the Chief of Staff of the Army’s unfunded priorities list.

PAC-3 Missile Segment Enhancement

The budget included \$414.9 million in Missile Procurement, Army (MPA) for PAC-3 Missile Segment Enhancement (MSE) mis-

siles for use in the Medium Extended Air Defense System and Patriot missile defense systems. The PAC-3 MSE provides substantial improvement in interceptor altitude, range, propulsion, lethality and agility while furthering insensitive munitions compliance. The committee recommends an increase of \$200.0 million in MPA for procurement of MSE missiles. Additional funding was included on the Chief of Staff of the Army's unfunded priority list.

Army Tactical Missile System

The budget request included \$30.1 million in Missile Procurement, Army (MPA) for Army Tactical Missile Systems (ATACMS) modifications. The committee is concerned about the Army's plan to enter into a production contract prior to the completion of testing. Therefore, the committee recommends a decrease of \$10.0 million in MPA for ATACMS.

Improved recovery vehicle

The budget request included \$123.6 million in Weapons and Tracked Combat Vehicles, Army (WTCV) for improved recovery vehicles (M88A2 Hercules). The committee recommends an increase of \$72.0 million in WTCV for the procurement of 16 additional M88A2s. Additional funding for the improved recovery vehicle was included on the Chief of Staff of the Army's unfunded priorities list.

Precision sniper rifle

The budget request included \$2.0 million in Weapons and Tracked Combat Vehicles, Army (WTCV) for the precision sniper rifle. Given this requirement is early to need, the committee recommends a decrease of \$2.0 million in WTCV for the precision sniper rifle due to program delay.

Compact semi-automatic sniper system

The budget request included \$1.5 million in Weapons and Tracked Combat Vehicles, Army (WTCV) for the compact semi-automatic sniper system. Given this requirement is early to need, the committee recommends a decrease of \$1.5 million in WTCV for the compact semi-automatic sniper system due to program delay.

Common remotely operated weapons station

The budget request included \$8.4 million in Weapons and Tracked Combat Vehicles, Army (WTCV) for common remotely operated weapons station (CROWS). At the Army's request, the committee recommends an increase of \$6.4 million in WTCV for the CROWS. The Army will use the additional funds to synchronize the conversion and fielding of systems in a sustainable configuration.

Handgun

The budget request included \$5.4 million in Weapons and Tracked Combat Vehicles, Army (WTCV) for handguns. The committee recommends a decrease of \$5.4 million in WTCV for handguns due to program delay.

Sniper rifle modifications

The budget request included \$2.4 million in Weapons and Tracked Combat Vehicles, Army (WTCV) for sniper rifle modifications. Given this requirement is early to need, the committee recommends a decrease of \$1.4 million in WTCV for sniper rifle modifications due to program delay.

Items less than \$5.0 million

The budget request included \$391,000 in Weapons and Tracked Combat Vehicles, Army (WTCV) for items less than \$5.0 million. The committee recommends an increase of \$2.5 million in WTCV for the items less than \$5.0 million. The Army would use the additional funds to procure nonstandard weapons for Regionally Aligned Forces training.

Army ammunition decrease

The budget request included \$1.2 billion in Procurement of Ammunition, Army (PAA), of which \$7.7 million was for LI 1450EA3000 CTG, Handgun, All Types and \$79.9 million was for LI 3222ER8001 CTG, 40mm, All Types.

The committee believes that funding related to both line items are requested ahead of need.

Accordingly, the committee recommends a decrease of \$952,000 in LI 1450EA3000 PAA for CTG, Handgun, All Types and \$10.0 million in LI 3222ER8001 CTG, 40mm, All Types.

Transportable Tactical Command Communications

The budget request included \$45.0 million in Other Procurement, Army (OPA), for the Transportable Tactical Command Communications (T2C2) system. The committee notes that the program's Milestone C decision has been delayed to late fiscal year 2015. Therefore, a portion of the funds requested for fiscal year 2016 are early to need. The committee recommends a decrease of \$15.0 million in OPA for T2C2.

Prophet Ground System

The budget request included \$63.6 million in Other Procurement, Army (OPA) for Prophet ground systems. The committee recommends a decrease of \$15.0 million in OPA for the Prophet due to unjustified growth in production.

Counterfire radars

The budget request included \$217.4 million in Other Procurement, Army (OPA), for counterfire radars (AN/TPQ-53). The committee notes that this program is delayed due to problems discovered during initial operational test and evaluation resulting in unobligated funds available from prior year appropriations. Procurement funds requested for fiscal year 2016 are not operationally urgent and appear early to need. The committee recommends a decrease of \$75.0 million in OPA for counterfire radars to allow the program test and production schedules to synchronize in fiscal year 2017.

The committee directs that not later than 180 days after the dates of the enactment of this Act, the Secretary of the Army shall

submit to the congressional defense committees a report on counterfire radars explaining the under execution of fiscal year 2014 and fiscal year 2015 funds as well as repair problems. The report should also include actions planned and taken to correct the deficiencies. Specifically, the report should address problems discovered during initial operation testing and evaluation. The committee directs that not later than 60 days after the report of the Secretary, the Comptroller General of the United States shall review the report and submit to the congressional defense committees an assessment of the matter contained in the report.

Global Combat Support System—Army

The budget request included \$162.7 million in Other Procurement, Army (OPA) for the Global Combat Support System—Army (GCSS–A). The committee recommends a decrease of \$16.0 million in OPA for GCSS–A due to unjustified program growth.

Automated data processing equipment

The budget request included \$106.4 million in Other Procurement, Army (OPA) for automated data processing equipment. The committee recommends a decrease of \$12.0 million to this program. The committee recommends that the Army should ensure that information technology procurements are not redundant with capabilities available under joint, other Service, or other agency programs.

Non-system training devices

The budget request included \$303.2 million in Other Procurement, Army (OPA) for non-system training devices. The committee recommends a decrease of \$25.0 million in OPA for non-system training devices due to unjustified cost growth.

Navy

F/A–18E/F aircraft procurement

The budget request included no funds in Aircraft Procurement, Navy (APN), for F/A–18E/F aircraft. Procuring additional F/A–18E/F aircraft will reduce near-term strike fighter inventory gaps and risk. This item was included on the Chief of Naval Operations' unfunded priorities list. Therefore, the committee recommends an increase of \$1.2 billion in APN for 12 F/A–18E/F aircraft and initial spares.

F–35C

The budget request included \$897.5 million in Aircraft Procurement, Navy (APN), for four F–35C aircraft. The committee recommends a decrease of \$24.5 million in APN due to anticipated efficiencies savings and excess support equipment cost growth.

