

# ARMY TRANSFORMATION – THE INFANTRY PERSPECTIVE

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As leaders and Soldiers pass through the Infantry School, we try to capture as much information as we impart. A common concern seems to be the uncertainty of change associated with Army Transformation. Therefore, we want to explain the path ahead as we, collectively, reshape the Army.

By now, every leader has heard or read the vision statement of Chief of Staff of the Army General Eric K. Shinseki announcing Army Transformation in October 1999. We had won the cold war, the Russian Bear was gone, and it was time for our Soldiers to move on and prepare to defend against enemies on the battlefields of the future. General Shinseki presented a vivid picture of future conflict and challenged us to design a force that would make the transition from the current structure through an interim phase to a new objective force – a force that would dominate the full spectrum of conflict in the future. Sometimes, in our effort to maintain the pace of change, we may not remind our leaders often or forcefully enough that our first task is to maintain our non-negotiable contract to fight and win our nation's wars. We must be trained and ready at all times to execute operational requirements in support of National Military Strategy and CINC requirements. Our Army has shed its Cold War structure and equipment, and it has embarked on the Army Transformation strategy to turn the CSA's vision into reality.

Our Army will have to rely on our Legacy – or Current, as we like to think of them – forces for many years to come. It will be at least 2010 before we have procured enough of the Objective Force to begin fighting it as a unit and 2031 before we have transformed the entire Army to *this* Objective Force.

As a refresher, let's revisit the Chief of Staff's Vision – articulated before the attacks of September 11:

*Our nation is at peace. Our economy is prosperous. We have strategic perspective and technological potential. This window of historic op-*

*portunity will grow narrower with each passing day. We can transform today in a time of peace and prosperity. Or we can try to change tomorrow on the eve of the next war, when the window has closed, our prosperity has narrowed, and our potential limited by the press of time and constraints of resources.*

The CSA used a trident to portray the Transformation of the Army. This now familiar graphic depicts a Legacy Force that, although modernized, is approaching 20 years old. This force features the finest and most lethal equipment ever developed and provides a distinct combat overmatch against any current threat.

As the graphic shows, Army Transformation includes three axes we must work concurrently. Army Transformation entails the simultaneous maintenance of a trained and ready force capable of fighting and winning the Nation's wars, the transformation of the operational force to more agile and deployable Interim Forces, and the transformation of the institutional Army to be able to prepare Soldiers to fight as part of any force.

The CSA stated the following:

*We intend to transform the Army, all components, into a standard design with internettted C4ISR packages that allow us to put a combat capable brigade anywhere in the world in 96 hours once we have received execute liftoff . . . To this end, we will begin immediately to turn the entire Army into a full spectrum force which is strategically responsive and dominant at every point on the spectrum of operations . . . As quickly as we can, we will acquire vehicle prototypes, in order to stand up the first units at Fort Lewis, Washington.*

We had taken only a few steps toward implementing General Shinseki's vision when the events of September 11, 2001 challenged our ability to conduct the methodical, orderly Army Transformation we had envisioned during a time of peace and prosperity. We find ourselves fully committed to a war on terrorism, both at home and around the world. During this time, our

Chief's commitment to Army Transformation has become even more resolute, and we accelerated the pace of producing viable Interim Forces to meet the warfighting CINCs' requirements (Figure 1).

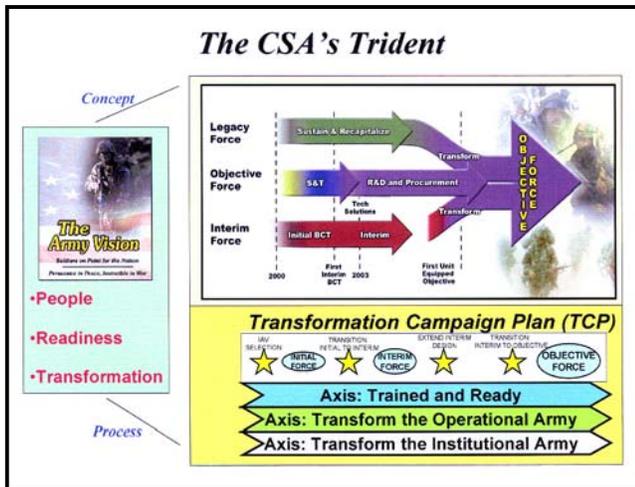


Figure 1. The CSA's Trident.

