DIVISION A—DEPARTMENT OF DEFENSE AUTHORIZATIONS

TITLE I—PROCUREMENT

AIRCRAFT PROCUREMENT, ARMY

Items of Special Interest

Brigade combat team utilization of unmanned aircraft systems in training operations

The budget request contained $55.4 million for MQ-1C Gray Eagle unmanned aircraft systems, but contained no funds for the additional procurement of ground mounted airspace deconfliction radars to directly support brigade combat teams during training event operations with unit organic unmanned aircraft systems (UAS).

The committee notes that multiple U.S. Army posts, which have brigade combat teams (BCT) stationed to operate unit organic medium or large UAS aircraft within continental United States (CONUS) and outside CONUS airspace, lack adequate and certified ground radar facilities and capabilities to provide realistic training operations involving the employment of UAS aircraft. Army posts affected by this training environment limitation include: Ft. Hood, Texas; Ft. Stewart, Georgia; Ft. Riley, Kansas; Ft. Campbell, Kentucky; Ft. Bragg, North Carolina; Ft. Drum, New York; Ft. Huachuca, Arizona; Ft. Polk, Louisiana; Ft. Carson, Colorado; Ft. Wainwright, Alaska; and Kunsan Air Base, South Korea. The committee is concerned that BCT units that must rely on maintaining visual sight of the UAS, or that have to procure chase aircraft services to maintain situational awareness of the UAS, are not able to fully optimize training as a result of the inability to create realistic combat environments to conduct employment of UAS doctrine, tactics, techniques, and procedures in support of the BCT. The committee believes that BCT training with unit organic UAS aircraft could be made more efficient and effective with the use of ground-based radar capabilities and facilities to alleviate reliance upon visual sight or chase aircraft procured services. The committee also notes that ground-based radar facilities supporting Army UAS training operations for BCTs are a high-priority and unfunded requirement of the Army.

Therefore, the committee recommends $85.0 million, an increase of $29.6 million, for procurement of ground mounted airspace deconfliction radars to support BCT unit organic UAS training operations.

MISSILE PROCUREMENT, ARMY

Items of Special Interest

Joint air-to-ground missile increment 2 acquisition strategy
The committee understands the joint air-to-ground missile (JAGM) program is a new generation of air-launched, ground-attack tactical missiles that will complement and replace the Army's legacy inventory of Hellfire missiles.

The committee is aware the Army is pursuing an incremental approach to JAGM acquisition. The committee understands the program consists of two increments, with Increment I beginning low-rate production in fiscal year 2017 and consisting of a dual-mode seeker tactical missile capable of attacking stationary and moving targets. The committee is concerned over the lack of clarity and funding in the Army's budget request for the JAGM Increment II program.

The committee directs the Secretary of the Army to provide a briefing to the Committee on Armed Services of the House of Representatives by February 1, 2017, on the status of the JAGM Increment II program that shall include the program's requirements, acquisition strategy, and funding profile.

PROCUREMENT OF WEAPONS AND TRACKED COMBAT VEHICLES, ARMY

Items of Special Interest

Army National Guard M2 Bradley Infantry Fighting Vehicle upgrades

The committee notes that the Army intends to maintain two versions of the M2 Bradley Infantry Fighting Vehicle (IFV) for the foreseeable future, with the M2A3 equipping Active Duty armored brigade combat teams (ABCT) and the M2A2 Operation Desert Storm Situational Awareness variant in the Army National Guard. While the committee understands the funding constraints that have led to this mixed fleet approach, the committee continues to be concerned about the potential divergence in capability between Active Duty ABCTs and Army National Guard ABCTs. Therefore, the committee encourages the Army to continue to work toward a pure fleet approach to M2 Bradley Infantry Fighting Vehicles in the Army. However, if funding is not available for that goal, the committee encourages the Army to continue to modernize M2 Bradley IFVs in the Army National Guard to the maximum extent possible.

M240 medium machine gun modernization

In the committee report (H. Rept. 114-102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee directed the Secretary of the Army to brief the House Committee on Armed Services on the Army's long-term sustainment strategy and life-cycle sustainment plans for the M240 medium machine gun. The committee appreciates the briefing provided by the Army regarding the sustainment of the industrial base for the M240 medium machine gun, but has concerns that industry was not consulted in the preparation of the sustainment plan. Therefore, the committee directs the Assistant Secretary of the Army for Acquisition, Logistics, and Technology to develop a plan, with input from the M240 original equipment manufacturer, that would consider the
advisability and feasibility of establishing an M240 recapitalization program, and provide the House Committee on Armed Services with a briefing on this plan, including its associated costs and timelines, not later than September 30, 2016. The committee expects this briefing to also detail the plans to ensure the sustainment of the domestic small arms industrial base, including both original equipment and spare parts manufacturers.

Multi-Role Anti-Armor Anti-Personnel Weapon System

The committee understands the M3 Carl Gustaf Multi-Role Anti-Armor Anti-Personnel Weapon System (MAAWS) 84mm recoilless rifle is a multipurpose, medium-range weapon system designed specifically to engage structural targets at ranges up to 500 meters, lightly armored targets at ranges up to 700 meters, and soft targets at ranges up to 1,000 meters. The committee is also aware that the Army has finalized a program of record for M3 MAAWS and is synchronizing program activities for Type Classification of combat and training ammunition, the M3 and lightweight M3A1 gun variants, as well as leveraging acquisition and logistics functions with U.S. Special Operations Command. The committee also notes the Marine Corps is procuring a similar system, which is the follow-on to the Shoulder Launched Multipurpose Assault Weapon (SMAW).

The committee directs the Secretary of the Army to provide a briefing to the House Committee on Armed Services by March 1, 2017, on the MAAWS capabilities, including: whether size and weight issues continue to be a factor in combat effectiveness; capability to safely fire from enclosures; and the Army’s assessment of current Marine Corps SMAW programs, and whether these systems could potentially meet Army operational performance requirements.

PROCUREMENT OF AMMUNITION, ARMY

Items of Special Interest

Ammunition industrial base investment strategies

The committee notes that the Army has reported that a steady-state funding of approximately $250.0 million per year is required to properly modernize and sustain the eight government-owned, contractor-operated (GOCO) Army Ammunition Plants (AAPs), as well as the government-owned, government-operated (GOGO) AAPs, many of which were built during World War II. The committee notes that the budget request actually exceeded this annual baseline investment across the Future Years Defense Program. The committee also notes, however, that despite this commitment, significant safety, environmental, and operational discrepancies exist among the four largest AAPs, which could require investments exceeding what is currently in the Army’s long-term modernization plan for the ammunition industrial base. The committee is concerned about this discrepancy between documented need and planned investment. Therefore, the
committee encourages the Secretary of the Army to reevaluate its AAP funding investment model and the underlying recapitalization assumptions in order to determine a more accurate steady-state funding baseline for all GOCO AAPs and GOGO AAPs.

**Small guided munitions acquisition strategy**

The committee commends the Army for rapidly fielding small guided rockets for the AH-64D Apache Attack Helicopter in 2015. Furthermore, the committee understands the Marine Corps continues to qualify guided rockets on the AV-B Harrier, AH-1 Cobra attack helicopter, and UH-1 utility helicopter, while the Air Force is rapidly moving forward to qualify small guided rockets on the F-16 and A-10 platforms.

The committee notes that while not a replacement for heavier guided missile munitions, small guided rockets could provide an affordable precision guided weapon capability to prosecute targets that have been routinely engaged in recent years by heavier and more expensive guided munitions. The committee also recognizes that precision delivery of the munition does not always equate to lethality at the target, and encourages the Department of Defense to consider fielding the most capable and lethal warhead technology available to maximize capability on small guided rockets.

The committee directs the Secretary of Defense, in consultation with the Chairman of the Joint Chiefs of Staff, to provide a briefing to the Committee on Armed Services of the House of Representatives by August 31, 2016, on the joint requirements for small guided rocket munitions, the long term acquisition strategy for small guided rocket systems, the plans for maximizing lethality of these systems, the potential for integrating these systems on unmanned aerial systems, and to provide options to streamline the procurement and fielding of these critically needed systems across the military services.

**OTHER PROCUREMENT, ARMY**

**Items of Special Interest**

*Accelerate fielding of personal dosimeters*

The committee remains concerned about the increasing chemical, biological, radiological and nuclear (CBRN) threats to our soldiers. Maintaining adequate modern protective equipment is of critical importance for the safety of U.S. forces in CBRN environments. Modern dosimeters also establish a legal dose of record for service members, which the services can track for safety and liability purposes. The committee remains concerned that shortfalls in fielding the most current radiation detection devices, specifically personal dosimeters, continue to exist, most notably within the Army National Guard force structure. To ensure our troops and domestic homeland first responders are provided with the best possible protection to monitor
against nuclear exposure, the committee strongly encourages the Secretary of Defense to expedite and complete the fielding of modern radiation detection equipment across the force to meet existing, critical requirements for personal dosimeters.

*Army small-scale experimentation*

The committee notes that senior Army leadership has expressed a desire to increase the amount of innovation and experimentation within the Department of the Army, and make Army acquisition faster and more responsive. The committee also notes that although large-scale Army experiments, such as the Network Integration Evaluation and Army Warfighting Assessment are beneficial, they take considerable time and resources to organize, conduct, and assess. Therefore, the committee encourages the Secretary of the Army to consider the creation of smaller-scale, quicker-turn experimentation units and exercises focused on addressing Army Warfighting Challenges and near-term capability gaps with commercial and government off-the-shelf technologies.

*Army tactical communications waveforms*

The committee supports the Army’s Non-Developmental Item (NDI) procurement strategy for software defined radios. Furthermore, the committee recognizes the critical role radio waveforms play in battlefield communications and network capability, and how an NDI procurement approach can save money and deliver communications technology rapidly to the warfighter. The committee encourages the Army to expand its NDI procurement policy to include new software technology for innovative commercial waveforms. The committee is further aware and interested in seeking more information about the Defense Technology Security Administration’s (DTSA) consideration of polices that could lead to additional regulations regarding the export of software defined radios. The committee believes that both of these approaches have the potential to impact the availability of radios to warfighters.

Therefore, the committee directs the Secretary of the Army and the Director of the Defense Technology Security Administration to provide a briefing to the Committee on Armed Services of the House of Representatives not later than September 30, 2016, on the potential use of new radio waveforms for tactical communications that may be available via an NDI acquisition approach and the potential effects of U.S. government policy changes on this industrial sector and on the ability of warfighters and our international partners to access innovative radio technologies.

*Bridge Erection Boat program*

The committee is aware that the new XM30 Bridge Erection Boat (BEB), which will replace the 30-year-old legacy Mk II BEB platform, represents an
essential readiness capability and an important part of the Army's incremental modernization efforts. The XM30 BEB will be fielded to Active Army, Reserve, and National Guard Multi-Role Bridging Companies (MRBCs) and used to transport weapon systems, troops, and supplies over water when permanent bridges are not available. The XM30 BEB will also provide MRBCs significantly enhanced capabilities for diving support, rafting transport, and patrols. The Army Acquisition Objective for the XM30 BEB is 379 vessels. However, the program currently remains in low-rate initial production with a transition to full-rate production expected during fiscal year 2017. Therefore, the committee continues to support this program and encourages the Secretary of the Army to program sufficient funds to support the Army Acquisition Objective for the XM30 BEB and to provide a more efficient funding profile that avoids large variations in quantity ordering.

