

equipment and schedule training before the occupation of the mission.

For an SASO mission, the gaining command must specify the legal and tactical responsibilities of the light infantry company. In traditional infantry missions, the unit briefs specific rules of engagement for combat engagement and disengagement. For security force operations, within the rules of use of force (RUF), the soldiers remain engaged with increasing levels of force until the situation is resolved. Soldiers must use the minimum force necessary and proportional to the threat, with deadly force being the last resort. The steps can be categorized by the following (TRADOC Command Guidance AR 190-1):

SHOUT: Verbal warnings to halt.

SHOVE: Non-lethal physical force.

SPRAY: OC Spray (when trained and certified).

SHOW: Intent to use weapon.

SHOOT: Deliberately aim shots until threat no longer exists. (Warning shots are not permitted.)

FM 3-90, *Tactics*, defines a reaction force as “offensive in nature and conducted as either spoiling attacks or counterattacks.” These guidelines do not necessarily apply to a reaction force in SASO. The reaction force may be activated to respond to critical situations

that have already escalated beyond the initial RUF stages. In CONUS, the reaction force can be used primarily to supplement the existing forces of the perimeter defense, but cannot be employed on the attack. A reaction force commander must move cautiously to pursue, detain, or become involved in an escalation of the RUF. Many of these roles and reactions must be defined by local authorities. A relationship with the Staff Judge Advocate is essential in ensuring that the activation of the reaction force does not violate the rule of law.

To reinforce vigilance and defeat complacency, the infantry company must develop a plan to sustain the company on both its SASO mission and its mission essential tasks. For sustainment on security force missions, the unit must be creative in designing an area that allows for training on the daily mission tasks as well as chemical, biological, radiological, nuclear, or explosive reaction drills. For leaders, this training should include intelligence preparation of the battlefield (IPB) from various sources to include open media sources, which help develop the tone and realism of the training. A commander can schedule these rehearsals and training events in a variety of areas, including traditional situational training

exercise lanes. Local fire, rescue training centers, and civilian police training areas are excellent in reinforcing the SASO skills without requiring modification.

To prepare for the mobilization and employment of a light infantry company in a SASO environment, leaders must design specific plans to reduce the confusion associated with deployment in an unconventional environment. The integration of the unit into the daily operations of a garrison is critical to maintaining high morale and mission focus. Effective combat units must maintain balance between the traditional roles of an infantryman with those of a peacekeeper and a citizen. As a citizen of the country patrolled, the soldier must remain vigilant to all threats to ensure the protection of vital U.S. assets, while ensuring that the laws of the country are enforced so that basic civil rights are protected within the area of operation.

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Modernizing to the M2A3 Bradley

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In the midst of the Army Transformation, the heavy force has been the object of some criticism. With the introduction of the future combat system and proposed full fielding by Fiscal Year 2010, one might think the M2A3 Bradley is a waste of taxpayer's dollars. I disagree.

I do agree with one goal of the Objective Force to maintain the lethality of the Legacy Force while increasing strategic responsiveness, but during the

transformation, the Legacy Force is responsible for handling emerging threats. The M2A3 brings a combat vehicle that provides increased lethality and survivability to meet those threats.

Before I begin, I must disclose some information and explain the limits of my experience. My opinions are based on my experience as a company commander from January 2000 to May 2001. During those months, I commanded the first company to field the

M2A3. I participated in the initial operational testing and evaluation (IOT&E) of the M2A3, during which it was tested against the M2A2 Operation *Desert Storm* (ODS) version. Additionally, I took the company to the division capstone exercise (DCX) at the National Training Center (NTC) from 1 March 2001 to 1 May 2001. I have completed new equipment training (NET) and the Force XXI Battle Command, Brigade and Below (FBCB2) training. I have

spent an inordinate amount of time testing the functions of the M2A3 and employing them in training.

The M2A2 ODS and the M2A3 are similar in their employment. For example, the M2A3 is still employed best as a support-by-fire vehicle for the decisive force, the infantry squads. But this is not a discussion of vehicle capabilities, but rather a synopsis of the benefits that make the M2A3 worth the cost. I want to highlight two major capabilities, the sights and FBCB2, and provide some tactics, techniques, and procedures (TTPs) to enhance the training and employment of future M2A3 company commanders.