The Army formalized the Chief's three-pronged approach in an Army Transformation Plan that both mapped our course and fixed responsibilities. There are several definitions that are key to our understanding of the Army Transformation Plan:

**Legacy Forces:** These are the Army's **Current Forces**. These existing forces form the strategic hedge that provides the Army's essential capability in support of the National Command Authority and warfighting CINCs while we design and stand-up Interim and Objective Forces. For Army Transformation to work, we will sustain and recapitalize **Current Forces** to guarantee maintenance of critical warfighting readiness. The Army will recapitalize selected current formations, in both Active and Reserve components, to enhance key armored and aviation systems, as well as enhance light force lethality and survivability. Whether you serve at Fort Hood, TX; Fort Bragg, NC; or any of the numerous other places, we depend on your units, as part of our **Current Forces**, to be ready to fight and win our nation's wars not only now, but also for several more decades.

**Interim Forces:** In an October 2001 monogram for the Institute of Land Warfare, Association of the United States Army, MG James M. Dubik called the Interim Force a "Twofer." This dynamic new organization offers our nation a force the

Army can deploy rapidly, and take on the tough roles called for today. It is also our technological bridge to the future and operations across the full spectrum of conflict.

We plan to harvest and harness existing technology and build six lethal and deployable brigades that provide enhanced, strategic Army options to our National Command Authority. These are the forces into which we will insert the new Stryker vehicle and new technologies to be able to both respond to the near-term capabilities gap we face and serve as the bridge to get us successfully from our current capabilities to our objective capabilities. These brigades will be organized as six SBCTs. These **Interim Forces** will be organized as combined arms teams. The first two of these, the 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division, and the 1<sup>st</sup> Brigade, 25<sup>th</sup> Infantry Division, are forming now at Fort Lewis, Washington. We are forming them in full partnership with all TRADOC schools. Each TRADOC school is working hard on its piece of the combined arms team that goes into the brigades.

**Objective Force:** This is the transformed force intended to achieve the Army Vision. It will be a combined arms team designed to be responsive, deployable, agile, versatile, lethal, survivable, and sustainable; able to dominate across the entire spectrum of conflict. The Objective Force concept employs a functional framework in which Units of Employment (UE) perform tasks assigned today to division and higher headquarters in which Units of Action (UA), as the tactical warfighting echelons, comprise brigades and below.

**Future Combat System:** The FCS is a networked system of systems that will serve as the core building block within all maneuver UA units to develop overmatching combat power, supportability, agility, and versatility necessary for full spectrum, joint military operations. FCS is the system of systems that will make our Objective Force dominant.

With the CSA's Vision as a base, we want to share the Infantry School's part in this Transformation process. Throughout this process, we will ensure that Soldiers remain at the center of our efforts.

Figure 2 shows the Chief of Infantry's vision and how it supports the Army vision. Considering the Army Vision, the ongoing operations in which our Infantrymen are participating today, and considering that the individual Infantryman stands as

the centerpiece of Army Transformation, the Chief of Infantry's vision identifies those challenges we must meet to ensure future Infantrymen and Infantry units are prepared to fight and win future conflicts.