**Chemical, Biological, Radiological, and Nuclear Response Enterprise Information Management System**

The committee is aware that the National Guard Bureau Weapons of Mass Destruction-Civil Support Teams (CST) currently field a system, the CST Information Management System (CIMS), to provide a common operating picture, promote information sharing and real-time collaboration in an emergency situation, and support the CST mission of assisting and advising first responders and facilitating communications with other Federal resources. The committee is also aware that the CIMS system is being modified to establish an enterprise-capable tool, referred to as the National Guard Chemical, Biological, Radiological, and Nuclear Response Enterprise Information Management System 2018+ (NG CIMS 2018+), that will expand the capabilities of the CIMS to support the other National Guard Bureau forces, such as the Chemical, Biological, Radiological, Nuclear, and High-Explosive Enhanced Response Force Package and Homeland Defense Response Force units.

The committee believes it is important that this enhanced CIMS capability be fielded quickly and efficiently by utilizing prior investments to expand and enhance communication capability. The committee is aware of the plan to develop and establish the NG CIMS 2018+ through a multi-phase approach, including establishing initial operational capability in fiscal year 2016 and proving full operational capability in fiscal year 2018. Therefore, the committee directs the Secretary of Defense to provide a briefing to the Committee on Armed Services of the House of Representatives by December 1, 2016, detailing the status of the development of the NG CIMS 2018+ tool to date, as well as a description of the progress on providing the initial operational capability and an update on the future plans and milestones to establishment of full operational capability.

**Ground mobility vehicle**
The budget request contained $4.9 million for 10 low-rate production ground mobility vehicle (GMV) systems and associated test and evaluation activities.

The GMV provides "enhanced tactical mobility" for a 9-soldier infantry squad with their associated equipment to move quickly around the battlefield, and was initiated as an urgent operational need by the 82nd Airborne Division and endorsed by the 18th Airborne Corps and U.S Army Forces Command. The current acquisition objective for GMV is 150 systems, broken out as 3 battalion sets of 50 systems each for infantry brigade combat team units in support of the global response force mission.

The committee understands the Army is conducting an analysis of alternatives that should be complete in June 2016. The committee is aware that current market research has identified several possible vendors, and the Army has identified that the solution will most likely be a commercial/non-developmental item with procurement based on best value, full and open competition. According to the current acquisition schedule, a low-rate production contract award is scheduled for fourth quarter fiscal year 2017, with the first unit equipped by third quarter fiscal year 2019.

The committee remains concerned about this timeline. The committee encourages the Army to develop ways to accelerate and streamline this acquisition in order to more rapidly address the critically urgent operational need as stated by the 82nd Airborne Division.

High Mobility Multipurpose Wheeled Vehicle ambulance recapitalization

The committee recognizes the tactical importance of the High Mobility Multipurpose Wheeled Vehicle (HMMWV) fleet and the enduring requirement to maintain a capable HMMWV fleet supporting multiple relevant mission roles for Active and Reserve Component units. The committee notes that Congress has provided an additional $520.0 million over the past 3 years to address unfunded modernization requirements for the Army Reserve (USAR) and Army National Guard (ARNG) HMMWV fleets.

The committee also recognizes the critical medical ground evacuation mission role provided by the HMMWV ambulance variant. The committee is concerned that the Army’s current fleet of Active Component HMMWV ambulances are now on average 27 years old, exceeding the expected useful life of the vehicle by 12 years. The committee also understands the Army does not have a fully funded reset, recapitalization, or replacement plan in place for the entire HMMWV ambulance fleet. The committee is aware of the successful effort already underway to modernize the HMMWV ambulance fleet for the ARNG and USAR through new production vehicles, the M997A3 variant. The committee believes the Army should consider a similar effort for the Active Component. The committee directs the Secretary of the Army to develop an acquisition strategy to modernize the current fleet of HMMWV ambulances for the Active Component and to provide a briefing to
the Committee on Armed Services of the House of Representatives by March 1, 2017, on the details of this acquisition strategy.

**Material handling equipment modernization strategy**

The committee is concerned that the budget request did not include funding for the Rough Terrain Container Handler (RTCH), a material handling equipment system considered vital and critical to Department of Defense expeditionary logistics. The committee understands the RTCH system, along with other material handling equipment logistic systems, provides strategic capability to set the theater, strategic agility to the joint force, and maintains freedom of movement and action during sustained and high tempo operations at the end of extended lines of communication in austere environments. The committee is concerned by the number of RTCH systems that are combat worn, and notes there is neither a formal reset and recapitalization program for these systems, nor a long-term strategy to modernize a fleet that entered service in 2001. Accordingly, the committee encourages the Secretary of the Army to develop plans to recapitalize and modernize RTCH systems and other material handling equipment systems in a timely manner, as well as resource this effort across the Future Years Defense Program.

**Mid-Tier Networking Vehicular Radio**

The budget request contained $25.1 million in Other Procurement, Army, for procurement of Mid-Tier Networking Vehicular Radio (MNVR) systems. The committee supports the goals of the MNVR program and believes that modernizing battlefield communications is a critical priority for the Army. The committee notes that the MNVR is intended to provide the terrestrial backbone for the Army’s tactical network, connecting lower-echelon radios, like Manpack and Rifleman radios, with the upper tier at the brigade and battalion level. This terrestrial backbone is designed to provide a critical capability to the Army, and reduces reliance on satellite communications for command and control capability. The committee is aware that the MNVR radio has completed initial test activities and is expected to move to full-rate production after testing in the summer of 2016. The committee encourages the Army to maintain its testing schedule and, if testing proves successful, its production schedule in order to meet fielding requirements.

The committee recommends $25.1 million, the full amount requested, in Other Procurement, Army for MNVR systems.

**Tactical Communication and Protective System**

The budget request contained $3.6 million for 983 tactical communication and protective hearing systems (TCAPS) and 1,127 TCAPS-Lite systems. The committee is aware that the Army has been updating standards pertaining to the TCAPS program, and understands the Army conducts annual
assessments of technology to acquire the best that is available to meet Army requirements for hearing protection. The committee is aware that as a result of the annual relook of technology in 2014, the Army identified a TCAPS-Lite solution which would provide the same level of active hearing protection at an 85 percent reduction in unit cost for soldiers that do not have the need to connect to radios. The committee notes that TCAPS-Lite enables soldiers to communicate in combat environments while simultaneously providing active hearing protection from harmful steady-state and impulse noise. The committee supports the Army's current strategy to begin procurement of TCAPS-Lite starting in fiscal year 2016, and notes fielding is scheduled for the fourth quarter of fiscal year 2017. The committee encourages the Army to accelerate fielding of TCAPS-Lite, and expects the Army to resource TCAPS-Lite across the Future Years Defense Program.

The committee recommends $3.6 million, the full amount requested, for TCAPS and TCAPS-Lite.

**AIRCRAFT PROCUREMENT, NAVY**

**Items of Special Interest**

**MQ-8 Fire Scout aircraft**

The budget request contained $72.4 million for the MQ-8 Fire Scout program.

The committee is concerned that the budget request does not meet the minimum production rate of five aircraft per year. The committee believes that procuring only one aircraft per year significantly increases the aircraft cost per unit and will lead to a break in the production line. Specifically, the committee understands that the unit cost for procuring five aircraft will result in a $24.0 million per aircraft unit cost as compared to $72.4 million when buying one aircraft.

The committee recommends $119.9 million, an increase of $47.5 million, to purchase five aircraft for the MQ-8 Fire Scout program.

**V-22 Osprey**

The committee notes that in the 9 years since the establishment of an initial operational capability, the V-22 Osprey has provided the U.S. Marine Corps and the U.S. Air Force Special Operations Command (AFSOC) with a unique and revolutionary vertical lift capability due to its superior airspeed, range, and survivability. The operational tempo for both Marine and Air Force Ospreys has grown over the years and is expected to continue to increase as combatant commanders more fully exploit the attributes of the tilt-rotor platform in helping to meet national security challenges posed by traditional nation-states and terrorist organizations. Recently, the U.S. Navy selected the Osprey to perform the carrier on-board delivery mission that will transform the concept of logistic support at sea.
The committee understands that the Navy plans to begin their purchase of 44 aircraft beginning in fiscal year 2018. The committee also understands that U.S. Special Operations Command may have unmet requirements for additional attrition reserve CV-22 platforms that are not accounted for within current Department of the Air Force multiyear procurements (MYPs).

The committee notes that the first and second V-22 MYPs have generated approximately $1.25 billion in savings over year-to-year procurements, and that a third, and last, MYP is under consideration for fiscal year 2018. As this new procurement window opens in 2018, the committee encourages the Department of Defense, particularly the Department of the Air Force, to take advantage of this opportunity to generate further savings over year-to-year procurements. Should there be a plan for additional Ospreys to meet the increased demand, the committee encourages participation in the third MYP. The committee believes that the third MYP CV-22 unit pricing will be lower than independent year-to-year procurements in the future. Air Force participation would also help drive down unit pricing for the Department of Defense and partner nation aircraft.

Therefore, the committee directs the Secretary of Defense to brief the House Committee on Armed Services by November 1, 2016, on the current operational tempo for V-22 aircraft, forecasted demand for the aircraft in the future, and any V-22 procurement strategies under consideration.

**Weapons Procurement, Navy**

**Items of Special Interest**

*Littoral Combat Ship Over-the-Horizon Missile*

The budget request contained no funds for the Littoral Combat Ship Over-the-Horizon Missile.

The committee notes that the Department of the Navy has decided to accelerate backfitting of the Over-the-Horizon missiles on Littoral Combat Ships to improve their lethality. The committee further notes that this funding would procure eight missiles and launcher installation, integration, and testing to allow outfitting of the LCS 3 and LCS 5 in fiscal year 2017 prior to their next deployment. Finally, the committee notes that this element was included in the Chief of Naval Operations' Unfunded Priorities List.

The committee recommends $43.0 million, an increase of $18.1 million in Weapons Procurement, Navy, for procurement of 8 missiles, and an increase of $24.9 million in Other Procurement, Navy, for procurement, integration, and installation of a launcher.

*Tomahawk Block IV*

The budget request contained $186.9 million in Weapons Procurement, Navy for procurement of 100 Tomahawk missiles, which are 98 missiles below the
minimum sustaining rate. The budget request would also terminate Tomahawk Block IV procurement beginning in fiscal year 2018.

The committee is concerned by the Secretary of the Navy's recommendation to terminate procurement of the Nation's only long-range, surface-launched land-attack cruise missile production capability prior to finalizing concept development of the Next Generation Land Attack Weapon, which is not planned to be operationally fielded until 2024 at the earliest. Furthermore, the committee is concerned that the capability to recertify current inventory Block IV Tomahawk missiles could be put at risk if the Secretary of the Navy decides to shutter the Tomahawk Block IV production line in fiscal year 2018. The committee is concerned that the Navy is well below necessary categories of inventory requirements.

Therefore, the committee recommends $262.9 million, an increase of $76.0 million, in Weapons Procurement, Navy for procurement of 198 Tomahawk missiles and to reduce risk to the Tomahawk missile industrial base. The committee supports continuing the minimum sustaining rate of Tomahawk Block IV to fully satisfy inventory requirements and bridge transition to Tomahawk Block IV recertification and modernization.

SHIPBUILDING AND CONVERSION, NAVY

Items of Special Interest

*Arleigh Burke-class destroyer*

The budget request included $3.21 billion for two *Arleigh Burke*-class destroyers.

