

**PREPARED TESTIMONY REVIEW**

<b>1. TO:</b> CHIEF, OFFICE OF FREEDOM OF INFORMATION AND SECURITY REVIEW	<b>2. DATE</b> 29 March 2006
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The attached document is forwarded for review in accordance with paragraph D.2.a.(2), DoD Directive 5400.4.

**3. DESCRIPTION OF DOCUMENT**  
 Written testimony of Assistant Secretary of the Army Claude M. Bolton, Jr., LTG James J. Lovelace, and LTG David F. Melcher BEFORE THE TACTICAL AIR AND LAND FORCES SUBCOMMITTEE ARMED SERVICES COMMITTEE UNITED STATES HOUSE OF REPRESENTATIVES ON THE ARMY MODULAR FORCE AND THE FUTURE COMBAT SYSTEM

**4. WITNESS**  
 Assistant Secretary of the Army Claude M. Bolton, Jr., LTG James J. Lovelace, G-3, and LTG David F. Melcher, G-8

**5. COMMITTEE/SUBCOMMITTEE**  
 TACTICAL AIR AND LAND FORCES SUBCOMMITTEE ARMED SERVICES COMMITTEE UNITED STATES HOUSE OF REPRESENTATIVES

**6. HEARING DATE AND SUBJECT**  
 4 APRIL 2006, THE ARMY MODULAR FORCE AND THE FUTURE COMBAT SYSTEM

<b>7. PAGE COUNT</b> 12	<b>8. THIS DOCUMENT IS FOR</b> ( <i>X applicable term</i> ) <input type="checkbox"/> CLASSIFIED <input checked="" type="checkbox"/> UNCLASSIFIED PRESENTATION
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**9. PRIOR COORDINATION**

a. NAME ( <i>Last, First, Middle Initial</i> ) Vollemecke, LTC(P) Kirk/Carter, Lopez, LTC	b. AGENCY ASA(ALT), also G-3	c. TELEPHONE ( <i>Include Area Code</i> ) 703-614-8406
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**10. UPON COMPLETION NOTIFY**

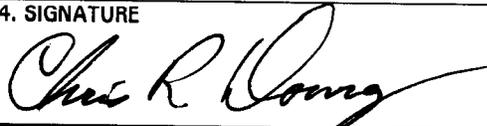
a. NAME ( <i>Last, First, Middle Initial</i> ) Downey, Chris R. LTC(P)	b. AGENCY G-8, Initiatives Group	c. TELEPHONE ( <i>Include Area Code</i> ) 703-695-7406
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**11. DIRECT QUESTIONS TO**

a. NAME ( <i>Last, First, Middle Initial</i> ) Downey, Chris R. LTC(P)	b. AGENCY G-8, Initiatives Group	c. TELEPHONE ( <i>Include Area Code</i> ) 703-695-7406
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**12. REQUEST CLEARANCE NO LATER THAN** (*YYYYMMDD*)  
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The attached material has department/agency approval for the purpose specified. Any portions requiring security protection have been appropriately marked.

<b>13. ATTACHMENT</b> Written Statement	<b>14. SIGNATURE</b> 
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**STATEMENT BY**