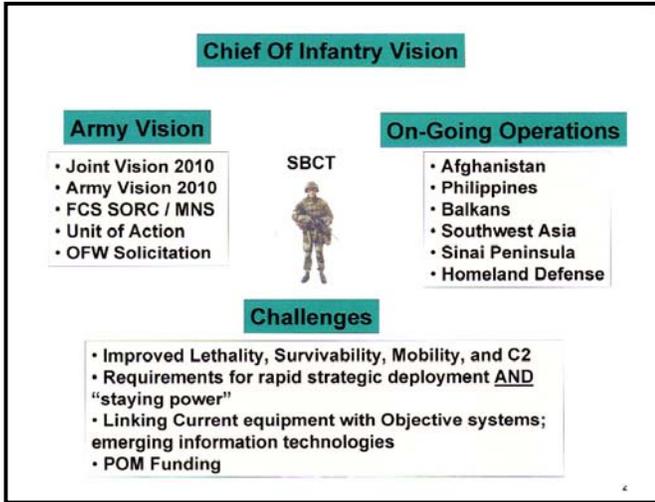


Figure 2. Chief of Infantry Vision.

There is a natural tendency to become focused on the technology of things. The exotic platforms and sophisticated C4ISR architecture draw the most attention as we go through the process, and, even the term "Legacy," which is defined as 'something transmitted by or received from an ancestor or predecessor or from the past,' hints that we have already moved on to some newer technology. At Fort Benning, we use the term, "Current Force" because that force and its Soldiers will remain the backbone of the Army, and their gear and TTP will remain current throughout the transformation.

Overlaying the forces on the CSA's trident provides a clearer picture of the relative size of each program and effort.

An even better way of looking at our force is to compare the Infantry formations of today with those we envision for tomorrow. The forces we are designing and modernizing are the forces you junior leaders today will lead and fight as senior leaders. Figures 3 and 4 show how you and your sons will serve in Infantry units that are part of a continuum of change.

These projections show that even though our Army has embarked on an aggressive program to transform itself into an Objective Force dominating future conflicts across the entire spectrum of con-

flict, we will still have to depend on our current forces to fight and win our Nation's wars for the next several decades. Thus, it is critical that we pay attention to modernizing our current forces with the same sense of urgency that we are giving to creating our Objective Forces.

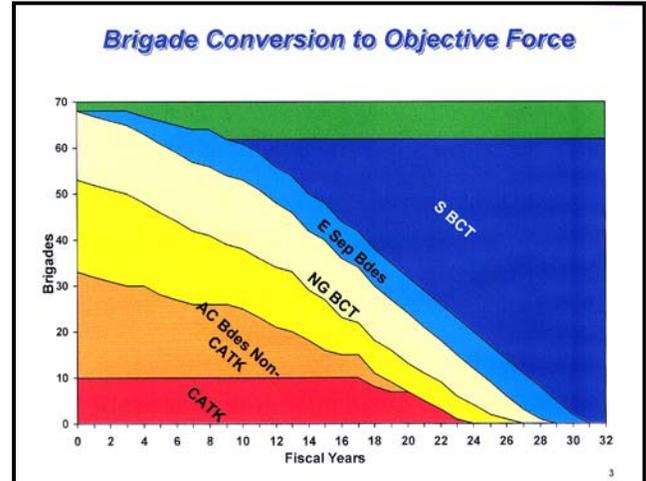


Figure 3. Brigade Conversion to Objective Force.

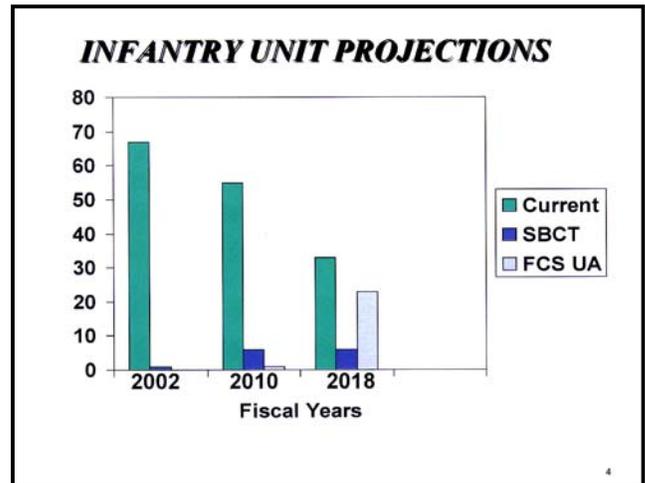


Figure 4. Infantry Unit Projections.