The committee notes that the Consolidated Appropriations Act, 2016 (Public Law 114-113) included $1.00 billion for a third *Arleigh Burke*-class destroyer in fiscal year 2016 but these funds are insufficient to procure the entire ship. The committee also notes that the Chief of Naval Operations included $433.0 million on his fiscal year 2017 unfunded requirements list in order to fully fund the balance of this *Arleigh Burke*-class destroyer.

Therefore, the committee recommends $3.64 billion, an increase of $433.0 million, for procurement of an additional *Arleigh Burke*-class destroyer.

*Cruiser replacement strategy*

The committee notes that the Secretary of the Navy's reluctance to implement congressional direction regarding modernization of the guided missile *Ticonderoga*-class cruisers is jeopardizing the long-term viability and recapitalization of these ships. Specifically, the committee is concerned that the Secretary's request to obviate the "2-4-6" cruiser modernization plan is hindering efforts to develop a replacement capability for these cruisers, which the Navy has assessed will begin to retire in 2035. The committee supports the Navy's Future Surface Combatant Capability Based Assessment that has been proposed for
funding in Cross Platform System Development Research, Development, Test, and Evaluation, Navy PE 0603563N. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by March 1, 2017, regarding the overall timeline to develop a replacement strategy for the Ticonderoga-class cruisers in accordance with the retirement timelines included in the "2-4-6" cruiser modernization strategy.

**CVN-81 advance procurement**

The budget request contained no funds for advance procurement associated with the CVN-81 Carrier Replacement Program.

The committee believes that the Ford-class carrier replacement program is tracking to deliver more efficiently with each proceeding aircraft carrier. For example, the committee is anticipating a savings of over $1.40 billion between CVN-78 and CVN-79. The committee notes the second year of advance procurement for CVN-80 has been included in the budget request. While the committee believes that a more efficient learning curve will be obtained with CVN-80 that will provide more savings, the committee also believes additional savings could be obtained by procuring economic order quantity material for CVN-80 and CVN-81.

Therefore, the committee recommends $263.0 million for advance procurement associated with CVN-81 Carrier Replacement Program in Shipbuilding and Conversion, Navy, to procure CVN-81 economic order quantity material.

**Expeditionary Mobile Base ship**

The committee notes that the flexible capabilities of the recently-renamed Expeditionary Mobile Base (ESB, formerly AFSB) class of ships are increasingly important to Navy and Marine Corps leaders and planners, as is the attractive affordability of this platform. USNS Lewis B. Puller, the first ESB, was delivered in 2015 and represents a flexible platform for a wide-range of missions, including U.S. Marine Corps Special Purpose Marine Air Ground Task Force-Crisis Response (SPMAGTF-CR) and special operations. Three AFSB-ESBs have been funded to date, in addition to two Mobile Landing Platforms (MLPs), formally renamed Expeditionary Transfer Docks. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by March 1, 2017, as to how the procurement of additional ships of this class would provide multiple mission requirements around the globe including SPMAGTF-CR and special operations. The committee specifically requests additional analysis as to how this capability is integrated into the overall Navy force structure assessment.

**Frigate**

In December 2015, citing concerns with the Navy’s balance between capability and quantity of platforms, the Secretary of Defense directed the
Secretary of the Navy, among other actions, to procure 40 Littoral Combat Ships (LCS) and frigates, a reduction of 12 ships. In response to this direction, the Navy modified the LCS procurement and initiated acquisition of the frigate based on a modified LCS in 2018, a year earlier than planned in the Navy’s budget request for fiscal year 2016. The committee notes that there is considerable uncertainty in the frigate program, as reported by the U.S. Government Accountability Office. The committee notes that over $8.00 billion in investment remains to procure the frigate. Therefore, the committee directs the Comptroller General of the United States to submit a report to the congressional defense committees by March 1, 2017, as to the following items relating to the frigate production:

1. Plans to develop and mature the frigate design prior to starting production;
2. The strategy for acquiring the frigate;
3. Realism of frigate cost estimates; and
4. Planned capability of the frigate and the degree to which it will meet the Navy’s small surface combatant needs.

Landing Craft Air Cushion Service Life Extension Program

The budget request contained no funds for the Landing Craft Air Cushion (LCAC) Service Life Extension Program.

The committee notes that the Department of the Navy budget request for fiscal year 2016 anticipated four craft from the Landing Craft Air Cushion Service Life Extension Program would be included in the budget request for fiscal year 2017, but due to budgetary constraints the craft were removed during budget deliberations. The committee is concerned about the Department of the Navy's amphibious lift capacity and believes that additional service life extension of existing LCAC assets is warranted.

The committee recommends $80.3 million for the Landing Craft Air Cushion Service Life Extension Program.

Littoral Combat Ship

The budget request included $1.13 billion for two Littoral Combat Ships (LCS).

The committee notes that the Navy has entered into a block procurement contract with two shipbuilders that maximizes efficiency and minimizes costs for the LCS seaframe. Unfortunately, the committee also notes that the administration has not requested sufficient funding in fiscal year 2017 to take advantage of the competitive pricing, which could lead to a 20 percent increase in the unit cost.

Therefore, the committee recommends $1.51 billion, an increase of $384.7 million, for procurement of a third Littoral Combat Ship.

The committee notes that the Navy completed a Force Structure Assessment based on projected threats and determined that 52 small surface combatants were necessary. Senior Navy officials reaffirmed the 52 small surface
combatant requirement in testimony before the committee earlier this year. Therefore, the committee is perplexed by the administration's statements that sufficient forces are available to support a reduction in the numbers of the small surface combatants to 40 ships. The Department of Defense briefed the committee as to options that they would pursue to mitigate the lower number of small surface combatants. The committee was unimpressed with the depth of this review. The committee is not willing to take risks in warfighting requirements and remains supportive of the Department of the Navy's Force Structure Assessment.

**LX(R) Dock Landing Ship Replacement Program**

The budget request contained no funds for advance procurement associated with LX(R) Dock Landing Ship Replacement Program.

The committee notes that the Secretary of the Navy, the Chief of Naval Operations, and the Commandant of the Marine Corps have agreed to support the LX(R) as a derivative of the LPD-17 *San Antonio*-class hull form. The committee also notes that the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) and the Consolidated Appropriations Act, 2016 (Public Law 114-113) both included $250.0 million to begin detailed design and construction of the LX(R) amphibious warship. The committee believes that it is imperative to continue the construction of LPD-17 class derivative in line with current construction efforts rather than the current Navy program of record of fiscal year 2020.

Therefore, the committee recommends $856.0 million in Shipbuilding and Conversion, Navy, for construction of amphibious vessels.

**Modular ship design**

The committee notes that in recent decades the Department of the Navy has placed increased emphasis on commonality in combat systems, open architecture and common object software code, and derivative ship designs. The committee also notes that recent Department of the Navy ship designs have incorporated elements of flexibility and modularity, such as the Littoral Combat Ship mission packages, CVN-78 flexible infrastructure, and DDG-1000 Electronic Modular Enclosures, although these remain specific to these ship classes. The committee believes that ship design is changing to realize life-cycle benefits in common and flexible fleet architectures. The committee also believes that modular, adaptable, and flexible ship designs can provide advantages in the domestic and export marketplace, facilitate use of off-the-shelf technology, incentivize innovation, and accelerate the fielding of new capabilities.

Therefore, the committee encourages the Secretary of the Navy to increase commonality, modularity, scalability, and flexibility in future ship construction, modernization, and conversion plans across the fleet architecture. The committee encourages the Secretary to solicit input from the commercial and naval ship design communities to optimize best design practices.
Service Craft

The committee notes that the budget request for fiscal year 2017 included $65.2 million for “Service Craft,” which consists of $39.0 million for one Auxiliary Personnel Lighter and $26.2 million for two Harbor Tugs. The committee is pleased to note the Department of the Navy is addressing the need for Auxiliary Personnel Lighter Berthing Barges and Harbor Tugs. The committee encourages the Navy to consider appropriate small business set-asides for these efforts to maintain the small shipyard industrial base.

Ship to Shore Connector

The budget request included $128.1 million for two Ship to Shore Connectors.

The committee notes that the Department of the Navy budget request for fiscal year 2016 anticipated five Ship to Shore Connectors being requested to support an efficient construction build strategy in fiscal year 2017. However, the committee notes that this program was reduced in the fiscal year 2017 budget request because of budgetary constraints. The committee is concerned about the Department of the Navy’s amphibious lift capacity and believes that additional Ship to Shore Connectors are warranted. The committee notes that an additional three Ship to Shore Connectors were also included in the Chief of Naval Operations' unfunded requirements list.

Therefore, the committee recommends $293.1 million, an increase of $165.0 million, for procurement of five Ship to Shore Connectors.

Strike capability assessment from surface amphibious forces

The committee notes that the administration is assessing an “arsenal plane” as an option to expand the capabilities of existing aircraft. The committee is supportive of these inventive methods to better employ developing technologies with existing capabilities. The committee also notes that similar concepts could be employed on the surface Navy forces to augment a loss of land attack strike capability that will result with the retirement of the guided missile submarines. While the Virginia Payload Module (VPM) that is being incorporated into the Block V Virginia-class submarines will partially offset the loss to the land attack strike capability, the committee notes the Navy will still realize a net loss of strike capacity with the retirement of these guided missile submarines. The committee also notes that the lack of flexibility within the Navy surface forces to reload at sea also complicates salvo responses. Finally, the committee notes that there is potential for some of our amphibious force assets to accommodate additional capabilities in terms of space, weight, and machinery capacity. The committee believes that the Secretary of the Navy should review other alternatives to manage the loss of naval strike capacity including an option that could include the addition of the MK 41 Vertical Launch System on the Landing Platform/Dock (LPD) hull
form to support other naval combatants with an “engage on remote” capability. The committee also believes that additional strike capability from surface amphibious forces appears to be consistent with the Navy’s pursuit of distributed lethality and complicates potential enemy targeting solutions of our forces.

Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by October 1, 2016, that includes an assessment of options to optimally provide strike and missile defense from naval amphibious forces. Such an assessment should include options to insert the MK 41 Vertical Launch System on an LPD hull form.

**TAO(X) oiler shipbuilding program**

The committee notes that the budget request seeks to execute a block buy for TAO(X) ships and includes $73.0 million in fiscal year 2017 Advance Procurement (AP) funding, as well as similar amounts in subsequent years to leverage the cost efficiency of a block buy for these required assets. The program’s first ship was authorized in fiscal year 2016, and section 127 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) provided the Navy the authority for use of a block buy for the program. The committee further notes that the 1-ship-per-year TAO(X) procurement rate planned beginning in fiscal year 2018 will result in a lengthy period to fulfill the 17-ship requirement and will not optimally utilize the industrial base, which has the capacity to produce at least 2 ships per year. Accelerating this procurement may serve to reduce overall program costs and minimize the time that the Navy has to continue to operate single-hulled fleet oilers.

Therefore, the committee directs the Secretary of the Navy to submit a report to the congressional defense committees concurrent with the date on which the budget for fiscal year 2018 is submitted to Congress pursuant to section 1105 of title 31, United States Code, on the potential benefits and program savings that could be achieved by increasing the program procurement rate to two ships per year as well as by taking continued advantage of block-buy procurement. The Secretary is further directed to report on the industrial base capacity to construct two TAO(X) fleet oilers per year.