F–35B

The budget request included \$1.5 billion in Aircraft Procurement, Navy (APN), for nine F–35B aircraft. The committee recommends a decrease of \$25.1 million in APN due to anticipated efficiencies savings and excess support equipment cost growth. Additionally,

the committee recommends an increase in F-35B procurement to a total quantity of 15 F-35B aircraft to mitigate the strike fighter shortfall. This request was on the Commandant of the Marine Corps' unfunded priority list.

Therefore, the committee recommends an increase of \$1.1 billion in APN for the procurement of six additional F-35B aircraft.

AV-8 series aircraft

The budget request included \$83.2 million in Aircraft Procurement, Navy (APN), for AV-8 series aircraft. Link 16 upgrades are necessary for the fleet of AV-8 aircraft to improve pilot situational awareness, joint communications, and force protection. Therefore, the committee recommends an increase of \$3.3 million in APN. This item was included on the Commandant of the Marine Corps' unfunded priorities list.

F-18 series kill chain enhancements

The budget request included \$986.8 million in Aircraft Procurement, Navy (APN), for F-18 series aircraft modifications. The committee recommends an increase of \$170.0 million in APN for F-18 aircraft series radio frequency kill chain enhancements to counter sophisticated digital weapons and combat systems currently proliferated around the world. This item was included on the Chief of Naval Operations' unfunded priorities list.

V-22 Osprey

The base budget request included \$121.2 million for procurement of V-22 Osprey. The committee notes the Commandant of the Marine Corps' unfunded requirement for MV-22 integrated aircraft survivability (\$15.0 million) and MV-22 ballistic protection (\$8.0 million). As a result, the committee recommends an increase of \$23.0 million to this program.

Tomahawk

The budget request included \$184.8 million in Weapons Procurement, Navy to procure 100 Tomahawk missiles. The future years defense program envisions shutting down the Tomahawk production line after the fiscal year 2016 procurement.

The committee is concerned about the Navy's decision to truncate production. The Tomahawk is a combat-proven missile, having been used well over 2,000 times in the last two decades, most recently against targets in Syria during Operation Inherent Resolve in September 2014 and remains the country's first-strike weapon of choice. The Navy has stated that the current Tomahawk inventory is sufficient for munitions requirements and will meet the Navy's needs until its replacement is operational in the mid-2020s. The Next Generation Land Attack Weapon, however, is only in initial planning stages and is not due to enter service until 2024. The committee believes the assumption of this much risk in a capability as important as long-range strike is not prudent in the current and projected security environment.

Additionally, the Navy plans to begin recertification of its existing Block IV missiles beginning in 2019. By its own analysis, the Navy recognizes that the existence of a production gap between the

end of new missile builds and the start of recertification will put tremendous strain on the Tomahawk supplier base and involve millions of dollars to requalify suppliers for recertification. The committee is concerned by the Navy's plan as it moves toward recertification.

The committee believes that it would be imprudent to ramp down and close production of the Tomahawk missile at this time. Therefore, the committee recommends an increase of \$30.0 million to keep Tomahawk production at the minimum sustaining rate of 196 missiles per year.

Advanced Medium Range Air-to-Air Missile

The budget request included \$192.9 million in Weapons Procurement, Navy funding to procure 192 Advanced Medium Range Air-to-Air Missiles (AMRAAM). The AMRAAM remains the preeminent all-weather, radar-guided missile fielded by the U.S. Navy and Air Force. The most up-to-date version, the AIM-120D, provides enhanced lethality to the warfighter and is essential to success in any potential conflict involving air combat. Chief of Naval Operations Jonathan Greenert testified to the Navy's shortfall in AMRAAM before the committee. The committee believes the Navy needs to address the shortfall and therefore recommends an increase of \$15.0 million to procure additional missiles.

Ordnance support equipment

The budget request included \$57.6 million in Weapons Procurement, Navy for Ordnance Support Equipment. The committee recommends an increase of \$3.7 million.

Virginia-class submarines

The budget request included \$2.0 billion in advance procurement and \$3.3 billion in procurement in Shipbuilding and Conversion, Navy for *Virginia*-class submarines.

The committee notes that the *Virginia*-class submarine program has continued to perform well, delivering submarines early and within budget to combatant commanders. As Assistant Secretary of Navy for Research, Development, and Acquisition Sean Stackley testified on March 18, 2015, "Submarines' stealth and ability to conduct sustained forward-deployed operations in anti-access/area-denial environments serve as force multipliers by providing high-quality intelligence, surveillance, and reconnaissance as well as indication and warning of potential hostile action. In addition, attack submarines are effective in anti-surface warfare and undersea warfare in almost every environment, thus eliminating any safe-haven that an adversary might pursue with access-denial systems. As such, they represent a significant conventional deterrent."

Despite these important capabilities and the success of the *Virginia*-class submarine program, the committee notes that on March 18, 2015, Vice Admiral Joseph P. Mulloy testified that the Navy is only meeting approximately 54 percent of combatant commander requests for attack submarines.

The Navy has a validated requirement for 48 attack submarines, and currently has a fleet of 53 attack submarines. However, the committee notes that the Navy's attack submarine fleet will drop

to 41 submarines in fiscal year 2029. This smaller attack submarine fleet, combined with an increasing demand for the unique capabilities they provide, could result in the Navy meeting an even smaller percentage of combatant commander requests for attack submarines. The committee believes it is important that the Navy procure two *Virginia*-class submarines per year in fiscal years 2016 to 2020.

The committee understands that the Virginia Payload Module (VPM) will help mitigate the nearly 60 percent decrease in under-sea strike capacity associated with the declining number of attack submarines and retirement of the Navy's guided missile submarines (SSGNs) in the 2020s. The VPM will increase the capacity of *Virginia*-class submarines from 12 to 40 cruise missiles. The committee believes it is essential to accelerate as soon as practicable the inclusion of the VPM on *Virginia*-class submarines. Furthermore, once inclusion of the VPM is determined to be feasible, the committee supports inclusion of the VPM on every new construction *Virginia*-class submarine.

Therefore, the Secretary of the Navy is directed to submit a report to the committee no later than December 1, 2015 on the feasibility of accelerating the VPM introduction to *Virginia*-class submarines, as well as an assessment of the industrial base impact of building *Ohio*-class replacement submarines, *Virginia*-class submarines with the VPM, and *Virginia*-class submarines without the VPM, simultaneously.

Furthermore, in light of the importance of *Virginia*-class submarines and the VPM, the committee recommends an increase of \$800.0 million in advance procurement and the full requested amount in procurement for *Virginia*-class submarines.