There is a single thread that weaves through all our transformation, and that thread is the continuing need for the Infantryman. What can we expect as Infantrymen preparing to serve or serving in this Objective Force? First and foremost, it will not change the enduring Infantry mission of dominating the close, personal fight: rather, it will harness technology to give us enhanced situational awareness, lethality, mobility, and survivability to help us do our job quicker and better. It will not give us a "silver bullet" or a platform that avoids

combat. Technology will give us more tools in the combat toolbox we have carried throughout our service to the Army. Infantrymen have played the crucial role in every conflict in which our Army has fought throughout its over 200 year history, and Infantrymen will play the same crucial role in future conflicts. Serving in the Infantry of the future, we will need to possess and demonstrate the Infantry “ethos” we have always required to close with and destroy the enemy. The battle does not end until one Infantryman dominates another.

Figure 5 shows that our Infantrymen of the future will still require the same enduring qualities that have served them so well in the past.

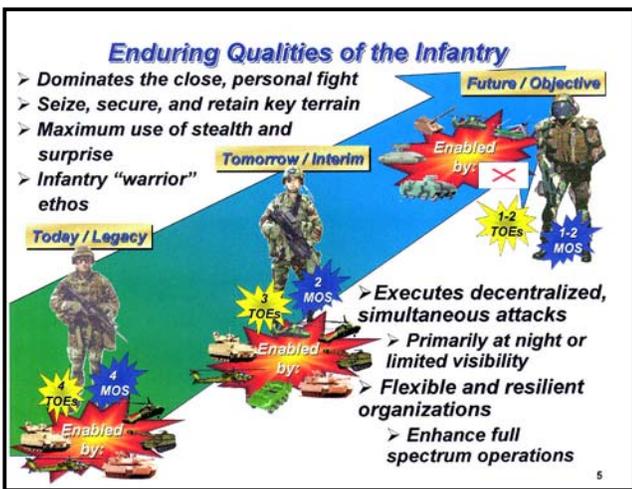


Figure 5. Enduring Qualities of the Infantry.

We at the Infantry School have identified the requirements to develop the objective warrior, the centerpiece of the Army’s Objective Force:

- We must synchronize requirements between our Current, Interim, and Objective Forces.
- We must reduce the Soldier’s load, giving him an improved power management capability and reducing the amount of weight he must carry on his back.
- We must increase the Soldier’s lethality, giving him more powerful individual and crew-served weapons so he can continue to dominate on the battlefields of the future.
- We must improve our Command and Control (C2) capabilities. Our Infantry Soldier requires an enhanced Situational Awareness capability to know where he is, where his friends are, and where the enemy is, so he can maneuver to attack and defeat the enemy at a time and place of his choosing, while minimizing the risk to his own

forces.

- Finally, we must enable the Infantryman to use precision engagement to be able to mass his firepower and maneuver forces to overwhelm the enemy.

Synchronization of these efforts is a complex process, a process that will require our total attention and commitment.

As proponent for the Stryker Brigade Combat Team (SBCT), the Infantry School is an active participant, working with other proponent schools across TRADOC. We are proponent for hundreds of individual soldier enhancement systems that make every Soldier more lethal and survivable. Many of the materiel solutions we work at the Infantry School are small in terms of program dollars, but huge in the life of a Soldier.

During the next year, we will complete our transformation to our first interim brigade, the 3d Brigade, 2d Infantry Division. We will introduce the Stryker vehicle, giving this unit the deployability and tactical mobility that is lacking in our current forces. The digitization enhancers we evolved and employed during the Army Warfighting Experiments have reached maturity and will be integral to achieving a Situational Understanding that is unique to the SBCT. This enhanced Situational Understanding will enable the SBCT to know where the enemy is located and be able to attack to destroy the enemy at a time and place of the SBCT’s choosing.

