



TSM STRYKER/BRADLEY CORNER

THE BRADLEY FIGHTING VEHICLE: THE ULTIMATE URBAN ASSAULT VEHICLE?

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“There is a current need for a lightly armored vehicle that will provide protected cross-country mobility and a vehicular mounted firepower capability able to support mechanized infantry operations in mounted and dismounted combat.”

“The IFV shall possess a cross-country mobility capability sufficient to permit its employment in battlefield formations with the Main Battle Tank of the time period.”

— **Materiel Needs Statement for an Infantry Fighting Vehicle,**
2 March 1978

While we cannot go back in time to sit in on the acquisition process and listen to the in-depth discussions that resulted in the vehicle we now know as the M2 Bradley, we can be fairly confident little consideration was given to its use in an urban environment. The original Bradley Needs Statement quoted above is filled with considerations for an open field battle that would allow our infantry and cavalry to keep pace with the M1 Abrams main battle tank while simultaneously providing protection and a certain amount of firepower. A quick scan of the doctrine that incorporated the new Bradley into the battlefield reveals an emphasis on high mobility and firepower in a wooded environment against the massed armored formations of the Soviet Union. Very little discussion can be found on the use of the Bradley against an enemy in and around urban sprawl. The developmental and doctrinal documents do not speak of movement through confined areas, short range engagements, high speed road movement or knocking down walls. Yet, this is precisely what the Bradley fighting vehicle does today in support of Operation Iraqi Freedom.

Recently, I had the opportunity to travel with the Abrams and Bradley Product Managers (Lieutenant Colonel Mike Flanagan and Lieutenant Colonel Andy Contreras) during a survivability assessment of the M1 and M2 in support of Operation Iraqi Freedom (OIF). We visited 10 Bradley-equipped battalions and interviewed more than 100 Soldiers. Officers and enlisted personnel, master gunners and company commanders, gunners and Bradley commanders all provided comments and suggestions on how they employed their Bradleys in an urban environment and how we can make the vehicle more effective in urban operations. Each unit visited had a unique story to tell. While they had similar sets of missions to accomplish, the varied nature of the threat and environment gave every unit a distinctive perspective on how to accomplish those missions. However, one

common thread appeared wherever we traveled: Soldiers love their Bradley fighting vehicles. Whether an A3 or an ODS version, the Bradley is the “hands-down” weapon of choice for operating in the current OIF environment.

The Bradley brings many assets to the urban operation. Fitted with reactive tiles, it is survivable against many anti-armor weapons, improvised explosive devices (IED) and small arms fire. The M242 Bushmaster and the 7.62 COAX machine gun creates a lethal combination in destroying and defeating IEDs, masonry and RPG threats. In some cases, the shock effect alone of a 25mm attack can prevent further attacks on our vehicles. The Bradley’s greatest success, however, is the combination of the Improved Bradley Acquisition Sub-System (IBAS) and the Commanders Independent Viewer (CIV), both 2nd Generation Forward Looking Infrared, on the M2A3. Designed as a hunter/killer system to defeat multiple enemy armored vehicles at maximum ranges, it also allows for buttoned up movement through urban areas. Giving the vehicle superb situational awareness while simultaneously providing maximum protection for its crew and infantry squads makes the M2A3 the most lethal and versatile machine in the urban environment.

Improvements

In life, there is always room for improvement. The Bradley is no exception. Every Soldier interviewed commented on how to further equip the Bradley to better adapt to the urban environment. It usually started with: “Don’t get me wrong, Sir. I love my Bradley. But what I would like to see is ...” Some of those insightful comments include:

* One of the most prevalent comments made, was the need for a stabilized machine gun for the Bradley Commander (BC). This allows for suppression of a close-in target, while the gunner engages elsewhere. It also provides vital coverage for vehicles in the trail of section/platoon movements. What this entails for the M2A2 is a ring mounted, flexible machine gun, possibly fitted with a transparent gun shield. The M2A3, however, requires a more complex solution. The M2A3 crews are very enthusiastic about getting a machine gun coaxially mounted to the CIV, again providing suppression on a target while the gunner engages elsewhere or the turret is slewing to engage with the main gun. A commander’s machine gun, even one with a small caliber, that covers a secondary field of fire, gives a whole new aspect to the lethal coverage the Bradley ODS and A3 could provide in an urban area.

* The M240C has achieved a new importance in the current



Courtesy photo

A Bradley fighting vehicle from the 1st Infantry Division moves into an overwatch position at a traffic control point outside Ad Duluyiah, Iraq.

environment. It has often become the weapon of choice due to the need to keep collateral damage to a minimum in some situations. The COAX machine gun therefore requires a greater basic load and improved access.

* M2A3 units have been bending 25mm barrels. One of the disadvantages of buttoned-up operations is the loss of barrel situational awareness. A shorter, 'Urban Operations Barrel' may be a solution due to the shorter ranges needed in that environment.