**Undersea Mobility for Special Operation Forces**

The committee notes that the Department of the Navy has proposed the retirement of the guided missile submarines starting in the 2020s. The committee further notes that U.S. Special Operations Forces (SOF) significantly leverage the capabilities resident in these assets, and that a loss of this mobility capacity will significantly impact future clandestine undersea mobility operations. Therefore, the committee directs the Secretary of the Navy, in coordination with the Commander, U.S. Special Operations Command, to prepare a report to the congressional defense committees by March 1, 2017. The report shall address the Navy’s plan to continue to support clandestine SOF undersea mobility requirements. The Secretary’s plan
shall specify Department of the Navy's efforts to address the following elements: (1) sustaining the capability to deploy twin dry deck shelters; (2) deployment of a dry combat submersible from a low-or-no visibility transport; (3) enhanced lockout capabilities to support an expanded array of dive missions; and (4) maximizing berthing space for special operators to train underway.

The Secretary is encouraged to present multiple means of enhancing the Navy's support of SOF undersea mobility requirements, including potential designs for a SOF-optimized submarine based on the SSBN(X) class submarine to be built after the Sea-based Strategic Deterrence program has met all commitments to the nuclear triad. This report shall be submitted in unclassified form, but may include a classified annex.

Virginia Class Submarine

The budget request included $1.77 billion for the Virginia Class Submarine Advance Procurement.

In fiscal year 2017, advance procurement is necessary to support procurement of long lead time materials and advanced manufacturing efforts for a total of four ships: the SSN800 and SSN801 (from the existing Block IV multiyear procurement contract) and the SSN802 and SSN803 (from the anticipated Block V multiyear procurement contract). It is anticipated that the Block V contract will include, for the first time, the Virginia Payload Module, a new hull section which contains four large-diameter payload tubes for increased Tomahawk missile capacity. The committee believes that additional funding is necessary to support advanced construction for the Virginia-class submarine program in fiscal year 2017 to maintain cost, schedule, and contractual requirements.

Therefore, the committee recommends $1.85 billion, an increase of $85.0 million, for the Virginia Class Submarine Advance Procurement.

Virginia class submarine industrial base capacity

The committee notes that since the end of the Cold War, the United States has produced an average of less than one attack submarine (SSN) per year. Over the next 20 years, submarine production is planned to average two submarines per year, and, for most of those years, one of the two submarines will be an Ohio Replacement ballistic missile submarine (SSBN), which is roughly two and a half times larger than the attack submarines currently under construction. The committee believes that this sustained annual submarine production workload at the nation's two nuclear shipbuilders and their vendor base will double from what it has been in the recent past. Managing this increase in production to be both affordable and executable in delivering critically needed capabilities to the fleet will require careful planning and attention, as well as continued coordination with the carrier programs.

While SSBN requirements will be met under current shipbuilding plans, attack submarine force levels will fall below the Navy requirement of 48 SSNs in
2025, and reach a nadir of 41 attack submarines in 2030. The committee is concerned that this unprecedented shrinkage in undersea force structure will come at a time of growing demand for naval forces, particularly for the assured access and capabilities provided by submarines. The committee has received testimony from a wide range of military leaders and experts about the strain that the submarine force is under today, and the need to mitigate the projected reduction in the fleet. Given the increasing demand on undersea capabilities, the committee firmly supports the sustainment of the current two a year production rate of new attack submarines to include during the procurement years of Ohio Replacement submarines which begins in 2021.

Therefore, the committee directs the Secretary of the Navy to submit a report to the congressional defense committees by March 1, 2017, as to the submarine industrial base and the viability of producing additional attack submarines beyond the fiscal year 2017 shipbuilding plan in the 2017-2030 timeframe. This report should address the following specific elements:

1. The capacity of the submarine shipyards and vendor base and factors limiting submarine production;
2. The viability of adding SSNs to Navy shipbuilding plans;
3. The impact of increasing attack submarine production during the 2017-2030 timeframe on Navy undersea force levels;
4. The impact of increasing attack submarine production on overall Virginia and Ohio Replacement program costs and workload profiles; and
5. Potential efficiencies and economies that might be achieved in increasing SSN production.

**OTHER PROCUREMENT, NAVY**

**Items of Special Interest**

**Destroyer modernization**

The budget request contained $367.8 million in Other Procurement, Navy for destroyer modernization.

The committee is concerned that the Secretary of the Navy has applied insufficient resources toward modernization efforts and that a dearth of capabilities will result when compared against needed capabilities outlined in the most recent Navy Force Structure Assessment. The committee notes that one destroyer combat system modernization, valued at $65.0 million, was included in the Navy Unfunded Requirements list.

Therefore, the committee recommends $432.8 million, an increase of $65.0 million, in Other Procurement, Navy for an additional destroyer modernization.

**Joint Strike Fighter integration on amphibious ships**
The committee notes that the Department of the Navy will begin deployments of the F-35B on amphibious ships in the near future. However, the committee also notes that all the accompanying communication system upgrades necessary to fully utilize the F-35B capabilities have not been programmed to be fielded for the entirety of the amphibious force structure. The committee believes that limited amphibious ship communications system capability may limit the capabilities provided to the fleet by the F-35B. Therefore, the committee directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by March 1, 2017, detailing F-35B integration for amphibious ships. This briefing should specifically include the F-35B deployment schedule, the proposed amphibious ship modernization plan, and the proposed integrated communications architecture that is being developed to support F-35B.

Navy Communications

The committee believes that Navy activities associated with underway replenishments, aircraft launch and recovery, fuel and ordnance handling and small boat operations represent some of the most hazardous operations conducted at sea and are increasingly difficult during conflict. The committee also believes that these activities are further complicated during Emissions Control (EMCON) operations when the Navy is responding to emerging threats. To address communications requirements when performing these activities, the committee notes that the Navy has initiated a phone distance line replacement program that allows the Navy to securely communicate using infrared light, enabling simultaneous data, video and voice communications in environments where communication would be impossible or undesirable. Therefore, the committee directs the Secretary of the Navy to prepare a brief to the House Committee on Armed Services by August 1, 2016, that details implementation of a Phone Distance Line Replacement that could be used in EMCON environments.

Navy expeditionary combat patrol boat requirements

The budget request contained $43.7 million in Other Procurement, Navy, for standard boats.

The committee is concerned that the Department of the Navy has not fully defined its requirement for expeditionary combat patrol boats, which has led to an inconsistent acquisition strategy for the procurement of such boats. This inconsistent strategy prevents the government from taking advantage of stable procurement lines that provide the best pricing. It also fails to provide industry with the ability to make long-term planning decisions in order to provide the most competitive pricing.

The committee recommends $63.7 million, an increase of $20.0 million, for the acceleration of a request for proposals for the procurement of additional patrol boats in fiscal year 2017.
The committee also directs the Secretary of the Navy to submit a report to the congressional defense committees, concurrent with the date on which the budget for fiscal year 2018 is submitted to Congress pursuant to section 1105 of title 31, United States Code, as to expeditionary combat patrol boat requirements to include the following elements:

(1) The number of expeditionary combat patrol boats required to carry out the naval strategy, National Military Strategy, and meet joint and combined warfighting requirements relating to crisis response, overseas posture, and support to contingency operations;

(2) The annual funding necessary to procure the expeditionary combat patrol boats required by the naval strategy and National Military Strategy;

(3) The quantity of expeditionary combat patrol boats that are funded for procurement in the President's budget for fiscal year 2018 and in the current Future Years Defense Program;

(4) A long-range expeditionary combat patrol boat building plan for the Department of the Navy, through fiscal year 2022, that includes annual quantities of each type of patrol boat to be procured; and

(5) A detailed discussion of the risks associated with any deviation from the long-range expeditionary combat patrol boat building plan required in paragraph (4), to include the implications of such a deviation for the following areas: (a) warfighting requirements; (b) crisis response and overseas posture missions; and (c) contingency operations.

**Ship’s Signal Exploitation Equipment Program**

The committee recognizes the importance of continued funding for the Ship’s Signal Exploitation Equipment (SSEE) modification program that will continue development of an electronically steered multi-beam antenna array that can operate over a very broad frequency and transmit high power for multiple functions while maintaining a low radar cross-section. The Navy's SSEE program represents the latest technology advancement in Naval Information Operations. Threat evolution mandates higher power, frequency agility, wide band, lower weight, decreased maintenance and ease of shipboard installation and integration. The current and future protection of Navy sailors is dependent upon battlespace awareness and assessing hostile threats. Navy ships require wideband, multi-function antennas that can operationally support high power signals anywhere in the hemisphere of the ships' field of view. These ships are also required to have a low radar cross-section, and utilize antennas for more than one function. Current technology has provided those capabilities for the Navy but requires critical, threat-driven improvements to ensure ship and sailor safety. The currently deployed Naval Information Operations system provides wideband, high-power transmit capability using a dish antenna. However, this limited system can only produce a single beam at any given time, limiting operations in a multi-dimensional battlespace. SSEE fulfills an urgent fleet requirement to provide frequency extension and counter
intelligence, surveillance, and reconnaissance enhanced capabilities. Therefore, the committee encourages the Secretary of the Navy to continue development and funding of the Ship’s Signal Exploitation Equipment modification program.

**PROCUREMENT, MARINE CORPS**

**Items of Special Interest**

*Marine Corps fielding of Enhanced Combat Helmet*

The budget request contained no funding for procurement of Enhanced Combat Helmets for the Marine Corps.

The committee notes that in 2009 the Marine Corps received an urgent need statement for a helmet with enhanced ballistic protection from selected small-arms ammunition and fragmentation. Working in collaboration with the Army, the Enhanced Combat Helmet (ECH) was ultimately developed and deployed beginning in 2014. By utilizing the latest lightweight material technology, the ECH provides increased small-arms protection above what is currently provided by the Marine Corps' Lightweight Helmet and the Army’s Advanced Combat Helmet. The committee understands that the Marine Corps has now deployed approximately 80,000 ECHs, but requires further funding to ensure the ECH is more broadly fielded to Marines. The committee also notes the Commandant of the Marine Corps has identified an unfunded requirement of $22.0 million for helmets in fiscal year 2017.

In addition, the committee notes that in the committee report (H. Rept. 113-446) accompanying the Howard P. “Buck” McKeon National Defense Authorization Act for Fiscal Year 2015, the committee indicated there was a need to ensure at least two vendors are capable of producing combat helmets, soft armor, and hard armor components in order to maintain competition for better body armor technology and retain surge capacity for a large-scale conflict.

The committee remains concerned that the Marine Corps has not more widely fielded the ECH due to funding limitations and that there remains a risk to the domestic advanced combat helmet industrial base. Therefore, the committee recommends $22.0 million, an increase of $22.0 million, in Operation and Maintenance, Marine Corps, for the procurement of additional Enhanced Combat Helmets for the Marine Corps and to address the unfunded requirement identified by the Commandant of the Marine Corps.

*Mobile User Objective System capability*

The committee notes that the Mobile User Objective System (MUOS) program has established a satellite constellation on orbit, but that only a limited number of communications terminals or radios carry MUOS waveform software. The committee is concerned about the delays in incorporating the MUOS waveform into Marine Corps and Air Force communications terminals. The committee directs
the Secretary of the Navy and the Secretary of the Air Force to provide briefings to the Committee on Armed Services of the House of Representatives by September 1, 2016, on their current plans for integrating the MUOS waveform upgrades and associated equipment for current radios. To the maximum extent possible, these briefings should include detailed projections for delivery schedules, and fielding schedules for such equipment.