**THE HONORABLE CLAUDE M. BOLTON, JR.  
ASSISTANT SECRETARY OF THE ARMY  
(ACQUISITION, LOGISTICS AND TECHNOLOGY)**

**LIEUTENANT GENERAL JAMES J. LOVELACE, JR.  
DEPUTY CHIEF OF STAFF, G3, UNITED STATES ARMY**

**LIEUTENANT GENERAL DAVID F. MELCHER  
DEPUTY CHIEF OF STAFF, G8, UNITED STATES ARMY**

**BEFORE THE**

**TACTICAL AIR AND LAND FORCES SUBCOMMITTEE  
ARMED SERVICES COMMITTEE  
UNITED STATES HOUSE OF REPRESENTATIVES**

**ON THE ARMY MODULAR FORCE AND THE FUTURE COMBAT SYSTEM**

**SECOND SESSION, 109<sup>TH</sup> CONGRESS**

**APRIL 4<sup>TH</sup>, 2005**

NOT FOR PUBLICATION  
UNTIL RELEASED BY THE  
COMMITTEE ON ARMED SERVICES

SAPA-OSR  
DATE: MAR 29 2006  
INITIALS: *fm*

Chairman Weldon, Ranking Member Abercrombie, and distinguished members of the Committee, on behalf of our Army leadership, our Soldiers, and all those who strive to keep this Nation safe, thank you for all you have done and continue to do to raise and support the Army that defends America as part of the joint and interagency team. We appreciate the opportunity to come before you and explain the unified transformational effort we are pursuing through the Army modular force initiative and the Future Combat System (FCS) program. With due diligence, the Army is striking a better modernization balance between current and future needs in a shorter time span. Given today's wartime imperative, the Army cannot afford transformational change and modernization over multiple decades.

We meet today at a crossroads where the direction of this Nation's future military readiness will be determined. It is not just about the Army budget or an isolated Army program. The outcome of this debate will determine America's ability to prosecute land warfare in the information age. We believe that the FCS is critical to that capability. Modernization, however we do it, comes at some cost. The Army does not casually accept or vitiate that cost on the presumption that the consequences of our decisions lie beyond the horizon. We know that our own children will bear the cost of any failure on our part to modernize effectively. That is why the Army leadership has implemented a plan to rapidly, yet methodically and efficiently transform the Army in a way that provides for our constant readiness to meet the Nation's security challenges. The FCS program is the materiel centerpiece of the Army's future modular force and fits within that plan as the Army's principal materiel modernization program. It leverages the full benefit of the ongoing reorganization into modular brigade combat teams and support brigades. Our testimony today will explain how our FCS program and its approved evolutionary acquisition strategy are fundamentally sound and continue to remain on schedule and within budget. Our testimony will also explain the inter-relationship between the modular force initiative and FCS as two key efforts in transforming the Army.

The FCS program and the modular force initiative are indispensable aspects of far reaching changes throughout the Army today. These changes consist of materiel modernization (FCS), organizational modernization (the Army modular force initiative),

and cultural change (the commitment to fielding whole, fully manned, equipped, and resourced units). Our cultural change is most clearly demonstrated in the Army force generation model for mobilization and readiness, and our move toward cyclical resourcing instead of tiered resourcing. This commitment to field fully resourced units applies across all components—Regular Army, Army National Guard, and Army Reserve. The Army is building a rotational pool of 70 brigade combat teams (BCTs) and over 200 support brigades, across the three components. Up to 19 of these BCTs, with support elements, will be ready to respond immediately to contingencies, with a surge capability to employ more BCTs as needed. The Army will no longer “hollow out” units in order to maintain the appearance of a particular force structure. Our volunteer Soldiers deserve fully resourced and capable formations.

In 2003 we began to change these formations away from a division-centric, mission specific model to brigade-centric, full spectrum, modular formations with common designs for Regular and Reserve Component units. These highly tailorable, common designs are critical to realizing the full capabilities of the FCS. Army modular forces, without the FCS, would not have the situational awareness and joint interoperability so critical to effectiveness on today’s battlefield. FCS-equipped forces in a ponderous division-centric organization would not have the flexibility and employability so critical for full spectrum operations in today’s strategic environment. The FCS Brigade Combat Team (BCT) will provide the Joint Force with networked, modular warfighting capability consistent with an evolving vision of future land combat.

The Army believes so firmly in the concept of brigade-centric, modular organization that we have already converted 54 brigade-sized units to the new modular configuration. In this fiscal year alone, we are converting an additional 47 brigade-sized units. With nearly half the force converted to the new design, the coming fiscal year of 2007 will be a pivotal year for the Army. The resources provided to the Army will enable the Army to conduct operations while it transforms the force and adjusts its overseas posture. We are, in fact, at a point of no return with respect to modularity. We must go forward to a more effective force, ready to face the future, but we can’t go back. If transformation stalls in the next two years, we will be left with a patchwork force of disparate designs and levels of capability. The campaigns we prepare for today will be

fought by Combatant Commanders, some of whom may be leading modular brigades and battalions in combat as we speak. We owe them, and the Nation, a truly campaign quality force.

