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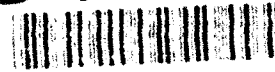
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**The Bradley Infantry Squad Leader
A Breach Of Faith?**

**A Monograph
by
Major Frederick S. Rudesheim
Infantry**



**School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas**

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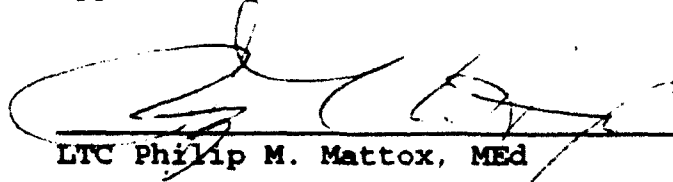
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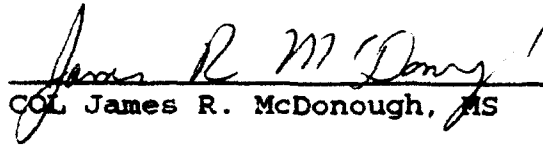
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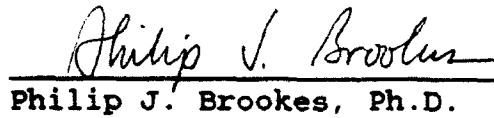
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ABSTRACT

THE BRADLEY INFANTRY SQUAD LEADER: A BREACH OF FAITH? By
MAJ Frederick S. Rudesheim, USA, 45 pages.

The Bradley Fighting Vehicle (BFV) equipped units have undergone significant reorganization at the platoon level. The most significant change is the delineation of vehicle (mounted) and dismounted elements, with the Bradley vehicle commander remaining with the vehicle and the two dismount squad leaders leading the dismounted element.

This study answers the question, Can the Bradley squad leader manage both the mounted and dismounted responsibilities he once had? This monograph builds on a historical examination of armored infantry in German, Great Britain, and the Soviet Union to provide some perspective on the growth of mechanized infantry in the US. The evolution of the current BFV doctrine is also discussed, leading into alternative BFV employment considerations. A close examination of what is expected of the squad leader concludes that the BFV squad leader is capable of adequately commanding both the vehicle and the infantry dismount element.

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INTRODUCTION

The 1989 Bradley White Paper asserts: "The most demanding job in the Infantry is that of the squad leader, the traditional trainer of soldiers."¹ This is all the more true today as the mechanized infantry seeks to integrate into doctrine the M2 Bradley Fighting Vehicle (BFV) system. The mechanized infantry has changed substantially in the decade since the M2 was first received into the inventory. The squad leader now manages a sophisticated firing platform that offered significant advantages over the venerable workhorse, the M113 Armored Personnel Carrier (APC). Yet, beyond the necessary adjustments inherent in the vehicle's quantum leap in technology (compared to the M113), the BFV system presents a number of challenges regarding unit organization, command and control, and tactical employment that ultimately require resolution. The Infantry School, as proponent for emerging BFV system doctrine, organization, and training, determined that the squad leader could not effectively act as both vehicle crew commander and a dismount element leader.² The solution was to split the squad leader job between two NCOs, one a vehicle commander and the other a dismounted squad leader. This paper will examine what

requirements drove the changes in squad level command and control. Most significantly, did we lose faith in the squad leader's abilities or were the changes necessary? To provide an analysis, this monograph is organized in the following manner: First, a brief survey of how armored infantry³ evolved in Germany, Great Britain, and the Soviet Union will provide a historical perspective of how US mechanized infantry structure and doctrine developed. Next, given the historical backdrop, this monograph will focus on contemporary developments in training, organization, and doctrine in mechanized infantry since the fielding of the BFV. Given then the evolution of current US doctrine, this paper will analyze BFV organizational structure and employment considerations. Next, provided an understanding of existing employment doctrine, the focus will shift to an analysis of the capabilities, roles and responsibilities of the mechanized infantry squad leader. Finally, the conclusion will provide arguments concerning the current BFV doctrine with regards to the squad leader's responsibilities. Given the abundance of issues surrounding the BFV, this monograph will not attempt to specifically address the problems resulting from the low number of dismounted infantry in BFV units nor the

personnel replacement problems created by assignment shortages.

HISTORICAL PERSPECTIVE

The concepts and doctrinal principles for the use of mechanized infantry have undergone significant changes since their initial fielding prior to World War II. The development, both technical and doctrinal, of the armored infantry in Germany, Great Britain, and the Soviet Union significantly influenced the US armored infantry integration. A brief survey of how each of these countries approached the new concept of armored warfare, particularly with respect to armored infantry, will provide a perspective on the US Army's parallel development.

The German Army began integrating mechanized and armored forces in the early 1930's. Heinz Guderian, considered the architect of the modern German armored forces, focused on the idea of using motorized infantrymen in support of shock action by tanks.⁴ According to Simpkin, the *modus operandi* of the panzer grenadiers when working dismounted with tanks evolved in the Spanish Civil War. The German technique, "when not actually required to lead, place the infantrymen

tucked in behind the tanks, using their armor as cover and guarding their flanks and the blind zone that immediately surrounds every tank."⁵ The vehicle used varied throughout the prewar and World War II period. The medium APC Sdkfz 251 and the six man APC version of the smaller Sdkfz 250 were first issued to the German Army at the beginning of the war. Only a relatively small number of Sdkfz 251 were ever produced. The major issue of the day was the proportion of tanks to infantry in the major German Army formations. Panzer grenadier divisions started with a 6 to 1 infantry to armor ratio, later reducing the number to 4 to 1. There appears to have been a trend towards balanced forces that remains with the Bundeswehr today.⁶

During World War II, the German's use of APCs reached a peak in 1943, with only 26 out of 226 units (11.5%) armored. The remaining units were unarmored three-quarter track or soft-skinned wheeled vehicles.⁷ The trend in the roles and importance of the panzer grenadiers began shifting. At the beginning of the war, their role was clearly to support tanks. Later, the panzer grenadiers became a combat arm in their own right, "equal partners of the tanks and even, in the eyes of some commanders, first among equals."⁸ The Weermacht designated the following roles for panzer

grenadiers with relation to tanks in their Field

Service Regulations (16 June 1944):