***Arleigh Burke*-class destroyers**

The budget request included \$3.1 billion in Shipbuilding and Conversion, Navy for procurement of *Arleigh Burke*-class destroyers (DDG-51). Additional funding and incremental funding authority would help relieve pressure on the shipbuilding budget as funding requirements grow for the *Ohio*-class replacement program over the next several years. As a result, the committee recommends an increase of \$400.0 million and incremental funding authority for 1 *Arleigh Burke*-class destroyer in addition to the 10 DDG-51s in the fiscal year 2013-2017 multiyear procurement contract or for a DDG-51 in fiscal year 2018.

Afloat Forward Staging Base

The budget request included no funding in Shipbuilding and Conversion, Navy for advance procurement of afloat forward staging base (AFSB). The committee notes the Navy has procured two AFSBs and has a new requirement to provide support to the Crisis Response Security Force that justifies an increase in AFSBs from two to three. As a result, the committee recommends an increase of \$97.0 million to this program for advance procurement.

Amphibious Assault Ship (LHA) Replacement

The budget request included \$277.5 million in Shipbuilding and Conversion, Navy for advance procurement of amphibious assault

ship (LHA) replacement. The committee notes additional advance procurement funding would expedite delivery of this ship enabling the Navy to reach the force structure assessment objective of 11 large deck amphibious ships as early as fiscal year 2023. As a result, the committee recommends an increase of \$199.0 million to this program.

LX(R)

The budget request included no funding in Shipbuilding and Conversion, Navy for advance procurement of LX(R), which is expected to functionally replace LSD-41 and LSD-49 class ships. The committee notes accelerating the delivery of LX(R) class ships to the fleet will enable the Navy to meet a greater amount of combatant commander demand for amphibious warships. As a result, the committee recommends an increase of \$51.0 million in advance procurement for this program.

Landing craft utility replacement

The budget request included no funding in Shipbuilding and Conversion, Navy for procurement of landing craft utility replacement. The committee understands accelerating this program from fiscal year 2018 to 2016 has acceptable technical risk and will alleviate some pressure on the shipbuilding budget in future years. As a result, the committee recommends an increase of \$34.0 million to this program to procure one landing craft utility replacement.

T-ATS(X)

The budget request included no funding in Shipbuilding and Conversion, Navy for procurement of T-ATS(X). The committee notes T-ATS(X) will replace two ship classes—*Safeguard*-class salvage and rescue ships (T-ARS) and *Powhatan*-class fleet ocean tugs (T-ATF). The committee understands accelerating this program by one year from fiscal year 2017 to 2016 has acceptable technical risk and will alleviate some pressure on the shipbuilding budget in future years. As a result, the committee recommends an increase of \$75.0 million to this program to procure one T-ATS(X).

Destroyer modernization

The budget request included \$364.2 million in Other Procurement, Navy for DDG modernization. The committee notes the Navy's DDG modernization program increases the Fleet's Navy Integrated Fire Control—Counter Air and Ballistic Missile Defense capacity, which improves the U.S. ability to pace high-end adversary weapons systems. Procuring one additional combat system ship set in fiscal year 2016 will allow the Navy to modernize an additional DDG in fiscal year 2018 with these capabilities. As a result, the committee recommends an increase of \$60.0 million to this program. This was a Chief of Naval Operations' unfunded priority.

Littoral Combat Ship Mine Countermeasures Mission Module

The budget request included \$85.1 million in Other Procurement, Navy to procure Littoral Combat Ship (LCS) Mine Countermeasures (MCM) mission modules. The committee notes the Navy

has two MCM mission modules delivered and four MCM mission modules procured through fiscal year 2015. The Director of Operational Test and Evaluation (DOT&E) has stated that only one MCM module of each increment is required to complete operational testing. During developmental testing, as noted by DOT&E, “attempts to demonstrate the sequence of events necessary for an LCS to complete end-to-end mine clearance operations have been limited by low operator proficiency, software immaturity, system integration problems, and poor reliability of MCM components including RMS/RMMV.” As a result, the committee recommends a decrease of \$55.8 million for this program due to procurement in excess of need ahead of satisfactory operational testing.

This reduction would reduce the hardware components to the manufacturer minimum sustaining rate—a reduction from two to one Airborne Mine Neutralization Systems (AMNS), two to one Airborne Laser Mine Detection Systems (ALMDS), six to one AN/AQS-20A Minehunting Sonars, and two to zero COBRA systems (two other COBRA systems are requested in LI 2624, which satisfies the manufacturer minimum sustaining rate).

Remote Minehunting System

The budget request included \$87.6 million in Other Procurement, Navy for the Remote Minehunting System (RMS). In January 2015, the Director of Operational Test and Evaluation noted in his annual report, “RMS had not demonstrated sufficient performance or successful integration with interfacing LCS systems to demonstrate the Navy’s minimum Increment 1 warfighting capability, and developmental testing completed in the first quarter of fiscal year 2015 demonstrated continued performance issues and RMS mission package integration challenges.” The committee believes that upgrading two previously procured systems may provide further assets for testing to demonstrate whether upgrades improve performance and reliability. As a result, the committee recommends a decrease of \$65.6 million for this program due to procurement in excess of need, ahead of satisfactory developmental and operational testing.

Submarine towed arrays

The budget request included \$214.8 million in Other Procurement, Navy for fast attack submarine (SSN) acoustics. The committee notes TB-29X and TB-34X submarine towed arrays improve detection, classification, and tracking capabilities for deployed *Virginia*-class SSNs. Accelerating procurement by four additional TB-29X and four additional TB-34X arrays will improve operational availability of advanced towed sensors and flexibility of operational, forward-deployed submarines. This was a Chief of Naval Operations’ unfunded priority. As a result, the committee recommends an increase of \$20.0 million to this program.

Surface electronic warfare improvement program

The budget request included \$324.7 million in Other Procurement, Navy for AN/SLQ-32. The committee notes the Surface Electronic Warfare Improvement Program (SEWIP) provides for upgraded electromagnetic sensing capabilities for surface ships.

SEWIP Block II provides an upgraded receiver/antenna group and improved electromagnetic interference mitigation and combat system interface. Procuring two additional units in fiscal year 2016 would outfit two additional ships in fiscal year 2018. This was a Chief of Naval Operations' unfunded priority. As a result, the committee recommends an increase of \$28.0 million to this program.

Tube-launched, optically-tracked, wireless-guided missile

The budget request included \$12.5 million in Procurement, Marine Corps (PMC) for tube-launched, optically-tracked, wireless-guided (TOW) missiles. The committee recommends an increase of \$140.0 million in PMC for TOW missiles to replenish a depleted inventory. The additional funding was included on the Commandant of the Marine Corps' unfunded priority list.