The Infantryman continues to be the heart and soul of our formations. He was the essence of the design of the Stryker Brigade Combat Team, and he remains the focus of our future efforts. We built the Operational and Organizational Concept of the SBCT around this Infantryman, and his employment in the close fight is the strength of the organization.

The Operational and Organization Concept for the SBCT, the first of our Interim Forces, describes the brigade as follows:

- The brigade’s two core qualities are high mobility (strategic, operational, and tactical) and its ability to achieve decisive action through **dismounted Infantry assault**.
- The primary mode of operations centers on **dismounted assault by Infantry**, supported by organic vehicle direct fire weapons, integrated combined arms, and joint force effects.
- Direct fire support to **dismounted assault Infantrymen** focuses on defeating hardened and

or fortified positions. Mortars embedded within maneuver elements down to company level facilitate noncontiguous and distributed operations and enhance responsiveness, essential to effective engagement in urban and complex terrain.

- Decisive action is achieved through the conduct of deliberate assaults by motorized Infantry platoons employing their **Infantry dismounted**.

- In the close fight, platoons and squads execute traditional fire and maneuver tactics.

We designed a force around the enduring qualities and requirements for the SBCT, and we made the Infantry Soldier the pivot man of the combined arms team. The soldiers at Fort Lewis have trained long and hard to hone their basic Infantry assault skills, and, over the next few months, the process of fielding an entire family of Interim Armored Vehicles will give them the mobility enhancements they need.

The immediate need for this force is obvious. Operations in Afghanistan prove that operations in difficult and complex terrain require the mobility of this new force. The scheduled Initial Operational Capability of the 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division, is just a year away.

As we start the final fielding for the 3<sup>rd</sup> Brigade, 2<sup>nd</sup> Infantry Division, we are concurrently transforming the 1<sup>st</sup> Brigade, 25<sup>th</sup> Infantry Division, at Fort Lewis. This unit will use the same rigorous training used in basic Infantry assault techniques as the basis for its fielding program. As the new Stryker vehicles hit full production, they will join the queue for Unit Set Fielding.

As a Contingency Force option becomes more apparent, the Army has developed a disciplined process to measure the progress of fielding. This process, coupled with Azimuth Checks by senior leaders, give the Army a new array of options as force providers (Figure 6).

**Objective Force:** This is our future force (Figure 7) – the force that will permit us to achieve our transformation objective. The Objective Force will be strategically responsive and capable of dominating an enemy at every point on the spectrum of operations. It will be able to win a Major Theater War, be responsive and flexible enough to be tailored to meet any crisis, be durable, and be capable of interoperating as a full partner in any joint or multi-national environment. Although the Objective Force will be dependent on the FCS for the SA that makes it effective, its formations will still be centered on the Objective Force Warrior-

equipped Soldier, whose most demanding task will be to close with and destroy the enemy while dismounted. This future force will be the focus of the Army's Science and Technology (S&T) effort in the near term.

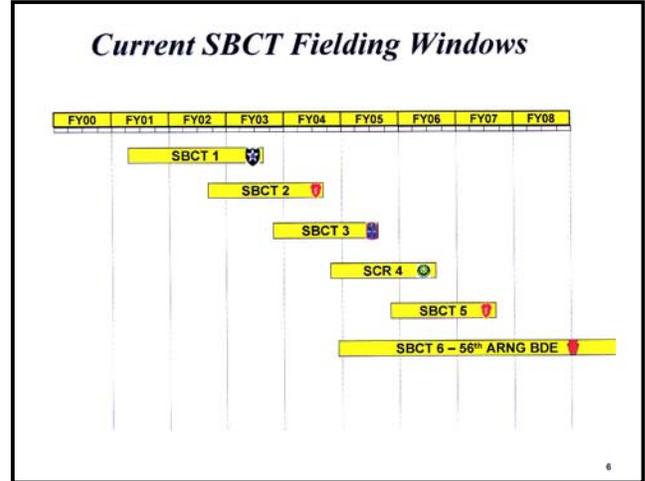


Figure 6. Current SBCT Fielding Windows.