. . the tank fights the enemy tank and destroys other weapons. The panzer grenadier looks for hidden antitank guns and fires on them. He prevents close quarter attack on the tanks. Covered by tanks, he clears the enemy position . In good country, the armor moves by bounds from cover to cover, giving fire protection to the panzer grenadiers following. in wooded areas, the panzer grenadiers precede the tanks [and] . . . destroy the enemy with the weapons they carry on their vehicles.⁹

The regulation further elaborates on the role of the panzer grenadiers:

Every other arm is dedicated to helping the tank advance . . . Tanks cannot completely clear the enemy from captured ground, and scattered groups of the enemy may combine to continue the fight. The panzer grenadier regiments follow the tanks in elongated echelon, and, collaborating with the second armored wave, annihilate enemy remnants as well as carrying out the tasks of guarding and securing the rear and flanks of the armored units. Panzer grenadiers hold the areas captured by tanks. Where a tank is obstructed by difficult terrain or by artificial barriers, the panzer grenadiers advance first. The conditions for this are: (a) attacking across rivers; (b) in heavily wooded areas, swamp or badly cutup terrain; (c) minefields, antitank ditches and other tank obstacles; (d) when breaking through enemy antitank fronts. The tanks will give supporting fire to the panzer grenadiers' advance. Once past the obstacles, the tanks resume the leadership of the advance . . .¹⁰

In order to accomplish its tasks, the panzer grenadiers used three methods in the offense. The first technique, and most common, was for the infantry to

follow tanks to the objective and then dismount at predesignated location. The dismounted infantry then assaulted or cleared the obstacle. The second method involved driving into the middle of the enemy's position where panzer grenadier fought from either the vehicles or dismounted to clear the objective. The third (and least preferred) method was to cross the line of departure dismounted and move to the objective in the traditional form of the infantry attack.¹¹ There was a growing reliance on panzer grenadiers as the war continued. A memorandum, written by a high ranking German officer, asserts; "it is even said by some that commanders would prefer to lose tanks rather than their infantry."¹²

Today, the Germans have fully integrated mechanized infantry and armor. Armored combat troops provide the bulk of the combat troops of the German Field Army. The tank is the central weapons system, around which the major effort at every level of command is built. In the attack, the tank forms the nucleus of the offensive force. Mechanized infantry usually is employed in mountainous or covered terrain. During offensive and delaying operations, mechanized infantry usually fights mounted in their Marders (German Infantry Fighting Vehicles). In the defense, the

panzer grenadiers invariably fight dismounted from fortified positions. Whenever possible, all dismounted infantry in a company should be consolidated into one position, with a width of 500 meters. The Marders, utilizing their mobility, fight initially in front of and later on the flanks of the fortified positions. The dismounted panzergrenadiers and the Marders do not conduct separate operations but operate as an entity. The German brigades are true combined arms organizations, with all branches of the armored combat troops and combat support elements .

All German officers and NCOs must be capable of leading units and platoons of other branches. They must master the principles of employment and know the weapons and equipment characteristics of the other armored combat troops. At Munster, the German Army has one school and one doctrine for the leaders of their four armored combat troop branches.

The British use of armored infantry also underwent a series of changes in the prewar and World War II years. In the 1930's, the Bren carrier was used in British infantry battalions as a weapons carrier. The carriers were organized into scout platoons, with motor platoons in soft-skinned wheeled vehicles with limited mobility.¹³ Simpkin states: "the interesting

feature of the early days in North Africa is that the motor battalions were used with great success in mobile columns without tanks (emphasis in original), in exactly the same way . . . that Brauchitsch and many German cavalry officers had foreseen for the panzer grenadiers."¹⁴ Simpkin believed that these operations were significant because they illustrate the effective use of infantry in mobile operations as a force in its own right, with or without tank support. The British motor battalions did establish a lasting role as organic infantry of the tank brigades, in a proportion of 1 to 3 (motor platoon to tank company).¹⁵ As with the German, British armor divisions moved from tank heavy towards a balanced mechanized infantry - armor organization during World War II. But, "at no time . . . was there any deliberate, organized tactic of infantry riding straight into battle or of the armored motor battalion venturing forth more than locally from its role of 'in-house' support of tanks. For British infantry, the march into battle was still by foot and any defense from a foxhole."¹⁶ As with the British, the Soviets also devoted substantial effort to devising the most effective motorized force.

In the years prior to World War II, the Soviets sought to build up mobile forces. They appreciated the

need for balance in these forces and tried to build a motor mechanized corps. Unfortunately, the 1937 purge led to the execution of Marshall Tukachevsky and other proponents of mechanized forces and put a halt to their plans.¹⁷ In 1939, a commission chaired by General G. I. Kulik reviewed the question of tank force organization. With Tukachevsky and his followers gone, there was not a big emphasis on large mechanized formations. The commission directed the partial dismantling of these units, emphasizing the infantry support role. Another product of the commission was a new, more balanced organization, the motorized rifle division of 1939.

Four of the fifteen planned motorized divisions were formed in 1940, representing a better all-round organization than the tank corps they replaced.¹⁸ The Soviets, along with the Germans and the British armies, continued experimenting with armored mechanization throughout the 1930's. Meanwhile, the US Army was yet to begin armored mechanization in earnest. It would take the Germans to provide the US impetus to begin the development of an armored force.