Ground/Air Task Oriented Radar

The budget request included \$130.7 million in Procurement, Marine Corps (PMC) for the Ground/Air Task Oriented Radar (G/ATOR). The committee notes that excessive concurrency makes the G/ATOR program a relatively high risk development effort. This has been demonstrated in poor developmental test results to date and a major system design change introducing a less mature technology not tested in previous radars. G/ATOR continues to struggle with software performance and reliability problems resulting in significant schedule delays. The committee recommends a decrease of \$32.1 million in PMC for G/ATOR procurement.

Not later than 180 days after the date of enactment of this Act, the Secretary of the Navy shall submit to Congress a report on G/ATOR regarding the procurement in excess of need and ahead of satisfactory testing. The report should explain the poor development test results and why there has been major system changes. Furthermore, the report should address the software performance and reliability problems that have resulted in significant schedule delays. Not later than 60 days after the report of the Secretary is submitted, the Comptroller General of the United States shall review the report and submit to the congressional defense committees an assessment of the matters contained in the report.

Air Force

F-35A

The budget request included \$5.3 billion in Aircraft Procurement, Air Force (APAF) for 44 F-35A aircraft. The committee recommends a decrease of \$99.1 million in APAF due to anticipated efficiencies savings and excess support equipment cost growth.

MQ-9

The budget request included \$553.0 million in Aircraft Procurement, Air Force (APAF), for 29 MQ-9 aircraft. The committee recommends an increase of \$480.0 million in APAF for 24 additional MQ-9 aircraft and initial spares to support increased combatant commander requirements for medium altitude intelligence, surveillance, and reconnaissance support. Additional funding was in-

cluded on the Chief of Staff of the Air Force’s unfunded priorities list.

The committee also recommends under title V in this Act a provision that would direct the Secretary of the Air Force to submit a report on actions the Air Force will take to rectify persistent remotely piloted aircraft career field manning shortfalls. The committee expects the Air Force to take required actions to correct these shortfalls to facilitate these additional aircraft to fulfill combatant commander requirements.

F-15 capability upgrades

The budget request included \$464.4 million in Aircraft Procurement, Air Force (APAF), for F-15 fighter aircraft modifications. The F-15 series of fighter aircraft will be operated through the 2030 decade, and must have capability upgrades to increase its operational effectiveness against advanced threats and operate in increasingly contested environments, and training aircraft modified to mirror combat configurations for the most effective aircrew training. Additional funding was included in the Chief of Staff of the Air Force’s unfunded priorities list.

Therefore, the committee recommends an increase of \$11.6 million for the Eagle Passive/Active Warning Survivability System (EPAWSS), an increase of \$48.0 million for six F-15C advanced electronically scanned array (AESA) radar upgrades, an increase of \$192.5 million for 24 F-15D AESA radar upgrades, and an increase of \$10.0 million for Advanced Display/Core Processor II (ADCP II) upgrades to support AESA upgrades. The total recommended increase for APAF is \$262.1 million.

Budget request realignment

At the Air Force’s request, the committee recommends realignments in the following table to correct various errors in the budget request for Aircraft Procurement, Air Force (APAF), and Other Procurement, Air Force (OPAF).

AIR FORCE REQUESTED REALIGNMENTS
(in millions)

Item	Quantity	Account	Line Item	Amount
QF-16	APAF	12	- 25
F-15	APAF	22	-\$12.8
F-15	RDTEAF	136	+\$12.8
C2ISR TDL	APAF	59	-\$2.2
COMSEC Equip	OPAF	11	+\$2.2

C-130H Propulsion System Enhancements

The budget request included \$7.0 million in Aircraft Procurement, Air Force (APAF), for C-130 modifications. The Air National Guard and Air Force Reserve will operate C-130H aircraft for the next two decades. Enhancements to the C-130H propulsion system will provide increased performance, improved fuel efficiency, and greater reliability. Therefore, the committee recommends increases

of \$33.2 million for T-56 3.5 Engine Modifications, \$1.5 million for In-flight Propeller Balancing System certification, and \$13.5 million for Electronic Propeller Control System for a total increase in APAF of \$48.2 million.

C-130H avionics modernization program

The budget request included no funding in Aircraft Procurement, Air Force (APAF), for the C-130H Avionics Modernization Program (AMP). The committee believes the term “avionics modernization program of record for C-130 aircraft” in section 134 of the Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) includes C-130H safety modifications and airspace compliance modifications that will be required to operate in both Federal Aviation Administration-controlled airspace and International Civil Aviation Organization-controlled airspace after January 1, 2020.

The current Air Force plan includes making those airspace compliance modifications within the C-130H Avionics Modernization Program (AMP) effort. However, as the Air Force plan for making airspace compliance modifications (AMP Increment 1) would not achieve airspace compliance for the entire C-130H aircraft fleet until well after that deadline, the committee expects the Air Force to accelerate the AMP Increment I schedule as rapidly as possible. Additionally, the committee also expects the Air Force to accelerate the effort for AMP increment 2 modifications, using previously purchased components and leveraging research and development efforts to the maximum extent practical. The committee expects the Air Force to comply with the spirit and intent of section 134 of the Carl Levin and Howard P. ‘Buck’ McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) for executing the C-130H AMP program of record.

The committee understands that the Air Force is restructuring the AMP program of record, but also recognizes that it has no completed design, cost estimates, or schedule plan on how it will execute AMP Increment 2. The committee expects the Air Force to continue to execute AMP and field C-130H aircraft previously upgraded by the AMP program until the Air Force provides a concrete plan that describes the final modification configuration for AMP Increment 2, a service cost position, and a procurement and installation schedule that would realistically support a fleet viability requirement.

Therefore, the committee recommends an increase of \$75.0 million in APAF for C-130H AMP aircraft modifications.

A-10 Munitions Buyback

The budget request included \$1.7 billion for Procurement of Ammunition, Air Force (PAAF) of which \$131.1 million was for LI 352010 Cartridges.

The committee believes that the Air Force is proposing the retirement of the A-10 fleet purely on the basis of the fiscal environment and not on grounds of the ability of the combat air forces to effectively meet the requirements of the combatant commanders and defense strategy. The committee also believes that with the A-10 fleet currently engaged in operations against the Islamic State of

Iraq and the Levant, providing a theater security package in Europe to assure our allies and partners, and continuing rotational deployments operations to Afghanistan, divesting this capability at this time incurs unacceptable risk in the capacity and readiness of the combat air forces without a suitable replacement available.

Accordingly, the committee recommends an increase of \$38.5 million for LI 352010 Cartridges for munitions for the A-10 buyback.

Battlefield air operations kits

The budget request included \$13.1 million in Other Procurement, Air Force (OPAF), for mobility command and control equipment. The committee recommends an increase of \$19.9 million in OPAF for additional battlefield air operations kits which decrease the risk of fratricide and lowers by 30 percent the weight of equipment carried by battlefield airmen. Additional funding was included on the Chief of Staff of the Air Force's unfunded priorities list.

