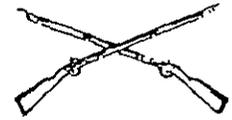




# Commandant's NOTE



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*The Bradley Infantry Fighting Vehicle has been under attack by certain elements of the Congress and the media. I wrote this paper some time ago to clarify my own thoughts as I addressed these attacks in public and private forums. I've used it in testimony before Congress and in informing influential supporters and detractors alike. Parts of it were used in a much shorter article I prepared for the Armed Forces Journal several months ago.*

*I am reprinting it here in its entirety for several purposes: First,*

*I am hopeful that the field can use it as a simplified approach to tactically employing this marvelous fighting vehicle. Second, I am hopeful that it can be used to inform our soldiers that we have the finest fighting vehicle in the world today, and one that will survive on the high technology battlefield better than any other. Finally, I am hopeful that it will stimulate responses to the Infantry School from soldiers, NCOs and officers as we continue our dialogue in how to fight the Bradley force. We look forward to hearing from you.*

Defeat of an enemy force, superior in numbers and equipped with weapons of equivalent technology, must be accomplished through maneuver warfare. The essence of such warfare embraces the avoidance of major frontal engagements where enemy combat power prevails and the initiation of friendly attacks along lines of least expectation and resistance where the enemy's combat power is emasculated and ours is substantially enhanced. At the lowest levels, these tactics are referred to as fire and movement, at higher levels as firepower and maneuver, and at the highest levels as maneuver warfare.

To accomplish these indirect tactics, infantry-heavy forces fix or at least control the movement of enemy first-echelon forces while artillery, air, and engineer units support them and freeze second-echelon forces through fire interdiction and barrier operations. While the enemy's attention is on these fixing, interdiction, and barrier actions, tank-heavy units, accompanied by protecting infantry, attack his vulnerable flanks and rear before he can react. Such operations unhinge enemy tactical integrity and provide opportunities for attack deep in the enemy's rear by division and corps constituted operational reserves.

A more precise snapshot of the maneuver aspects of these combined arms operations displays enemy target acquisition and weapons systems, offensive formations, and defensive entrenchments facing in one direction, and friendly attacks emanating from a different direction, normally the flank or rear. Such attacks avoid the enemy's superior strength while concentrating friendly strength against his weaknesses. Flank and rear attacks quickly lead to the destruction or

paralysis of the enemy's command posts and his artillery, aviation, engineer, and logistical support units. Without having taken on the enemy's superior combat force, friendly forces defeat him from within by desynchronizing his command and control and depriving his combat forces of critical firepower, maneuver and logistical support.

As indicated, there are two maneuver force underpinnings that allow these tactics to succeed. First, the enemy's first-echelon force movement must be fixed or at least controlled. Secondly, an agile maneuver force must be able to react more quickly than the enemy. The tank is clearly the preeminent weapons and mobility system for the maneuver force, and it has always performed its role well. The weapons of the infantry's M113 carrier and its organic troops have neither the range nor the lethality to perform the fixing function. Previously, tanks had to be used to execute this role and, thus, were deprived of the role that they do best — maneuver. When tanks were previously used to fix the enemy, our forces were deprived of adequate maneuver elements and were forced into attrition warfare. The enemy's superior numbers normally presented him victory. Tank-heavy forces are too precious to be used as the predominant fixing force.

With the Bradley Infantry Fighting Vehicle, the infantry now has the vehicle it needs to fix the enemy, freeing tank-heavy forces for maneuver and, thus, providing the Army with the opportunity to conduct maneuver warfare. Not only can the Bradley's TOW missiles destroy enemy tanks, its 25mm Bushmaster can destroy or

suppress its Soviet counterpart, the BMP, and its coaxial machinegun can destroy or suppress dismounted infantry. The range of these Bradley weapons systems also allows the infantry to occupy long range, dispersed, mutually supporting positions, arrayed in depth, on flanks along likely avenues of approach throughout the battle area. These positions deny the enemy complete use of his combat power by providing the directional orientation of his target acquisition equipment and weapons systems and brings the majority of our forces' combat power to bear on his weaknesses, the sides of his tanks and the flanks of his formations.

There are other premiums. The range of these weapons systems allows an extension of the umbilical cord between the infantry vehicles and the dismount elements. Previously, the location of both the vehicles and the dismount elements was a compromise between positions that would optimize each element. The positions completely ignored neither the dismount elements nor the vehicles. Now, with the longer range weapons, vehicle dash speed, and improved armament and optics, both the vehicles and the dismounted elements can be placed in optimized positions. Furthermore, such positional flexibility allows dismounted infantry the opportunity for infiltration and ambush attacks and reverse slope and checkerboard defenses, "misdirection" operations implicit in maneuver defenses.