The devastating German armor attacks on France in 1940 renewed interest in "mechanized experiments"¹⁹ within the US Army. Brigadier General Adna Chaffee, a cavalry officer, convinced the War Department to create

an armored force that was not branch specific.²⁰ Two armored divisions were authorized in 1940, each with two battalions of infantry. The importance of armored infantry was recognized early on and tactical and doctrinal development was unified under the control of the Chief of the Armored Force. The Armored Infantry was trained by the Armor Center until June of 1941, when the Infantry Center assumed control. Despite the lack of a clear and direct path for the US mechanized infantry, it was able to field an adequate armored infantry force that worked well with tanks. Once the US entered World War II, the importance of the armored infantry grew significantly. The ratio of armored infantry to tanks increased throughout the war. At the onset of hostilities, the ratio was two to one tank to infantry and about one to one by the end of the war.²¹ After World War II, General George S. Patton stated: "the armor divisions should have at least two armored infantry battalions for each tank battalion."²² The first real efforts at armored mechanization for infantry included the venerable International M2 Half Track in 1941. Although comparatively less mobile cross-country than the German three-quarter tracked sdkfz 251, the M3 saw action throughout World War II.²³ Following World War II, a number of vehicles succeeded

the M3. The most notable of these was the M113 armored personnel carrier (APC). The preliminary concept drawings for the M113 were completed in 1956, with approval in late 1956 to seek competitive proposals for the engineering development. In only 43 months, the winner, Ford Motor Company (FMC), delivered the first production vehicle.²⁴ The development of the Soviet BMP and the German Marder caused the US to seek an alternative to the M113 'battle taxi'²⁵. The Mechanized Infantry Combat Vehicle (MICV)-1965 program was in response to the search for a US IFV. The Vietnam war and the resulting shortage of funds caused the cancellation of the MICV-'65 program. Continued pressure from Soviet mechanization and the proliferation of the BMP caused the US to resume its IFV program in 1968.²⁶ The production of the IFV began in May 1981. The decision to include a stabilized 25mm Bushmaster cannon and the tube-launched, optically-tracked, wire command link guided (TOW) missile system provided the mechanized infantry with more firepower than ever before. The infantry now had a weapons platform that required specialized training and a new approach to employment. The production of the Bradley Fighting Vehicle was the culmination of considerable research and testing. As this historical

survey shows, the use of armored (mechanized) infantry and the Infantry Fighting Vehicle (IFV) concept are not new. The US. Army developed the Bradley in response to a number of requirements in emerging technology and doctrine. The problem that plagued the Army from the very beginning was just how to employ this new vehicle that was a quantum leap in armored infantry capability. As the Infantry struggled to resolve how to best utilize the BFV, the Infantry School considered a number of proposals. In 1989, the Infantry School published the "1989 Bradley White Paper (hereafter called the White Paper)."

EVOLUTION OF CURRENT BFV DOCTRINE

The purpose for writing the White Paper was to identify the weakness' in the Bradley force which impact on fighting effectively and provide a method for organizational realignment.²⁷ The authors reiterate the central issue that plagued the integration of the Bradley into units during its initial fielding; "There is a disconnect between current structure and how we intend to employ the Bradley Fighting Vehicle. This same disconnect impacts negatively on our ability to train to combat standards. Simply stated we are not

organized the way we intend to fight."²⁸ Very few within the infantry community dispute the fact that serious problems existed with how to organize the BFV units for combat. The immediate answer for these Bradley equipped units was to find a solution to the employment dilemma that suited their requirements and integrate the vehicle into their standard operating procedure. The Infantry School updated the field on proposed changes, but allowed units to implement their own solutions to the problem. The Infantry School hosted periodic infantry conferences that became the forum for disseminating and exchanging ideas on how to better organize and employ Bradley equipped units. The Third Infantry Division figured prominently in these conferences, proposing many of the ideas that would later become the foundation for the White Paper.²⁹

3ID's review of the Final Draft of FM 7-7J, The Mechanized Infantry Platoon and Squad (Bradley), became one of the first stepping stones in the effort to provide direction to the emerging Bradley doctrine. There were several key points developed in 3ID's March 1984 review. First, the document pointed out that having all three squad leaders capable of independent action was the exception rather than the rule. The document went on to say:

Variations in talent and experience as well as personal experience contributed to this phenomenon. Although we should direct our training programs towards improving this situation, our tactics and techniques should realize that, as a general rule, the leadership of the platoon will center around the platoon leader and platoon sergeant. Accordingly, the standard technique for fighting mounted should be to deploy as sections: one led by the platoon leader, the other controlled by the platoon sergeant. . . The 'Fight by section' concept also acknowledges that the BFV should never fight alone, supported only by its dismounted element.³⁰

Also significant was the document's assertion that while FM 7-7J indicated the positioning of dismounted team and vehicle team together under squad control was the preferred method, 3ID contended that "for a variety of reasons it should be the exceptional method, with [vehicle and dismounted] elements being the normal configuration."³¹ The document cited the following reasons:

1. In the offense or defense it will usually be wiser not to site the vehicles with the dismounted infantry. The vehicle will be a natural target for the enemy, drawing fire to the dismounted infantry.

2. The vehicles need room to move between primary and alternate positions. The distance created by these movements makes control by the squad leader impractical.

3. The vehicles need different ground than the dismounted infantry, whether in offense or defense. The infantry will seek covered terrain, dismounted approaches, and close battle. The vehicles seek long range fires. These opposing criteria will rarely be available within 50 meters of each other; consequently, terrain needs will make squad leader control difficult.³²

In addition to the initial review of the field manual, a number of related documents followed. One such document was the 1987 letter from MG Krawciw, the commander of 3ID, to MG Leuer, Chief of Infantry and Commandant of the Infantry Center.³³

The "Krawciw Paper," as the document became known, expanded on many of the same issues surfaced for the Final Draft critique of FM 7-7J and subsequent Infantry School sponsored conferences. In an attached personal note to MG Leuer, MG Krawciw wrote, "More work than meets the eye went into the attached paper. It is a product of this division's BFV experience since 1983." ³⁴ Having read the document, MG Leuer attached his own note to the Infantry School's Assistant Commandant stating, "None of this is new -- the only thing new is the BFV, which few people, to include many at the United States Army Infantry School (USAIS), have recognized and accepted." ³⁵ The document reiterates the suggested changes to FM 7-7J, highlights the BFV training problems, and discusses needed changes in Bradley gunnery training and qualification. Most significantly, it offered an alternative to the current BFV platoon Table of Organization and Equipment (TOE). Throughout the document, the role of the Bradley squad leader figured prominently in all discussions of the

issues. Several issues impacted directly on the technical and tactical requirements of the squad leader.

