

# Training Transformation to Future Combat Systems (FCS)

by Clyde T. Wilson

As an integral part of the U.S. Army, Armor and Cavalry are transforming to meet the realities of the post-Cold War era. At the end of World War II, Germany and Japan did not have a problem producing aircraft, however, they could not produce trained and experienced pilots. The Army will face the same dilemma with the FCS unless it develops and institutes a personnel acquisition and training strategy to support the Objective Force. The research and development for the Objective Force is proceeding with an emphasis on organization and equipment. The trend toward flatter organization, joint integration at a low level, automating traditional human functions, and increasing task load raises significant training issues for the U.S. Army Training and Doctrine Command (TRADOC) as the Army transitions to the Objective Force.

The current digitization effort in the Army is only the first wave. The Army has applied signal and computer technology to automate its command and control processes. This has not changed the fundamental way we prosecute direct fire combat, but it allows us to speed up the decision cycle and share knowledge among the force.

The second wave of digitization will be quite different. This wave will change the way we fight at the basic level, and require us to take a fundamental look at how we train. Current tank design balances survivability, mobility, and firepower. Technology has changed tank engagements dramatically during the past 20 years. The technology advances that have taken us from infrared/white light searchlight/mechanical range finders to thermal sights/digital range finders is a trend that will continue. In the future, firepower advances (smart/brilliant munitions) and information technology will decrease the requirement for armor protection. Digital networking will provide direct links from a variety of sensors to the shooter, placing new skill and tasks requirements on soldiers. In the future, our leaders will have to have as much skill at reading digital displays as they do reading a topographic map. Brilliant antitank, X-band, and side-looking radar will be as

much part of the frontline warfighter lexicon as dual-purpose improved conventional munitions, SABOT, and final protection fires are today.

Today's basic course student will serve in first-wave units and command second-wave battalions. The fundamentals of digital warfighting need to be incorporated into current Armor School courses — not the operator/machine specific detail, but the current theory and future trends of our developing Army. Just as



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it is important for a company commander to understand the fire support system that supports him to adequately plan an operation, future commanders must have an understanding of the sensors and array of precision weapons that will support them.

FCS soldiers will have the reconnaissance skills of a scout, coupled with the target engagement skills of a fire support element in a complex joint environment.

Personnel acquisition and training the Objective Force may require a fundamentally different approach from the current Armor branch model because additional tasks will be placed on Armor soldiers. The Special Forces branch may provide insight.

Special Forces rely on the general Army population as a recruiting pool. Personnel with airborne or ranger training are prime candidates. This reflects not only the skill required of Special Forces soldiers, but conveys the requirement for experience, maturity, and demonstrated performance.

Selection for service in an FCS organization will require a detailed screening process. The issue is defining the entry requirements. The Army would not waste resources sending officers to flight school if they are colorblind. The selection for FCS cannot be one of drawing the line based on available personnel resources, but by setting a minimum standard. The selection process should include a significant emotional event, such as hell week during SEAL training, where candidates are tested for physical stamina, intelligence, motivation, dedication, and aptitude prior to expending expensive training resources.

A large portion of FCS training will necessarily be conducted in simulation. The nature of joint, network centric warfare makes live fire training, at any level, resource restrictive. Live fire gunnery for the Objective Force, using joint precision weapons, will have a much greater cost than current tank gunnery. Conduct of fire trainers (COFT) will have to be developed to train crews on full-spectrum engagements that they will be required to conduct. Virtual and constructive training support packages will be required to train collective skills. All of this is additive to the live training that will include tactical skills, self-protection, leadership, battlefield stress management, and survival, evasion, resistance, and escape. The requirements

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for an FCS training area will require both a fixed tactical internet and a higher simulation architecture that allows the simulated employment of precision non-line-of-sight weapons. The institutional training strategy will have to produce soldiers, leaders, and staff officers capable of operating in a joint environment when they report to the unit.

TRADOC is adept at developing traditional training products such as soldier training publications, mission training plans, and programs of instruction. Field commanders take these products and apply mission essential task lists to develop tailored training programs. TRADOC uses a similar process and a common training scenario to focus institutional training. For example, the Fulda Gap scenario was not as much about fighting in the Fulda Gap as it was about providing a model for fighting a significant modern armored threat on short notice in a mature theater. U.S. forces were forward deployed with little or no asymmetric threat. At a strategic level, the intent was to deter attack and if attacked, successfully defend while being prepared to escalate to tactical nuclear or strategic nuclear warfare. During the Cold War, the Army trained other scenarios, but the Fulda Gap scenario represented the clear priority for training the heavy force. The National Training Center and professional development courses used the Fulda Gap template adapted to local terrain to train. The Gulf War, in many

ways, conformed to the Fulda Gap scenario.

The nation now faces a new reality embodied in the Caspian Sea scenario. The Caspian Sea scenario is not about fighting in the Caspian Sea area, but is all about the next most dangerous situation U.S. forces are likely to face. In many ways, it follows the 1950-53 Korean War scenario. Country A (South Korea) is attacked by Country B (North Korea). The U.S. comes to the assistance of Country A. The thrust of the scenario is how does the U.S. enter the battle area and build-up sufficient forces to achieve its national goals. The scenario is further complicated by Country C (China), which threatens to enter the conflict, especially during the build-up phase when the U.S. is most vulnerable.

The Korean scenario provides national decisionmakers with significant geopolitical issues. The situation becomes more complicated when adding an asymmetric threat like we saw during Vietnam. The Caspian Sea scenario is about getting credible force into the area of operations and deterring aggression by Country C. In the scenario, the arrival of U.S. heavy forces represents end-game. At this point, we dominate the battlefield. After heavy forces arrive in the area, they must be prepared to conduct combat operations against the heavy threat presented by Country C while providing self-protection against

an asymmetric threat that specifically targets U.S. vulnerabilities.

TRADOC should produce a detailed training scenario that clearly illustrates the missions, roles, and functions of the organizations that TRADOC is responsible for training. This will allow training centers and schools to gear training toward specific unit responsibilities within the scenario. Early entry forces, such as an Airborne brigade or an Interim Brigade Combat Team, focus on the beginning of the scenario, while heavy forces focus on the latter portion of the scenario.

The transition to the Objective Force requires a deliberate front-end analysis that will define the doctrine, training, and personnel acquisition implications for the Army. This analysis, in conjunction with force-development efforts, is critical for focusing resources and accelerating the U.S. Army's transition.

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