Once the enemy force's movement is either fixed or controlled, a tank-heavy force can quickly maneuver into its flanks and rear. The Bradley infantry also has important roles with the tanks during this maneuver. It performs reconnaissance and counterreconnaissance, clears restricted terrain, protects at night, and breaches obstacles. Further, it mops up bypassed enemy, seizes key terrain to maintain the momentum of the tank attack, and, importantly, destroys and suppresses enemy antitank weapons. Tanks alone are unable to perform these roles. The M113 armored personnel carrier's lack of cross-country speed and agility prevents it from accompanying the tanks, and its lack of mounted firepower to destroy enemy tanks and fighting vehicles compromises the maneuver force. Bradley infantry can effectively fight tanks, BMPs, and other armored vehicles, thus allowing brigade and battalion commanders to mass tanks for maneuver. As can be seen, Bradley infantry is as critical to the maneuver element as it is to the fixing force.

Concern has been expressed that Bradley dismounted strength has been reduced to unacceptable levels that prevent it from performing the roles just discussed. Even when the M113 personnel carrier was structured with an 11-man squad, there were only five maneuver soldiers. Five members of the squad were dismounted to perform fire support because the gunner with the .50 caliber machinegun could not perform that role without substantial reinforcement. The current Bradley squad with its six dismount soldiers dedicated to maneuver can perform infantry dismount roles as well as, if not better than, the five in the larger M113 infantry squad.

Other concerns have been expressed relative to the Bradley's capability to stay up with tanks during maneuver because of its light armor protection. The F15 aircraft is highly vulnerable to any ordnance that hits it; however, it derives its survivability from its speed, agility, and tactical employment. The same situation applies to the Bradley. Against light resistance by an enemy force such as a mechanized or tank platoon (3 or 4 vehicles) that is not dug in and does not possess combined arms support, the Bradley can fight in the same combat formation with the tank.

During a medium resistance situation, where the friendly force is faced with a company-sized element (10 to 15 vehicles) with combined arms elements supporting and dismounted elements in a hastily dug position, the Bradley is able to perform overwatch missions,

suppressing and destroying targets to allow the tanks to maneuver to break the integrity of the enemy's tactical dispositions. Once this is accomplished, the Bradleys can then join the tanks and continue the fight in the same combat formation. Against heavy resistance, where a battalion-sized enemy force (40 to 50 vehicles) is echeloned in depth, with security to the front, with combined arms support, and with all vehicles and infantry in dug-in positions, both the Bradley and the tanks will go into overwatch positions. From these positions, the tanks and Bradleys destroy and suppress the enemy to allow dismounted infantry from the Bradleys to move forward to conduct close overwatch and assault breaching missions. Once the assault breach is accomplished, tanks can move forward, exploit the breach, hold the shoulders, and allow follow-on tank and Bradley combat formations to continue the attack.

In a battalion task force area, many independent but related fire-fights occur. In some of these fights, Bradleys will be fighting within the same battle positions or formations as tanks. In other situations, they will be in long overwatch with or without the tanks. In each situation, conditions are dynamic and the Bradleys move forward or remain in defilade as the situation dictates. This is the nature of combined arms tactics that are subscribed to by infantry and tank forces throughout the world. Importantly, the Bradley can perform in all situations relatively impervious to artillery fire because its ammunition and POL are stored internally. Externally stored fuel and ammunition might increase survivability somewhat from direct fire interdictions but would degrade the vehicle's enormously important firepower and mobility functions considerably during enemy artillery engagements, which will be formidable and frequently experienced.

To capsulize, the defeat of an overwhelming echeloned force must be accomplished through maneuver warfare which, in conjunction with combined arms fire and barrier support, requires both a fixing force and a maneuvering force. Infantry-heavy forces must perform the fixing functions to free tanks for the maneuver elements. These fixing forces will also contain some tanks to perform reconnaissances in force, spoiling attacks, and local counterattacks. The maneuver element, consisting principally of tanks, will also contain some Bradleys to perform reconnaissance, security, clearing, breaching, and suppression missions. The M113 carrier force can neither fix the enemy nor perform the infantry functions required during maneuver because of its inferior firepower and mobility characteristics. The Bradley can perform both roles and perform them well.

The wisdom of the Bradley design has been validated in 19 high resolution wargames. Fighting as a member of a combined arms task force against overwhelming 3 to 1 odds (motorized regiment), in a full range of mission and terrain conditions, the Bradley has increased measures of total force effectiveness up to 100 percent over that of an M113-equipped force, the precise measure depending on the scenario. Importantly, the Bradley's contribution to the fight was over 200 percent that of the M113 in all cases. The Bradley force sustained up to 25 percent fewer casualties to indirect fire than the M113 force and reduced total task force personnel casualties by almost 20 percent in most cases. These increased capabilities allow Bradley forces to fix the enemy, freeing tanks and other Bradleys to seize the initiative through maneuver and shock action — roles that are the basic underpinnings of maneuver warfare doctrine.

In short, the Bradley, with its optimized firepower and mobility, working synergistically with the remainder of the combined arms force in the execution of a doctrine for which the force was designed, allows that force to win. Without the Bradley, the force frequently loses.