Air Force Network Procurements

The budget request included \$103.8 million in Other Procurement, Air Force for Air Force network (AFNet) procurements. The committee recommends a decrease of \$17.0 million for this program. The committee notes that many network and maintenance functions can be outsourced to reduce costs and leverage commercial technologies. The committee also notes that some of the systems being procured will be better delivered through the Department-wide Joint Information Environment.

Joint terminal attack controller training and rehearsal system simulators

The budget request included \$81.6 million in Other Procurement, Air Force (OPAF), for tactical communications-electronics equipment. The committee recommends an increase of \$36.0 million in OPAF for additional Joint Terminal Attack Controller Training and Rehearsal System Simulators to increase availability of Joint Terminal Attack Control personnel and increase unit readiness for combat deployments. Additional funding was included on the Chief of Staff of the Air Force's unfunded priorities list.

Defense Wide

MC-12

The budget request included \$63.2 million in Procurement, Defense-Wide (PDW), to modify MC-12 aircraft that were to be transferred from the Air Force to U.S. Special Operations Command (SOCOM) to replace the existing U-28 fleet and support the tactical airborne intelligence, surveillance, and reconnaissance (ISR) requirements of deployed special operations forces. The committee notes that the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) prohibited the transfer of MC-12 aircraft from the Air Force to SOCOM until an analysis and justification for the transfer of such aircraft was submitted to the congressional defense committees. According to the resulting analysis of alternatives, SOCOM identified the U-28 as the most cost-effective ISR platform to meet

special operations requirements through 2020. Therefore, at the request of SOCOM, the committee recommends a transfer of \$63.2 million from PDW for MC-12 modifications (P-1 Line # 41) to PDW for U-28 modifications (P-1 Line #45).

MQ-9 Unmanned Aerial Vehicle

The budget request included \$11.7 million in Procurement, Defense-Wide (PDW), for the acquisition and support of special operations-unique mission kits for the 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 increase of \$10.0 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 3 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.

Items of Special Interest

Armored vehicle transmission industrial base

The committee remains interested in the Army's management of strategic risk in the armored vehicle industrial base, including its related transmission industrial base.

Accordingly, last year's Senate report accompanying S. 2410 (S. Rept. 113-176) the Carl Levin National Defense Authorization Act for Fiscal Year 2015 required the Secretary of the Army to conduct a business case analysis of the armored vehicle transmission industrial base. The required analysis would assess the costs, benefits, risks, feasibility, and advisability of strategies to manage risks in the armored vehicle transmission industrial base including, but not limited to, increased competition, consolidation, or other industrial approaches across public depot, private commercial, and public-private partnership entities and facilities.

The committee was recently notified by the Assistant Secretary of the Army for Acquisition, Logistics, and Technology (ASA-ALT) that the analysis required by last year's committee report has been delayed until June 2015. Included with this notification the ASA-ALT indicated that the Army is working with its current transmission suppliers to carefully manage increasingly constrained resources, maintain combat vehicle fleet readiness, foster future competition, reset production facilities, invest as necessary in selected critical and fragile suppliers to sustain capabilities, and use investments in science and technology to retain important engineering capabilities.

The committee agrees that successful management of risk in this important sector of the industrial base will require the Army to develop plans and programs, sufficiently funded, to address each of these areas. Although the current fiscal environment is challenging, it could be an opportunity to develop new technologies, implement creative partnerships, and take advantage of opportunities for competition that may achieve improved technical performance, cost savings, and greater value for the warfighter and taxpayers. The committee expects the Army's final report no later than June 30, 2015.

Army UH-60A to UH-60L conversions for the National Guard

The committee is aware that the UH-60 Black Hawk helicopter is one of the most versatile and heavily used aviation capabilities in the Army National Guard, as well as by all the states in which they serve. The UH-60A is the oldest model Black Hawk in service and currently flown almost exclusively by the Army National Guard. Although old, these A-model Black Hawks continue to provide a reliable and critically important medium-lift capability to the National Guard in support of its state role in homeland defense and support for civil authorities in response to emergencies. While the Army National Guard currently uses UH-60A Black Hawk helicopters for the range of state and domestic requirements for medium-lift, the lack of modern on-board capabilities means these helicopters are not ordinarily available for deployment overseas into hostile environments without significant upgrades to their current configuration.

The committee notes that based on the Army's current budget projections Army National Guard units will not replace their aging UH-60A Black Hawk helicopters until the end of fiscal year 2025. This naturally results in higher operational tempo and increased flight hours for the rest of the Army's rotary wing aviation in support of overseas contingency operations. To sustain the readiness and increase the availability of the Army National Guard's UH-60 fleet, and close the A-model capability gap, the committee encourages the Army to review the feasibility of accelerating the replacement of all UH-60A aircraft through the production of new UH-60M helicopters, the UH-60V upgrade program, and the conversion of A-model Black Hawks to UH-60L model aircraft.

Combat logistics fleet

The ability of U.S. naval forces to deter aggression and rapidly respond to crisis around the world is sustained by Military Sealift Command ships. U.S. global logistics capability provides a significant advantage over the regionally focused fleets of potential adversaries. With challenges to U.S. allies and interests growing, the committee believes U.S. naval forces must be able to remain deployed and at sea, even in the face of enemy anti-access/area-denial (A²/AD) threats.

The size and structure of today's logistics force appears to be based on a longstanding operating concept in which naval forces operate almost exclusively in strike groups or ready groups with accompanying logistics ships. While such a model applied in the

years following the end of the Cold War, today a smaller fleet, new missions, such as ballistic missile defense and counter-piracy, and improving adversary A2/AD capabilities cause strike groups and ready groups to disperse over more expansive areas. Additionally, global shipping systems place fuel and supplies at depots closer to naval forces, enabling logistics ships to shuttle them out to the fleet as opposed to having to carry them for the whole deployment.

As the Navy finalizes the requirements for the new oiler, T-AO(X), the changes in naval operations and threats since its predecessor, the Henry J. Kaiser-class, was designed should be a foremost consideration. Therefore, the Secretary of the Navy, in coordination with U.S. Pacific Command, is directed to provide the committee a report no later than February 1, 2016, describing the requirements for T-AO(X) that addresses the following elements:

(1) Ship's capacity for fuel, dry stores, and chilled or frozen stores;

(2) Operational concept for fleet resupply that forms the basis for the T-AO(X) requirement, including how T-AO(X) will complement existing T-AKE class logistics ships and how the concept will evolve over the life of the T-AO(X) class;

(3) Number of T-AO(X) hulls required, how this requirement addresses a more dispersed fleet and combat losses likely in a modern conflict, and how the requirement may evolve over the next 30 years;

(4) How the T-AO(X) will be protected from missile and submarine attack as it supports a more widely distributed fleet; and

(5) An analysis of various fleet resupply force structures to meet projected mission needs in the 2025 timeframe, including: the current program of record, an alternative consisting a larger number of smaller ships with the same overall resupply capacity, and a mixture of the program of record and smaller ships.

