

LETTERS

Bradley Weaknesses Rooted In Cold War Compromises

Dear Sir:

Since I have been in or associated with Bradley-equipped mechanized infantry units 11 of my 12 years in the Army, I read with great interest the article, "Chariots of Fire: Building the Bradley Fighting Vehicle" by MG Stan R. Sheridan (Ret.). I am disappointed, however, that some beliefs about the Bradley's abilities and doctrinal roles are still misunderstood by even the very senior officers that helped bring about its creation. While I do agree that the M2A2 Bradley Fighting Vehicle is superior to its contemporaries (the British Warrior, German Marder, and Russian BMP 2/3), I do not believe that its basic design and doctrinal employment will prove able to withstand the rigors of 21st century high-intensity armored combat.

Several points MG Sheridan made in his article I believe are well worth discussing and will support my beliefs. In the order they were written they are:

1. "Was the replacement to be another APC that brought fighting men to the battle in a protected 'battlefield taxi' and then placed them in harm's way to fight on foot; or was it to be a true fighting vehicle, giving the soldier a protected place from which to assault, fight, and kill the enemy?" While it has long been a goal of designers to decrease the risk a soldier faces in combat, it has been proven by actual combat and during training simulations that attempting to fight through an objective while keeping your dismounted infantry mounted is pure folly. The end result of this is usually a substantially higher number of friendly casualties without any increase of effectiveness. Desert Storm is the worst example to use if one wants to validate the fighting vehicle concept. Our Iraqi opponents had so little will to fight that I'd dare say we actually did not fully exercise our doctrine or the capabilities and vulnerabilities of our equipment. A better example would be to look at the lack of success the Syrian army experienced during the 1973 Yom Kippur War with its BMP-equipped mechanized infantry accompanying T54/55 and T62 tanks in Soviet style mass formation "cavalry charges" against Israeli prepared and hasty defenses protected by simple and complex obstacles.

While most would say the reason for the lack of Syrian success was their faulty Soviet-style tactics, coupled with the fact that we in the West may consider them a third-rate military, I disagree. Nearly the same tactical style can be seen monthly being practiced by U.S. Army units at the National Training Center (NTC) with most often the same results. Thin-skinned BFVs accompanying M1A1/2 tanks into head-on direct fire fights with an OPFOR equipped with large caliber tank main guns and heavy antitank missiles. These are the weapon systems that MG Sheridan specifically points out as the highest threat to the Bradley and the dismounted infantry con-

tained within: "...We also knew from the beginning that, if the vehicle was hit by large mines, large antitank missiles, or tank rounds of any size, there would be major penetrations and serious damage. These risks, as a trade-off between mobility, protection, and weight, were accepted by the Army from program inception..."

2. "The addition of a two TOW antitank missile launcher gave the mechanized infantry battalion a long-range, front-line, tank-killing capability without increasing the Army's force structure." This desirable capability of providing the infantryman a means to both offensively (long-range antiarmor ambush) and defensively (battle position) engage and destroy enemy tanks has more than anything else made the Bradley a "high-payoff target" for opposing tankers. One of the first lessons an infantryman or tanker learns is of the importance of combined arms. It is a widely held belief that the majority of attacks or defenses will fail if all pieces of the combined arms team do not work together effectively. Separate the infantry from the armor, or vice versa, and the attack or defense will fail; and since we have equipped our primary infantry carrying vehicle with a heavy antiarmor weapon, its use in this role makes it such a threat to the enemy that it is often more profitable to destroy the Bradleys, because they are vulnerable to tank main guns and heavy AT missiles, than it is to engage the harder-to-destroy M1s. During World War II, the greatest crisis the Allies faced on the Western Front was not a shortage of Sherman tanks but the shortage of trained, quality dismounted infantry that could operate as part of that combined arms team.