* M2A3 crews want a redesigned Gunner's Hand Station. The Auto Track Button (located on the Hand station) is rarely used in urban areas, but the Zoom Button (located on the Gunner's Sight Control Panel) is in constant use. Gunners request these two buttons be reversed.

* The Turret Emergency Evacuation Cable, attached to the Commander's Hatch, allows the driver to open that hatch if either of the turret crewmen are incapacitated and

unable to open the hatch. However, since the Commander's Hatch only opens to the first pop position, it requires a Soldier to reach in to completely open it. Attaching the cable to the Gunner's Hatch, which fully opens upon release, would be more beneficial for rapid access to the crew in an emergency situation.

Gunners request several improvements to their cramped world:

* Add a storage box behind their head to store equipment (spare hand mikes, etc.).

* Remove the back pad: it pushes them forward into the sight while wearing body armor (many have removed it themselves).

* Increase the padding for their seats (12 hours on the present seat greatly degrades effectiveness).

* Move the radio. Commanders continuously exit the turret and knock it out of the correct frequency.

* One unit attached M88 searchlights to their vehicle. It has been an asset in poorly lit areas. They request a high-

powered, directional searchlight mounted near the commander's hatch to illuminate shadowed areas.

* Climate control, especially for the buttoned up M2A3s, is essential. Crew and equipment functionality depend on it while in a hot desert climate.

* Develop a less bulky, crewmember's body armor. The straps of the current body armor catch in the turret.

* Develop a stronger, more reliable Engine Access Pump, which are breaking due to the added weight of reactive tiles.

* Crews require a stronger Drift Pin. Very few crews have them anymore due to their high breakage rate.

* Power line protection is needed. Some units fashion rebar over their hatches to push power lines over the top of the turret and prevent catching low hanging wires on the vehicle or injury to the crew.

* Some crews state the front reactive tiles and the headlights are getting damaged from using their vehicle as a "Bradley Fighting



Battering Ram.” A breaching bar attached to the front to assist in ‘wall-busting’ would be helpful.

Training

Now that we have proven the capability of the fighting vehicle in an urban environment, it is time to ensure the crews within them are properly trained. One glaring deficiency in this area is the inability of our Conduct of Fire Trainers (COFT) to replicate the urban environment and the encountered threat. The good news is that deficiency is currently being rectified with development of an urban environment for both the COFT and the Close Combat Tactical Trainer (CCTT). While much information was gathered during the tour on how to best replicate the environment, one theme was prevalent: the CCTT is the preferred method for training urban operations. Due to the close proximity of vehicles and the need to utilize wingmen to cover the numerous avenues of approach in an urban environment, a single crew trainer does not accurately replicate all of the coordination needed to properly train scanning/gunner techniques. The best use of a COFT with an urban environment is to train gunners/commanders on rapid identification, short fire commands and familiarization with the 360-degree aspect. Then they will need to hone those skills with their wingmen and platoons in the CCTT, which allows for proper team scanning coverage, the BC’s ‘heads up’ view (essential with high buildings) and the use of a driver. The driver has become more important than ever in obstacle avoidance, threat identification and anticipating how the Commander wants to negotiate along narrow streets.

While it will never receive the title, “Ultimate Urban Warrior,” the Bradley fighting vehicle and its’ crews have proven their worth as a great Army asset in the Global War on Terror. Its survivability, lethality and mobility allow the Bradley to achieve results in an urban environment far beyond what its designers could have predicted. Those designers, developers, builders and Soldiers all associated with this vehicle should be proud with the product they have created, maintained and utilized.

But let’s not stop there. Agree or disagree with anything in this article? Have further comment or ideas to make a better Bradley. As the Assistant TRADOC System Manager for the Bradley, I can assist you to make your vehicle the most capable fighting vehicle in the world. Please e-mail me at gary.linhart@benning.army.mil. Your comment can make a difference.

Lieutenant Colonel Gary Linhart has served as the Bradley New Equipment Training (NET) Commander; 1st Battalion, 29th Infantry Regiment executive officer; and the 29th Infantry S3. He is currently the Assistant TRADOC System Manager for the Bradley.

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REDEFINING RANGER SCHOOL

COMMAND SERGEANT MAJOR DOUGLAS M. GREENWAY

Winning, never quitting, never stopping, completing the mission, busting down the walls and kicking in doors, standing and finishing after being knocked down, driving on when most would have long before given up, this defines the spirit and attitude of the Ranger.

Since Ranger School’s inception in 1950, the RTB has produced well-trained, adaptive close-combat leaders. Over the years, we have made minor adjustments to the school’s program of instruction (POI) while always remaining focused on teaching the basics and fundamentals of close combat and the warrior ethos. Those fundamentals don’t involve shooting one live round. Ranger School focuses mainly on the basics of taking on miserable situations. These situations involve sleep and food deprivation, steep and nasty snake-infested terrain, stress-inducing Ranger Instructors, and, worst of all, a chaotic melting pot of inexperienced Ranger students that don’t care about anything until they are in a leadership position. It is about each student leader being in that situation for at least 61 days. When they have finished, no matter what they are confronted with, they understand that the mission must be completed. The question is, should we adjust our POI to hone more valuable skills these men need to support our Army at war? If I were a platoon sergeant, would I be confident to send them into war after Ranger School?