Comptroller General of the United States review of the implementation of recommendations from the National Commission on the Structure of the Air Force

Section 1055 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) requires that, not later than 30 days after the date of the submittal to Congress pursuant to section 1105(a) of title 31, United States Code, of the budget of the President for each of fiscal years 2016 through 2019, the Secretary of the Air Force shall submit to the congressional defense committees a report on the response of the Air Force to the 42 specific recommendations of the National Commission on the Structure of the Air Force in the report of the Commission pursuant to section 363(b) of the National Commission on the Structure of the Air Force Act of 2012 (subtitle G of title III of Public Law 112-19 239; 126 Stat. 1704). The committee received the initial report from the Secretary of the Air Force in March 2015.

The committee is concerned that although the Air Force was required by the statute to provide discernible milestones for review of the recommendations or preliminary implementation plans, none

were included in the initial report. Additionally, several of the Commission's recommendations concerned the force mix ratio between the active and reserve components, which the Air Force elected to review through its High Velocity Analysis process. None of the analysis from this process was included in the report.

Additionally, section 138 of the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015 (Public Law 113-291) required the Secretary of the Air Force to submit to the congressional defense committees an assessment of the costs and benefits of the proposed transfer from one facility of the Department of Defense to another of C-130H or C-130J aircraft. The committee received this report in April 2015.

The committee is concerned that while the Air Force stated it would provide a review of the force mix balance between the active and reserve components through its High Velocity Analysis process, and in response to specific recommendations of the National Commission on the Structure of the Air Force, no reference to observations, conclusions, or recommendations are found in the C-130 force structure report that refers to this High Velocity Analysis review process on the C-130 mission area.

In addition, the report also contains no range or weighting of criteria, similar to the Air Force's strategic basing process, that would determine the operational effectiveness of stationing C-130 units at one location over another.

The committee directs the Comptroller General of the United States to review the Air Force's methodology and effectiveness in its effort to plan for and implement the National Commission recommendations. The review should include, at a minimum, assessments of:

- (1) the Air Force's plans for review and implementation of the Commission's recommendations;
- (2) the sufficiency of the Air Force's High Velocity Analysis process to provide decision level information to senior Air Force leaders on appropriate force mix balance between the components;
- (3) the applicability and appropriateness of the models used in the High Velocity Analysis process;
- (4) the decision process used following data collection and analysis; and
- (5) any other matters the Comptroller General determines are appropriate during the review.

The Comptroller General shall submit a preliminary review to the congressional defense committees not later than August 31, 2015, and a final report to follow on February 1, 2016.

Comptroller General review of the CVN-78 class aircraft carrier program

The committee notes the estimated procurement costs for the first three CVN-78 class aircraft carriers are \$12.9 billion, \$11.3 billion, and \$13.5 billion, respectively. In fiscal year 2008, the procurement costs for these ships were estimated to be \$10.5 billion, \$9.2 billion, and \$10.7 billion, respectively. The committee remains concerned with the current and potential future cost growth in this program. In light of the significant cost growth since the original

estimates and substantial costs that continue to be requested for the CVN-78 aircraft carrier program, the committee directs the Comptroller General of the United States to submit a report, not later than February 1, 2016, that includes analysis and recommendations for the following:

- (1) Cost estimates and cost estimating practices for the development and acquisition of the first three CVN-78 class aircraft carriers, including the factors that contributed to the quality of these estimates and the extent to which the cost estimates are reliable;
- (2) Effectiveness of current cost accounting and cost surveillance practices in providing reliable information for budget and program planning and execution, in light of the cost caps; and
- (3) Reporting format for CVN-78 aircraft carrier program costs, including annual budget requests and selected acquisition reports.

Enhance cockpit displays to improve safety and mission effectiveness

The committee notes that advancements in cockpit display technologies have the potential to improve safety and mission effectiveness for military aircrews operating a wide range of fixed wing and rotary aircraft. These technologies include but are not limited to enhanced vision and video overlays, integration of aircraft data with real world and stored imagery, ability to display three dimensional information, and ability to share information both on and off the aircraft. The committee also understands these technologies may be available as commercial off-the-shelf (COTS) equipment.

The committee directs the Under Secretary of Defense for Acquisition, Technology & Logistics to investigate recently developed cockpit display technologies to improve flight safety and enhance mission effectiveness through improved situational awareness. The committee believes that Department of Defense may be able to improve flight safety, reduce aircrew workload and increase combat effectiveness by incorporating new cockpits display technologies into aircraft cockpits, to include the use of existing COTS systems.

Expeditionary Health Services Systems

The committee supports the Department of the Navy's Expeditionary Health Services Systems (EHSS) and notes with interest the goal of transitioning dated legacy systems to rapidly erectable Expeditionary Medical Facilities (EMF). Improving and/or correcting performance and safety issues in the EMF legacy systems should be a high priority in the Navy's EHSS Equipment Purchases. Therefore, the committee urges the Department of the Navy to make the modernization and upgrading of the EMFs a priority focused on improving the safety of legacy systems while upgrading their performance. This would include fast-tracking improved material technology insertion for immediate impact on legacy equipment.

F-35 Joint Strike Fighter program

The committee supports, and is committed to, the F-35 Joint Strike Fighter program. The committee notes the progress made in

the System Development and Demonstration phase since the program was re-baselined following the Nunn-McCurdy breach in 2011, generally achieving program schedule goals and driving aircraft flyaway costs downward despite ongoing technological challenges and deficiencies revealed in both hardware and software testing. The committee desires to increase the annual procurement quantities for all three variants insofar as program performance and available funding allow.

The committee is concerned with the growing fighter force structure capacity shortfalls in the Departments of the Air Force and Navy due to delays in the F-35 program, noting the original program delivery plan expected to have 1,013 aircraft of all three variants delivered by fiscal year 2016, with actual and currently planned deliveries now only totaling 179. These program delivery delays occurred while legacy fighter aircraft continue to reach the end of their designed service lives, become increasingly less capable due to adversaries' technological advances, or are being divested in significant numbers due to shrinking defense budgets.