One such issue was the training of the Bradley platoon members in the technical and tactical skills required to achieve combat readiness. The paper asserts that the Bradley platoon leadership must be trained in the following areas: the dismounted skills of a light infantry platoon; the mounted and gunnery skills of an armor platoon and the antitank skills of an Improved Tow Vehicle (ITV) platoon. It concludes that "the Bradley platoon has two to three times the number of individual and collective tasks that the light infantry must be proficient in, but much less time in which to accomplish them." ³⁶ The preferred option offered is a radical departure from the prevailing thought on Bradley operations -- separate the dismounted infantrymen from the crew that fights from the vehicle, thus breaking up the traditional notion of squad integrity. The authors argue that the BFV does not have to go the traditional route of both light and M113 equipped infantry. Instead, the BFV provides "the potential for true armored infantry, a departure from traditional US experience, which suggests the possibility that the squad may not be the

optimal subunit organization." ³⁷ The authors provided two proposals for new squad organizations that meet the criteria for separate vehicle crew and dismounted infantry.

Both proposals for the Bradley platoon restructuring include two distinct mounted (vehicle) and dismounted (infantrymen) entities. The vehicle teams, consisting of three crew members each, would maneuver together and remain under the centralized control of either the platoon leader or platoon sergeant (depending on which one of them was with the dismounted infantry element). The significant difference between the two proposals is the structure of the dismounted infantry element. In one proposal, the dismounted element consists of three teams of six men. The second proposal organized the dismounted infantrymen into two nine man squads, each consisting of two teams. These and other ideas forwarded in the Krawciw Paper figured prominently in what would later become the White Paper.

The White Paper was the Infantry's most significant attempt to capture the best ideas from Bradley equipped units and provide focus and direction to the Mechanized Infantry under the rubric of the Infantry School. With the publishing of the White

Paper, there was a concerted effort to consolidate disparate ideas on tactics, techniques, and procedures and provide the best solution to what were generally acknowledged as the Bradley's most significant challenges. The White Paper, borrowing liberally from the 3ID document, asserted that the Bradley equipped mechanized infantry organization was hamstrung by its direct patterning after the M113 based mechanized infantry. Further, it clearly states that "the platoon now must fight in elements; one mounted, one dismounted. The subordinate sections and vehicles are not independent fighting units." ³⁸ The tactical dilemma posed in the document is that "tactical employment and training emphasis remained focused on training the squad." ³⁹ The job of the Bradley squad leader figured prominently in how the Infantry School envisioned the development of an improved Bradley doctrine. Most of the issues developed in the White Paper stem either directly or indirectly from the role of the squad leader. The document contends that the BFV squad leader is incapable of controlling both the mounted and dismounted elements simultaneously.

In tactical situations, the squad leader cannot control the BFV and the rifle team without improperly siting or losing control of one or the other elements

-- or both. The White Paper provides the following rational:

Siting the vehicle with the dismounted rifle team makes squad leader control possible but limits the application of the BFV's combat capabilities. Keeping dismounted infantry near the vehicle equally limits full use of their capabilities to maneuver in close terrain and against armor killing systems. Both doctrine and mounted/dismounted BFV platoon capabilities virtually mandate their separate use to mass fully the combat power at the decisive time and place. ⁴⁰

The result, according to the white paper, is confused leadership roles for both the squad leader and the assistant squad leader. In a training environment, the ramifications are even more severe.

In what appears to be a direct graft from the Krawciw Paper, the white paper contends that the squad leader must be fully trained in the dismounted infantry skills, gunnery skills, and antitank (TOW) skills. The direct result of these requirements is the imposition of additional tasks and with no additional time to train. The multiple jobs (mounted/dismounted) of the squad leader requires that he be trained both ways. The White Paper argues that while the squad leader may be capable of exercising all the skills at once he cannot train the squad in both

simultaneously.⁴¹ The solution is the restructuring of the platoon organization.

The resulting proposal for revamping the structure of the Bradley platoon is essentially the same as the second proposal in the Krawciw paper -- a four vehicle mounted element and a dismounted element consisting of two squads . There are two Staff Sergeants (E6) as squad leaders within the Bradley platoon. These squad leaders are solely responsible for leading their squads when dismounted. The senior dismounted squad leader is additionally responsible for the employment and training of the dismounted element until the platoon leader or platoon sergeant arrive. There is no command relationship between the dismounted squad leader and the Bradley vehicle commander. The dismounted element is expected to provide local security for the vehicle and assist in the digging in of the BFVs. Otherwise, the infantrymen in the rear of the Bradley are expected to conduct typical infantry dismounted missions under the direct control of the dismounted squad leader.

The expectation that mechanized infantrymen, once dismounted, can perform the same missions of light infantry proves to be problematic. Should mechanized infantrymen be expected to perform as light infantry

given the special capabilities of the BFV, or is there some special niche for units with their capabilities?

BFV EMPLOYMENT CONSIDERATIONS

The mission of the mechanized infantry becomes the critical determinant in the employment of the BFV system. FM 71-2: Tank and Mechanized Infantry Battalion Task Force defines the mission of a mechanized infantry battalion as follows: "close with the enemy by means of fire and maneuver in order to destroy or capture him, or to repel his assault by fire, close combat, and counterattack."⁴² Conspicuously absent from this definition is any mention of the mechanized infantry supporting tanks. Conversely, FM 100-5: Operations states: "Mechanized infantry compliments armor through its ability to seize and hold ground. It provides overwatching antitank fires and suppresses enemy infantry and antitank fires and suppresses enemy infantry and antitank guided missile elements."⁴³ The Army's keystone manual further elaborates on the armor-infantry relationship with the following:

Mechanized infantrymen have the same mobility as tankers but less firepower and protection. Armor and mechanized infantry must perform as a team to defeat enemy armored forces. When equipped with infantry fighting vehicles, the mechanized infantry can accompany tanks in mounted assault,