The attacks of September 11, 2001, the subsequent Afghanistan and Iraqi campaigns, and the National Security Strategy, have clearly indicated the need for capabilities like those envisioned for the FCS (BCT) program. The FCS (BCT) program remains at the heart of the Army's strategy to mitigate risk using the current to future force construct. At the same time, the Army is accelerating selected technologies to reduce operational risk by improving the current modular force's survivability, intelligence, surveillance and reconnaissance, and joint interdependence. The FCS (BCT) program is a complex undertaking. Because of its scope and complexity, the FCS (BCT) program is routinely reviewed, examined, and audited, and not all agree with its current acquisition strategy and approach. The Government Accountability Office (GAO) is one that has expressed concerns about the FCS program—its strategy, progress, and affordability. The recently released GAO annual report 06-367, *Improved Business Case Is Needed for Future Combat System's Successful Outcome*, is critical and believes the FCS program has not presented a "sound business case" to the Department of Defense (DOD). The report expresses concerns over stability in requirements, maturation of critical technologies, soundness of the current acquisition strategy, and the reasonableness and affordability of the program.

From the Army's perspective, and contrary to GAO opinion, the 2004 restructured FCS program is fundamentally sound. Its evolutionary path is in concert with DOD acquisition policy and best practices. The FCS continues to keep pace with its performance objectives and baseline. The currently approved acquisition program baseline is attainable; risks are manageable; and progress is steady and proceeding as planned. 2006 is a critical execution year for the program. FCS is moving forward in completing all of the platform-based system functional reviews and transitioning into design and prototypical development activities this year. Extensive software and hardware deliveries are planned and major field experiments are scheduled in the April 2006 Joint Expeditionary Force Exercise (JEFX-06), and Experiment 1.1 in the fall of 2006. In addition, the program will have its Interim Preliminary Design Review (IPDR) in

August 2006. The Non-Line of Sight Cannon (NLOS-C) continues to move ahead as the lead development vehicle for Manned Ground Vehicles. Additionally, the program is leaning forward in preparation for its Defense Acquisition Board (DAB) in-progress review scheduled for May 2006.

The FCS program is a complex undertaking that has a deliberately planned and executable evolutionary strategy. Requirements have not changed significantly since the original Operational Requirements Document was approved by the Joint Requirements Oversight Counsel in 2003. In fact, the Army has traded some unrealistic requirements to keep System Development and Demonstration (SDD) on schedule. Platform or system level requirements are planned and will be stable prior to the program's IPDR, which matches the program's master schedule and execution plan. The FCS program has deliberately structured and resourced a time-phased technology maturation approach for certain technologies consistent with DOD acquisition policy. The program planned for the integration of these technologies during SDD specifically for the purpose of properly and successfully fielding a revolutionary, networked System of Systems. Risk associated with the maturation of technologies was one of the contributing factors in the Army's decision to restructure the FCS (BCT) program in 2004 and extend development by four years. The current program plan significantly reduced the degree of concurrency and risk previously noted by GAO and other critics.

There is a fundamental disagreement between GAO and DOD on technology maturation. The Department of Defense's acquisition policy allows a lower Technology Readiness Level as the technology maturity level for program start, or Milestone B, than from what GAO recommends. GAO's higher benchmark is based on commercial market practices, not the Defense Department's operating conditions. Even still, the common denominator for success ultimately depends heavily upon the maturity of technology. The key is to find the right level of acceptable risk and point of transition to properly leverage a time-phased approach. The 2004 restructure program, which was approved by the Defense Department in November 2004, is intended to do that. While this technology maturation approach presents some risk, the overarching benefit is that we can develop and produce a more advanced product, faster and at lower cost. Although this requires close oversight and detailed risk mitigation and management, we

believe the success of this FCS strategy will eventually become a major highlight and success for DOD. To date, all of the critical technologies are on schedule to be mature enough by PDR in August 2008. The FCS (BCT) program has worked hard and continues to do so to preserve the phased approach for integrating mature technologies to support the development of the common network and integrated platforms.

