4th ID DCX II: The Digitized Division Fights the COE OPFOR

Ironhorse Six *makes a call in the 4th ID Command Information Center.*

By Colonel Charles B. Allen

The Secretary of the Army and Chief of Staff have articulated a clear vision for the future transformed Army, and we are pursuing that vision. On 1 January 2001, the 4th Infantry Division (Mechanized) (4th ID), Fort Hood, Texas, was designated the Army's First Digitized Division (FDD). The digitization path that we have been on for the past five years clearly complements the Army's priorities for Transformation. The Initial Brigade Combat Team (IBCT) at Fort Lewis, Washington, uses most of the same Army battle command system (ABCS) equipment the 4th ID has been developing.

The purpose of this article is twofold. First I discuss the conduct of the Division Capstone Exercise II (DCX II) and some of the lessons we learned while fighting the contemporary operational environment (COE) opposing force (OPFOR); I also update the Army and the fire support community on some of the fire support tactics, techniques and procedures (TTPs) we are employing in our division.

Historical Context. In 1996, the Army made the decision to take the force into the 21st century, and the mechanism that was chosen for that journey was the Force XXI to be followed by the Army After Next (AAN). The 4th ID was selected as the Force XXI unit and given a series of monikers, one of which was the Experimental Force (EXFOR).

Along the way, the unit participated in advanced warfighting experiments (AWEs) at the task force and division levels. The *Ironhorse Division's* journey as the Army's EXFOR culminated in 2001 when the division completed the second of two successful training events: DCX I and II.

DCX I was the largest rotation ever conducted at the National Training Center (NTC), Fort Irwin, California. Almost half of the division, just under 8,000 soldiers—a ground maneuver brigade, the aviation brigade and the division tactical (DTAC) and division main (DMAIN) command posts—deployed to the NTC to demonstrate the 4th ID's capabilities. In October of 2001, the division participated in a Battle Command Training Program (BCTP) Warfighter exercise that was dubbed DCX II.

DCX II was a normal BCTP Warfighter exercise with a few noteworthy exceptions. Most importantly, the division fought with its assortment of ABCS "tools"—the advanced FA tactical data system (AFATDS), maneuver control system (MCS), all-source analysis system (ASAS), air and missile defense warning system (AMDWS), combat service support computer system (CSSCS) and the tactical airspace integration system (TAIS). Second, we fought over the extended battlespace the division is designed for, which is 120 kilometers wide by 200 kilometers deep. Third, the DMAIN and the division support element (DSE), formerly called the division rear (DREAR), were physically located in Brownwood, Texas, more than 100 miles from Fort Hood and the rest of the exercise participants. Finally, DCX II was the first time any unit fought a Warfighter against the newly designed COE OPFOR.

DCX II and the COE OPFOR. The international landscape has changed over the years and with it our potential adversaries. After the break up of the Soviet Union in the early 1990s, the Army kept the Soviet "Threat" as our model enemy. We continued to train for and fight against Threat doctrine and capabilities at the Combat Training Centers (CTCs).

However, as we have seen in Bosnia, Kosovo and, most recently, in Afghanistan, this model does not provide the most realistic training approach for our leaders and soldiers. With this in mind, the Army's leadership approved the development of a contemporary opposing force for units to fight during their CTC rotations—our DCX II enemy.

As we studied the new OPFOR in preparation for the Warfighter, we came to understand that fighting this new force with its modern weapon systems and the ability to employ diverse, unpredictable tactics would be much like "fighting ourselves." With this in mind, we assembled a group to study the best methods to attack and destroy the OPFOR's ability to deliver effective fires against us.

This group determined that our high-payoff targets (HPTs) in the enemy's fire support structure would be his command, control and communications integrated fires command post (IFC); reconnaissance, surveillance and target acquisition (RSTA) capabilities; delivery systems/firing units; and logistical capabilities. During DCX II, we were successful against his delivery systems/firing units and special purpose forces (SPF)/RSTA capabilities.

OPFOR IFC. The IFC is clearly an HPT. It is a combination of a standing

command and control (C^2) structure and a task organization of constituent and dedicated fire support and maneuver units. The IFC is designed to exploit the combat power inherent in carefully integrated ground and air operations with a desired effect being the rapid destruction of enemy formations or systems.

