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THE HOUSE ARMED SERVICES COMMITTEE  
TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

STATEMENT OF

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BEFORE THE

TACTICAL AIR AND LAND FORCES SUBCOMMITTEE

OF THE

HOUSE ARMED SERVICES COMMITTEE

ON

MARINE CORPS GROUND FORCES MODERNIZATION  
MODERNIZATION PROGRAMS

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## INTRODUCTION

Mr. Chairman, Ranking Member Sanchez, and distinguished members of the Subcommittee, we thank you for the opportunity to appear before you today to discuss the Marine Corps Ground Force Modernization. Our testimony will provide background and rationale for the Marine Corps' Fiscal Year 2017 budget request aligning to our strategic priorities and budgetary goals.

The United States is a maritime nation with global responsibilities. Our Navy and Marine Corps persistent presence and multi-mission capability represent U.S. power projection across the global commons. We seek to move at will across the world's oceans, seas and littorals, and extend the effects of the sea-base deep inland. We enable global reach and access, regardless of changing circumstances, and will continue to be the nation's preeminent solution for employing deterrence through global presence, sea control, mission flexibility and when necessary, interdiction. We are an agile strike and amphibious power projection force in readiness, and such agility requires that our Naval expeditionary forces remain strong.

The Marine Corps is the Nation's expeditionary force-in-readiness. By congressional mandate, it has a unique role and structure as a "...balanced force-in-readiness, air and ground." This mandate results in the requirement for the Marine Corps to maintain a high state of combat readiness to be "most ready, when the Nation is least ready."

The Marine Corps executed over 100 operations, 20 amphibious operations, 140 Theater Security Cooperation (TSC) events, and participated in 160 exercises during calendar year 2015. Marine Corps units deployed to every Geographic Combatant Command (GCC) and executed numerous TSC exercises to help strengthen relationships with allies and build partner capacity. In Syria and Iraq, Marine squadrons continued over 1,275 total sorties and 325 strikes in support of Operation Inherent Resolve (OIR). 300 Marines from Special Purpose Marine Air Ground Task Force – Crisis Response – Central Command (SPMAGTF –CR-CC) and Advise and Assist (AA) teams advised and enabled the Iraqi Army. SPMAGTF-CR-AF incident response force (IRF) maintained various alert postures from NASSIG, Italy, Souda Bay, Greece, and Moron Air Base, Spain during multiple iterations of SOCAF operations, and provided fixed site security forces to US embassy Bangui, Central African Republic, to assist in the reopening of the embassy. In addition, SECFOR provided security at Diplomatic Transit Facility, Sana'a, Yemen and AMEMB Yemen.

Marine Expeditionary Units (MEU) provided support to the U.S. Embassy Sana'a, Yemen to safeguard American civilians and facilities including facilitating the evacuation of the Embassy in February and March. The 31st MEU also deployed to Saipan to provide Defense Support to Civil Authorities (DSCA) as Typhoon Soudelor passed through the Commonwealth of the Northern Marianas killing 30 and displacing 150,000 people. The 15th MEU and III MEF supported POTUS's travel in Kenya, Ethiopia, and Malaysia. Additionally, the 15th MEU provided support to SOCCENT by offloading air combat assets into Djibouti to make room on

the USS ANCHORAGE to provide an Afloat Forward Staging Base (AFSB) capability in support of SOF taskings in the region.

Marine Security Augmentation Units (MSAU) teams deployed 33 times in 2015 at the request of the State Department executing 12 Embassy/Consulate security missions and 21 VIP (POTUS/VPOTUS/SECSTATE) security missions. MSAU Marines deployed to Iraq, Burundi, South Sudan, Belgium, Egypt, Philippines, Kenya, Ethiopia, Turkey, Uruguay, Canada, Tajikistan, Chile, Switzerland, Jamaica, Panama, Sri Lanka, Germany, Jordan, Kyrgyzstan, France, Burkina Faso and Ukraine. Additionally, Joint Task Force-505 (JTF-505) was activated in response to a magnitude 7.8 earthquake in Nepal in April 2015 that killed over 8,000 people and injured more than 21,000. JTF-505 Forward assumed command of all DOD assets in support of Foreign Disaster Relief operations in Nepal and delivered about 114 tons of emergency relief supplies, transported 534 personnel and conducted 63 casualty evacuations.