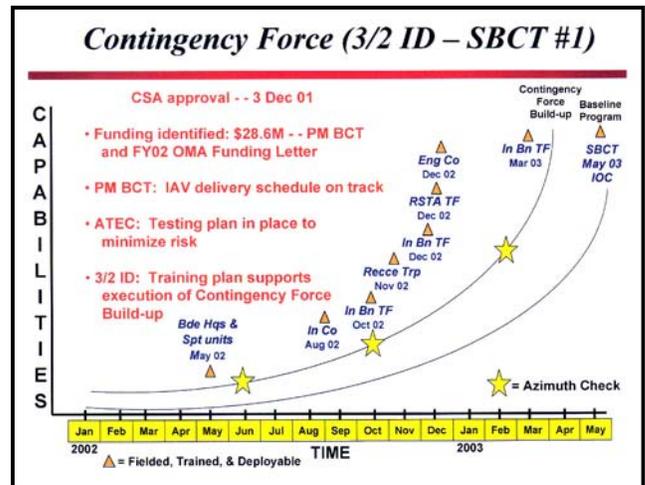


Figure 7. Contingency Force (3/2 ID – SBCT #1).

The Army is using the same Integrated Process Team approach that allowed accelerated fielding of a new force of the Army for the Interim Force. It is a concept-based development system. We started with a review of that continuum of missions against the most probable adversaries in four potential areas of operation.

We evaluated the critical missions and tasks in each of the following four areas in which our future Infantrymen will fight:

- Operations in Dense, Complex Terrain (Dismounted).

- Operations on Urban Terrain (Dismounted supported by Mounted).
- Operations on Rolling or Mixed Terrain (Mounted supported by Dismounted).
- Operations on Rolling or Mixed Terrain (Mounted).

From these evaluations, we identified the critical missions and tasks our future Infantrymen will require. These evaluations solidified our position that the essence of current and future missions is the Infantryman engaged in the close assault.

After we identified the critical missions and tasks for our Infantrymen, we used a series of seminars, discussions, modeling, and simulations to develop the combat requirements for our Objective Force warriors. Our output was the identification of mission tasks we saw for our Infantry to conduct combat in the future.

The first area of operations we evaluated was dismounted operations in dense, complex terrain (Figure 8). We envision many critical missions and tasks for our Infantrymen in this area.

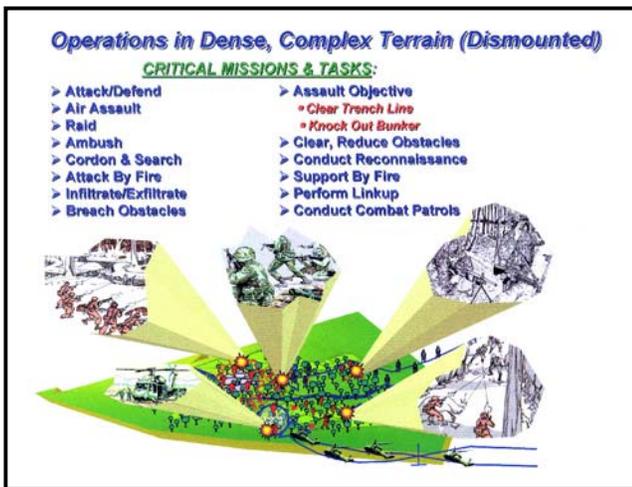


Figure 8. Operations in Dense, Complex Terrain (Dismounted).

Not surprisingly, the list reflects the same basic missions and tasks that we have sought for the Infantryman for the current force.

Operations in this type of environment entail the following combat requirements for our Infantrymen:

- Decreased soldier load.
- Lightweight, full body ballistic and laser protection.
- Power management for the individual Soldier.
- Lighter individual and crew served weapons

that maintain current lethality and range.