The OPFOR TTP of using one C^2 headquarters to control fires and maneuver creates a significant synchronization and integration capability. In short, the IFC can be described as having the characteristics and capabilities of a cross between our division targeting cell and the division artillery tactical operations center (TOC).

Although we acquired IFCs several times during the Warfighter—using signal intelligence (SIGINT) and electronic intelligence (ELINT)—and engaged them with Army tactical missile systems (ATACMS) and air attacks, we never felt the payoff we expected from neutralizing or destroying the enemy's ability to command and control his integrated fires. The enemy was in a defensive posture and had had several weeks to prepare his defenses, caching and digging in enough ammunition to support his forces for most of the campaign. For that reason, we had few, if any, reports of enemy logistics nodes we could engage.

OPFOR Fire Support. While the COE OPFOR does not have the tremendous number of artillery systems we had become familiar with, he now has systems that allow him to mass effects without massing actual weapons—like our multiple-launch rocket system (MLRS) and Paladin 155-mm howitzer.

He also has improved fire support systems, such as the 9A52 (Smerch) with its 70-kilometer range that placed us at a serious range disadvantage. During our BCTP Warfighter, approximately 10 percent of the 9A52 munitions were extended-range rockets that ranged out to 90 kilometers.

The OPFOR's fires are more precise due to close coordination and streamlined links between sensors and shooters. The COE OPFOR sensors include unmanned aerial vehicles (UAVs), SPF, commandos, RSTA, maneuver units with reconnaissance and surveillance missions, etc.

The OPFOR positions his long shooters in built-up areas and disperses them to a resolution of one to two systems per geographic location. This technique seriously challenges our ability to respond to the threat.

During our Warfighter, we had little problem acquiring the enemy's 9A52s with our extended-range (ER) Q-37 radars. However, the 9A52s fire across operational support command boundaries and their fires *are* mutually supporting. The problem was to determine how to destroy them once acquired.

In our train-up exercises, we attempted to attack the Smerches with ATACMS missiles. Due to the enemy's ability to displace the launchers after they fired and our inherently slow approval process for ATACMS launches, we had little or no success against the Smerches.

Our most successful TTP was to coordinate air attacks against them, preferably using aircraft that were already in the air when the ER Q-37 acquisition occurred. We passed the acquisition from the counterfire headquarters to our DTAC fire support element (FSE), and the request for uncommitted air interdiction sorties (XINT) to attack was processed from that command post.

We also had success doing predictive analysis of the locations (or "bands") from which we expected the enemy to initiate Smerch attacks and then established kill boxes that covered those bands.

OPFOR artillery commanders position a single howitzer/multiple rocket launcher (MRL) or up to battery-sized firing units on the battlefield while retaining the capability to mass the effects of multiple battalions at the decisive place and time. That's what we do. To fight the COE OPFOR, we had to prepare to "fight ourselves."

We did find, however, that the OPFOR seemed to be reluctant to employ their shorter-range cannon and MRL systems, opting instead to engage us with their Smerches at near max range. The enemy only employed his shorter range systems as part of IFC strikes—synchronizing his indirect fires with fixed- and rotary-wing air attacks—when he believed he had acquired our massed maneuver forces and the benefit of engaging the target outweighed the risks posed by the responsiveness of our reactive counterfire.

While the COE OPFOR disperses units and masses effects like we do, we differ in the locations in which we position our weapons systems. While we would never risk the lives of non-combatants or accept the potential collateral damage from positioning our cannons or MLRS launchers (or maneuver units, for that matter) in built-up areas or near protected sites, the COE OPFOR does that by design. He does so and then challenges American units to engage his systems.

He believes he can defeat us by inflicting considerable casualties against us, causing us to lose our will to continue the fight. After DCX II, the OPFOR commander offered that his mission was to destroy one combat brigade from our division. He believed that accomplishing that mission would have met the standard for inflicting an unacceptably high number of casualties against an American unit.