3. "It is not an APC nor a battlefield taxi, but it does take soldiers to the battle and lets them fight while mounted and protected. It is not a boat, but it does have a swimming capability. It is not a tank, nor is it heavily armored, but it does have a long-range tank killing capability..." [This is] a pretty fair description of what the Bradley is and was designed to do during the peaceful confrontation of the Cold War conventional arms race between the former Soviet Union and the United States. The Bradley's limitations stand out; it was a compromise of several different factions within the infantry and armor communities. The infantry community wanted a vehicle that was more capable than the M113-series armored personnel carrier in terms of mobility, firepower, and protection. The armor community wanted a vehicle with both a light and heavy antiarmor capability that could replace the ill-fated M551-series light tank in its divisional and regimental armored reconnaissance units. The result was the current Bradley, too light to stand toe-to-toe in the direct fire fight, too large to provide a stealthy recon platform, too small to carry sufficient dismounted infantry to the fight, and too much of a threat to the enemy with its TOW missile to be considered a low payoff target. Although this sounds overly critical of the BFV, it's not meant to be. The United States during the Cold War could not afford to build and purchase several different specialized vehicles

for all of the above roles. The U.S. Army in Europe needed a vehicle that could offset the Soviet superiority in numbers of tanks and their own infantry fighting vehicle, the BMP. Unfortunately, it has been decided that the Bradley will be improved and upgraded at the expense of a newer, more capable vehicle. The most unfortunate result of this compromise will be the continuation of the doctrinal disconnects we now see at the NTC. Whereas the Bradley has potential as a lightweight complement to the M1 heavy tank in its antiarmor role (both 25mm and TOW), it does not meet the requirements of a vehicle whose primary mission is to get sufficient infantry (less than a full 9-man rifle squad per vehicle) to the critical place on the battlefield.

As for swimming, the U.S. Army placed a moratorium on swimming the Bradley in 1994. The original requirement stemmed from the fact that Western Europe has significant water obstacles in the form of rivers and canals approximately every 10 to 25 kilometers and the ability to rapidly shift forces in any direction was considered critical to reacting to a Soviet thrust into West Germany. Simple calculations will show that having a Bradley with its swim capability would in theory significantly decrease the amount of time an M1/M2-equipped heavy force would take to cross a major water obstacle. The time spent, however, in vehicle and swim site preparation reduced the time savings to the point of negative returns.

4. "...in view of the recent HBO movie about the Bradley, which said just the opposite, described the vehicle and the program as a flaming disaster..." The HBO comic satire, "The Pentagon Wars," was just that...a comic satire. Hollywood has a proven reputation of being able to turn anything into a complete farce and, for that reason, their creations should not be taken seriously by professionals who make hard decisions. Although the Bradley Fighting Vehicle program was, and is, the result of several compromises, it is still a capable vehicle that partially meets a need. I believe that the Army's decision to continue development of the BFV in order to fulfill the needs of the 21st century mounted/dismounted combined arms team are incorrect. What the future combined arms team needs is a vehicle capable of carrying a full-sized infantry squad (9-11 soldiers plus vehicle crew), a weapon system optimized for support of dismounted infantry, and sufficient armor protection (as much as the current M1) that will allow it to operate in close proximity to the main battle tank it will accompany. Mr. Simon Tan (*ARMOR*, January-February 1999, "Is the Bradley Heavy Enough to Replace the M113 in Combat Engineer Units?") proposed a similar M1-based vehicle in his article about a possible replacement for combat engineer M113s. The inclusion of a heavy antiarmor missile system should be considered as long as it does not reduce the carrying capacity for dismounted infantry and the warfighters understand the vehicle's doctrinal role. A current example of this is the Israeli Achzarit heavy infantry carrier. The greatest lesson learned, I

believe, from the Bradley IFV/CFV program was that combining a reconnaissance vehicle and infantry vehicle does not give you a system that truly meets the needs of either requirement.

MARK D WINSTEAD
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via e-mail

Army History of VII Corps Was Not Intended As Combat Account

Dear Sir:

The January-February issue of *ARMOR* included a review of *From the Fulda Gap to Kuwait, U.S. Army, Europe and the Gulf War*. The reviewer acknowledged that this report, written by USAREUR command historian Steve Gehring, contained a great deal of information based on extensive research. But he found it to be uncritical, even biased, and of little use to anyone not serving on a corps or division staff. He concludes that the book glosses or ignores mistakes made during the deployment of USAREUR units to the Gulf and does not recommend it.

