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BY THE SENATE ARMED SERVICES
COMMITTEE SUBCOMMITTEE ON
SEAPOWER

STATEMENT

OF

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BEFORE THE

SUBCOMMITTEE ON SEAPOWER

OF THE

SENATE ARMED SERVICES COMMITTEE

ON

MARINE CORPS PROGRAMS -- GROUND VEHICLE STRATEGY

DATE: MAY 18, 2011

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SUBCOMMITTEE ON SEAPOWER

*"The Marine Corps is America's Expeditionary Force in Readiness—a balanced air-ground-logistics team. We are forward-deployed and forward-engaged: shaping, training, deterring, and responding to all manner of crises and contingencies. We create options and decision space for our Nation's leaders. Alert and ready, we respond to today's crisis, with today's force … TODAY. Responsive and scalable, we team with other services, allies and interagency partners. We enable and participate in joint and combined operations of any magnitude. A middleweight for*ce, we are light enough to get there quickly, but heavy enough to carry the day upon arrival, and capable of operating *independent of local infrastructure. We operate throughout the spectrum of threats—irregular, hybrid, conventional—or the shady areas where they overlap. Marines are ready to respond whenever the Nation calls … wherever the President may direct."*

—General James F. Amos, Commandant of the Marine Corps

Introduction

Chairman Reed, Senator Wicker, and distinguished members of this Subcommittee, we are honored to appear here today. We want to thank you for your continued support to our Sailors, Marines, and their families, and we appreciate the opportunity to address our ground investment strategy.

As America's Expeditionary Force in Readiness our ground program investments support our ability to engage forward to build partners, assure allies and protect our interests; build access to a global economic system, deter aggression, and respond to crises; assist others when disasters strike; provide the only sustainable means to overcome access challenges; and, when required, defeat threats to our interests ashore. Key is the ability to deploy and employ from the sea in austere environments at a time and place of our choosing — a significant asymmetric, strategic and operational advantage that has been used 137 times since 1990.

Our ground investments allow us to develop and sustain a ready, middleweight force that is easily deployable, energy efficient, and highly expeditionary. Complementary to our ground investment, we require parallel investments in amphibious ships, amphibious combat vehicles, connectors such as the landing craft air cushion (LCAC) and landing craft utility (LCU), naval surface fire support assets, mine counter measures, radars, command and control, vertical lift, and fixed-wing, short take off and vertical landing (STOVL) aircraft and many other programs critical to maintaining tactical and operational readiness. These investments are designed to provide a full range of complementary capabilities for our Nation's Expeditionary Force in Readiness.

The Operating Environment

The adversaries we face and will likely continue to face are diverse and not easy to characterize into a monolithic threat. They learn and adapt quickly to counter our actions and target our vulnerabilities simultaneously across multiple domains. Surprise is a reality that cannot be eliminated; it must be mitigated by properly organizing, training, equipping, and employing our forces.

Access must be created and maintained during all phases of conflict against a wide range of adversaries. Today, we face a number of challenges to access that must be overcome. The American Association for the Advancement of Science concluded in 1995 that within 30 years "75 percent of humanity…will reside in coastal areas" (defined as 150 km inland). This prediction appears to be coming to fruition, as densely populated urban centers become increasingly common in the littorals — precisely where access is required.

Environmental challenges caused by major disasters not only inflict intense human suffering and loss of life, the resultant damage to roads, buildings, fresh water resources, communications systems, and electrical power distribution impede first responder actions and can quickly overwhelm local governments. Therefore, the execution of disaster relief operations and restoration of basic governmental services present a high degree of danger and uncertainty.

The **military challenges** we face span the full spectrum from improvised explosive devices (IEDs) through high-tech weaponry, to include precision munitions that target our vulnerabilities both on land and at sea.

Additionally, growing sensitivities to U.S. and coalition presence on, near, or in the air over sovereign boundaries present increasing **political challenges**.

In combination, these changes in the operating environment are having a profound impact of the complexity of combat and tactical vehicle designs.

The Nation needs an expeditionary force-in-readiness that can overcome impediments to access and immediately respond to a crisis anywhere in the world across the range of military operations.

Posturing for the Future

While supporting operations in Afghanistan remains the Commandant's top priority, the Marine Corps Service Campaign Plan directs the Marine Expeditionary Force (MEF) commanders to continue to develop and maintain amphibious capabilities. In 2010, the Navy-Marine Corps team returned to conducting large-scale Marine Expeditionary Brigade / Expeditionary Strike Group exercises in order to hone these critical amphibious skills. On the west coast, I Marine Expeditionary Force and Expeditionary Strike Group-3 commenced its annual Marine Expeditionary Brigade-level amphibious exercises DAWN BLITZ and PACIFIC HORIZON. On the east coast, II Marine Expeditionary Force and Expeditionary Strike Group-2 conducted the first in a series of Marine Expeditionary Brigade-level exercises known as BOLD ALLIGATOR. While these exercises are critical to enhancing our proficiency in large-scale amphibious operations, they also serve as a valuable platform from which new concepts can be tested that lead to the development of updated joint operating doctrine.