**Non-lethal ocular interruption capabilities**

The committee continues to support the Department’s efforts for accelerated development, fielding, and deployment of non-lethal technologies for both force application and force protection missions. The committee is encouraged by the Marine Corps’ efforts to modernize and procure hail and warning, laser dazzlers, and other escalation of force systems. The committee recognizes that these materiel solutions allow personnel engaged in combat, stability and support, security, and force protection operations to employ visual technologies to non-lethally intercept and interdict personnel at safe standoff distances. These solutions provide commanders with a non-lethal hailing and warning capability applicable across the range of military operations to support Marine Corps missions when the minimization of civilian casualties and collateral damage is essential to mission success. The committee is concerned that the funding reductions over the past few years to both the Department’s Non-Lethal Weapons program, and the services' procurements for non-lethal systems, will not be able to support the readiness need for escalation of force capabilities that may be needed for humanitarian relief efforts, non-combatant evacuation operations, and peacekeeping. The committee, therefore, directs the Secretary of the Navy to provide a briefing to the House Committee on Armed Services by November 1, 2016, on actions being taken to ensure sufficient procurement of such equipment to meet projected operational needs. This briefing should include details on the programming, planning, and budgeting for procurement of hail and warning, and other escalation of force systems.

**AIRCRAFT PROCUREMENT, AIR FORCE**

**Items of Special Interest**

**A-10 aircraft**

The committee notes that the Department of the Air Force plans for the F-35A aircraft, a fifth-generation multi-role fighter, to replace A-10 and F-16 aircraft. The committee further notes that mission sets for F-35A include, but are not limited to, missions currently performed by the A-10, which are primarily close air support (CAS), combat search and rescue (CSAR), and forward air controller-airborne (FACA). The Air Force has taken the equivalent of four A-10 squadrons out of service over the last 4 years, and only nine operational A-10 squadrons remain across the
Active Duty and Air Reserve Components, while the A-10 is currently deployed to three overseas locations including the Republic of Korea, Europe, and for Operation Inherent Resolve against the Islamic State of Iraq and the Levant.

The committee also notes that the Department of Defense has made contradictory statements about the Future Years Defense Program for activation of F-35A units and divestiture of A-10 units. These contradictory statements, including the current plan to begin retiring more A-10s before there is a proven replacement for its capabilities, create uncertainty over the Department of the Air Force’s ability to provide continuous CAS, CSAR, and FAC-A capabilities to the joint force.

The committee believes that the Department of the Air Force continues to suffer from capacity shortfalls in its fighter aircraft fleets, and that these shortfalls are being exacerbated by the near-term readiness challenges that are systemic across all the military services. As such, the committee believes that retiring any more A-10s without a proven replacement to its unique capabilities, or proof that the F-35A can replace the A-10’s mission capabilities, is an unacceptable risk.

The committee understands the F-35 is scheduled to complete an initial operational test and evaluation (IOT&E) in fiscal year 2018 or in early fiscal year 2019. Elsewhere in this Act, the committee includes a provision that would prohibit the retirement of A-10 aircraft until the Director of Operational Test and Evaluation (DOT&E) provides a report to the congressional defense committees on the results of the IOT&E. The IOT&E would include, but would not be limited to, a comparison test and evaluation that examines the capabilities of the F-35A and A-10C in conducting CAS, CSAR, and FAC-A missions. This provision would also require the Secretary of the Air Force to submit a report to the congressional defense committees on the Secretary’s views of the results of this IOT&E, which should include any issues or concerns from the DOT&E report, a path forward for addressing any deficiencies or corrective actions identified by DOT&E, and the near- and long-term strategy for preserving the Air Force’s capabilities in CAS, CSAR, and FAC-A.

The committee believes that to ensure combat realism, the comparative testing should include, but not be limited to, both pre-planned and emergency divert missions to address effectiveness in realistic, complex ground firefight scenarios. These scenarios should include those in which enemy forces are in close proximity to friendly forces where the pilot is required to visually identify the target and friendly forces in day and night conditions; armored targets; scenarios requiring continuous weapons delivery, command and control (C2), extended time over target, and simulated collateral damage restrictions; deception scenarios with degraded visual environments; low-altitude employment, including “shows of force” and strafe; survivability from simulated direct hits by small arms fire, light anti-aircraft artillery, and man-portable air defense systems; scenarios in which simulated aircraft systems are damaged; scenarios conducted without joint tactical air controller or higher headquarters control to test CAS aircraft suitability for forward air controller-airborne deconfliction of fires; and scenarios including joint fires
coordination and timing, including Joint Air Attack Team attacks with Department of the Army aviation assets and artillery deconfliction. CSAR missions should compare effectiveness in the rescue mission commander role, coordinating all aspects of an extended CSAR mission, including but not limited to: locating and protecting the isolated personnel with continuous firepower; controlling other fighters as FAC-A; coordinating electronic attack; intelligence, surveillance and reconnaissance; aerial refueling; C2; and rescue vehicle escort. The committee notes that previous aircraft programs such as the F-22 also conducted comparison testing as part of IOT&E. The committee also notes that at a hearing held by the House Committee on Armed Services’ Subcommittee on Tactical Air and Land Forces on March 23, 2016, the Director of Operational Test and Evaluation testified that the cost of the F-35 and A-10 comparative testing would be between $3.5 million and $5.2 million, and that he was working to ensure that the F-35 and A-10 comparative testing is accomplished within the established budget for IOT&E.

Additionally, the committee expects that the Department of Defense will provide the report required by section 142 of the National Defense Authorization Act for Fiscal Year 2016 (Public Law 114-92) on time, and based on that report, the committee may take further action on options for an A-10 replacement program.

**Aerial refueling recapitalization**

The committee notes that the nation’s ability to meet its air-refueling requirements must not be placed at increased risk while the Department of Defense executes its strategic aerial refueling recapitalization strategy.

Specifically, the committee notes that the Department is currently executing its KC-46A Pegasus acquisition program to replace a number of aging KC-135 Stratotankers and that KC-46As will eventually replace the KC-10 Extender fleet.

The committee strongly reiterates the importance of ensuring that the Department’s execution of the phase-out and replacement portion of its aerial refueling recapitalization strategy does not compromise its ability to meet stated short- or long-term air-refueling requirements.

**Air Force Command, Control, Intelligence, Surveillance, and Reconnaissance (C2ISR) Fleet**

The committee is aware that the Department of the Air Force's critical manned C2ISR aircraft are high-demand assets facing low availability rates, end-of-life issues, and growing sustainment costs. The committee is supportive of the Air Force’s plan to replace the JSTARS fleet with an affordable commercially available platform under a full and open competition. When recapitalizing the rest of the manned C2ISR fleet, the committee believes the Department of the Air Force should use a similar acquisition strategy as the one used with JSTARS, and consider a full and open competition. The term "C2ISR fleet" is defined as predominantly 707/C-135 platforms which are approaching end of service life. The
committee directs the Secretary of the Air Force to provide a briefing not later than September 1, 2016, on the Air Force's current plans for recapitalization of these aircraft.

Air National Guard F-16 mission training centers

The budget request contained $15.2 million for F-16 aircraft support equipment and facilities, but contained no funding for the procurement of additional F-16 mission training centers (MTC) for the Air National Guard.

The committee notes that an F-16 MTC allows pilots to train in scenarios that are either impossible or too expensive to conduct in home-station flying training, and believes that the MTC environment significantly improves F-16 pilot skill and readiness to perform actual combat missions with increased effectiveness. Each MTC includes high-fidelity simulator cockpits, instructor operator stations, a threat server, and briefing and debriefing capabilities. The MTC is also capable of linking and integrating into geographically distributed high-fidelity combat and combat support training devices that include command and control and intelligence, surveillance, and reconnaissance systems. This capability allows F-16 pilots at home stations to exercise and train at the operational and tactical levels of war, as well as conduct networked unit-level training, in large force employment scenarios with other Air Force aircraft integrated into the distributed mission operating architecture.

The committee understands that F-16 MTCs are currently planned for Hill Air Force Base (AFB), Utah; Shaw AFB, South Carolina; and Holloman AFB, New Mexico. The committee further understands that other F-16 pilots based in the United States would be required to travel to one of the three MTC locations to take advantage of its capabilities, and believes an additional MTC would avoid travel costs and make the F-16 block MTC more accessible to Total Force F-16 pilots, enabling the Air Force's current state of low readiness for full-spectrum combat capability to more quickly recover.

Therefore, the committee recommends $40.0 million, an increase of $24.8 million, in F-16 aircraft support equipment and facilities for the procurement and installation of an additional F-16 MTC for the Air National Guard and utilization by all Total Force F-16 pilots.

Aircraft urethane sealant upgrades

The committee notes that the KC-135 and B-52 fleets experience chronic leaks primarily in the wing cavities. Current wet cavity sealing technology is specified for polysulfide. The committee understands that polysulfide becomes brittle over a short period of time and cracks, which results in repeated removals and replacements of the material to try to repair leaks, or more commonly maintainers add more polysulfide sealant over the cracked material and significantly increase the aircraft weight.
In order to better assess this issue, the committee directs the Secretary of the Air Force to conduct a study into the value of using the polyurethane Integral Fuel Tank sealant to correct chronic leaks in KC-135 and B-52 military aircraft, and brief the House Committee on Armed Services by September 30, 2016, on the results of the study. The study should include an evaluation of the long-term savings in maintenance and operating costs using dollars per pound per flight hour.

B-21 bomber

The committee received independent testimony stating that the Air Force should procure between 174 and 205 B-21 bombers to ensure that enough aircraft are available to meet combatant commander, training, test, back-up inventory, and attrition reserve requirements. Additionally, the Global Strike commander indicated that the previously announced 100 B-21 bombers should be treated as the lower limit of the total required number.

The committee directs the Secretary of the Air Force to submit a report to the congressional defense committees by February 1, 2017, that estimates the number of B-21 bomber aircraft needed to meet the combatant commander requirements. The report, which may include a classified annex, shall include the following elements:

(1) A detailed explanation of the strategy and associated force sizing and shaping constructs, associated scenarios and assumptions used to conduct the analysis;

(2) A range of numbers to meet requirements for B-21 bombers given best case and worst case assumptions and the associated risk based on Chairman of the Joint Chiefs of Staff risk management classifications; and

(3) A detailed transition plan that integrates the B-21 into the current bomber fleet through 2040.

B-21 Development Progress Matrix

The committee notes that the Air Force, through the Rapid Capabilities Office (RCO), entered into a contract for the Engineering, Manufacturing, and Development (EMD) phase associated with the B-21 bomber. The committee is pleased to see progress on this program and believes that this program has stable requirements in place. However, the committee is concerned that, given the length of time associated with the EMD phase and the amount of resources planned for this phase, the congressional defense committees need an improved ability to track annual progress and cost throughout the development. Therefore, the committee directs the Secretary of the Air Force to submit an initial B-21 Development Progress Matrix to the congressional defense committees, concurrent with the budget request for fiscal year 2018 that includes. The matrix should provide milestones and metrics for measuring progress made in technology, design, software, manufacturing, testing, and product reliability maturity in relationship to
the resources that are planned and expended. The committee may consider requesting annual updates to the matrix in the future.