I'd like to comment on this assessment. As the Army's former Chief of Military History, I was determined to get this study by a MACOM published. We found the funds necessary to do so. In publishing what had initially been a classified After Action Report, we committed to providing the Army and the history community in general with a base document dealing with a massive undertaking by a field army. It seemed to me that we badly needed to chronicle the efforts of all those participants in Operations Desert Shield, Desert Storm, and Provide Comfort who had been launched into CENTCOM's AO from a forward-deployed location in Europe.

Those people who served in USAREUR in the late 1980s are aware of how well our soldiers met the Army's goal of being "Trained and Ready." We were just that. Not perfect, but very, very good. With over 200,000 personnel serving in Europe, the United States Army was able to deploy a fully capable corps, numerous support and special operations units, and still maintain stability in the Central Region. It seems to me that we need to make readers aware of the power, the flexibility, and the talent that existed ten years ago. By comparison, while still composed of superb soldiers and talented leaders engaged in a host of different operations, today's USAREUR is only a shadow of the mighty force that is the subject of this book. That is something that seems to have escaped the attention of far too many people in the United States. In showing what it took to deploy a sizable force to a combat zone, this volume will raise questions (in fact, has already done so) about our capacity to support our current National Military Strategy.

So, if you want to read something while pulling staff duty, should you take your unit's copy of *From the Fulda Gap to Kuwait* over to bat-

alion headquarters with you? I'd probably say yes. You don't have to read the whole thing, but you can get a sense of the enormity of the undertaking from just parts of it. Oh, and if you are looking for info on the kinds of challenges that popped up in executing the USAREUR and Corps plans, skim Chapter 5 on "Deploying VII Corps." Glitches encountered by family support groups? Look at pages 204-211. (The discussion of "burn-out" among officers' and NCOs' wives is enlightening.)

In his review, CPT Sobchak states correctly that the book touches only briefly on the ground war. Anyone looking for accounts of combat in the Gulf can find a number of book-length sources. There are hundreds of articles. In fact, if you are going on staff duty soon, save the Jan-Feb '99 issue of *ARMOR* so you can take it on duty with you to read Steve Borque's fascinating piece entitled "Incident at Safwan." Former *Armor* officer Borque is in the final stages of a superb history of the VII Corps in combat that will be published by the Center of Military History. Hopefully, there will be more work done soon to flesh out the history of this critical period in the history of our Army. Hey, XVIII Airborne Corps; are you listening?

In closing, let me point out that while automation has assisted us in countless ways, it is not without its pitfalls. When we were given the mission of collecting, reviewing, and cataloging the Army's operational records from the Persian Gulf War, those of us at the Center of Military History responsible for this massive undertaking were dismayed to find out just how few of the original (paper) operational records of Gulf War units had been saved. Commanders were, in nearly all cases, ignorant of their requirement to save their TOC logs, orders, and SITREPs. They lost, misfiled, or disposed of them. We are left today with great holes in our history. The publication of studies like this one will help us retain the history of this great undertaking and provide a real service to historians and commanders for years to come. As the great author and historian Steve Ambrose told me a few years ago, if the Army doesn't continue to tell its own story, to publish histories, and to investigate what happened and why, future generations of writers like him will find it nearly impossible to write a book like *Citizen Soldiers*. I am inclined to think he's right.

JOHN W. MOUNTCASTLE
BG, USA (Retired)
via e-mail

FSCS Program Will Resurrect Problem-Prone Gun Technology

Dear Sir:

"Casual readers of *ARMOR* may get the impression from Sharoni and Bacon's article that the 35mm Bushmaster III is the chosen weapon for the Future Scout and Cavalry System (FSCS). It is not. The Bushmaster III is the choice of the article's authors, not that of

the Project. Cased Telescoped Ammunition and Gun Technology (CTAGT, aka: CTA) is clearly the Project's favorite, made clear at the May 1998 *Armor* Conference. The FSCS presentation, under Relevant Technologies - 2, Lethality, mentioned only CTA, no other weapon approach. You may be certain that the bidders will understand so unobtrusive a 'hint.'