- Man-portable UAV.
- Through-wall/subterranean sensors.
- 3-D urban personnel tracking.
- Precision wall/door breaching.
- Javelin CLU/Land Warrior Interface.
- A mortar system that has increased range, more lethality, and less weight than current dismounted systems

The second area of operations we evaluated was operations on urban terrain (Figure 9). Operations in this environment will be primarily dismounted, supported by mounted forces.



Figure 9. Operations on Urban Terrain (Dismounted supported by Mounted).

Our analysis of Urban Operations resulted in the following list of Infantry Combat Requirements:

- Use of robotic systems in appropriate situations to reduce exposure of personnel and manned equipment.
- Communications link between dismounted and mounted forces.
- Capability to remote fire vehicle weapons.
- Capability to laze targets for precision munitions.
- Capability to initiate call for fire using unmanned ground vehicles.
- Sensors that provide improved early warning systems and locations of mounted/dismounted enemy soldiers in complex and urban terrain
- Non-line-of-sight lethality linkage between dismounted and mounted forces.

Our analysis of the third area of operations, Operations on Rolling or Mixed Terrain (Mounted supported by Dismounted) (Figure 10, page 7),

produced these missions and tasks for our Infantrymen.



Figure 10. Operations on Rolling or Mixed Terrain (Mounted supported by Dismounted).

Missions and tasks in the more mobile environments are a little different, making it more critical that Situational Understanding between mounted and dismounted Soldiers work effectively and be transparent. We are working hard to embed this Situational Awareness in our Interim Forces.

Operations on rolling or mixed terrain (Mounted supported by dismounted) resulted in the following list of Infantry Combat Requirements:

- Improved, integrated C4ISR linkages.
- Remote minefield detection and clearing.
- Improved non-line-of-sight communications from Soldier to vehicle/vehicle to Soldier.
- Turreted, digital, fully automated, shoot-on-the-move mortar system.
- Networked links between sensors and shooters for all weapon systems and platforms.
- Ability to rapidly scale from non-lethal to lethal effects to minimize collateral damage and non-combatant casualties.
- Ability to remotely control weapon and sensor systems, including UAVs, ground robotics, and robotic direct fire systems.

The final area we analyzed was Operations on Rolling or Mixed Terrain (Mounted) (Figure 11). Even though this is a purely mounted operation, there are critical missions and tasks for our Infantrymen to facilitate them.

The combat requirements for our Infantrymen in this type of operation were more platform-oriented

and appeared to be more traditional in solutions:

- Multi-hit protection from direct fire up to 14.5mm, artillery shrapnel, and shoulder fired anti-tank systems.
- Improved AT weapon stand-off capability.
- Improved lethal and non-lethal precision munitions.
- Automatic survivability (360-degree hemispherical).
- Real-time combat identification, to include non-combatants, across the spectrum of operations from platform to platform, platform to Soldier, Soldier to platform, and Soldier to Soldier.
- Unmanned platforms that can maneuver with manned platforms, determine target locations, and augment or execute lethal and non-lethal functions
- Superior situational understanding, including near-real time, digitized terrain updates.
- Fused, non-line-of-sight lethality.



Figure 11. Operations on Rolling or Mixed Terrain (Mounted).

The combat requirements from each operational environment determined the needs for the Future Combat System (Figure 12, page 8). This assessment also provides the framework for defining requirements for the Objective Force and allows us to develop a force that is both threat and capabilities based. Infantry forces must retain a quality of adaptive dominance – we will win regardless of situation or enemy actions.

Regardless of the shape of our Infantry forces, we must have the capability to see the enemy first, fix his position, and destroy him in depth. This will present technological as well as training

challenges as we ensure that our Soldiers can use the digital tools of the future. The focus of development for our Objective Force is still the Infantryman.



Figure 12. Future Combat System.

These analytical building blocks provide the requirements for the Objective Force.

In a time when some would say that the United States could win wars using drive-by platforms alone, it is important to understand the force development process. It is METT-TC on an Army level. The future missions for the Army and, specifically, the nature of today's and tomorrow's adversaries, dictate that the Infantry School must be at the center of every discussion – because the Infantry warrior is critical to winning our nation's future wars. Our Combat developers are working hard to assess the nature of future conflict and identify effective solutions to those combat challenges.