These exercises and our force development experiments inform future amphibious capability requirements in mobility, command and control, intelligence, fires, sea-based logistics, organization, doctrine, training, and education. The landing force of the future requires surface and vertical assault systems with the speed, range, precision location and navigational capabilities, protection, and firepower to launch from over-the-horizon positions, maneuver through tactical points of entry, and achieve the objective regardless of whether it is on the low- or high end of the spectrum of conflict. The technologies required to enhance these capabilities are under development, and the combat systems implementing these technologies are the highest priority in the Marine Corps.

Both the Secretary of Defense and the Secretary of the Navy have reaffirmed the necessity of the Marine Corps' amphibious assault mission. Accordingly, we must develop an affordable and capable amphibious combat vehicle to project Marines from sea to land in permissive, uncertain, and hostile environments. This remains the Corps' top priority. We ask for your continued support to reach this goal.

In order to adapt to the future operating environment and address access challenges, the Navy and Marine Corps are pursuing a number of other programs that leverage operational lessons learned and adopt acquisition best practices.

Ground and Combat Tactical Vehicles

Over the next two decades the Marine Corps will replace or upgrade a large portion of the ground combat and tactical vehicle inventory. Unit costs for new vehicles have risen substantially, on the order of 300 to almost 500 percent, over their predecessors. The Marine Corps is facing increasing fiscal pressure across all investment categories. Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4/ISR) capabilities, requirements and costs have increased significantly. Some programs that were initiated in response to urgent universal needs statements (UUNSs) and joint urgent operational needs (JUONs) and initially funded with overseas contingency operations (OCO) funds are being integrated into standard force structure and will therefore need to be funded in the base budget.

The Marine Corps initiated its Ground and Combat Tactical Vehicle Strategy (GCTVS) in 2008 to provide a basis for planning, programming, and budgeting for balanced maneuver and mobility capabilities to our force. This effort is evolutionary in approach, and it includes combat vehicles such as the M1A1 Main Battle Tank, Amphibious Assault, and Light Armored Vehicles, as well as tactical vehicles such as the Medium Tactical Vehicle Replacement (MTVR), Mine Resistant Ambush Protected (MRAP), High Mobility Multipurpose Wheeled Vehicle (HMMWV), and Joint Light Tactical Vehicle (JLTV). The strategic goals of the GCTVS are to field vehicles with the correct balance of performance, protection, payload, mobility, transportability, and fuel efficiency. This balance will enable rapid concentration and dispersion of Marine Air-Ground Task Force (MAGTF) combat power, support strategic deployment concepts, and meet and sustain worldwide Marine Corps commitments.

Our end-state is to develop a more relevant and affordable portfolio of combat and tactical vehicles. Through procurement, recapitalization, and service-life extension, we will provide the capacity for Marine forces to conduct irregular warfare and sustained operations ashore, and, when necessary, conduct Marine Expeditionary Force-sized forcible entry operations from the sea. The enduring challenge to the strategy is that the cost to procure and sustain new vehicles is exponentially more expensive than their predecessors.

GCTVS is evolving in four phases. Phase I supported the 2010 Program Objective Memorandum, and identified the boundaries of our strategic lift capacity and assessed the negative impact that increased armor protection is having on our ability to remain a sea-based expeditionary force. During Phase II, which supported planning for the fiscal year 2012 Program Objective Memorandum, we assessed the capacity needed to meet operational requirements. As

a result of this analysis, we will be able to reduce our overall inventory by about 10,000 vehicles across all vehicle types, resulting in savings in both procurement and long-term operations and maintenance costs.

We will continue to refine our vehicle inventory requirements as we move into Phase III as part of our reconstitution strategy to inform POM-13 planning, update our tables of equipment to reflect our reduced inventory, and plan to have the reductions fully implemented by the fourth quarter of fiscal year 2013. We will also continue to move into the engineering manufacturing and development phase of the JLTV program and examine the feasibility of a HMMWV recapitalization program to address critical performance and protection requirements in our light tactical vehicle fleet.

Subsequent to the decision to cancel the Expeditionary Fighting Vehicle (EFV) program, we broadened the strategy objectives to include a comprehensive cost-informed, systems engineering review of amphibious combat vehicle operational requirements. This ongoing review will analyze costs and requirements of water and land mobility, lethality and force protection in order to develop trade-space to drive down procurement and sustainment costs for future amphibious combat vehicles.