Marines must be ready to respond anywhere in the world, at any time, with the full spectrum of expeditionary capabilities across a range of operations, to include, crisis response, disaster relief, or armed conflict. Consequently, we man, train, and equip our force and prioritize resources for readiness. As one of the five pillars of readiness, equipment modernization is a critical factor in our ability to support our capability requirements. But under current fiscal constraints, we have prioritized near-term readiness while assuming risk in other areas, including equipment modernization. The support of this committee is greatly appreciated in relieving this budgetary pressure.

We are committed to delivering required warfighting capabilities to Marines in a timely and affordable manner. Continued funding shortfalls in our investments will force reliance on aging equipment and diminish our technical advantage over our adversaries. The continuing need to maintain and update legacy systems takes the focus off innovation and is costly in its own right. Experience tells us that investing in new capabilities and technologies is a proven cornerstone for your Marines and Sailors to achieve mission success today and into an uncertain, but no less demanding future.

Additionally, as we face risks to our investments, we also see an adverse impact on the industrial base placing at risk our future modernization efforts. Working as a team, and with your support, we can prevail over these challenges on behalf of our service men and women and our Nation's readiness.

A fundamental strength we have working for us is the close partnership between Navy and Marine Corps. Naval integration is a critical factor in our mission performance. The Marine Corps also works closely with the Army, other Services, and industry to provide the most effective and affordable capabilities to your Marines and Sailors. The Marine Corps and the Army have worked together on programs such as the Joint Light Tactical Vehicle (JLTV), the Enhanced Combat Helmet and the Modular Scalable Vest. To improve our collaborative

relationship, this year we are resuming use of the Army Marine Corps Board, with regularly scheduled meetings at the 3-star level, to identify, develop, review, and resolve issues with concepts, capabilities, service approved requirements and programs.

Ground force modernization is focused on high-priority programs such as the Amphibious Combat Vehicle (ACV) 1.1, Amphibious Assault Vehicle (AAV) survivability upgrades, Ground/Air Task Oriented Radar (G/ATOR), and Joint Light Tactical Vehicle (JLTV).

### **Ground Combat and Tactical Vehicles (GCTV)**

The overarching priority within the GCTV portfolio is the replacement of the legacy Amphibious Assault Vehicle (AAV) with modern armored personnel carriers through a combination of complementary systems. The ACV program is the Marine Corps highest ground modernization priority and will use an incremental approach that consists of two Phases: ACV Phase 1 Increment 1 (ACV 1.1) and ACV Phase 1 Increment 2 (ACV 1.2). Phase 1 Increment 1 will field a personnel carrier while Increment 2 will deliver improved personnel carrier capabilities, a command and control variant, and a recovery variant. Phase 2 will examine High Water Speed.

The second highest priority within the portfolio remains the replacement of a portion of the high mobility multi-purpose wheeled vehicle (HMMWV) fleet that is most at risk; those vehicles that perform a combat function and are typically exposed to enemy fires. In partnership with the Army, the Marine Corps has sequenced the JLTV procurement so as to ensure affordability of the entire GCTV portfolio while replacing one third of the legacy HMMWV fleet with modern tactical vehicles.

#### *Amphibious Combat Vehicle (ACV) 1.1*

The Fiscal Year 2017 President's Budget requests \$158.7 million in RDT&E for ACV 1.1. The Marine Corps appreciates the support of the Congress and this Committee in the restructuring of the ACV program in the Fiscal Year 2015 defense authorization. The Marine Requirements Oversight Council (MROC) approved ACV 1.1 on March 6<sup>th</sup>, 2015, Milestone B was certified on November 17<sup>th</sup>, 2015, and a two Competitive Contract were awarded to industry on November 24<sup>th</sup> 2015. Those vendors are scheduled to deliver 16 prototype vehicles each in FY2017. The ACV 1.1 program successfully leveraged technology demonstrations and competitive prototyping to create a set of realistic requirements that are achievable with a non-developmental vehicle. Market research and extensive discussions with industry confirmed that requirements could be met with low-risk, affordable solutions. The use of demonstrated mature technologies and stable requirements reduced technical risk and allowed foregoing the Technology Maturation and Risk Reduction (TMRR) phase, accelerating Initial Operational Capability (IOC). The condensed Engineering and Manufacturing Development (EMD) phase will focus on manufacturing and testing rather than system design. An acquisition strategy that included affordability constraints and competition through to Low Rate Initial Production (LRIP) will continue to ensure affordability. We have developed a program to field a capability to our

Marines in (6) years. The Acquisition Objective (AO) for ACV 1.1 is 204 vehicles. This AO provides lift for two infantry battalions and is planned to achieve Initial Operational Capability (IOC) in Fiscal Year 2020. This aggressive schedule for ACV 1.1 requires full funding and the continued support of this Committee and Congress.

