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The United States Army's strategic transformation program is correctly structured to prepare the Army to defeat future threats while simultaneously engaging terrorist forces in counter-insurgency campaigns on two fronts. Force modernization is a major component of this transformation program. It allows the United States to remain the most strategically dominant country in the world.

In 1999 the Army began its largest transformation in almost 40 years by using three modernization tenets that support transformation and the ability to conduct combat operations (The Official Homepage of the United States Army Web site, 2007). The first tenet looks toward the Objective Force. Science and technology will allow the fielding of new equipment. This new equipment focal point is on Future Combat Systems. The second tenet requires the Army to transform in order to supply the Interim Force with the materials that it needs today. The third tenet focuses on the Legacy Force. Modernization, digitization, and recapitalization will maintain and improve its capability to remain superior in countering today's threats. Modernization is the introduction of new equipment that has advanced capabilities. Recapitalization is the overhaul of old equipment that brings it back to a new-like status or adds to its warfighting capability. Recapitalization can take any of three different approaches. It can rebuild the equipment, conduct an upgrade, or simply maintain (Army Knowledge Online Web site, n.d.). These three tenets allow the United States to fight threats today with a Legacy Force that is slowly becoming more technologically advanced. The Interim Force adds a maneuver and engagement capability that adds to battlefield dominance due to its utilization of new vehicles like the Stryker. The Stryker has maximized the efforts of transformation by incorporating newfound advances resulting in situational awareness systems, and increased

speed, survivability, and reliability. The Legacy and Interim Forces safeguard the United States while the Objective Force will ensure the United States will remain the world's dominant force in the future.

The three modernization tenets answer how the Army will transform. It does not answer the question of "why now"? The major systems within the Legacy Force are already at their half-life. This means that this equipment has already depleted over half of its expected service life. Some equipment moved beyond their half-life band this year and about 60% of the Army's Legacy Force will arrive at or move beyond its service life by 2017. The Army strives to maintain its fleet age at or underneath a systems half-life. This is its measure of success. The raising cost of maintaining this aging equipment also plays a pivotal role as it gets older (Google Web site, 2000). The Army could continue to maintain, rebuild, and upgrade but it has chosen a better and more enduring approach. The Objective Force and its Future Combat Systems are the solution to the problem.

Future Combat Systems are the foundation of tomorrow's Army. Unlike the Stryker, with its ten different versions built upon the same platform, Future Combat Systems are an interconnected family of systems linked by a network. Future Combat Systems are comprised of 14 individual systems, a network, and the Soldier and is known as the 14+1+1 Family of Systems because of its structure (The Official Homepage of the United States Army Web site, 2007).

The Soldier is the most important element within the FCS. The Soldier's ability to connect to the network will allow them to utilize 6 of the 14 individual systems. This will greatly expand his or her situational awareness, making them more lethal while increasing their

survivability across any number of full spectrum operations (The Official Homepage of the United States Army Web site, 2007).

The FCS network will enable the “Family-of-Systems to operate as a cohesive system-of-systems where the whole of its capabilities is greater than the sum of its parts” (The Official Homepage of the United States Army Web site, 2007, ¶ 1). The FSC network will consist of networks already in operation along with ones under development now and networks that will come in the future. The network is the key feature in the Army’s transformation. This connectivity will enhance the ability to fight as a Joint team as never before (The Official Homepage of the United States Army Web site, 2007).

The 14 individual systems comprise several different areas. The largest area consists of eight different FCS manned ground vehicles. These include the Infantry Carrier Vehicle, Mounted Combat System, Non-Line-of-Sight Cannon, Non-Line-of-Sight Mortar, Reconnaissance and Surveillance Vehicle, Command and Control Vehicle, Medical Vehicle-Treatment and Evacuation, and the Recovery and Maintenance Vehicle. Two of the remaining six systems are the Class I and Class IV Unmanned Aerial Vehicles. The Small Unmanned Ground Vehicle, Unattended Ground Sensors, Multifunctional Utility/Logistics and Equipment, and the Non-Line-of-Sight – Launch System completes the arsenal (The Official Homepage of the United States Army, 2007).

The FCS will enter the operational Army in three phases or Spin Outs. This will allow the rapid fielding of systems as they become available. Spin Out 1 is undergoing its initial testing already. Spin Out 2 will begin testing in FY 2010 and Spin Out 3 in FY 2012. The goal is for the 14+1+1 Family-of-Systems to be completely fielded in one Brigade Combat Team by 2015 (The Official Homepage of the United States Army, 2007). As the FCS and the Objective

Force grow, both the Legacy and Interim Forces can streamline into it. This is the Army's vision - An Objective Force that is "responsive, deployable, agile, versatile, lethal, survivable, and sustainable" (Google Web site, 2000, p. 4).

The FCS program has drawn some criticism. The majority of this criticism is not related to the \$164 billion price tag for the project but about the FCS ability to defeat the current threat. Some argue that only heavy armor can counter improvise explosive devices that litter many roads today in Iraq and undoubtedly will present a major threat in future conflicts. Their viewpoint is if 70 ton tanks sometimes have difficulty surviving a blast then a 20 or 25 ton vehicle does not stand a chance. The solution to the IED problem is to pile on more armor according to critics like Craig Arndt of Ideal Innovations, a company that supplies add on armor to the Army (Axe, 2007). Another point of disagreement centers on the Soldier. Rep. Joe Sestak has hinted that some Soldiers lack the mental capacity to make FCS truly effective. Rep. Sestak's theme portrays a picture of superior military equipment that is wasted because Soldiers do not process the intellect required to operate the FCS to its full potential (United States House of Representatives House Armed Services Committee Audio Transcript Web site, 2007).

Major General Charles Cartwright, the FCS chief, strongly disagrees. He says "The military can't win the armor race against increasingly powerful bombs so it must find other ways to address threats" (Axe, 2007, ¶ 8). These other ways are the introduction of the Future Combat Systems. Instead of hitting IED's with heavier and heavier armor, let's use modern technology and find the threat, and defeat it, before we roll over it. The second point of concernment is somewhat easier to grasp. Enlistments recently have included a larger number of individuals who are not high school graduates (United States House of Representatives House Armed Services Committee Audio Transcript Web site, 2007). This does not mean that they are

uneducated. All of these individuals have at least earned a General Education Diploma.

Granted, this is not as good as a high school diploma, but certainly does not mean that they are unable to master state-of-the-art weapon systems.

The FCS as the core of the Objective Force is a very viable solution for the United States' desire to achieve and maintain full spectrum dominance. It will allow all seven characteristics – responsiveness, deployability, agility, versatility, lethality, survivability, and sustainability – of modern warfare to be available in one package. The Legacy and the Interim Forces are unable to bring these tenets, in their entirety, to the battlefield. Only the FCS can do this.

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