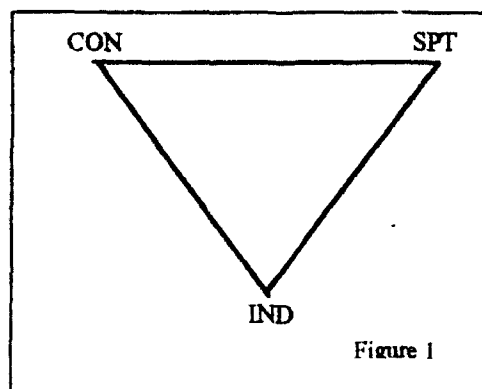
although care must be taken in determining when and where infantry must dismount to accomplish their mission. In the attack, such infantrymen can act as fixing forces."⁴⁴

The 1957 version of FM 17-20: Armored Infantry Units Platoon, Company, and Battalion describes the relationship even more succinctly: "The Armored Infantry has the mission of assisting in the successful advance of tanks through mounted and dismounted action."⁴⁵ The primary role for the BFV equipped infantry is to support armor. The White Paper fails to emphasize this important consideration. According to the document, the primary capabilities of the Bradley infantry are as follows:

- (a) Provide a mobile protected transport of sufficient infantry to the critical decision point on the battlefield
- (b) Overwatch by fired to support the dismounted infantry
- (c) Suppress/destroy THREAT IFV/light armor vehicles
- (d) Kill THREAT armor ⁴⁶

If the focus of mechanized infantry is not armor support then the evaluation of the BFV squad leader's job requirements becomes skewed towards conventional infantry tactics. Brigadier Richard E. Simpkin, British Army (retired), proposed a model for describing the vehicle employment options after dropping off its infantrymen.

The three options for using the vehicle are depicted as the three corners of a triangle. The corners are labeled the following: conservation (CON), ensuring that the IFV is available to pick up its squad again; support (SPT), directly supporting its dismounted squad; independent (IND), firing and maneuvering as an armored vehicle platform (See Figure 1).⁴⁷ The actual use of the vehicle can reside at one of these poles or anywhere between the poles. Simpkin contends that an Army converting from APCs to IFVs naturally and logically starts in the conservation corner of the triangle. The direction it moves depends on whether its thinking is dominated by the offense or by the defense. In the offense, both in the attack and within the framework of an aggressive defense, armored infantry maintains the mobility of the tanks; the IFV supports both the tank and its squad and maintains the mobility of both.



In the mechanized combat team, which is supported by main battle tanks (MBTs), it is the IFV's mobility that must be maintained. The infantry squad contributes to this either by firing its weapons through its weapons ports or by dismounting and clearing forward. All of this activity lies near the line joining the "conservation " and "support" corners of the triangle, as in the Soviet case. Soviets do not like dismounting their infantrymen. The shortcomings of the armor on the BMP1 and BMP2 have led the Soviet commanders to use increasing caution in their handling of the BMP within the direct fire zone. The problem arises from the roles assigned to mechanized (infantry heavy) combat teams and the way they fight. The rate of advance and the movement technique used is usually more deliberate than the armored (tank heavy) combat team. There is the clear expectation that the infantrymen will dismount whenever feasible. Within the armored combat team, a premium on speed and momentum precludes the use of deliberate dismounted infantry support unless it is absolutely necessary. For this reason, the armored combat team does not suffer from the pull to separate the IFV from the squad. The Bundeswehr may well have had second thoughts concerning

the employment of the Marder because of these vehicle versus dismounted infantrymen considerations.

In the 1983 edition of Tanks of the World, General von Senger of the Bundeswehr writes, "Nevertheless, the linked requirements... [have] led to jack-of-all-trades designs. For this reason the trend may well swing back towards two separate types of vehicles - the fire support (or escort) vehicle to relieve the MBT, and the APC whose operational characteristics have yet to be defined."⁴⁹

Colonel Huba Wass de Czege, in his 1985 Infantry magazine article, "Three Kinds of Infantry," postulates a similar argument concerning the US Army's attempt to over extend the IFV equipped infantry units. Col Wass de Czege contends that there is a need for the following three basic kinds of infantry: armored infantry, whose primary mission is to support the advance of the tank; regular infantry, whose primary mission is to hold ground and to take fortified or infantry defended positions; and light infantry, that is strategically, operationally, and tactically highly mobile using Army or Air Force aircraft and that can fight highly mobile tactical engagements in difficult terrain.⁵⁰ There is general agreement concerning the traditional categories of armored (mechanized) infantry

and light infantry. The key distinction drawn by COL Wass de Czege was the identification of regular infantry. This regular infantry, equipped with the M113, would have the mobility to get to the battlefield, but would fight dismounted. The IFV equipped armored infantry, in their tank supporting role, would fight dismounted by exception. Col Wass de Czege states: "the debate today over how to use the Bradley equipped infantry and the [then] new light infantry results from trying to use either force as regular infantry."⁵⁰

THE SQUAD LEADER'S TRAINING BURDEN - WHAT IS EXPECTED OF HIM?

A focus of concern was the excessive number of tasks that the BFV squad leader had to perform. In 1987, the 3ID's "Krawciw Paper" addressed the demands placed on the squad leader, specifically the following:

To reach combat readiness, the Bradley platoon and its leadership must be trained in:

- (a) The dismounted skills of a light infantry platoon
- (b) The mounted and gunnery skills of an armored platoon
- (c) The antitank skills of an Improved TOW Vehicle (ITV) platoon⁵¹

The same document goes to say that "the Bradley platoon has two to three times the number of individual and collective tasks that light infantry must be proficient in, but much less time in which to accomplish them."⁵³ This assertion that the task load is unreasonably heavy is found later in the 1988 War College paper of LTC Theodore Severn. LTC Severn, having contributed to the Krawciw Paper, uses identical wording to describe the triple load (light, mounted gunnery, antitank) of requisite skills for the Bradley platoon. He further asserts that "there are well over 100 additional tasks for Bradley infantrymen to learn, beyond what is required of airborne, light, or airmobile infantrymen."⁵⁴ The White Paper uses virtually the same words to specifically describe the squad leader's skill load. This subtle shift in emphasis from the generic infantryman or Bradley platoon to the squad leader may have been the Infantry School's deliberate attempt to highlight the squad leader as the 'long pole in the tent', the individual leader who bore the brunt of the increased task load. Again, the White Paper asserts that, because of the increased number of individual and collective skills for the Bradley Infantryman, the squad leader's training responsibilities have "almost doubled."⁵⁵ The

issue of overburdening the squad leader with tasks is a reoccurring theme throughout the previously cited Bradley related documents. A comparison of critical tasks for skill levels 1-4 for Bradley Infantryman, military occupational specialty (MOS) 11M, and basic infantrymen, MOS 11B, will provide some perspective concerning the actual number of tasks required of the Bradley Infantrymen.