**Basing priorities for future Air National Guard Modular Airborne Firefighting Systems missions**

The committee is concerned about the current positions of Modular Airborne Firefighting Systems (MAFFS) that are operated by Air National Guard (ANG) C-130s. As shown in the National Guard Bureau’s brief to the committee on MAFFS, there is a current gap in northwest States based on the current allocation of existing MAFFS unit locations. Additionally, the committee understands that the year 2015 was one of the most devastating fire seasons on record and, according to the National Interagency Fire Center, the most destructive forest fires occurred in the northwestern States of Montana, Oregon, Idaho, and Washington. One of the most important factors for fire suppression in high-density forested areas is the ability to contain forest fire immediately before the fire grows to catastrophic size. The committee believes that MAFFS units should be located in areas that have the ability to rapidly respond to areas with a high propensity for high-density forest fires.

The committee concurs with the U.S. Department of Agriculture (USDA) Forest Service recommendations that the location of MAFFS units should be in close proximity to fire-prone States, not located on the East Coast. The committee believes that these recommendations would be able to prevent a repeat of the 2015 fires season where over $1.70 billion was spent by the USDA Forest Service alone for fire suppression.

The committee believes that when making future basing decisions with regard to MAFFS units, the Air Mobility Command should consider geographical gaps of MAFFS units, and give preference to areas that are prone to high-density catastrophic forest fires.

**Battlefield Airborne Communications Node**

The committee notes that since its fielding, the Battlefield Airborne Communications Node (BACN) system has provided critical communications and information-sharing capability between different tactical data and voice networks in support of operations in the Republic of Iraq, the Islamic Republic of Afghanistan, Libya, and other areas. The BACN program continues to act as a critical communications gateway and data relay, flying on EQ-4B and E-11A aircraft in support of Operation Freedom’s Sentinel throughout the United States Central Command’s area of responsibility and elsewhere in support of joint urgent operational requirements.

In addition, the committee recognizes the Department of the Air Force’s efforts to establish a program of record, and continues to believe that doing so is important to preserve previous investments and operational experience to meet ongoing operational requirements. Therefore, the committee encourages the
Secretary of the Air Force to continue the planning and establishment of a BACN Program of Record, while continuing to meet ongoing warfighter requirements in theater. In addition, the committee encourages including modernization planning in support of anticipated future requirements across multiple theaters. This would ensure that this capability is maintained in the Department of the Air Force for the long term to support joint operational communications, fifth-generation aircraft communications, combat cloud, and data networking requirements.

**C-130H Modernization**

The budget request contained $9.2 million for C-130 modernization for the Avionics Modernization Program (AMP) Increment 1 program. This program will provide the mandated radios, Automated Dependent Surveillance Broadcast (ADS-B) Out and enhanced Mode S capabilities necessary to operate in international airspace by the year 2020. The committee fully supports this request and is committed to ensuring the long-term viability of the C-130H aircraft in the Air Force’s Regular, Guard, and Reserve Components until they reach their expected service life or are recapitalized. By most estimates, with proper avionics upgrades, the roughly 172-aircraft C-130H fleet is viable until at least 2040.

However, AMP Increment 1 only addresses 4 of the 12 Communication, Navigation, and Surveillance/Air Traffic Management compliance mandates and does not resolve the cockpit avionics obsolescence that limits the long-term viability of the aircraft. The planned follow-on AMP Increment 2 effort will replace the current cockpit with a modern digital “glass cockpit.” This will allow the Air Force’s fleet to be supported well into the future, resolve diminishing manufacturing sources, and increase mission availability. It will also provide upgraded Automatic Flight Control System capabilities to take advantage of more efficient airspace management capabilities, and eliminate some maintenance and readiness issues.

The committee is aware of commercially available, non-developmental Increment 1 and Increment 2 solutions for C-130-derivative aircraft. The committee encourages the Secretary of the Air Force to fully pursue full and open competitions for both the Increment 1 and Increment 2 programs. The committee is encouraged by the Air Force’s renewed commitment to upgrading C-130H aircraft and expects both AMP Increments 1 and 2 to continue to be fully funded in future budget requests.

In addition to avionics upgrades, the committee continues its strong support for C-130H propulsion and propeller system upgrades. The committee believes that these upgrades will provide cost savings through increased fuel efficiency and reduced maintenance requirements.

The committee recommends $81.7 million, an increase of $72.5 million, for C-130H propulsion and propeller system upgrades.

**C-130J Hercules aircraft**
The budget request contained $146.0 million for the C-130J program. The committee is concerned by the Air Force plans to procure only two C-130Js in fiscal year 2017.

The committee is concerned that the Air Force reduced two C-130J aircraft from the President's budget request due to fiscal constraints. These reductions have also put the initiation of Air National Guard and Air Force Reserve C-130H-to-J fleet recapitalization at increased risk. The committee notes that the Active Duty combat delivery fleet has essentially completed its replacement of legacy C-130H aircraft with the C-130J. Likewise, it is noted that the Air Force Special Operations Command and U.S. Marine Corps, including the U.S. Marine Corps Reserves, are also well on their way to C-130J recapitalization completion.

The committee recommends $417.5 million, an increase of $271.5 million, for the procurement of three additional C-130J aircraft.

**C-40A Clipper aircraft**

The budget request contained no funds for the Navy and Marine Corps C-40A program.

The committee notes that the Navy has stated that it has a warfighting requirement of 23 C-40A aircraft with a fiscally constrained inventory objective of 17 aircraft that will provide adequate capacity at acceptable risk. The current fleet inventory is 14 aircraft with 1 on order. The addition of two aircraft will complete the minimum inventory objective. This will allow the Navy to better execute the Navy Unique Fleet Essential Aircraft mission and provide combatant and component commanders with short-notice, quick response, intra-theater air logistics support, as well as direct support of fleet requirements. While the Navy has recapitalized its fleet of C-9B aircraft, the Marine Corps is still operating two aging C-9B aircraft that are the only two in the Department of the Navy inventory, which greatly increases their maintenance and sustainment costs. The procurement of two C-40A aircraft for the Marine Corps would allow them to provide critical, reliable, highly flexible airborne logistics capabilities to deployed Marine Air-Ground Task Forces. Finally, the committee notes that these four aircraft were included in the Chief of Naval Operations' and the Commandant of the Marine Corps' unfunded priorities list.

The committee recommends $415.0 million for the procurement of four aircraft for the Navy and Marine Corps C-40A program.

**Demonstration of high performance unmanned jet aircraft**

The committee is encouraged by the success of recent system demonstration flights at the Navy test range at China Lake, California, of unmanned aerial systems (UAS) capable of tactical speeds and maneuverability, coupled with substantial autonomy and multi-aircraft collaboration.

The committee notes that legacy UAS continue to rely heavily on human operators, and it supports ongoing research to develop a more seamless human-
machine environment. The committee also recognizes the potential force multiplier effects provided by a UAS with fighter-like performance operating collaboratively with manned aircraft, specifically in support of the suppression of enemy air defenses.

Furthermore, the committee notes that the characteristics of this advanced capability are consistent with those the Navy has identified for acquisition through use of rapid prototype development and experimentation in order to explore and expedite innovative operational concepts to the fleet.

As such, the committee believes the Navy should pursue an industry-developed low-cost, reusable, penetrating, unmanned semiautonomous tactical combat aircraft capable of being launched from multiple platforms and performing a broad range of missions in a nonpermissive environment, to include electronic attack, and encourages the Navy to demonstrate the capability at an exercise no later than fiscal year 2017.

**E-8C prime mission equipment diminishing manufacturing sources kits**

The budget request contained $6.2 million for E-8C modifications, but included no funds for prime mission equipment diminishing manufacturing sources (PME-DMS) kits.

The committee understands that PME-DMS kit procurement and installation is a top issue for E-8C fleet viability, and is required to maintain the E-8C's net-centric warfighter capabilities, including the ground moving target indicator and battle management command and control, as specified in the operational requirements document. Of the fleet of 16 operational E-8C aircraft, the committee notes that only 14 aircraft have been budgeted to receive PME-DMS kits, and the committee believes that all 16 aircraft should be configured with the PME-DMS kit so that all operational E-8C aircraft are maintained in the most up-to-date configuration.

Accordingly, the committee recommends $23.7 million, an increase of $17.5 million, for E-8C modifications, for procurement of two PME-DMS kits.

**EC-130H Compass Call recapitalization**

The budget change request contained $165.7 million across multiple appropriations for the Air Force’s Compass Call program.

The committee received a letter from U.S. Air Force requesting a technical adjustment to the fiscal year 2017 budget request and a new start authorization to re-host the EC-130H Compass Call mission equipment onto a new platform. The U.S. Air Force stated that the only option that does not require development and/or certification work is a Gulfstream G550 Conformal Airborne Early Warning airframe, which will be designated the EC-37B.

While the committee supports the Air Force’s need to accelerate fielding a replacement aircraft that meets its requirement, the committee is concerned about the U.S. Air Force’s 10-year acquisition strategy that acquires one EC-37B per year.
and results in a 6-year period where the Air Force is operating a mixed fleet of EC-130s and EC-37Bs. The committee does not believe this is the most efficient or cost effective way to cross-deck the capability. The committee encourages the Air Force to optimize the divesture of the EC-130s and accelerate the fielding of the EC-37B.

The committee recommends $165.7 million in PE 27253F for Aircraft Procurement, Air Force; Research Development Test and Evaluation; Operations and Maintenance; and Operations and Maintenance, Overseas Contingency Operations, for the Compass Call program.

**F-22 production restart assessment**

The committee notes that production of the F-22 fifth-generation tactical aircraft concluded in 2009, and notes 187 aircraft were produced, far short of the initial program objective of 749 aircraft, as well as the Air Combat Command’s stated requirement of 381 aircraft. The committee also understands there has been interest within the Department of the Air Force, Department of Defense, and Congress in potentially restarting production of the F-22 aircraft. In light of growing threats to U.S. air superiority as a result of adversaries closing the technology gap and increasing demand from allies and partners for high-performance, multi-role aircraft to meet evolving and worsening global security threats, the committee believes that such proposals are worthy of further exploration.

Therefore, the committee directs the Secretary of the Air Force to conduct a comprehensive assessment and study of the costs associated with resuming production of F-22 aircraft and provide a report to the congressional defense committees, not later than January 1, 2017, on the findings of this assessment. The committee expects the report to be unclassified, but may contain a classified annex. Further, the committee directs that the assessment and report consider and address the following:

1. Anticipated future air superiority capacity and capability requirements, based on anticipated near-term and mid-term threat projections, both air and ground; evolving F-22 missions and roles in anti-access/area-denial environments; F-15C retirement plans and service-life extension programs; estimated next-generation aircraft initial operating capability dates; and estimated end-of-service timelines for existing F-22As;

2. Estimated costs to restart F-22 production, including the estimated cost of reconstituting the F-22 production line, and the time required to achieve low-rate production; the estimated cost of procuring another 194 F-22 aircraft to meet the requirement for 381 aircraft; and the estimated cost of procuring sufficient F-22 aircraft to meet other requirements or inventory levels that the Secretary may deem necessary to support the National Security Strategy and address emerging threats;

3. Factors impacting F-22 restart costs, including the availability and suitability of existing F-22A production tooling; the estimated impact on unit and
total costs of altering the total buy size and procuring larger and smaller quantities of aircraft; and opportunities for foreign export and partner nation involvement if section 8118 of the Defense Appropriations Act, 1998 (Public Law 105-56) prohibiting export of the F-22 were repealed;

(4) Historical lessons from past aircraft production restarts; and
(5) Any others matters that the Secretary deems relevant.