The committee is also concerned that the Department of Defense established the requirement for the F-35 program of record total buy quantity under very different strategic circumstances nearly 20 years ago. In addition, prospective adversary technological advances and increased capabilities with regard to establishing contested combat environments, combined with updated threat assessments and an evolving national defense strategy, have significantly changed the calculus for force sizing constructs.

The committee notes that the rapid pace of new technological developments in such areas as unmanned systems, robotics, cyber, directed energy, propulsion, hypersonics, nanotechnology, and composites, among many others, is pointing the way to the future. Moreover, 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.

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 F-35 Joint Strike Fighter total program of record quantity, or identify a new requirement for the total number of F-35 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 and fulfilling warfighting capability and capacity requirements in the areas of an optimized force mix of long-range versus medium/short-range ISR/strike platforms; manned versus unmanned platforms; observability characteristics; land-based versus sea-based; advanced fourth-generation platforms of proven design; next generation air superiority capabilities; and promising, game-changing, advanced technology innovations.

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

Joint Standoff Weapon

The committee is concerned with the lack of clarity in the Navy's proposal to terminate the Joint Standoff Weapon (JSOW). The Secretary of the Navy is directed to provide to the congressional defense committees, within 60 days of the enactment of this act, a detailed analysis of Navy JSOW inventory, wartime requirements and the impact of termination on U.S. war plans and JSOW Foreign Military Sales. Should the Navy's analysis determine the need for more JSOWs, the committee would be supportive of additional procurement.

Land mobile radio

The committee is aware that some U.S. Army Europe (USAREUR) installations may be operating with outdated installation security and public safety communications systems that do not support multiple-party conversations in the event of an emergency. A land mobile radio (LMR) study conducted by the Naval Surface Warfare Center—Crane found that insufficient radio coverage could occur between installations over large distances within the Army's Installation Management Command—Europe (IMCOM-E). In order to improve radio coverage, the study recommended that the Army join an initiative with the U.S. Air Force—Europe (USAFE) on its Enterprise Land Mobile Radio program. The committee also notes that cost savings may be realized if IMCOM-E and USAFE pursue a joint LMR system rather than if IMCOM-E upgrades its LMR independently. Additionally, migrating to a joint USAREUR—USAFE installation security network could allow for the reuse of system frequencies throughout the area, resulting in reduced spectrum use. Accordingly, the committee encourages IMCOM-E and USAFE to coordinate efforts to find and implement an effective and affordable system that meets requirements.

Missile and munitions industrial base

The committee is concerned by the fragility of the missile and munitions industrial base. Unstable and declining budgets and a lack of new start programs continue to pressure tier two and tier three suppliers, particularly in the solid rocket motor, fuse and energetic materials segments. The committee notes the importance of sustaining design engineering and systems integration skills and the critical sub-tier supply chain and is encouraged by Department of Defense efforts to mitigate some of the most acute risks. The committee looks forward to working with the Department to ensure a healthy missile and munitions industrial base.

Modernization for Light Armored Vehicles

The committee finds that the Light Armored Vehicle (LAV) Family of Vehicles (FoV) has been plagued by inadequate and unreliable power due to technological increases in communications, command and control, situational awareness, modern weapon systems, and an aging electrical infrastructure. The committee encourages the Secretary of the Navy to continue to seek ways to modernize the LAV FoV to meet the existing and future vehicle power requirements.

Navy maritime security barriers

Given the continued terrorist threat to U.S. military personnel and installations, the committee believes the department must seek to continually improve force protection measures. Security at Navy shipyards and bases depends not only on land-based security measures, but also on effective maritime barriers. As we tragically observed in the 2000 attack on the USS *Cole*, an attack against a U.S. vessel in port can result in a significant loss of American life.

The committee understands that the maritime barriers on many Naval bases and shipyards may utilize dated technology that may not provide the best available protection.

Therefore, the committee directs the Secretary of the Navy to submit a report to the congressional defense committees no later than March 31, 2016. That report should: (1) assess the force protection capability of maritime barriers used by the Navy; (2) assess the force protection capability of maritime barriers that are currently available on the commercial market; (3) describe whether additional force protection capability could be achieved by employing new maritime barriers; (4) estimate acquisition costs for the alternative maritime barriers currently available on the commercial market; (5) compare the operating and support costs of current barriers with the projected operating and support costs of maritime barriers available on the commercial market; and (6) evaluate whether any potential increase in force protection capability, as well as potential reduced operating and support costs, would be worth the costs of deploying that capability. In assessing potential differences in force protection capability, the Secretary should examine such factors as the estimated stopping power and stopping distance of the respective maritime barriers.

Navy training helicopters

The committee is aware that the Navy and Army have used the TH-57 Sea Ranger and TH-67 Creek helicopters respectively for initial pilot training for more than 30 years. The TH-57 Sea Ranger has been a reliable and affordable training aircraft, however, this fleet of aircraft is becoming increasingly expensive to maintain and may require significant upgrades to extend the fleet's service life. The committee also notes that the Army has started to divest itself of the TH-67 Creek trainers and is procuring a modern, dual-engine training helicopter to improve initial pilot training and make pilot transitions to operational aircraft more effective and efficient.

Given the challenges associated with the sustainment and cost to extend the life of the Navy's aging TH-57 fleet, the committee is interested to know the Navy's near and long-term plans for training helicopter modernization. Accordingly, the committee directs the Secretary of the Navy to submit a report on the TH-57 fleet to the Committee on Armed Services of the Senate no later than September 30, 2015. That report should provide: (1) an assessment of the current and a 5-year projection of TH-57 fleet reliability, including related maintenance and sustainment costs; and (2) the Navy's 10-year plan for training helicopter modernization, including funding profile and schedule assumed in the future years defense program, as provided in the fiscal year 2016 budget request.

Night Vision Reset

Night vision systems are an essential capability for successful conventional military and counterterrorism operations.

As night vision technologies continue to proliferate around the world, the committee believes it is crucial that the Department of Defense maintains and where possible extends its technological advantage in night vision systems. The committee notes that the Army has plans and programs in place to address the technological opportunities, operational requirements, and industrial base challenges associated with current and future night vision systems. In this regard, the committee encourages the Secretary of the Army to develop and implement a comprehensive night vision systems research, development, acquisition, reset maintenance, and sustainment strategy that improves readiness, identifies and delivers promising new or emerging technologies, and ensures the affordability of night vision systems by managing cost throughout their life cycle.

Patriot Product Improvement Future Lower Tier Sensor Alternatives

The Congress supports retention of the Integrated Air and Missile Defense (IAMD) technical superiority in balance with affordability to protect our forces and our coalition partners. To that end, the Army is conducting an analysis of alternatives (AoA) to determine the future path for IAMD Lower Tier investment and modernization within the overarching IAMD Strategy.