Recently, our nation has adjusted its focus from set-piece engagements with discernable fronts and an easily recognizable enemy to conducting military operations against transnational threats in a noncontiguous and ambiguous environment. Accordingly, the Ranger Training Brigade is considering augmenting Ranger School’s POI to better prepare leaders to defeat current and future threats.

At the same time, however, we must be wary of “refighting the last war” by making drastic, quickly initiated changes to our POI without regard to the future of close combat. Recent enemy action has precipitated significant changes in our military’s training and preparation for combat operations. At Ranger School, we must always be mindful that our nation’s enemies will adapt and change. Likewise, the environment in which we fight is ever-changing. It would be ill-advised to focus solely on a single environment knowing that engagements over the last 20 years have found U.S. forces in every conceivable environment from extreme cold-weather to desert and built-up areas to mountains. What has not changed – what will never change — is the need to provide the Nation with capable, dependable self-confident combat leaders. Therefore, any proposed changes to Ranger School must never dilute our mission of teaching the basics and fundamentals of combat operations.

While retaining our concept of being a fundamentals and principles based school, the Ranger Training Brigade is currently examining all facets of our instruction for ways to better prepare Ranger School graduates for combat operations. Current proposals under consideration include the following:

- A marked increase in Urban Operations missions — The students will operate in and around built-up areas, learn urban breaching techniques, conduct cordon and searches, and conduct selective room clearing. This

training would pay dividends as graduates would teach the most current doctrine and techniques to their squads and platoons at home station.

□ Integration of mobility operations — The students will conduct some missions mounted and must properly plan and execute convoy operations. They must react to IEDs and near ambushes and be prepared to conduct a hasty attack. All too often, leaders have little exposure to realistic combat convoy operations prior to deployment. Through the concept of chain-teaching, graduates would be able to impart their knowledge on their units.

□ Integration of civilian role players — The students will be exposed to additional guidance on the Laws of Land Warfare,

operate under a restrictive ROE, and encounter media and civilians during combat operations. Additionally, the RTB is considering conducting “media train-up” where actual journalists would join the students during a phase and act as an embedded journalist. The benefits are two-fold: the students would learn to operate with media present in a consequence-free learning environment while the journalists would learn the basics of combat operations in order to better understand the role and actions of the Army. This program would alleviate the need for the precarious “on the job training” that many Soldiers and journalists face in GWOT.

□ Increased prerequisites — Although the current prerequisites for admittance to Ranger School remains the same, we are currently assessing the need to add combat lifesaver (CLS) certification and Skill Level 1 Combatives training as necessary skills that students must possess



U.S. Army photo

Ranger School officials are assessing the need to require combat lifesaver and combatives training as prerequisites. This would allow Ranger Instructors to build on this base to improve the student's medical training and hand-to-hand combat proficiency.

before they are admitted. The addition of these skills would allow Ranger Instructors to build on this base to improve the student's medical training and hand-to-hand combat proficiency.

□ Renewed emphasis on marksmanship — Students would learn the fundamentals of close quarters battle (CQB) through extensive train-up program culminating in a shoot-house live-fire. Marksmanship has given U.S. forces a decisive edge over our enemy's, yet many units are lacking marksmanship subject matter experts.

Renewed emphasis on medical training. Students would learn advanced techniques to keep wounded Soldiers alive. As we have seen in GWOT, the separation of forces necessitates Soldiers being trained to treat wounded comrades. Students would be exposed to the most current medical equipment and techniques and show proficiency on a variety of medical tasks

throughout the course.

We have not and will not make any major changes to Ranger School for the time being but the contemporary operating environment compels us to adapt to the current threat and consider updating our POI. Ranger School will always be grounded in the basics and fundamentals of combat. The proposals outlined above are intended to reinforce and enhance, never replace, the core principle of Ranger School — no matter what the distance, no matter what the odds, no matter what the environment, well-trained, well-rehearsed and disciplined Rangers will defeat every threat in every engagement. Ranger School will remain a rigorous, mentally and

physically challenging environment where only those students fully committed to meeting unwavering standards will graduate.

To better provide realistic training that is relevant to today's contemporary and future threats, we encourage input from units currently serving in or recently redeployed from OIF and OEF. Please contact the RTB S3, Major Michael McNally, at Michael.McNally@benning.army.mil with recommendations.

Regardless of what initiatives we integrate, the Ranger Tab will remain a mark of excellence; tangible evidence that the bearer is a trained leader whose legacy is that of a warrior who has never let our nation down during a time of need. We will always provide the Army with tactical leaders that excel in the unforgiving environment of combat and remain the best life insurance policy a Soldier can get before going to combat for himself and his men.