F-35 Lightning II aircraft program

The F-35 Lightning II is the Department of Defense’s largest acquisition program, which will eventually deliver 2,443 F-35 aircraft to the Departments of the Navy and Air Force. The committee believes that the F-35 will form the backbone of U.S. air combat superiority for decades to come, replacing or complementing the legacy tactical fighter fleets of the Air Force, Navy, and Marine Corps with a dominant, multi-role, fifth-generation aircraft capable of projecting U.S. power and deterring potential adversaries. The committee notes that for the F-35 program’s international partners and foreign military sales customers, who are participating in the program, the F-35 will become a cornerstone for future coalition operations. The committee believes that the F-35 will help to close a crucial capability gap that will enhance the strength of our security alliances. Therefore, the committee continues its strong support of this crucial aircraft development and procurement program.

The F-35 Lightning II program is approximately 80 percent through its flight test program which is planned to be completed in the first quarter of fiscal year 2018. At a hearing held by the Subcommittee on Tactical Air and Land Forces of the House Committee on Armed Services on March 23, 2016, the F-35 Program Executive Officer (PEO) testified that the F-35 program is executing well across the spectrum of acquisition. However, the committee notes that the F-35 PEO has identified the software development for the final development software block, known as block 3F, as an area with some risk remaining that could result in a 4-month delay in delivery of software block 3F. This delay will not affect the Department of the Navy’s initial operational capability for the F-35C in 2018. At that hearing on March 23, 2016, the F-35 PEO also identified the next version of the autonomic logistics information system (ALIS) as an area with some schedule risk. The Government Accountability Office’s Director of Acquisition and Sourcing Management, who also testified at that hearing, likewise identified both completion of software block 3F and ALIS as risk areas. Accordingly, the committee continues to closely monitor both software progress and ALIS development.

Looking toward the future, the committee is concerned about plans for F-35 sustainment. Consequently, elsewhere in this Act the committee includes a provision that would require the Comptroller General of the United States to provide a report to the congressional defense committees on the F-35 Lightning II aircraft program’s sustainment support structure.

MQ-9 production funding in Future Years Defense Program
The budget request contained $575.6 million in Aircraft Procurement, Air Force, for MQ-9 Reaper unmanned aerial systems (UAS).

The committee supports the President’s budget request for fiscal year 2017. However, the committee is concerned that there is no additional funding for procurement of additional MQ-9 UAS in the Future Years Defense Program. The committee notes that the Air Force recently announced a plan to increase intelligence, surveillance, and reconnaissance (ISR) capacity through a $3.0 billion plan that includes basing expansions, increased manning, and procurement of additional MQ-9s. The committee understands that this plan may include establishment of up to 9 additional squadrons and 3,500 more personnel. Given this expansive new plan to increase ISR capacity, the committee encourages the Air Force to reconsider its Future Years Defense Program projections for the MQ-9 to ensure it includes the appropriate amount of new systems to support planned growth in ISR capacity.

The committee recommends $575.6 million, the full amount requested, in Aircraft Procurement, Air Force, for MQ-9 Reaper unmanned aerial systems.

**Reporting requirement for C-130H recapitalization and modernization**

The committee notes that the Air Force Reserve and Air National Guard, as well as the Special Operations Command, U.S. Marine Corps, and U.S. Coast Guard, are all well on their way to recapitalize their legacy C-130Hs with the newer, more cost effective, and more operationally capable, C-130Js. The Air Force has stated that some C-130H units within the Guard and Reserve will be modernized with upgraded avionics, while others will be recapitalized with C-130Js. What remains unclear at this point is which units will be modernized and which ones will be recapitalized.

Therefore, the committee directs the Secretary of the Air Force to submit a report to the congressional defense committees by February 28, 2017, on C-130H recapitalization and modernization that shall include the following elements:

1. C-130H to C-130J recapitalization timeline by unit for the Air National Guard and Air Force Reserve;
2. C-130H Avionics Modernization Program Increment 1 and Increment 2 fielding timeline by unit for the Air National Guard and Air Force Reserve; and
3. C-130H propulsion system upgrades: T56 3.5 engine modification, NP 2000 8-bladed propeller, and electronic propeller controller system, timeline by unit for the Air National Guard and Air Force Reserve.

**UH-1N replacement program**

The budget request contained $14.1 million in Research, Development, Test, and Evaluation, Air Force, and $18.3 million in Aircraft Procurement, Air Force, for the UH-1N replacement program. The UH-1N replacement program would replace the Department of the Air Force UH-1N fleet by acquiring a non-developmental commercial or U.S. Government vertical lift aircraft.
In the committee report (H. Rept. 114-102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee noted that the current UH-1N aircraft fleet fails to meet speed, range, payload, and defensive system requirements. The committee also noted that modifications to the existing fleet will not enable the UH-1N to meet mission requirements, and that the Department of the Air Force was assessing requirements for the UH-1N replacement, conducting market research, and developing UH-1N replacement acquisition alternatives. Since last year, the committee learned that nuclear weapons surety studies have highlighted a critical requirement for the replacement of the current fleet of UH-1N helicopters supporting the nuclear mission. However, while the committee notes that there is no validated Joint Urgent Operational Needs Statement (JUONS) associated with this requirement, the committee understands that a JUONS only applies to situations where U.S. military forces are actively engaged with enemy forces. Nevertheless, the committee believes that replacement of the helicopters performing the nuclear mission is now an urgent need based, in part, on the warning of the Commander of U.S. Strategic Command in an August 6, 2015, Memorandum to the Deputy Secretary of Defense and the Vice Chairman of the Joint Chiefs of Staff.

In recent hearing testimony, Air Force officials stated that, in response to the concerns of operational commanders, the Air Force was considering a range of options to more quickly address the requirement for UH-1N replacement aircraft. The committee understands that these options include deployment of existing units to provide additional capability through a formal Request for Forces to the Chairman of the Joint Chiefs of Staff, and a possible use of an Economy Act (31 U.S.C. 1535) decision, based on an “urgent and compelling need,” to procure UH-60M Black Hawk helicopters through the Department of the Army. The committee notes that in this case, an Economy Act decision to opt out of a competition would potentially allow for a sole-source contract award exceeding $1.5 billion in value. However, the committee recognizes that the Secretary of the Air Force may proceed with such a non-competitive award if the Secretary determines the statutory requirements for doing so are met. The committee assumes that, if an Economy Act decision is made, procurement of the UH-60M aircraft could begin in fiscal year 2017, which would require more funding than requested in the budget request.

Therefore, the committee recommends $14.1 million, the full amount requested, in Research, Development, Test, and Evaluation, Air Force, and $98.3 million, an increase of $80.0 million, in Aircraft Procurement, Air Force, for the UH-1N replacement program. The committee expects these additional funds to be used to accelerate the program’s schedule if an Economy Act decision is made to procure UH-60M Black Hawk helicopters in lieu of conducting a competition.

**U.S. Air Force combat search and rescue**

In the committee report (H. Rept. 113-102) accompanying the National Defense Authorization Act for Fiscal Year 2014, the committee encouraged the
Department of Defense to adopt concurrent and balanced fielding of new equipment between the Active Component (AC) and Reserve Component (RC). The committee believes that in many cases, concurrent and balanced fielding can better integrate AC and RC units and help ensure the RC remains an operational reserve. Furthermore, the committee notes that many major defense acquisition programs have followed concurrent and balanced fielding, including the F-35 Joint Strike Fighter.

The committee understands that the Air Force intends to field refurbished and upgraded HH-60G operational loss replacement (OLR) aircraft to RC combat search and rescue units in fiscal year 2018, and that these same units will receive new HH-60W combat rescue helicopter aircraft in the fiscal year 2027 to 2029 timeframe. The committee supports the plan to provide these OLR aircraft to RC units as soon as possible. However, the committee is concerned that there does not appear to be a plan to concurrently field the HH-60W to both AC and RC units, and that there is a potential 10-year gap between RC units receiving HH-60G OLR aircraft and the new HH-60W aircraft.

Additionally, the committee understands that the Department of the Air Force is undertaking an ongoing review to determine whether primary responsibility for combat search and rescue (CSAR) will remain with Air Combat Command or be moved to Air Force Special Operations Command. The committee notes the importance of the CSAR mission as the primary personnel recovery method for service men and women in extremis, as well as the complex nature of these operations that often require multi-service, dedicated, and fully trained forces. As the Air Force reviews this mission, the committee encourages an analysis of current and anticipated geographic combatant commander requirements and whether current force structure is capable of meeting those requirements with existing HH-60 and V-22 platforms.

To address committee concerns, the committee directs the Secretary of the Air Force and relevant subordinate commands to brief the Committee on Armed Services of the House of Representatives not later than September 1, 2016, on Department of the Air Force plans for fielding the HH-60W to the AC and RC, and the status of the ongoing review for responsibility for the CSAR mission.

U.S. Marine Corps C/KC-130 digital interoperability

The committee recognizes the importance of the Marine Corps' efforts to achieve Digital Interoperability (DI) as outlined in the 2016 U.S. Marine Corps Aviation Plan and is supportive of those efforts. The committee also understands that the integration costs to incorporate many new DI technologies across all of the U.S. Marine Corps aviation platforms is unaffordable given current and projected resources. The committee believes the Marine Corps should leverage as much government-owned technology as technically feasible before making investments in costly systems or developmental technology.
Therefore, the committee encourages the Secretary of the Navy to accelerate the integration and testing of existing interoperability capabilities for the C/KC-130, such as TACPOD, which is an existing government-owned, government-tested asset. TACPOD is a mature technology that has been tested to a Technology Readiness Level 8 and could potentially augment existing C/KC-130 interoperability capabilities with minimal integration efforts. Further, such capability could provide the Marine Corps’ C/KC-130 expanded mission capability, specifically in support of the Special Purpose Marine Air-Ground Task Force-Crisis Response mission.

PROCUREMENT OF AMMUNITION, AIR FORCE

Items of Special Interest

25 millimeter ammunition for the F-35 program

The committee recognizes the critical role that the F-35 will play in both air-to-air and air-to-ground combat capability, and believes that the 25 millimeter gun will be a critical part of the F-35’s overall weapons lethality. Consequently, the committee encourages the Department of Defense to consider all ammunition solutions to meet the lethality requirement for the F-35’s 25 millimeter gun.

To further the committee’s understanding of the Department’s F-35 25 millimeter ammunition plans, the committee directs the Secretary of Defense to provide a briefing to the Committee on Armed Services of the U.S. House of Representatives by August 1, 2016, on the requirements and acquisition strategy for 25 millimeter ammunition.

OTHER PROCUREMENT, AIR FORCE

Items of Special Interest

Civil engineers construction, surveying, and mapping equipment

The budget request contained $6.8 million for base procured equipment. Of this amount, no funds were requested for modernization of equipment used by base civil engineer units or Red Horse squadron (RHS) engineer units.

Red Horse squadrons provide the Air Force with a highly mobile civil engineering response force to support contingency and special operations worldwide. In the committee report (H. Rept. 114-102) accompanying the National Defense Authorization Act for Fiscal Year 2016, the committee noted that approximately 66 percent of existing engineering equipment is known to be discontinued, with some individual components ranging as high as 94 percent; therefore, maintenance requirements for this legacy equipment could potentially be cost prohibitive. The committee is concerned that the long-term replacement and modernization strategy for legacy engineering equipment remains under-resourced across the Future Years Defense Program. The committee believes additional funds
would help to accelerate the modernization of legacy civil engineering equipment, and expects these funds would be obligated under full and open competition to provide the best-value equipment to Air Force base civil engineer units and RHS units.