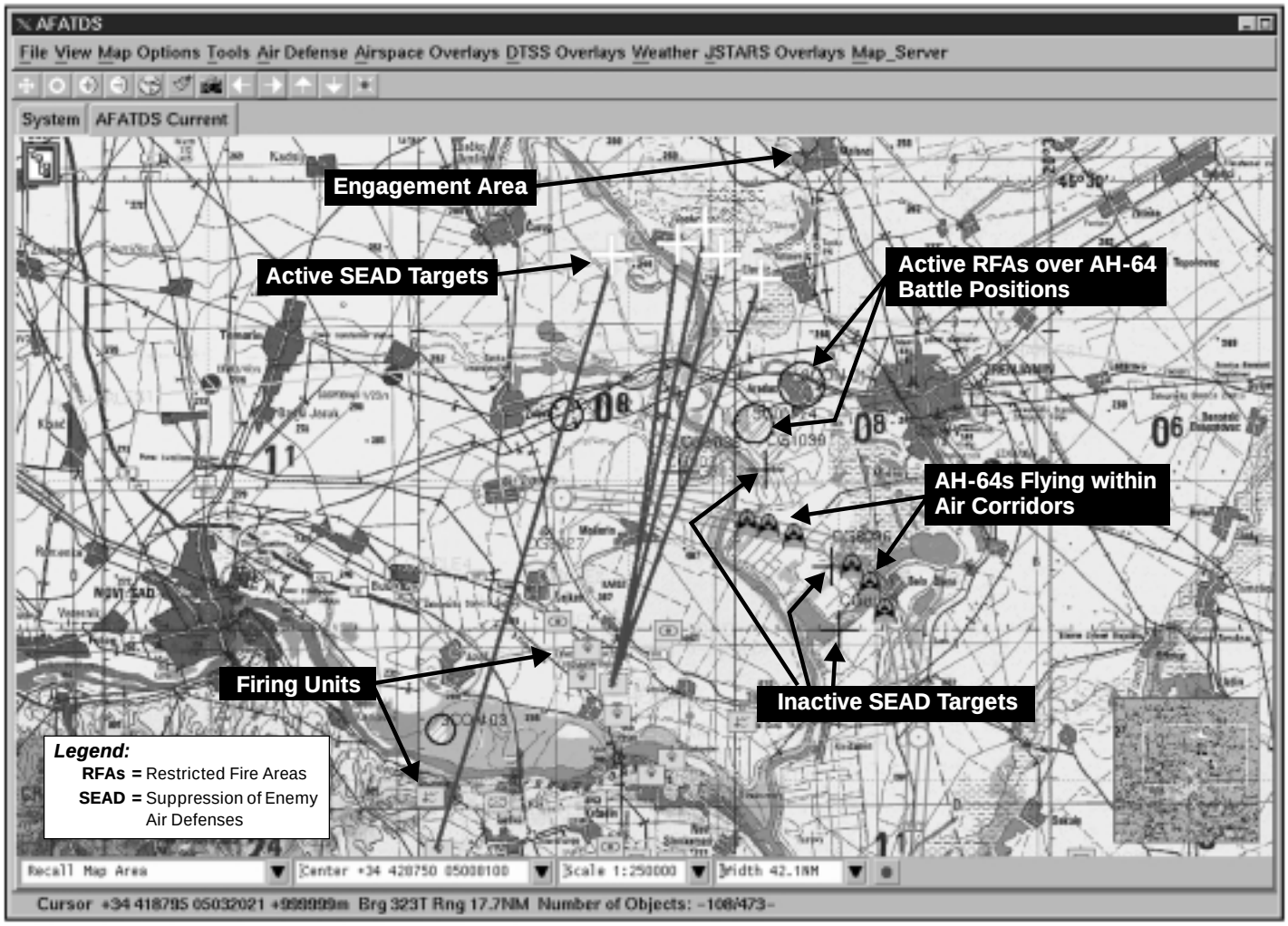
He also thinks he can defeat us in the world of domestic or international public opinion by forcing us to cause unacceptably high levels of collateral damage and (or) civilian casualties.

To address the challenge posed by the OPFOR's positioning of fire support and maneuver units in built-up areas, we worked our rules of engagement (ROE) in great detail. The III Corps Commander delegated authority to engage targets in built-up areas to the division commanders. Our division commander further delegated that authority to the assistant division commanders, the division artillery commander and the maneuver brigade commanders.