In the GAO report mentioned earlier, it estimates a higher total cost for the FCS program and cites unacceptable cost growth. We believe GAO's estimates are not accurate because they conflate the costs of other programs with FCS and do not accurately account for the restructuring of the program and costs over time. The GAO estimates the total cost of FCS at \$200 billion. This estimate conflates the FCS cost with costs for complementary programs not in the core program's baseline. Including the complementary program costs in the cost estimate for FCS is an inaccurate depiction of the total required investment for FCS. The total estimated cost for the FCS program in escalated dollars is \$160 billion (then year dollars); however, cost estimates are typically accounted for in Constant Year dollars, which are non-inflationary, adjusted. The overall cost of the FCS program has risen from \$78 billion to \$120 billion (Fiscal Year 2003 Constant dollars), but very little of the growth has been a result of increased contractor cost. Instead, most of the cost growth is directly attributable the 2004 restructure decision to bring back five deferred systems, extend the development schedule by four years, and accelerate the delivery of selected FCS capabilities to the current force (referred to as spin outs). The deferred systems added back were the Maintenance and Recovery Vehicle, two classes (II/III) of Unmanned Aerial Vehicles (UAVs), the Armed Robotic Vehicles, and the Intelligent Munitions Systems.

The FCS acquisition strategy is designed to support this need. The program has regular and frequent reviews, in addition to the milestone reviews called for by DOD acquisition policy. The program has been restructured to spin out mature FCS capabilities to the current force, with each spin out having decision points consistent with DOD acquisition policy. The frequent reviews of the FCS program, by the Defense Acquisition Board and the Joint Requirements Oversight Council offers opportunities to inform and alter the Department's acquisition and budget decisions, prioritize program efforts, and preserve the Government's ability to adjust course as indicated by

reductions in funding, changes in performance parameters and maturation of technologies.

The Army is executing a holistic and unified approach to make the complexity of the FCS program manageable. The Army's Lead Systems Integrator (LSI) management approach is not unsound. In fact, the opposite is true. The Army's LSI management approach was devised to tackle today's program complexity and integration challenges. A better management approach was needed than having the Government operate as the Integrator and attempting to manage 24 independent prime contracts from a horizontal integration and interoperability standpoint. The Army's LSI approach maximizes the use of a single integrated system of systems design process across the functions of the Brigade Combat Team to promote effective and efficient horizontal integration. Adopting the LSI model puts the Army on the leading edge of best business practices. More importantly, using an LSI is a design imperative if you want to be successful in creating a joint networked force. Commonality in design and development makes complexity manageable. The Army's LSI approach does not favor any particular technology or platform. It enables trades of risk, cost and capability, and it opens competition at multiple work levels, giving small and large companies equal opportunity to compete. In doing so, it encourages, indeed demands, best of industry solutions and innovation.

In executing the FCS-equipped BCT program, the Army has complete control of overall program management and development efforts while using a LSI to assist the Army in managing the system of systems integration. As stated earlier, the LSI is not a substitute for the Government Program Office but rather a focal point. It does not abrogate the role and duties of the Government Program Office and Defense Department's acquisition oversight. The LSI does, at the Government's direction, perform some individual developmental activities—the System of Systems Common Operating Environment and the Warfighter Machine Interface. However, Organizational Conflict of Interest provisions in the Federal Acquisition Regulation contract prohibit Boeing or SAIC from competing for any future competitive SDD work at any level.

We believe that FCS is a fundamentally sound program and has the right strategy in place to move the Army into the next era of land warfare. If Congress were to cancel FCS, the Army would then have to recapitalize and upgrade the systems associated with 15 BCTs that would otherwise have been replaced with FCS. This would require recapitalizing and upgrading approximately 1,050 M1 Tanks, 2,100 Bradley Fighting Vehicles, 270 M109A6 Paladins, 1,530 M113-type armored vehicles, and 450 M88 Recovery Vehicles at a cost of \$15.6 billion. Canceling FCS would deny critical capabilities to all BCTs in the force, because even those that are not scheduled to receive the FCS manned ground systems would have received selected FCS capabilities essential to fighting interdependently as part of the joint team. Canceling FCS would leave the Army without a combat vehicle modernization program, resulting in the Army skipping another generation of modernization, and retaining a combat force consisting of many vehicles first introduced in 1960—the year in which many of our present day colonels were born.

Some would suggest that the Army should forego materiel modernization at this time because it compromises the ability to provide adequately for the current force. In fact, the Army has adjusted its ongoing transformation plans and associated funding to appropriately meet both current and future requirements. Adjustments include aggressive equipping initiatives to accelerate the fielding of promising technologies to provide equipment for forces deployed in the operational environment in Iraq and Afghanistan. Examples include upgrades and armoring for tactical wheeled vehicles, better small arms, body armor, and aviation protective measures, to cite a few.