The second-generation FLIR (forward looking infrared) gives the M2A3 precision gunnery capabilities. I conducted two gunneries with the M2A3. In my opinion, the sight capabilities of the M2A3 are vastly improved over earlier models. During our first gunnery, we struggled to overcome habits and TTPs that had been used on earlier BFVs. Only four crews qualified as distinguished. Gunners were frustrated with new concepts such as new sight capabilities (2x and 4x digital zoom) and kinematic lead (the adjustments the ballistic computer uses to fire at a moving target so that you don't have to lead the target using the stadia lines). During the after-action reviews, I recorded new M2A3-specific TTPs and TTPs successfully used by gunners that still applied from earlier models:

On our second gunnery, 100 percent of primary crews shot *Distinguished*. The primary crews hit all but two targets. The results were amazing, but understandable, for two reasons:

First, we replaced most of our Legacy gunners. We found that young soldiers had good hand-and-eye coordination and aptitude for using the gunner's hand station. Additionally, the young soldiers had no "old" habits that had to be broken. They embraced the new system because they didn't know any other.

Second, during the practice tables, we focused our Bradley crew evaluators (BCEs) on the application of the lessons learned. M2A3 BCEs ride in the crew compartment and evaluate the crew using the squad leader's display (SLD).

M2A3-Specific TTPs

Run a screening range similar to tank gunnery. Just as before, boresighting improves precision, but M2A3 boresighting is a more in-depth process. It requires more time and additional resources. Avoid the temptation of throughput using M2A2 boresighting time allocations and devote a day to boresighting. Although the M2A3 is still a suppression system, a target that is dead is suppressed.

Let the gun settle. If the reticle moves while firing, gunners induce kinematic lead. To avert this, pause briefly at the top before firing or re-engage from the firing position (by releasing the palm grips, re-lasing the target, then firing).

The reticle must remain steady while lasing the target. If it moves even slightly, you risk inducing kinematic lead. Use the previous TTP to correct this problem. If the reticle will not remain steady—(moves more than 1 mil every 10 seconds)—null the drift.

When lasing, use 2x and 4x to obtain a more accurate lase. Former M2A2 gunners would use sensing rounds and burst-on-target techniques while shooting in low power. Although gunners can lase in lower powers, we found that those who used the zoom obtained more first-round hits. With accurate lasing and using the sights, I was able to see the strikes of the rounds enter the target and the heat signatures of the holes they made after passing through.

M2A2 TTPs Still Used

Set battle sight ammo and range before every engagement. Maintain good habits for degraded firing.

Practice berm drills. The driver still plays a major role in the crew's success.

From there, they see exactly what the gunner sees (the SLD is slaved to the gunner's and commander's sights) and can better give the gunner feedback on proper firing techniques. NOTE: With the new sights and a spotter vehicle, there was *no question* whether the target was hit or missed. The results were excellent.

The M2A3—with its enhanced sights (Improved Bradley Acquisition Sights or IBAS and FBCB2)—is the premier night fighting system. During the IOT&E, my company (Company B, 2d Squadron, 7th Cavalry) was extremely successful during the day. There were numerous other theories for this, but this is mine: Although my crews had been stabilized since the beginning of my new equipment training (March to October), the company's crews had been together longer. Because 1st Cav-

alry Division periodically is designated the Division Ready Force, I believe their crews on the average had been together longer and were better trained. The familiar thermal patterns that our gunners had become accustomed to during gunnery were not as easy to identify during the day. Although we still used our enhanced sights, limited ranges, reduced temperature differences between the vehicles and surrounding terrain, and the proficiency of their crews to acquire targets using additional assets available to them during the day mitigated our technical advantages. The company, using their organic sights, and binoculars, were able to acquire, discriminate, and engage targets to the maximum range of their weapons systems. But during the night, our *technical* advantage exceeded their *tactical* advantage. The company had difficulties acquiring and discriminating targets beyond 2.5km with the ISU on the M2A2. To them, we looked like "little red dots." For our gunners, we could clearly see and engage the enemy at our maximum range. We could acquire our adversaries more quickly because the temperature disparity between the vehicle and surrounding terrain was greater. Additionally, the improved sights allowed us to clearly discriminate and engage him before they could fire a shot. In addition to our technical advantage, my battalion commander and I invested a lot of time and resources in night vision (such as helmet mounts for Bradley commanders and focused night training). The IOT&E allowed me to develop TTPs for offensive and defensive missions that would pay off during the upcoming NTC ~~rotation~~ of our IOT&E experience, we tried to fight primarily at night during the DCX. We saw the night as the principle condition that mitigated the OPFOR's advantages in knowledge of the terrain. During offensive missions, typically my company was tasked to destroy the enemy recon along the route, and then suppress the enemy at the point of penetration.