The Balkan terrain we operated in during DCX II included many built-up areas and protected sites. In order to trigger the approval process for engaging targets in these areas, we established more than 400 no-fire areas (NFAs) and restricted fire areas (RFAs) around these locations. When AFATDS detected the initiation of a friendly fire mission inside one of these NFAs or RFAs, coordination was prompted. Then one of the approval authorities made the decision as to whether or not to attack the target.

To help make this decision, the affected commander enlisted the support and recommendations of the Staff Judge Advocate (SJA) and G5/S5. This team considered such information as the location and type of enemy unit or system involved, the effect it was having on friendly units and the mission, and the potential for causing collateral damage and civilian casualties.

When the commander made the decision to engage or not to engage the target, the SJA recorded the event, the circumstances and the commander's decision. This record was retained and passed to information operations (IO) and public affairs channels to proactively address possible collateral damage incidents before they were raised.



Screen Capture Courtesy of Raytheon

AFATDS Screen Capture. AFATDS is the only ABCS system that can display the entire picture as a deep attack is being conducted.

Those who do not support these procedures believe the number of NFAs and RFAs is too high and restricts our responsiveness at an unacceptable level. Their premise is that US forces always have the right of self-defense for individual soldiers and units.

During our training against the COE OPFOR in preparation for DCX II, we took this approach as well. However, responding with fires in self-defense must be proportionate and the decision-making process must be deliberate. To satisfy the requirement for a proportionate response, we used NFAs and RFAs as described.

The G5/S5 input in this process was particularly useful. On several occasions after consulting the G5/S5 representative, we discovered the built-up area in question was either no longer occupied or was occupied only by enemy forces. This information made the decision to engage the target much easier.

Our lesson learned was that we should have regular updates to our NFAs and RFAs based on information from the G5/S5; this would have allowed us to avert some AFATDS coordination prompts.

In short, these ROE TTPs allowed leaders to be more comfortable making what normally would be very uncomfortable decisions.

Blue Force Tactics and Techniques. During our DCX II, we learned many tactical lessons, three of which I discuss in this article: artillery-based maneuver, the employment of the IBCT artillery and the retention of counterfire responsibility at the division level.

Artillery-Based Maneuver. In the past in our division, we have employed artillery-based maneuver to decrease our range disadvantage and secure terrain from which our indirect fire systems could set the conditions for our maneuver units to be successful. While we still have a considerable range disadvantage against the Smerch that we were unable to overcome with our artillery systems, we were not overmatched in overall range or correlation of forces against the COE OPFOR.

During most phases of our DCX II fight, we had a one-to-one or better delivery system ratio vis-à-vis the COE OPFOR. Due to the expectation that the enemy would aggressively attempt to shape his battlespace with fires, our division commander declared the enemy's artillery and integrated fires capability as his center of gravity—at least in the initial phases of the fight. *Ironhorse Six* wanted to prevent the enemy from dictating the pace of the fight and using fires to delay, disrupt and attrit our attacking maneuver units. For that reason, we developed our concept of operations using an artillery-based scheme of maneuver.

The COE OPFOR is well trained at acquiring and attacking our high-value assets (HVAs). Our MLRS launchers and counterfire radars are at or near the top of the enemy's list of HPTs. He uses indirect fires requested by SPF teams to engage and destroy these HPTs.

However, his preferred method for attacking these targets is to hide small maneuver units, patrols or SPF teams in built-up areas, knowing our maneuver units will avoid that terrain. He then watches and waits for our maneuver units and the HVAs they are escorting/protecting to separate, so he can ambush and destroy the HVAs.

The solution is to ensure that in the execution of our artillery-based scheme of maneuver, our fires delivery systems, radars and other HVAs remain integrated into the movements of the maneuver units they are accompanying. The OPFOR will exploit the smallest gaps and separations between units.

The COE OPFOR also used indirect fire and fixed- and rotary-wing aircraft against our Paladins and MLRS launchers when we massed on the near side of rivers before executing the crossing. OPFOR UAVs cued these fires. Again, his capabilities are very comparable to ours.