The 11M Bradley Infantrymen must perform 53 more critical tasks than their basic infantrymen counterparts (see table 1)⁵⁵. The vast majority of these tasks concern the weapons system organic to the Bradley (25mm chaingun, 240C Coaxial machine gun, TOW system). Of the 53 tasks, 21 are skill level one tasks, dealing primarily with BFV maintenance and loading the weapons systems. The 27 additional 11M skill level 2 tasks focus the soldier on the more difficult tasks of operating the vehicle's weapons systems. Significantly, skill level 3 tasks, those pertaining to the squad leader, are virtually the same for 11M and 11B squad leaders. At skill level 4, there are three 11M specific tasks, all having to do with maneuvering the BFV platoon and movement techniques. Given this overview of critical tasks, we will next

examine the squad leader requirements during BFV gunnery.

Skill Level	Duty Position	Tasks Unique to 11B		Tasks Unique to 11M	
		Subject Area	Tasks	Subject Area	Tasks
1	Driver	M60	7	BFV Mounted Ops	6
	AntiArmor Spec			25mm Chain Gun	4
	Automatic Rifle.			Firing Port Wpns	8
	Rifleman			TOW	3
	Grenadier				
	RTO				
	Scout*				
	Machine Gunner*				
Skill Level 1 Sub Total				7	
2	Fire Tm Leader	50 Cal	3	M2 Turret	2
	M2 Gunner**	Sec & Intel	1	25mm Chain Gun	8
	Asst. Sqd Ldr			240C MG	8
				M257 Smk Grnd Lchr	2
			TOW	5	
Skill Level 2 Sub Total			4		25
3	Squad Leader			Man. BFV Rifle Tm	1
				Perp BFV Range Crd	1
Skill Level 3 Sub Total					2
4	Platoon SGT			Man. M2 Plt	1
				Con Mted Mvmt Tech	1
				Con Dismtd Movmt	1
Skill Level 4 Sub Total					3
Overall Total Tasks Unique to Each MOS			11		51
* Only 11B		** Only 11M			

TABLE 1

Under the old squad configuration (squad leader as Bradley vehicle commander (BC) and dismounted leader). BFV gunnery became one of the most difficult periods on the training calendar. The emphasis was clearly on the vehicle to the detriment of the infantrymen who rode in it. Bradley gunner skills are extremely perishable and require regular training to maintain a baseline proficiency. The Bradley commander's requirements in the turret are much more limited in terms of tasks to execute, but comprehensive in terms of supervision of the gunner. The Bradley driver also plays an important role in the crew overall effectiveness. The extent to which he can take appropriate action without direct intervention from the Bradley commander (BC) allows the BC to focus attention on the tactical aspects of navigation, maneuver, and vehicle fire distribution. The BC is the least incumbered, in terms of actual tasks required of the crew. This does not denigrate his extremely important job of crew trainer, but points to the fact that his proficiency in the turret rests primarily in how well he can train the gunner and driver. A hypothetical example of crew interaction for a specific engagement highlights the typical requirements of each crew member.

The Bradley crew is moving as part of platoon wedge formation during a company movement to contact.

Terrain is primarily open. The BC, scanning visually from the hatch (not looking through opticals), sights an enemy IFV.

BC: (slews turret to the general vicinity of the target while giving the fire command to the gunner) "GUNNER, SABOT, PC, 1200M" (his estimation).

GUNNER: (looks through the gunner station sight in low magnification to try to spot the target - sees the target) responds "IDENTIFIED" (the following must occur in rapid succession throughout the process of identifying the target: punch in the correct ammunition type and rate of fire, usually HIGH RATE on the control panel to his right; dial the correct range on the integrated sight unit (ISU) in front of him; flip the magnification switch above him to HIGH MAGNIFICATION once the target is sighted)

BC: "FIRE"

GUNNER: "ON THE WAY" (Gunner fires one or two sensing rounds at the target to determine range. This is where the Gunner-BC interaction is critical. The BC, looking through his sight, assists the gunner sensing the strike of the rounds. When the gunner hits the target, the BC calls "ON" and the Gunner fires a three round bursts until the target is destroyed and/or the BC calls "cease fire". The engagement was on the move and the driver's primary responsibility is to provide a steady firing platform throughout.

This example did not cover the many permutations that will occur during an engagement (e.g., the gunner can not identify the target) but it does emphasize how critical the gunner is during any given engagement. A similar sequence would repeat itself if the engagement called for firing either the TOW missile or the coaxial machine gun. The squad leader must ensure his gunner and driver get the necessary training to achieve and maintain proficiency, but the bulk of tasks required clearly rests with the gunner. But what of the rest of the squad during this period?

Training the dismounted infantrymen during a gunnery period is perhaps the most difficult peacetime challenge for mechanized infantry leadership. The entire chain of command is dedicated to the gunnery density, with little time to dedicate to the non-crew infantrymen. The issue is clearly one of focus. The most important training event is the vehicle qualification. This single track training negates any viable effort in what is the vehicle's primary mission support of dismounted infantrymen.