I used the following TTPs: First, I would use the line-of-sight (LOS) tool imbedded in FBCB2 to determine what the OPFOR could see on the approach,

and from what point. Then I would develop a plan that would keep me out of their direct fire range at night (~2.5km based on lessons learned from the IOT&E). We would maneuver slowly and deliberately toward the enemy (most battles took all night). Once we acquired their positions (usually 7-9km), we would use our laser range-finder and FBCB2 to create a SPOT report that provided a 10-digit grid and an icon on the digital map. My fire support officer (FSO), who also received the SPOT report, would ask if I wanted to engage the target with indirect fire. If I said yes, he would forward the request to the task force FSO. The TF FSO would confirm the report and then process the call for fire. All this occurred in about the same amount of time it takes to complete a voice call for fire. All participants, including the mortars and field artillery, had the exact information. Additionally, the laser range finder provided very accurate

calls for fire and excellent effects. Finally, when necessary, we would attack the OPFOR with direct fire.

During the defense, we employed similar TTPs. This time, I used the LOS tool to determine the best locations to position my systems to engage the enemy at maximum range. Also, the commander's independent viewer (CIV) enabled the commander to supplement the gunner or observe a different sector of fire. This decreased target acquisition time and increased our ability to observe a sector of fire. This increased ability to acquire targets also brought challenges. One of our major challenges was the discrimination of targets beyond 7km. The NTC OPFOR used deception well to mitigate our capabilities. At 7km, their actual vehicles and deception positions looked very similar. Although we destroyed both the deception positions and their reconnaissance, we were delayed beyond BMNT (beginning, morning nautical twilight).

When the sun came up, the OPFOR defeated us in a manner for which they are famous. To prevent any recurrence of our mistakes, I would recommend further training in long-range vehicle identification.

The M2A3 is an excellent modernization to the Bradley family of vehicles. It provides distinctive advantages to the Infantry and to the Army. By using the TTPs that we used and by developing TTPs of their own, M2A3 company commanders can better employ their units during both offensive and defensive operations. As the Army transforms, the M2A3 is ready now to meet emerging threats.

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Working With the “Light Fighters” Tips for Mechanized Company Commanders

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When I was assigned to the 2d Brigade Combat Team, 2nd Infantry Division, on the Korean peninsula, I learned a lot about the integration of light and heavy forces. Many of the lessons were painful, as I sat through many “humbling” after-action reviews in which every mistake I made was brought to light.

The *Strike Brigade* was permanently organized with two air assault battalions—1st Battalion, 503d Infantry, and 1st Battalion, 506th Infantry—and one mechanized infantry battalion—1st Battalion, 9th Infantry (Mechanized). As doctrine indicates, the brigade conducted operations as a cohesive fighting unit on the Korean battlefield in which light and mechanized forces worked

together. Company commanders had to fully understand the capabilities of both heavy and light forces to succeed in such an integrated brigade combat team.

I want to share some tips and techniques that I found useful during my time as a mechanized company commander within a light infantry brigade combat team.

Understanding of heavy/light link-up operations. The typical fight on the Korean peninsula is the classic defile fight. Normally, the two light battalions conducted air assault operations and seized high ground overwatching a defile. This allowed the mechanized force to clear the defile or low ground. To eliminate confusion on the battlefield, a battle hand-over line was established,

and the mechanized unit conducted linkup operations with the light forces in the area before moving through. This is usually conducted at battalion level with minimal difficulties. At company level, we often neglected the several small-unit linkups that needed to occur.

A mechanized company commander needs to realize that after his battalion conducts the initial linkup, he will probably conduct his own linkup with his light infantry counterpart. This is necessary because it will reduce the likelihood of fratricide and give the company commander a better picture of what is to his front. The best way to do this is to have the light commander climb up onto the mechanized commander's turret and exchange informa-