Employment of the IBCT Artillery. During the DCX II, the 3d Brigade of the 2d Infantry Division, the IBCT at Fort Lewis, was attached to our division. It was a valuable experience for the *Ironhorse Division's* command team to train with the IBCT leaders and use the tremendous capabilities of that unique unit. From a fire support perspective, we found it challenging to use the IBCT's direct support (DS) artillery (12 M198 155-mm towed howitzers) during offensive operations.

The IBCT initially was given a mission to conduct stability and support operations (SASO) in a built-up area located in the southeastern corner of the division's zone. During that phase of the fight, we chose to leave the IBCT's FA battalion DS to its brigade.

However, when the IBCT completed its mission and transitioned to offensive operations in the center of the division's zone of attack, the M198 battalion would not have had the mobility to keep up and provide DS fires to the brigade. For that reason, we sub-assigned an M109A6 Paladin battalion from one of our two reinforcing FA brigades DS to the IBCT. This arrangement worked well, and the IBCT had immediately responsive DS FA fires in support of its attack.

As we transitioned from SASO to offensive operations, we assigned the IBCT's 12 M198s DS to the division's rear area.

Counterfire Mission at the Division Level. In the past, we regularly charged the maneuver brigade and its DS FA battalion with responsibility for neutralizing regimental-sized artillery groups (RAGS) that could influence their battlespace. With the advent of the COE OPFPOR, there are no longer RAGs, division artillery groups (DAGs) or any other artillery groups.

In the 4th ID, the responsibility for acquiring, engaging and neutralizing or destroying the enemy's cannon and rocket/missile units is at the division artillery/force FA headquarters.

Depending on the organization for combat and the reinforcing artillery available to the division and force FA commanders, the counterfire headquarters mission likely will be assigned to one of the reinforcing FA brigades. The maneuver brigade commander still will have an attached Q-36 radar and will have to respond to any mortar acquisitions that influence his battlespace.

Retaining the counterfire mission at the division frees up delivery units and DS or reinforcing artillery for the brigade commander to commit to his shaping operations or close fight.

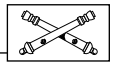
Digital Capabilities. One of the highlights of our DCX II experience was the performance of AFATDS as a comprehensive tool for SA and battle tracking during deep shaping operations. Most of us understand the standard, analog approach for monitoring these operations. Multiple command posts—for example, the DMain, DTAC, division artillery TOC, aviation brigade TOC—are forced to maintain FM or mobile subscriber equipment (MSE) communications with each other throughout the conduct of the attack. The primary function of these command posts is to relay critical information, such as the progress and location of the attack helicopters and the timing of the suppression of enemy air defense (SEAD) fires.

However in the *Ironhorse Division* with the Army tactical command and control system (ATCCS) and the capabilities offered by the joint common data base (JCDB) that produces a common tactical picture (CTP), leaders at these command posts can track the entire attack using one screen: AFATDS. (See the figure of the AFATDS screen capture showing the entire attack on Page 21.) AFATDS is the only ATCCS system that can display the entire picture in real time as the attack is being conducted—fixed- and rotary-wing aircraft on their routes and in their attack positions ("air breather" function), locations of indirect fire delivery systems, SEAD targets, Blue Force vectors from delivery systems to those targets when SEAD fires are delivered, Blue vectors as targets of opportunity are engaged, enemy locations (or "Red picture"), engagement areas, maneuver graphics, air corridors and airspace coordination areas (ACAs).

The AFATDS PM, Training and Doctrine Command (TRADOC) System Manager for FA Tactical Data Systems (TSM FATDS) and the great military and civilian personnel who work for them should be commended for their super work in bringing this picture to life for our commanders, fire supporters and aviators.

Making the Transition. 2001 was an eventful year for the *Ironhorse Division.* We achieved FDD status, participated in a highly successful DCX I rotation at the National Training Center and "capped off" our Force XXI/EXFOR experience with an impressive performance during Division Capstone Exercise II. On 1 November 2001, we put Force XXI and the EXFOR behind us and assumed responsibilities as the Army's heavy Division Ready Brigade (DRB) unit.

All *Ironhorse* soldiers and leaders are proud of the contributions we have made to the digitization and transformation of our Army. Through enhanced situational awareness and situational understanding, we stand ready to respond and dominate any battlefield anywhere in the world at any time.



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