Phase IV of the strategy will inform POM-16, providing the fully cost-informed plan to modernize our vehicle fleet to support the Marine Corps' objective force which was developed during the Force Structure Review Group.

Amphibious Combat Vehicles

The high production and operating costs of the EFV were the principal factors leading to the recommendation to cancel the program. Based on Marine Corps cost projections, the EFV would have consumed 44-57 percent of the Marine Corps' projected procurement account during the years 2018-25; consumed 90-100 percent of funding for all ground vehicles during the years 2018-25: and consumed 91 percent of the Marine Corps' vehicle-related operations and maintenance account when fully fielded.

Following several years of theater operations, we are facing competing demands across all elements to reset war-weary equipment and to modernize capabilities. Funding identified for EFV will be used to address overall modernization and to pursue an integrated vehicle program crafted from inception to provide affordable capabilities and where possible leveraging the investment made in the EFV. We intend to balance capability with cost while mitigating the risks associated with a new vehicle program through the use of an integrated acquisition portfolio approach. This approach will initially examine three integrated efforts: a service life extension program and upgrades for a portion of the existing **Amphibious Assault Vehicles (AAV upgrade),** the development of a new **Amphibious Combat Vehicle (ACV)**, and the procurement of **Marine Personnel Carriers (MPC).** Utilizing best practices in systems engineering, cost estimating, and government/industry teaming during concept refinement and technology development, we intend to develop operationally relevant and technically achievable requirements that are affordable.

Our fiscal year 2012 budget request was based on early cost estimates for the initial development of these three vehicle programs. We have since refined our program management approach and our cost estimates, necessitating a shift in some budget categories while maintaining a zero-sum profile. This year we will begin an analysis of alternatives (AoA) of amphibious combat vehicles that will evaluate cost versus capability of several different vehicle configurations. This AoA will also consider the input we have received from industry in response to requests for information that we released earlier this year. We will also conduct a series of wargames in collaboration with the Navy to evaluate the operational impacts of closing the ship-to-shore distance from 25 nautical miles (nm) to 12 nm while also reducing the water speed of the vehicle.

In the wake of the cancellation of the EFV, we intend to pursue an aggressive and responsible acquisition timeline for new and upgraded amphibious vehicles. To meet these challenges, we will utilize a disciplined systems engineering process and sound cost analysis. Where possible, we will streamline acquisition activities to ensure capabilities and requirements are met. We look forward to working with this Committee to help meet these objectives.

Other Programs Supporting Ground Vehicles

To complement our future ground and amphibious vehicles, the Marine Corps is investing in other key support areas. For example, the Corps is leading the way to build a next generation medium-range radar called the Ground/Air Task-Oriented Radar (G/ATOR). This system will replace five radars, and will be significantly more advanced in its capabilities. It will improve threat detection and be more deployable, able to be set up in a fraction of the time compared with current systems. In addition, we are investing in the Common Aviation Command and Control System (CAC2S), an ACAT I program which will help better network our communications, radars, intelligence, and ultimately our forces. To better protect the Marine on patrol, the Corps is also planning to replace its electronic jamming equipment to counter IED threats with the next-generation, open architecture JCREW 3.3 system.

Conclusion

In order to contribute to the stability of the global system and thrive in the 21st century, amphibious forces must: ***engage forward*** to forge partnerships, prevent crises, promote diplomatic access, reassure allies and friends of our commitment, build partner capacity, and facilitate the security and stability of our allies; ***respond*** rapidly and effectively to protect national interests, contain disruptions to global stability, overcome access challenges by operating from the sea base, reinforce U.S. credibility, solidify relationships with international partners and forge new ones; and ***project*** power in order to assure access allowing us to prevail when conflict arises by rapidly transitioning from the open hand of engagement to the closed fist of power projection that can impose our nation's will and defeat our adversaries.

The sea is a vast maneuver space — one that can be used to our advantage provided we maintain the capability and capacity to conduct amphibious operations. Equally integral to overcoming access challenges from the sea is our ability to conduct a wide range of missions

ashore against various threats. The mix of ground assets we are developing will provide the best flexibility for the Nation's Expeditionary Force in Readiness.

In this age of uncertainty, the demand for adaptable forces — capable of immediately responding to crises — is certain. It is true that all things are not equally important or affordable, and thus as the nation resources its future national security, it will be forced to make tough choices between capabilities, capacities, and levels of readiness in and among the Services. Although it is impossible to know where the next flare-up will be, it is clear that well trained and equipped amphibious forces will be ready to respond and protect interests or prevent undesired effects. With the continued support of the Congress and the American people, we will ensure amphibious forces are well prepared to secure our national interests in an uncertain future. Thank you for the opportunity to be here today and we look forward to answering further questions.