This is the process of Transformation and Force Development. In the near term, solutions tend to be more oriented toward changes in Tactics, Techniques, and Procedures and then doctrine. Training, both institutional and organizational, is built into the Unit Set Fielding process, starting with front-end analyses. This task is a major effort of the Infantry School, as it is critical for us to identify the "how, where and why of future training requirements" in time to program the Training Aids, Devices, and Simulations we need into the force design. We must identify the need and program ranges, facilities, classrooms, and training support into the budget years before we can field them.

This is the challenge at the Infantry School, and a challenge we gladly accept, because the effectiveness and survivability of our future Infantrymen depend on us. We must link our policies on how we will raise, train, and employ Infantrymen to the current and future force design work we are doing.

To provide a synopsis for synchronizing this process, I'll use Doctrine, Training, Leader Development, Organizations, Materiel, and Soldier Systems (DTLOMS) as a vehicle for a SITREP.

For the Objective Force, we are working with the Armor Center to have an Operational and Organizational concept out this summer. Meanwhile, we have an aggressive analysis and review program in conjunction with Knox's Maneuver Battle Lab to work through how we expect to fight this future force. This will give us the first elements for **doctrinal** development.

In the *Training* arena, there are several significant events. We have the leading role for implementation of the Digital Training Strategy for the Army. We have moved beyond the "knobology" of digitization, and we are leading the way in defining the tasks that every leader needs to succeed in the future. This will be critical in linking the mounted and dismounted combat power of the Objective Force.

Development of our *leaders* remains a primary effort. The mental and physical agility our Soldiers have demonstrated so clearly in Afghanistan takes a long time to develop; we need to devote more resources to help Soldiers become even more proficient and able to perform an expanded range of tasks. We have to create the training conditions that allow young leaders to time surf across years of experience. This will continue to be a challenge, both at the Infantry School and in the Infantry units in which you will lead and serve.

*Organizational* development for the SBCT is pretty much locked down. There will be the natural tweaking as we evolve and develop lessons for application to subsequent SBCTs and the Objective Force. Our near term organizational work will shift from the SBCT as we work with combat developers at Fort Leavenworth to ensure that we do not negate the brigade and below level work we have done in the interim division or the corps redesign work we must do next. We must ensure the functions not resident in our brigades or battalions, which our divisions or corps must provide, are still in our future divisions and corps. We will

build upon the inherent strengths of our organizations as we construct Units of Action for the Objective Force

In the *materiel* area, the Stryker vehicle will enter the force this year as an Infantry carrier. Other variants will take longer to develop and field, the longest time being for the Mobile Gun System. Stryker is the most visible system, but there are around fifty PMs working to ensure the successful launch of the SBCT. There are about two dozen PMs associated with the C4ISR systems alone. The quantum leap in the materiel arena will be from the current individual systems approach to a system of systems approach for the Future Combat System and the C4ISR architecture of the future.

The *Soldier as a system* remains my highest priority. In the near term, we are working to fully integrate Land Warrior into the Interim structure fast. Objective Force Warrior will go even further in improving the lethality and survivability of future

Soldiers. We must design and build Objective Force Warrior as a core system of the Future Combat System, not as a separate, or “stove-pipe” system.

**Summary.** Change is a natural state in the Army. We have a long history of redesigning our forces to better fit the needs of the nation. We are convinced that working together, we will make these changes effectively. Our challenge in this dynamic period has been to keep our leadership focused on Soldiers. With the apparent quick and sterile victories in Afghanistan, there is a tendency to devote our energies to technological solutions. The Infantry School will remain resolute in keeping the Soldier as the center of force development and giving the Soldier the best tools that technology can provide – both future and, most importantly, *off-the-shelf systems available today* products of development work in the past. As Infantrymen, we remain on point for the Army.