So, after 45 years of failure (and approximately \$213 million spent in then-year dollars), the arsenals' 'pet rock' gets another lease on life. Within the DOD, political considerations usually override the laws of physics, with disasters for readiness, the users, and the taxpayers, who are all of us."

DON LOUGHLIN
via e-mail

Editor's Note: The letter writer, a former Marine tanker (1953 *Armor* School graduate) with a long second career in ordnance development, complained to Congress about the Cased Telescoped Ammunition and Gun Technology program, calling it a waste of money on a system that has never proved itself despite years of research. Unsuccessful in getting action from Congress, he took the case to the Department of Defense Inspector General. That staff studied the complaint for six months and, in June 1996, issued a report confirming Loughlin's claims that there were serious problems with the technology, although the IG's staff did not conclude that the money was wasted. The IG report said, "...The DoD expenditure of \$213 million over 41 years has not resulted in a viable weapon system because several major problems have not been resolved." These problems included higher life-cycle costs, "ballistically inefficient" ammunition, significantly reduced barrel life (200 rounds vs. 10,000-15,000 rounds), and greater recoil forces requiring heavier mounts. According to *Jane's Armor and Artillery Upgrades*, the current proponent for this gun system is a British-French joint venture.

Expanding the Discussion Of Light Cavalry Issues

Dear Sir:

I very much enjoyed reading CPT Stephens' article ("Airborne Ground Cavalry") in the Nov-Dec '98 issue of *ARMOR*. Because it's such a strange beast in comparison to armor/mech and there are so few light cav units, few things tend to be said about light cavalry in general, and light division cavalry in particular. I would like to expand upon a few points CPT Stephens made in his article, specifically relating to light div cav ground troop TO&E. Briefly, my points are as follows:

1. Unit distribution: in addition to the four Regular Army light div cav squadrons (for the 82nd, 10th, 25th, and 101st Divs respectively)

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there is ONE other such unit — in the National Guard. It is 1st Squadron, 158th Cavalry, Maryland Army National Guard, which is the divisional cavalry squadron for the only light infantry division in the Reserve Component — the 29th ID (Light), where I had the privilege of serving in the unit for five years in various capacities: platoon leader, troop XO, and on the squadron staff.

2. TO&E. Unlike other cav troops, the light div cav ground troop lacks both a mortar section (as CPT Stephens stated) AND lacks a dedicated XO. While the Army seems to suggest that the XO position is unnecessary (since wheeled vehicles require little maintenance in comparison to heavy counterparts) both of the commanders I served under in A Troop disagreed and — like their active duty counterparts — found a way to get the senior LT to be his 2IC. In the A Troop that I know, this was accomplished in a remarkably similar way: by consolidating 1st platoon into the remaining three platoons, thereby increasing the effective strength of the 3 remaining platoons and freeing the senior LT for the CO's right-hand-man job. This has the added benefit, as the author noted, of increasing the number of vehicles in a platoon from five to six. However, by reducing the number of maneuver platoons from four to three, the ground troop commander may have difficulty covering the division's entire 20 km front for extended periods of time. This is particularly true if one considers the doctrinal frontage of a cavalry scout platoon is 3-6 km. Since the light div cav platoon's manning, however, is only 15-18 men, it becomes difficult for a platoon to continuously maintain more than one OP for over 24-36 hours. The lack of troop mortars has been recognized as a long-standing deficiency of the organization, but to my knowledge, nothing has been done about it.

3. Scout/TOW mix. If I recall correctly, the latest TO&E change made the cross-attachment of TOWs and .50 cal/Mk19 vehicles official. My experience is that this is the optimal configuration for general use of the troop. It allows the individual platoon leader to have antitank fires ready for his immediate use, and has the added benefit of providing him with thermal sight night vision capability. Of course, the commander retains the prerogative to call back his TOWs and mass them when he feels it is necessary.

Conclusions. The tankers and cavalymen I've met at various service schools tended to scoff or stare at me with puzzled looks when I told them I was in a light divisional cavalry squadron. While their confusion is understandable, the light squadron must be taken in its greater context to be appreciated for what it is. It is fairly well equipped to provide reconnaissance, surveillance, and limited security operations for the light infantry division. While the unit doesn't have any armored vehicles, its inherent firepower, communications, and mobility make it arguably the most deadly battalion-sized unit in the division. The light

division cavalry concept can — and does — work when air and ground troops team closely together to accentuate their respective strengths and minimize weaknesses on missions for which light forces are intended.

