STATEMENT BY

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BEFORE THE

SUBCOMMITEE ON TACTICAL AIR AND LAND FORCES
COMMITTEE ON ARMED SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES

ON COMBAT VEHICLE ACTIVE PROTECTION SYSTEMS

SECOND SESSION, 109TH CONGRESS

SEPTEMBER 21, 2006

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Chairman Weldon and distinguished members of the House Armed Services Committee, I would like to express my appreciation at this opportunity to appear before this committee to discuss the Army's continued effort to improve the force protection capabilities of our Soldiers, specifically, combat vehicle active protection systems (APS). In discussing this topic, I will attempt to address the following: the threat APS is intended to counter; types of combat systems or vehicles for which APS is planned, currently and in the future; U.S. and foreign systems under development; the LSI/Government award to Raytheon as the APS developer; and the technical and the operational challenges and risks associated with integrating and fielding APS.

The Army's priority is the well-being of Soldiers and their families—ensuring that they are the best trained, best equipped, and best led force, able to fight and win America's wars. The Army is absolutely committed to making sure our Soldiers have the best force protection capability and active protection systems available. However, it is of paramount importance that we ensure the systems we provide our Soldiers meet the current threat and are proven, tested, and validated.

The Army continues to upgrade and modernize its equipment. We will not, however, procure and field any system that is not operationally ready or safe, nor will we give our Soldiers a false sense of security. With respect to our defense contractors and their respective advertisements and reported claims, no system

is procured or fielded to the Army unless we ensure that the system is safe for Soldiers' use and is effective and survivable under operational conditions. Doing otherwise would violate the trust given to us and our fundamental commitment to providing our Soldiers with the best combat equipment possible.

Every Soldier is important and each loss of life is tragic. The Army has taken significant steps to counter the rocket-propelled grenade (RPG) threat for the past 35 years and will continue to modernize our force protection capabilities for future threats. The RPG threat to our combat systems is considerably less than what has been reported in the press. Since 2003, there were a total of 148 Soldiers killed in action (KIA) or died of wounds received in actions involving an RPG. Of the 148 killed in action, 63 were RPG only; the remaining KIAs were the result of complex attacks involving an RPG and some other kind of weapon. Additionally, of the 148 killed in action since 2003, only ten Soldiers killed in action involved current combat vehicle systems that the Army could potentially accept the integration of an active protection capability (Abrams, Bradley, Stryker, etc.). The reactive armor and slat armor protection systems currently deployed contribute to the effectiveness of our current combat systems to defeat the RPG threat without the use of an Active Protection System.

The Army has been working on threat countermeasure systems for the past 40 years. Our deployed heavy combat systems continue to be effective against RPG attacks thanks to the effectiveness of the force protection capabilities we have deployed. To date, the Army has fielded to theater 950 sets of Bradley Reactive Armor Tiles, 1097 sets of M113 Slat Armor Kits, and two brigades of

Stryker Slat Armor Kits. The first sets of Stryker Reactive Armor Tiles will be available for fielding in October 2006 and the first sets of Abrams Reactive Armor Tiles will be available for fielding to theater in June 2007. As evidenced by the low casualty rate of Soldiers using our combat systems, the current suite of force protection systems greatly contribute to the effectiveness of our deployed combat systems to defeat the RPG threat. The bottom line is that Army is continuing to enhance Soldier force protection in theater on a daily basis.

To counter future threats, the Army is embarked on a holistic approach towards survivability, including leveraging the network for improved situational awareness, reducing signature management, improving ballistic protection, modifying operational tactics, and pursuing hit avoidance. In the context of military ground combat vehicles, hit avoidance comprises technologies that enable defeat of the threat prior to its impact with the vehicle. The hit avoidance requirement for our future force is a 360-degree hemispherical "bubble" of protection to our combat platforms. Currently, the Future Combat Systems (FCS) program is developing a full-spectrum solution to counter short- and long-range threats, which include a wide range of ballistic projectiles: RPGs, mortars, antitank guided missiles, tank-KE/HEAT, top attack/precision guided missiles, and large caliber cannon.

APS is an explosive ballistic countermeasure capability that will serve as one element of the overall hit-avoidance solution. The current developmental approach is diligently working parallel paths in order to address current force system needs for defeating short-range RPG attacks, as well as FCS manned

ground vehicles (MGV) requirements for a full-spectrum hit avoidance subsystem that is robust enough to defeat the complete array of anticipated threats, including top attack. Our engineers are seeking as much commonality as possible among current and future force systems; and designs for all systems that will enable upgrades of capability into the future.

I would like to note that the APS development efforts of the Science and Technology community, PEO Ground Combat Systems (PEO GCS), and PM FCS Brigade Combat Team (BCT) are tightly aligned to ensure that we achieve these objectives: provide near-term close-in active protection to the current force, including Abrams, Bradley, and Stryker; and the deployment of full-spectrum survivability and hit avoidance capabilities for the FCS family of manned ground vehicles.