The Marine Corps is also investing in the exploration of a range of high water speed technology approaches to provide for an affordable, phased modernization of legacy capability to enable extended range littoral maneuver. These efforts will develop the knowledge necessary to reach an informed decision point in the mid-2020s on the feasibility, affordability, and options for developing a high water speed capability for maneuver from ship-to-shore.

#### *Amphibious Assault Vehicle (AAV) Survivability Upgrade (SU)*

The Fiscal Year 2017 President's Budget requests \$38 million for RDT&E and \$74 million for PMC for the AAV program. To restore much needed survivability and mobility to the current AAVs, approximately one third of that fleet will undergo a survivability upgrade. The AAV Survivability Upgrade (SU) improves AAV capability in order to support Marine Expeditionary Unit (MEU) deployments, and when globally sourced, provide the essential capacity necessary for the assault echelons of two Marine Expeditionary Brigades. The combination of a modern amphibious armored personnel carrier alongside the improved AAV generates a complementary set of capabilities to meet general support lift capability and capacity requirements of our Ground Combat Element.

#### *Joint Light Tactical Vehicle (JLTV)*

The Fiscal Year 2017 President's Budget requests \$23 million in RDT&E and \$113 million in PMC for the Marine Corps portion of the JLTV program. The Department remains firmly partnered with the U.S. Army in fielding a JLTV that meets requirements of both services while remaining affordable. The JLTV program strives to control ownership costs by maximizing commonality, increasing reliability over the legacy HMMWV fleet, improving fuel efficiency, and achieving additional reduced costs through effective competition in all phases of program execution. The program completed the EMD phase in November 2014. The program received a Milestone C decision on August 25<sup>th</sup> 2015 and the LRIP contract was awarded to Oshkosh Defense. The remaining acquisition objective of 5,500 will be procured in the first increment. Our ultimate goal is to replace our entire HMMWV fleet through multiple purchase increments in the out-years.

#### **Ground Force Command and Control (C2)**

The ability to coordinate and synchronize distributed Command and Control (C2) sensors and systems is critical to the success ashore of the MAGTF. Modernization priorities in this area are the Ground/Air Task Oriented Radar (G/ATOR), the Common Aviation Command and Control System (CAC2S), and Networking on the Move (NOTM). These systems will provide modern-

day, interoperable technologies that support real-time surveillance, detection, targeting and force protection, in addition to the common C2 suite required to enable the effective employment and situational awareness of the MAGTF.

#### *Ground/Air Task Oriented Radar (G/ATOR)*

The Fiscal Year 2017 President's Budget requests \$84 million in RDT&E and \$135 million in PMC for the G/ATOR program. G/ATOR is the Marine Corps short and medium range multi-role radar designed to detect aircraft, unmanned aerial systems, cruise missiles, air breathing targets, rockets, artillery and mortars. G/ATOR Block 1 provides air defense and air surveillance capability, and achieved Milestone C in 2014. Block 2 is in the EMD phase and will provide counter-battery and target acquisition capability. RDT&E funding resources Block 2 development. PMC funding resources procure three LRIP assets. This program is critical to replacing radars that have exceeded their expected life cycle and technological relevance and we appreciate the continued support of the committee in furthering the capability.

#### *Common Aviation Command and Control System (CAC2S)*

The Fiscal Year 2017 President's Budget requests \$12 million in RDT&E and \$47 million in PMC for CAC2S. CAC2S Increment 1 is a modernization effort to replace existing Marine Air Command and Control System (MACCS) equipment. Increment 1/Phase 1 successfully fielded a product baseline Processing and Display Subsystem (PDS) and Communications Subsystem (CS) during 4th Quarter Fiscal Year 2013. Increment 1/Phase 2, covers the integration of sensor capabilities with the PDS and addresses the remaining Air Combat Element (ACE) Battle Management and C2 requirements through integrating the Air Command and Control Subsystem.