Training the dismounted infantry along with the vehicle crew is currently only done during Bradley table XII, Platoon Qualification. Beginning with pregunnery through crew qualification, BT VIII, the dismounted element trains separately from the vehicle crew. The reasons for this separation are varied, but most significantly, the two elements of a platoon must achieve a level of technical proficiency (in small arms marksmanship or vehicle systems) before coming together for their final exam. The opposing view holds that crew and dismounted infantrymen must train as the team they constitute should hasty dismounted activity be required. In the offense, usually supporting tanks, the mechanized infantrymen dismount to reduce obstacles, clear out enemy antitank positions, and

clear choke points of enemy dismounted infantry. This implies close coordination between vehicle and dismounted element, something difficult to achieve with separate but equal training. The difficulty of training the two elements together raises one of the principle themes of the White Paper, How can the squad leader train and lead both effectively?

An answer to this dilemma is the assistant BC. The assistant BC would take the place of the squad leader in the turret when the he dismounts. This BC hop, as the exchange is called, is exactly what the platoon leader and platoon sergeant must do when dismounting their vehicles. The switch, while inadvisable while under effective enemy direct fire, allows the squad leader to make the situationally based assessment as to whether to dismount (the same factors the platoon leader and platoon sergeant must consider). A significant problem with this procedure is the lack of training the assistant BC would receive. While not required to perform the bulk of the technical tasks in the turret, he still must train with the gunner and driver to perform effectively as part of the crew. If the issue of properly training the assistant BC is resolved, there still remains the question, "Why not allow a dismounted squad leader to specialize in

dismounted training, leaving the BC to perfect his craft?

The White Paper contends that "both mounted/dismounted BFV platoon elements' capabilities virtually mandate their separate use to fully mass combat power at the decisive time and place against enemy weakness."⁵⁶ With the squad leader forced to accompany one, he will lose control of the other. The answer is not, as the new doctrine would suggest, to put leaders in both places. There is one important decision that must be made - Where is the critical point? This decision, more often than not, is out of the squad leaders hands. The company commander or the platoon leader would make that assessment and direct the leadership to that point. Losing control of one or the other elements is directly related to the communications the squad leader maintains with either vehicle or dismounted infantrymen. Command and control is more difficult, for obvious reason, when the infantrymen dismounts, but that is not sufficient reason to split the squad leadership responsibilities.⁵⁷ The Army Research Institute (ARI) conducted a number of studies concerning leadership in BFV units. One such test focused on the BFV platoon/squad leader span of control. The test

measured leader effectiveness in a field environment throughout a three -day period. The general conclusion included the following: There was no specific area of measurement in which leader performance errors could be attributed directly to fatigue, stress or preoccupation with other critical tasks;

Failures of omission or commission appeared to be reflective of knowledge deficiencies or memory failure, not lack of time or crisis involved situations;
Current duties assigned to BIFV squad and platoon leaders are considered to be well within their capability and capacity.⁵⁸

Another ARI study, titled "Task Analysis of Tactical Leadership Skills for Bradley Infantry Fighting Vehicle Leaders," concludes the following: "No single task area per se is extremely difficult, rather, it is the likelihood of having to do several tasks at one time that creates potential difficulty, and it is this interaction of tasks and operators that requires a great deal of practice."⁵⁹ Command and control of a Bradley company, platoon, and squad will always be complicated by the need to handle several tasks simultaneously. The answer, as ARI suggests, is effective training, not distributing those tasks among more leaders.⁶⁰

CONCLUSIONS

The BFV squad leader is, with some difficulty, capable of handling both the mounted and dismounted responsibilities. Unquestionably, his job gets easier when he no longer controlled the vehicle, but there is still considerable utility in maintaining unity of command in the vehicle.

Branch parochialism aside, the primary mechanized infantry mission is the same as the armored infantry of old -- support the mobility of armor. The BFV, far superior in fire power and protection to the M113, is a clear case of technology driving doctrine. The complicated nature of the vehicle's turret provided a leadership and training challenge for the infantry community. Furthermore, the dismounted tasks, once expected of M113 equipped infantry, were directly inherited by BFV units. The fallacy lies in the assumption that BFV units can handle the full gambit of dismounted actions covered by the vehicle poor and infantry rich M113 units. The strength of BFV units is the fire power afforded by the vehicle. The greatest weakness is their lack of infantrymen. To maximize the strength requires combining the efforts of vehicle and dismounted infantrymen. The current trend is towards separate but complementary operations. This paper

argues that the emphasis needs to be on joint vehicle/dismounted infantry operations. The majority of the mechanized infantry dismounted operations required what COL Wass de Czege called armored infantry. Armored infantry fights either mounted or dismounted. The problem is that BFV units replaced M113 equipped units instead of complementing them. The Bradley White Paper readily acknowledges the co-opting of M113 mechanized doctrine, while falling short of "accommodating the qualitative improvements of the Bradley."⁶¹ In fact, the opposite may be true. Removing the vehicle responsibility from the squad leader and dedicating the BC solely to fighting the vehicle pays tribute to the qualitative improvements rather than the desired synergistic effect of mounted and dismounted action.

The more cogent arguments for the present restructuring center on more efficiently organizing the dismounted infantrymen. A BFV only dismounts six soldiers when at 100% strength, while combat studies have shown that squad offensive capacity is considerably diminished when reduced from nine men to five or six men.⁶² The only way to increase the number of dismounted infantry is to join dismounted teams together. The question then arises, Have we reduced

the squad leaders' responsibilities to fix a vehicle imposed limitation? Has the BFV system forced the mechanized infantry to approach training from a weapons system perspective rather than focusing on the human/unit aspects. This paper argues that the answer to those questions is an unequivocal 'YES'.

The mechanized infantry of today bears the proud legacy of the armored infantry, with the clear mandate to support the rapid advance of armor forces. Attempting to make the dismounted infantrymen quasi-light infantrymen and the infantrymen on the crew light tankers dilutes the synergistic effect necessary to fulfill that mission. The efficiency of the mechanized infantry is measured by the product of the whole, not the sum of its elements.

ENDNOTES

¹ "White Paper: Bradley Fighting Vehicle Doctrine, Organization, and Equipment." Department of the Army, United States Army Infantry School (USAIC), 17 February 1989, 4.