The Army's current tactical wheeled vehicle (TWV) fleet consists of a total of over 231,000 tactical wheeled vehicles and trailers whose average age is 17.5 years. These systems are playing key roles in Iraq and Afghanistan but are stressed by high operational tempo. A modernization plan has been developed for each category of the TWV fleet. This modernization plan considers the Future Tactical Truck Systems Advanced Concept Technology Demonstration (FTTS ACTD), and the impact of the Army's investment strategy with regard to modularity requirements. The TWV strategy has been developed with Marine Corps and other Service input. The overall intent of

having joint service coordination is to improve requirements and program convergence. The Services meet regularly to identify, develop, review, and resolve TWV issues.

Small arms modernization has two parts. The first part is the development and fielding of a superior light machine gun. The Army is also considering fielding a personal defense weapon that includes a sub-compact weapon with more capability than a pistol, but less cumbersome than a rifle. The second part is the refining of analysis into requirements for future kinds of weapons. The Army continues to invest in proven small-arms weapon systems.

We continue to bolster the protection afforded to our Soldiers. This includes enhancing the protection levels of tactical wheeled vehicles against small arms, many types of mines, and various types of improvised explosive devices (IEDs). The Army met the theater commander's armored HMMWV requirements in July 2005. In May 2003, units deployed with 235 up-armored HMMWVs. Industry produced 450 up-armored HMMWVs in October 2004. Production increased to 630 per month in November 2005. The United States Central Command currently has over 11,000 up-armored HMMWVs in its area of responsibility.

Another system with integrated armor protection is the Armored Security Vehicle, or ASV. The ASV represents an Army program that had been cancelled, but has been reinstated in order to provide a versatile platform for tactical commanders in both local patrolling and protecting road convoys. The ASV protects Soldiers from machinegun fire, mortar rounds, artillery shells, and IEDs. Current production is increasing and is scheduled to reach 36 ASVs per month by May 2006, with the capacity for further production of up to 48 ASVs per month by August 2006. A total of 1,118 ASVs are funded, with funding for 50 additional ASVs requested in the fiscal year 2006 supplemental.

The Army's Interceptor Body Armor (IBA) is the best military body armor in the world and every Soldier in harm's way has a complete set. Since April 2004, Central Command reported sufficient Body Armor for every Soldier and DOD civilian deployed in Operation Iraqi Freedom and Operation Enduring Freedom (in Afghanistan). IBA improvements fielded to theater include over 200,000 sets of Enhanced Small Arms Protective Inserts, over 176,200 sets of Deltoid Axillary Protection (DAP), which

provides increased protection to the shoulder and armpit regions of the body and the latest improvement of side body armor currently being fielded to theater. IBA saves lives every day. To date, the Army has fielded over 785,000 sets of body armor worldwide. The Army plans to buy a total of 966,000 sets of IBA, 230,000 sets of DAP and 230,000 sets of Ballistic Side Plates.

The Army has also made the procurement of aircraft survivability equipment (ASE) a top priority. At the request of the theater commander, and again, with the support of Congress and industry, the Army is providing aircrews with enhanced protection from infrared, shoulder-fired missile systems, radio frequency missile systems, and laser-guided missiles. Army aircraft are given various ASE consisting of detectors, jammers, and other countermeasures. All aircraft deployed to Iraq and Afghanistan are equipped with the best available ASE system for that aircraft type, design, and series.

The Army uses unmanned aircraft systems (UAS), as an effective means of seeing the enemy first and preempting many attacks. The Army has three UAS Programs of Record designed to support the modular force company, brigade, and division: small UAS (Raven), tactical UAS (Shadow), and the extended range/multipurpose UAS (Warrior). Two of these systems, the Raven and Shadow, have been fielded to the fighting force. Today we have fielded 34 Shadow UAS (136 air vehicles) with 14 of these systems deployed in Afghanistan and Iraq. Shadow UAS have flown 15,813 sorties or 67,379 hours in support of Iraq as of 10 March. Given a fully funded supplemental request in fiscal year 2006, the Army will be able to field Shadow UAS to every active component and Army National Guard BCT by fiscal year 2011. We have fielded 376 Raven systems (1128 air vehicles) with over three hundred currently in operations in Iraq and Afghanistan. Raven UAS have flown 15,509 sorties or 18,894 hours in support of Iraq as of 10 March. The Army is currently conducting system design and development for the competitively selected Warrior UAS that will meet the Army's extended range multi-purpose UAS requirement.