Phase 2 completed a successful Milestone C in February 2015. Funding in this budget supports the assembly and Initial Operational Test and Evaluation (IOT&E) of the first four Limited Deployment Units and the required government furnished equipment. IOT&E is scheduled for Fiscal Year 2016. Phase 2 completion will result in the delivery of the full CAC2S Increment 1 capabilities and is planned to begin fielding in Fiscal Year 2017. The approved AO is 50 systems.

#### *Networking on the Move (NOTM)*

The Fiscal Year 2017 President's Budget requests \$9 million in RDT&E and \$37M in PMC for the NOTM program. NOTM provides the MAGTF with a robust, over-the-horizon/beyond line-of-sight digital command and control capability while on-the-move and at-the-halt. RDT&E funding resources the development of a NOTM Airborne variant for MV-22 and KC-130J systems in support of the SPMAGTF-Crisis Response forces, and the development of a NOTM Internally Transportable Vehicle (ITV) variant on a vehicle internally transportable in a MV-22.

PMC funding is focused on production of the current NOTM Ground Combat Vehicle (GCV) variant towards its Approved Acquisition Objective (AAO).

### **Small Arms Modernization**

Informed by operational lessons, technological maturity, industrial capabilities, and guided by concepts and initiatives such as Expeditionary Force 21 and Marine Expeditionary Rifle Squad, the Marine Corps is aligned with the Joint strategy for weapons modernization to improve accuracy, lethality and mobility. Initially prioritizing selective modernization and sustainment of critical legacy capabilities, longer-term goals will capitalize on technological advances to deliver modern replacements for critical weapon systems. Our end state is to develop improved lethality while also improving the mobility of the individual marine, the Marine Rifle Squad, and the MAGTF.

In the near term, we will selectively modernize systems and conduct a prioritized sustainment of legacy capabilities. For example, an adjustable stock of the M16A4 has been fielded in limited quantities while Commanders have been authorized to procure and modify rifles as necessary to improve the ergonomics of the rifle. In 3rd Quarter FY16 we will achieve IOC on the quick change barrel for our M2A1 heavy machine gun, an improved capability, common to all the services. We are realigning our M4 inventory to provide our infantry battalions with our most capable service rifle. We anticipate completion in 3rd Quarter FY16. Finally, the Marine Corps will participate in the Army's Precision Sniper Rifle (PSR) program in addition to fielding the M40A6 Sniper Rifle, ensuring accurate and lethal fires for our Scout Sniper community.

In the long term, we will look to make larger gains in capability through pursuit of next generation weapons with the other services. This includes working with the Army to explore the Modular Handgun System to develop a pistol that feature increased accuracy, improved ergonomics, and a higher degree of reliability/durability over legacy systems. We will also evaluate the next generation of infantry squad weapons by taking a holistic approach to integrating technological and materiel advancements for small arms to improve accuracy and increase lethality out to 600m.

### **Family of Ballistic Protective Systems (BPS)**

Coupled with our infantry weapons systems, we seek to improve the protection and lethality of our Marines through BPS. BPS provides technologically advanced ballistic protection at the lightest possible weight. It provides the critical ballistic protective systems to save lives, reduce the severity of combat injuries, and increase combat effectiveness by keeping more Marines in the fight. Major BPS programs include: Plate Carrier (PC); Improved Modular Tactical Vest (IMTV); Enhanced Small Arms Protective Inserts (ESAPI); Enhanced Combat Helmet (ECH); Improved Ballistic Eyewear (IBE); and hearing protection. As in small arms, we are actively working with the Army to develop improved protection systems that maximize mobility while providing the requisite protection through the active sharing of novel designs and materials. A key component of all of the BPS programs is that as new threats emerge on the battlefield, BPS equipment will be ready to adapt and meet these new threats. This initiative

supports this requisite adaptability as well as sustaining currently fielded protection. Continued Congressional support is critical to enable this capability.

### **CONCLUSION**

The Marine Corps continues to improve our essential ground capabilities through a strategy that is stable and affordable. We recognize the need for continued vigilance in achievement of a proper balance between current readiness and the long-term imperatives of modernization and innovation. This balance is critical to ensuring the Marine Corps and the individual Marine has the capability to fight and win future battles while being prepared to respond today as our Nation's force in readiness. Mr. Chairman, and distinguished committee members, on behalf of your Marines, we request your continued support for our modernization strategy.