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via e-mail

More Hints on Improving Effectiveness of After-Action Reviews

Dear Sir:

The recent article by COL William Blankmeyer and LTC Terry Blakely ("Leaders Conducting After Action Reviews Often Deliver Substandard Feedback," November-December 1998 *ARMOR*) pointed out a significant training issue and provided some sensible ideas for improvement. I would like to offer a few more.

1. Have commanders, not counterparts, conduct training events and facilitate AARs. Giving an effective AAR requires tactical knowledge and experience. AARs should be lead by leaders who have been tactically successful at the level of the AAR. The company commander and 1SG should lead AARs for their platoons and battalion commanders, S3s and command sergeants major company-level AARs. Besides having the needed experience, the commander should conduct the AARs of his subordinates because he must understand fully their strengths and weaknesses to assess, adjust and implement training programs.

2. Focus collective AARs on finding and fixing "what was broke" during execution. Look at the five bottom-line performance measures: 1) Killing the enemy, 2) Avoiding casualties, 3) Accomplishing the mission and mission required tasks, 4) Accomplishing critical sustainment functions (e.g. casualty treatment and evacuation), and 5) Giving higher timely accurate reports.

3. Do multiple execution repetitions. AAR lessons are best learned with an immediate chance to implement improvements. If there are any problems, do a quick AAR and execute again. Not doing a 2nd or 3rd "run" should be the rare exception. Always plan for multiple execution repetitions.

4. Use the 8-step training model effectively. Correct leader planning issues are before the order is issued and do not begin execution until preparation is done to standard. This allows shorter execution AARs and facilitates multiple repetitions.

5. Conduct "big" AARs. The NTC sequence of lower to higher level AARs with only the unit leader and direct subordinates participation is not the best for home station training. For full understanding and faster collective learning, it is better to have the leader and two levels of subordinates, for example a company team AAR down to tank/BFV commander and

squad leader level. These can be followed up with short AARs at the subordinate level focused on implementing fixes and specific internal issues.

6. Make the lanes hard and the OPFOR good. The unit should have to perform very well or suffer obvious consequences. I have heard numerous NTC OCs say that it is impossible to have an effective AAR if the OPFOR makes a mistake that allows the BLUEFOR to win even though it made many mistakes.

7. Have the OPFOR an active participant at AARs. Not just describing his plan and actions, but telling what the unit being trained did well and not so well, and offering suggestions for improvement. The impact of an OPFOR tank commander saying he was able to kill several tanks because no one was looking his way has a lot more impact than an OC saying that 360-degree security wasn't maintained.

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Reconnaissance — Better Left to Air Cav Elements

Dear Sir:

The Team Recon approach to reconnaissance puzzles me a tad (see "TEAM RECON: A New Approach to Armored TF Reconnaissance," March-April 1999 issue). It looks like an awkward effort to find a mission for armor, when scouting, in particular, and reconnaissance, in general, is better left to air cavalry elements than to armored elements. Granted, armored elements, even lightly armored HMMWVs, are better able to cope in a stand-up, knock-down fight than are choppers, but the purpose of scouting is generally to avoid direct contact with the enemy, and rather to shadow him in an effort to determine his intentions, no? Certainly, armored elements are better able to thwart enemy ground reconnaissance efforts than are helicopters. But if one is looking for a fight, then that is what the main armored elements are for, no?

A Vietnam-era air cavalry troop could better and more quickly do the job that Team Recon seeks to do, save slug it out with heavier enemy units. You want a Named Area of Interest checked out? The enemy found and fixed? The aero-scouts can do that in no time, flying nap-of-the-earth, hugging the ground. For instance, a scout chopper in 'Nam commonly, flying inches above the earth, followed enemy footprints on the ground.

P.S. I am not a dispassionate observer. To me the most beautiful fighting unit in the world is the armored cavalry squadron (circa 1966-7), with an air cavalry troop organic to it.

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