² Ibid., 4.

³ Note: Armored and mechanized infantry are used interchangeably throughout

⁴ Richard E. Simpkin, Mechanized Infantry. (New York: Brassey's Publishers Limited, 1980), 14.

⁵ Ibid., 15.

⁶ Ibid., 15.

⁷ Ibid., 22.

⁸ Ibid., 22.

⁹ German Wermacht, HDv 967, Field Service Regulations, dated 16 June 1944. (from James Lucas's book, Panzer Grenadiers, p. 15) As cited by Major Michael Esper in "Dismounted Mechanized Infantry on the Future AirLand Battlefield: Is the Squad Big Enough?". (Ft. Leavenworth: SAMS Monograph)

¹⁰ Ibid., 14.

¹¹ James Lucas and Matthew Cooper, Panzer Grenadiers, (London: MacDonald and Jane's Publishers, 1977), 24-26.

¹² Lucas, . 23.

¹³ Simpkin, 18.

¹⁴ Ibid., 18.

¹⁵ Ibid., 19.

¹⁶ Ibid., 20.

¹⁷ Ibid., 15.

¹⁸ CPT Jonathan M. House, Towards Combined Arms Warfare: A Survey of 20th Century Tactics, Doctrine, and Organization, (Fort Leavenworth, Kansas: Combat Studies Institute, August 1984), 67-68.

¹⁹ Ibid., 77.

²⁰ Ibid., 76.

²¹ Ibid., 36.

²² Ibid., 36.

²³ Simpkin, 16-17.

²⁴ Clifford D. Bradley, "The Future IFV," Infantry 71 (Jul-Aug 81): 24.

²⁵ The nickname 'battle taxi' is derived from the vehicle's primary purpose - to transport soldiers to the battlefield

²⁶ Steven J. Zaloga, The M2 Bradley Infantry Fighting Vehicle, (London: Osprey Publishing, 1986), 10.

²⁷ White Paper, 1.

²⁸ Ibid., 1.

²⁹ LTC Daniel Bourgoine, author of initial Bradley Issues for 1ST Battalion, 15TH Infantry, 3RD Infantry Division, phone conversation 3 September 1992.

³⁰ Department of the Army, HQ 3D Infantry Division, Memorandum for the Commandant, USAIS, Subject: Review of FM 7-7J, 2 March 1984, 2.

³¹ Ibid., item 20, 8.

³² Ibid., inclosure 3.

³³ Department of the Army, HQ 3D Infantry Division, Memorandum for the Commander, VII Corps, Subject: Bradley Doctrine, Training and Organization Issues, 6 October 1987 (Copy Furnished to Commanding General, Fort Benning) (hereafter referred to as the Krawciw Paper).

³⁴ Ibid., personal letter attached from MG Krawciw to MG Leuer.

³⁵ Ibid., memo attached from MG Leuer to Assistant Commandant, USAIS.

³⁶ Ibid., inclosure 3, 3-1.

³⁷ Ibid., inclosure 3, 3-3.

³⁸ White Paper, 2.

³⁹ Ibid., 2.

⁴⁰ Ibid., 3.

⁴¹ Ibid., 4.

⁴² Headquarters, Department of the Army, FM 71-2: The Tank and Infantry Battalion Task Force (Washington, D.C.: GPO, September, 1988) 1-2.

⁴³ Headquarters, Department of the Army, FM 100-5: Operations (Washington, D.C.: GPO, September, 1986) 41.

⁴⁴ Ibid., 42.

⁴⁵ FM 17-20, Armored Infantry Units Platoon, Company, and Battalion, (Washington, D.C.: GPO, August 1957), 3.

⁴⁶ White Paper, 2.

⁴⁷ White Paper, 2.

⁴⁸ Simpkin, "When The Squad Dismounts," Infantry, 76 (Nov-Dec 83): 15

⁴⁹ As quoted in Simpkin, "When The Squad Dismounts," 18.

⁵⁰ Huba Wass de Czege, "Three Kinds of Infantry," Infantry, 75 (Jul-Aug 85): 12.

⁵¹ Ibid., 13.

⁵² Krawciw Paper, 3-1.

⁵³ Krawciw Paper, 3-1.

⁵⁴ LTC Theodore R. Severn, Airland Battle Preparation: Have We Forgotten To Train the Dismounted Mechanized Infantryman?, Study Project, Carlisle Barracks, Pwnnsylvania, 30 March 1988, 14.

⁵⁵ "1989 White Pape", 4.

⁵⁶ Headquarter, Department of the Army, STP 7-11M14-SM-TG, Solier's Manual and Trainer's Guide, MOS 11M, Fighting Vehicle Infantrymen (Skill levels 1-4), 2-6 t 2-13 and STP 7-11BCHM14-SM-TB, Soldier's Manual and Trainer's Guide, MOS 11B, 11C, 11H, and 11M (Skill Levels 1-4), 2-6 to 2-12.

⁵⁷ White Paper, 3.

⁵⁸ It is important to note that the only individual on the vehicle capable of staying oriented throughout mounted movement is the BC (he the only individual allowed to scan outside to navigate and control vehicle maneuver)

⁵⁹ Army Research Institute, Bradley Fighting Vehicle Combat Effectiveness: Evaluations of Developments in Tactics, Training, and Equipment. Alexandria, Va.: Army Research Institute for Behavioral and Social Sciences, December, 1985, 16.

⁶⁰ Army Research Institute, "Task Analysis of Tactical Leadership Skills for Bradley Infantry Fighting Vehicle Leaders," Alexandria, Va.: Army Research Institute for Behavioral and Social Sciences, October, 1986, 27.

⁶¹ Ibid., 27.

⁶² White Paper, 2.

⁶³ MAJ Frederic Abt, "Tactical Implications of the M2 Equipped, J-Series Mechanized Infantry Battalion Dismount Strength," Paper, SAMS, Fort Leavenworth, KS: US Army Command and General Staff College, 15 January 1988, 9.

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