There are roughly 20 U.S. and foreign-based active protective systems under development – ranging in system and technological maturity from near-term availability to mid-term delivery to purely conceptual. These developmental systems stretch across a broad spectrum of capability and each presents a unique set of integration challenges – space, weight, power. Additionally, each system has a unique collateral damage geometry that must be minimized in order to ensure the safety of our Soldiers, non combatants and the system. The number of systems that are suitable, reliable, safe and able to be integrated in the near future into our current combat systems is a very small subset of the worldwide APS development continuum.

Contrary to recent news reports, the Lead Systems Integrator (LSI), Boeing and SAIC, and the government conducted the source selection for the subcontract award of the APS system -- not Raytheon as alluded to by the media. As a result of the Organizational Conflict of Interest (OCI) requirements set forth in the FCS System Development and Demonstration (SDD) FAR-based contract, Raytheon was not allowed to participate in the source selection process.

The general chronology of events leading up to the award begins back in September 2005, when the LSI released the Request for Proposal (RFP) to industry. Industry proposals were submitted in October 2005 and the LSI conducted the source selection evaluation between October 2005 and February 2006. In February 2006, the LSI selected Raytheon for the APS Development subcontract. The Army concurred with the contract awarded to Raytheon in March 2006. As with all contract award decisions, debriefings were conducted with unsuccessful offerors between March and April 2006, including the sponsor of the TROPHY system, General Dynamics.

I would like to reiterate that the Army provided oversight over the source selection process and stands by the ultimate subcontract award. The Army also maintains that no contract improprieties occurred during the source selection process. Raytheon had neither an unfair competitive advantage, nor did the Army "cook the books" as wrongly asserted by recent news reports.

In fact, the reference to Raytheon's participation in the Trade Study process as evidence of bias in this process underscores the misunderstanding of the

facts as they occurred. The terms of the APS subcontract required Raytheon to conduct a technical trade study. Thus, Raytheon's participation in the Trade Study was proper and consistent with the subcontract requirements. The terms of the APS contract required Raytheon to conduct an engineering Trade Study to determine the best short-range APS integrated concept that met the integration requirements for current force active protection requirements consistent with the established growth path for FCS MGVs. Thus, the Trade Study was conducted in May 2006, well after the source selection process was completed which led to the contract award to Raytheon in March 2006. Information distinguishing the source selection process from the trade study was provided both verbally and in writing to the media investigative reporter; however they did not include those facts in their broadcasts.

The Raytheon APS capability, Quick Kill, is a solution envisioned to defeat the full spectrum of threats, provide 360-degree all-aspect protection, from multiple simultaneous threats, and utilize a sophisticated vertical launch interceptor. Quick Kill, with its vertical launch and fire control capabilities, is best suited to support current force active protection ground combat system requirements and concurrently support the Future Combat Systems hit avoidance suite and full spectrum survivability requirements.

To date, no APS sub-system has been fully developed, integrated, and tested on a current combat system. This is because, generally speaking, a number of technical and operational challenges exist with developing, integrating, and fielding APS systems. For example, collateral damage against Soldiers and non-

combatants is a serious issue, especially in confined urban environments. Also, the tactics, techniques, and procedures to safe and effective employment of APS systems are immature. For example, rules of engagement always provide for self defense. However, those same rules of engagement direct our forces to limit or prevent noncombatant casualties and injuries. Employment of an APS system creates a challenge to solve these two fundamental rules simultaneously. We are seeking answers to questions of use of APS systems in urban settings with civilian crowds. We are considering the implications of employing dismounted soldiers around or near vehicles with an APS to prevent fratricide. As the materiel solutions mature, we are working the full realm of tactical considerations in parallel.

The Army considers TROPHY an engineering development model designed to protect heavy armored combat vehicles. The TROPHY system is not an operationally validated and proven system as proclaimed. The broadcasted TROPHY testing event at the Dalghren Naval Test Center did not constitute qualification or system verification testing as is typically conducted by the Army's Test and Evaluation Command. No formal Department of the Army/Department of Defense technical, live fire or operational testing or evaluation has been performed on TROPHY at the integrated system level.

Integration of the Quick Kill or Trophy will require sub-system and system integration, testing, hardware and software safety verification and qualification, user testing, and safety releases. To date, the Quick Kill system has demonstrated successful warhead, compound maneuver, radar integration and

RPG intercept tests using an advanced detection and tracking capability that incorporates precision fire-control algorithms and vertical launch interception. Currently the Army plans to provide prototypes and conduct a Limited User Test in 2010.

In conclusion, the Army is absolutely committed to providing our Soldiers with the best force protection and active protection available. However, the Army will not procure and field any system that is not proven, tested, and validated to be operationally ready and safe. To do otherwise would cause the Army to breach its implied contract with its Soldiers and families. The Army is diligently and methodically proceeding on a path to obtain the best single short-range APS for current force systems as soon as possible, while developing in parallel a common full-spectrum capable hit avoidance sub-system for FCS MGVs. All systems for both current and future systems must be robust and upgradeable. The Army finds the recent news story on our approach to procuring an APS capability biased, unfair, and truly disheartening. Our nation is at war. The Army is leading the global war and is doing everything within its means to protect this nation's invaluable treasure—our Soldiers.