To achieve this end state, the Army should thoroughly assess and consider all alternatives for modernizing the Lower Tier Patriot radar, including system solutions incorporating Active Electronic Scan Array (AESA) and Gallium Nitride (GaN) technology insertion into the existing Lower Tier Patriot radar. The committee believes the Army analysis should also consider relative risks, affordability and lead times of alternatives to maintain this capability.

The committee directs the Army to report within 90 days of completion of the AoA on the overall results of the AoA and on the relative merits of various technology options to sustain and modernize the existing Patriot radar.

Route and area clearance mine protected vehicles

The budget request included \$131.0 million in Other Procurement, Army for the modification of in service equipment that would upgrade a mix of route and area clearance mine protected vehicles. Route and area clearance mine protected vehicles, such as the Panther, Husky, Buffalo, and RG31, are special purpose vehicles with a combination of on board mine detection and clearing capabilities. All of these vehicles have been proven effective by U.S. forces and those of other nations in detecting and countering improvised explosive devices in combat operations in Iraq and Afghanistan.

The committee notes that the Army plans to retain 1,840 of these route and area clearance mine protected vehicles for distribution to units, pre-positioned stocks, training, and for repair cycle spares. Of these, 650 would be Husky and 324 would be Buffalo vehicles.

The committee understands that the budget request would complete the Army's acquisition objective for the Buffalo and Husky, however, the committee is concerned that to date neither of them has a sustainment or modernization plan. Therefore, the committee directs the Secretary of the Army to provide the Committees on Armed Services of the Senate and House of Representatives, no later than 120 days after the date of the enactment of this Act, a report detailing plans to sustain and modernize the route and area clearance mine protected vehicle fleet. The report required shall include details regarding the plan's schedule as well as funding profiles in relevant research and development and procurement accounts from fiscal year 2017 to fiscal year 2020.

***San Antonio*-Class Amphibious Transport Dock program**

The committee recognizes final requirements are still under development for the *San Antonio*-class amphibious transport dock ship designated LPD-28 and expects the fiscal year 2017 budget request to fully fund LPD-28 in the future years defense program.

Single-source providers of critical acquisition program components

The committee notes with concern the February 2015 fire in the United Kingdom that destroyed the factory of the single-source provider of propellers for C-130J aircraft.

While the committee received assurances from the Air Force that actions have been taken to avoid C-130J manufacturing delays, the committee is concerned there are other single-source or single-location providers of critical components of major defense acquisition programs where the loss of which, for any reason, could undermine the national security interests of the United States.

Therefore, the committee directs the Under Secretary of Defense for Acquisition, Technology, and Logistics to provide a classified report to the congressional defense committees, not later than February 1, 2016, that identifies major defense acquisition programs with operational implications, a list of critical components of such major defense acquisition programs provided by single-source and/or single-provider suppliers, the severity of the operational impact of the loss of such suppliers, and risk management actions with associated implementation plans and timelines the Department will take to prevent negative operational impact in the event of such loss.

Standoff precision guided weapons

As the air and missile defense capabilities of potential adversaries rapidly advance, the ability of the U.S. Armed Forces to employ short-range precision guided weapons such as Joint Direct Attack Munitions (JDAMs) will be increasingly challenged. The capability to employ precision guided weapons at standoff ranges in large numbers will be necessary to ensure operational success in any high-end engagement. Advanced weapons such as the Joint Air-to-Surface Standoff Missile—Extended Range (JASSM-ER), the Long Range Anti-Ship Missile (LRASM), the Tomahawk missile and others will be key elements in attack execution, but are cost

prohibitive to use in the numbers that future strike scenarios may require.

The committee is concerned the Navy is not adequately planning for a future environment in which large scale use of standoff precision guided munitions is a prerequisite for victory. The committee directs the Secretary of the Navy to provide, prior to submission of the fiscal year 2017 budget request, a report on the Navy's plan for standoff precision guided munitions in the 2025–2030 timeframe to include ship-, submarine- and air-launched weapons. The report should include what actions are being taken to ensure that cost-effective solutions are part of the planning. The Navy should provide this information in an unclassified report with an accompanying classified annex.

Unmanned Undersea Vehicles

The sophistication and endurance of autonomous undersea vehicles (AUVs) are dramatically improving as they incorporate new civilian and military technologies. Vehicles in development will likely be able to take over some missions performed today by submarines, reducing stress on the force and enabling greater capacity for undersea warfare. The decision-making limitations of AUVs, however, will constrain the degree to which they can replace or augment submarines for the foreseeable future.

A large number of AUVs are in development. However, the committee is concerned that the size and capabilities of these AUVs are not necessarily well suited for the missions they can perform. For example, AUVs that are small enough to be carried on submarines are not likely to have space for the redundant power and control systems needed to support independent long-endurance operations. They may be best suited for missions where the AUV is expended or acts as an extension of the host submarine's sensors or weapons. Conversely, large AUVs that can carry redundant power and control systems are likely to be launched from shore or large surface ships, and may be best suited for long-endurance surveillance or transport missions. Vehicles in the middle, such as the Large Displacement Unmanned Undersea Vehicle (LDUUV), are too large and expensive to deploy in quantity but are likely too small to host the systems needed for long-endurance independent operations.

As AUVs transition from science and technology projects to acquisition programs, the Navy should assess the number and type of AUVs needed so it can most effectively use the resources allocated to these systems. Therefore, the Secretary of the Navy is directed to provide the committee a report no later than February 1, 2016, describing its projected AUV force structure requirement for 2025 that addresses the following:

- (1) The missions expected to be conducted by different AUV classes and how this mission set relates to current and future submarine mission sets;
- (2) The different AUV classes, as well as other deployable undersea sensor and communications systems, anticipated in this timeframe and their host platform(s), as appropriate; and
- (3) The required number of AUVs in each class and the impact, if any, on submarine force structure requirements.

In the report on the Carl Levin and Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015 (Report 113–176), the committee expressed its belief that the Navy should, where feasible, take full advantage of existing expertise and infrastructure at the public shipyards for unmanned undersea vehicle development and maintenance.

The committee continues to expect the Navy to capitalize, where feasible, on existing expertise and infrastructure at the public shipyards for research, development, engineering, configuration management, acquisition support, technical problem solving, and operations and logistics support, including life-cycle maintenance and mission package support.

Vehicle occupant protection technology

The committee has followed with interest the development of unique technology to detect and autonomously respond to underbody explosive incidents with an active response to counter vehicle flight and reduce the physical effects on occupants. The committee is interested in the testing conducted under a Cooperative Research and Development Agreement between industry and the Army. The committee directs the Secretary of the Army to submit a report within 90 days of enactment of this Act which evaluates the results of the testing on this technology.