The committee recommends $11.8 million, an increase of $5.0 million, to competitively procure modernized engineer equipment and address any unfunded requirements.

PROCUREMENT, DEFENSE-WIDE

Items of Special Interest

Replacement of MH-60M for United States Special Operations Command

The budget request contained $6.4 million for MH-60M Block Upgrades in PE 116048BB, Rotary Wing Upgrades and Sustainment. The committee understands that an MH-60M within U.S. Special Operations Command (USSOCOM) sustained heavy damage, with main rotor strike, after a hard deck landing off the coast of Okinawa aboard United States Naval Ship Red Cloud. The Army Aviation and Missile Life Cycle Management Command determined the aircraft to be a total loss, based on the estimated cost of damage. The committee understands that an additional $18.6 million is needed for special operations-peculiar modifications to a replacement MH-60M aircraft being provided by the U.S. Army. This additional aircraft with modifications would restore USSOCOM to a basis of issue of 72 MH-60M aircraft. Therefore, the committee recommends $25.0 million, an increase of $18.6 million, for MH-60M Block Upgrades in PE 116048BB, Rotary Wing Upgrades and Sustainment.

LEGISLATIVE PROVISIONS

SUBTITLE A—AUTHORIZATION OF APPROPRIATIONS

Section 101—Authorization of Appropriations

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

SUBTITLE B—ARMY PROGRAMS

Section 111—Multiyear Procurement Authority for AH-64E Apache Helicopters

This section would authorize the Secretary of the Army to enter into one or more multiyear contracts for AH-64E Apache helicopters beginning in fiscal year 2017, in accordance with section 2306b of title 10, United States Code.
Section 112—Multiyear Procurement Authority for UH–60M and HH–60M Black Hawk Helicopters

This section would authorize the Secretary of the Army to enter into one or more multiyear contracts for UH-60M and HH-60M Black Hawk helicopters beginning in fiscal year 2017, in accordance with section 2306b of title 10, United States Code.

Section 113—Assessment of Certain Capabilities of the Department of the Army

This section would require the Secretary of Defense, in consultation with the Secretary of the Army and the Chief of Staff of the Army, to provide an assessment to the congressional defense committees by April 1, 2017, of the ways, and associated costs, to reduce or eliminate shortfalls in responsiveness and capacity of the following capabilities:

1. AH-64-equipped Attack Reconnaissance Battalion capacity to meet future needs;
2. Air defense artillery (ADA) capacity, responsiveness, and the capability of short range ADA to meet existing and emerging threats (including unmanned aerial systems, cruise missiles, and manned aircraft), including an assessment of the potential for commercial-off-the-shelf solutions;
3. Chemical, biological, radiological, and nuclear capabilities and modernization;
4. Field artillery capabilities and the changes in doctrine and war plans resulting from the memorandum of the Secretary of Defense dated June 19, 2008, regarding the Department of Defense policy on cluster munitions and unintended harm to civilians, as well as required modernization or munition inventory shortfalls;
5. Fuel distribution and water purification capacity and responsiveness;
6. Army watercraft and port opening capabilities and responsiveness;
7. Transportation (fuel, water, and cargo) capacity and responsiveness;
8. Military police capacity; and
9. Tactical mobility and tactical wheeled vehicle capacity and capability, to include adequacy of heavy equipment prime movers.

SUBTITLE C—NAVY PROGRAMS

Section 121—Procurement Authority for Aircraft Carrier Programs

This section would provide economic order quantity authority for the construction of two Ford-class aircraft carriers and incremental funding authority for the nuclear refueling and complex overhaul of five Nimitz-class aircraft carriers.

Section 122—Sense of Congress on Aircraft Carrier Procurement Schedules
This section would provide the sense of Congress that the Secretary of the Navy's schedule to procure 1 aircraft carrier every 5 years will reduce the overall aircraft carrier inventory to 10 aircraft carriers, a level insufficient to meet peacetime and war plan requirements. The section also recommends that the Secretary begin construction for the Ford-class aircraft carrier designated CVN-81 in fiscal year 2022 and align advance procurement activities with this accelerated programming.

Section 123—Design and Construction of LHA Replacement Ship Designated LHA 8

This section would authorize the Secretary of the Navy to enter into and incrementally fund a contract for design and construction of the LHA Replacement ship designated LHA 8.

Section 124—Design and Construction of Replacement Dock Landing Ship Designated LX(R) or Amphibious Transport Dock Designated LPD-29

This section would authorize the Secretary of the Navy to enter into and incrementally fund a contract for design and construction of the replacement dock landing ship designated LX(R) or the amphibious transport dock designated LPD-29.

Section 125—Ship to Shore Connector Program

This section would authorize the Secretary of the Navy to enter into a contract for the procurement of up to 45 Ship to Shore Connector vessels.

Section 126—Limitation on Availability of Funds for Littoral Combat Ship or Successor Frigate

This section would prohibit the Department of the Navy from selecting a single contractor for the Littoral Combat Ship or frigate program until the Secretary of the Navy certifies to the congressional defense committees that such a selection of a single contractor is conducted using competitive procedures and is performed for the purpose of constructing a frigate class ship.

SUBTITLE D—AIR FORCE PROGRAMS

Section 131—Elimination of Annual Report on Aircraft Inventory

This section would strike the requirement from section 231a of title 10, United States Code, for the Secretary of Defense to deliver an annual report on the military services' aircraft inventory to the congressional defense committees.

Section 132—Repeal of the Requirement to Preserve Certain Retired C-5 Aircraft
This section would amend section 141 of the National Defense Authorization Act for Fiscal Year 2013 (Public Law 112-239) to terminate the requirement for the Secretary of the Air Force to continue to preserve certain C–5 aircraft in a storage condition that would allow a recall of retired aircraft to future service in the Air Force Reserve, Air National Guard, or Active Force structure.

**Section 133—Repeal of Requirement to Preserve Certain Retired F-117 Aircraft**

This section would amend section 136 of the John Warner National Defense Authorization Act for Fiscal Year 2007 (Public Law 109-364) by striking subsection (b), which would remove the requirement that certain F-117 aircraft be maintained in a condition that would allow recall of those aircraft to future service.

**Section 134—Prohibition on Availability of Funds for Retirement of A-10 Aircraft**

This section would prohibit funds authorized to be appropriated by this Act, or otherwise made available for fiscal year 2017, for the Department of the Air Force to retire, prepare to retire, or place in storage any A-10 aircraft. This section would also maintain a minimum of 171 A-10 aircraft designated as primary mission aircraft inventory, and prohibit the Secretary of the Air Force from making any significant reductions to manning levels with respect to any A-10 aircraft squadron or division until the Director of Operational Test and Evaluation, and the Secretary of the Air Force, submit reports to the congressional defense committees on the results and findings of the initial operational test and evaluation of the F-35 aircraft program, as well as the comparison test and evaluation that examines the capabilities of the F-35A and A-10C.

**Section 135—Prohibition on Availability of Funds for Retirement of Joint Surveillance Target Attack Radar System Aircraft**

This section would prohibit retirement of Joint Surveillance Target Attack Radar System aircraft in fiscal year 2018.

**SUBTITLE E—DEFENSE-WIDE, JOINT, AND MULTISERVICE MATTERS**

**Section 141—Termination of Quarterly Reporting on Use of Combat Mission Requirements Funds**

This section would amend the quarterly report requirement in section 123 of the Ike Skelton National Defense Authorization Act for Fiscal Year 2011 (Public Law 111-383), to sunset the requirement for such reports on September 30, 2018.

**Section 142—Fire Suppressant and Fuel Containment Standards for Certain Vehicles**
This section would require the Secretary of the Army, or his designee, and the Secretary of the Navy, or his designee, to establish and maintain policy guidance regarding the establishment of, and updates to, fire suppressant and fuel containment standards that meet survivability requirements across various classes of vehicles, including light tactical vehicles, medium tactical vehicles, heavy tactical vehicles, and ground combat vehicles for the Army and Marine Corps. This section would also require the Secretary of the Army and the Secretary of the Navy to provide a report to the congressional defense committees, not later than 180 days after the date of the enactment of this Act, that contains policy guidance for each class of vehicle including armor, fire suppression systems, self-sealing material and containment technologies, and any other information as determined by the Secretaries.

The committee believes that operational performance requirements should be based on the vehicle type, mission, and employment. The committee notes that inclusion of fire suppression in performance specifications should be by vehicle design and risk driven.

Section 143—Report on Department of Defense Munitions Strategy for the Combatant Commands

This section would require the Secretary of Defense to submit to the congressional defense committees by April 1, 2017, a report on the munitions strategy for each of the United States combatant commands. It shall include an identification of munitions requirements, an assessment of munitions gaps and shortfalls, and necessary munitions investments. Such strategy shall cover the 10-year period beginning with 2016.

The committee notes that section 1254 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 Defense to submit to the congressional defense committees a report on the munitions strategy for the U.S. Pacific Command (USPACOM). The committee has reviewed this report and commends the Secretary of Defense and Chairman of the Joint Chiefs of Staff in their detailed assessment. As the Secretary completes the broader report on the munitions strategy for the combatant commands required by this section, the committee expects the Secretary only to provide updates where necessary to the munitions strategy of USPACOM previously submitted pursuant to Public Law 113-291.

Section 144—Comptroller General Review of F-35 Lightning II Aircraft Sustainment Support

This section would require the Comptroller General of the United States to conduct an analysis of status of and approaches considered in the sustainment support strategy for the F-35 Joint Strike Fighter program. This section would also require the Comptroller General to submit a report of the analysis to the congressional defense committees by April 1, 2017. The committee encourages the
Comptroller General to consider best practices for contractor logistic support during the conduct of this review.

TITLE II—RESEARCH, DEVELOPMENT, TEST, AND EVALUATION

RESEARCH, DEVELOPMENT, TEST, AND EVALUATION, ARMY

Items of Special Interest

Armored vehicle fuel tank and bladder safety

The committee notes that armored vehicles carry a significant amount of fuel, which can become a hazard to the crew in combat. The committee commends the work that the Army has done to improve crew safety, including the development of technologies that reduce risk of fuel spills when a fuel tank is punctured or ruptured, and efforts to render fuel inert where possible. Such efforts may reduce catastrophic injuries to soldiers.

However, the committee is aware of self-sealing polymers and other materials with self-healing capabilities that, combined with passive fire suppression blankets, may provide additional safety to crews within armored vehicles. Therefore, the committee directs the Secretary of the Army to provide a briefing to the Committee on Armed Services of the House of Representatives by March 1, 2017, on candidate technologies that could be used to improve the fuel containment and safety capability of legacy armored vehicle platforms and armored vehicle platforms currently in development.

Army advanced body armor research and development

The committee has consistently supported the need to provide soldiers with the most advanced body armor. The committee believes that body armor, which provides desired protection levels at the lightest possible weight, ensures greater soldier survivability and reduces injuries, while improving mission performance and effectiveness. The committee is aware that the Army's Soldier Protection System (SPS) program is seeking to reduce the weight of body armor by 10 percent, while maintaining or improving current ballistic capabilities, and would use a more holistic and systems-based approach to developing an integrated personal protective equipment kit for soldiers. The committee supports the Army's SPS effort. However, the committee believes that even as manufacturers are developing hard body armor components that achieve SPS requirements, it is also important that research and development continue on hard body armor components with even greater capabilities. The committee also believes this effort should be resourced and programmed in order to ensure that more dramatic improvements are readily available for soldiers in the near future, given the emerging threats in the global environment.