The Army and Air Force are working together to establish a collaborative UAS program to achieve lower costs, improved logistics while developing complementary tactics and training for the Warrior and Predator fleets. The Army also operates Hunter

and IGNAT. The Hunter program, though cancelled, provides support to the three Army Corps. There is currently one Hunter UAS in Iraq. To date, Hunter UAS has flown 2,091 sorties or 13,288 hours. The IGNAT has been provided through Congressional adds in fiscal year 2005 and fiscal year 2006 and supports the corps and other warfighters in Iraq. These systems will be replaced as Warrior becomes available. The Future Combat System (FCS) Family of UAS will incorporate sensor and payload technologies and expand capabilities developed for the current UAS systems.

The Army fielded an initial Joint and Combined Arms Counter Rocket Artillery Mortar (C-RAM) early warning and mortar/rocket intercept capability in less than 11 months from receiving Theater's operational requirement. While continuing to refine and improve this capability, Army plans include fielding integrated C-RAM early warning capability to more theater locations.

In November 2002, the Army began fielding Soldiers and units new or additional mission-essential equipment through the Rapid Fielding Initiative (RFI) program in support of Global War on Terrorism operations. RFI leverages current programs and commercial-off-the-shelf technology to provide Soldiers and small units with items of equipment such as squad communications gear and building entry devices to enhance their combat effectiveness and survivability. Through February 28, 2006, we have equipped 54 BCT equivalent sized units and more than 560,000 Army National Guard, Army Reserve, and Regular Army Soldiers through RFI. Current plans for Fiscal Year 2006 call for equipping over 272,000 Soldiers, with plans to equip the entire operating Army of 797,000 Soldiers by the end of September 2007. Another 160,000 sets of Soldier equipment is earmarked for the training base and other missions.

On January 18, 2006, the Deputy Secretary of Defense, Gordon England, reestablished the Joint IED Defeat Task Force as a permanent jointly-manned OSD activity, designating it the Joint IED Defeat Organization (JIEDDO). This reorganization enlarges the JIEDDO from a 174-person task force, led by a brigadier general, to a 365-person, permanent organization led by a retired four-star general, General (Retired) Montgomery C. Meigs. He reports directly to the Deputy Secretary of Defense and the Vice Chairman of the Joint Chiefs of Staff. Congress through DOD has applied significant resources to this task. Fiscal year 2006 funding already made available to

the JIEDDO by Congressional supplemental appropriations is over \$1.4 billion. Of this amount, JIEDDO has used over \$1 billion and is prepared to use the balance for approved initiatives. A second supplemental appropriation bill is pending in Congress with an additional \$1.9 billion for the JIEDDO. The total fiscal year 2006 JIEDDO budget is \$3.3 billion. JIEDDO currently has projects planned for all available dollars over the remainder of fiscal year 2006. The JIEDDO's efforts have forced the enemy to constantly adapt and change his tactics. The comprehensive capabilities fielded to date have driven casualties per IED emplacement down by 37 percent over the past 12 months.

Mr. Chairman, we believe the record shows unequivocally that the Army is aggressively transforming to meet future threats in the most responsible manner possible and the FCS program is proceeding under a sound and executable acquisition strategy. Modularity and FCS must move forward. The present force served us well, and we must all be grateful to those visionaries who built a force that won the Cold War and carried us to the dawn of this new era. But those systems have reached the twilight of their usefulness. Even if they were not wearing out, they cannot protect Soldiers as well as they once did, and they cannot deploy responsively from strategic distances to rapidly close with an illusive enemy. The Future Combat System comes at some cost. Can we count the cost of failure in war, or the price of a Soldier's life? We have a balanced approach to transformation that ensures our Soldiers and their Combatant Commanders receive the best possible support and capabilities as soon as we can provide them now and in the future. We can only do so because of the excellent support we enjoy from this committee and the Congress. Thank you Mr. Chairman for this hearing opportunity and we look forward to answering your questions.