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## The Real Issue is Wargaming

Dear Sir:

I enjoyed nearly every article in the July-August issue of *ARMOR*. I especially enjoyed the articles on digitization and synchronization. If your readers have not already done so, I strongly recommend the book *Hammer's Slammers* to them. It is about a mercenary armored regiment in the far future, a completely digitized and lethal force. It is written by David Drake, a member of the 11th ACR in Vietnam.

Synchronization is a hard subject to discuss, and even harder to train and execute. Too much of the synchronization process occurs on those charts hanging around the TOC and they (I suspect) are frequently thrown out or put away because no one has the time to digest the plethora of paperwork higher-level staffs throw at people. As I have stated before, a properly written Commander's Intent and Concept of the Operation will show how the commander expects the battle to be synchronized. The real issue, as I see it, and MAJ Cloy alludes to this, is wargaming.

Many officers do not know how to properly wargame, and that is why the problems

that surface during rehearsals are found there instead of during the wargame. More than a few that I have met refuse to wargame a course of action. To run a wargame requires an eye for the map, an understanding of the friendly force, the enemy force, and the capabilities of all the weapons and other support systems that the battalion task force employs or gets information from. To learn to do this takes time and training that the young officers who are S3-airs or brigade planning officers frequently do not have. Many planners evaluate courses of action on "gut feel." I know, because as the brigade S4 at an NTC rotation, I lost patience with our plans officer.

Then, I took over the planning session to show how to run a wargame (to the amazement of the O/Cs and my XO's amusement).

Ideally, you should be able to imagine, without the use of a map, the ebb and flow of the battle and the effects of, at least, major weapons and supporting systems. Then, with the use of a map or terrain model, refine that picture. How, then, can we obtain this training and use it on the battlefield?

First, officers should play wargames. How many of us will spend hours playing Trivial Pursuit or watching a football game and never think to play a wargame? In my years of service, when I mentioned that I played wargames to my commander or peers, I invariably received a response of "You do what?" However, I believe that wargaming enables me to understand terrain, friendly and enemy units, and weapons effects. There are several commercial board games that portray an accurate representation of the battlefield, such as GDW's *Sands of War*.

Second, we have several computer wargames in the inventory that allow us to wargame courses of action. The Brigade/Battalion Battle Simulation (BBS) and JANUS immediately come to mind. These simulations allow us to rapidly play (and replay) several courses of action and evaluate them. It is probably seldom used for this, and in preparing for an NTC rotation it would be of limited use because we cannot take all the equipment with us. Still, for the first mission a brigade could actually fight through several courses of action in a day and use that in its staff process. It must be emphasized that a success in a simulated battle does not necessarily equal a success on the battlefield. For the simulation to have any hope of portraying a possible result on the battlefield, the OPFOR must be thoroughly professional and trained in OPFOR doctrine and tactics.

This lack of portability drives a requirement for a simple, easy-to-use computer simulation. It should fit into one to four linked laptop/notebook computers that would enable a staff to input their information and rapidly play out different courses of action. Currently, there are no military simulations that are capable of this. No commercial game I have evaluated does, either. There are some new ones coming onto the market that may start to meet the requirement. Currently, commercial games do not support actual terrain in the detail we require, but I see this changing.

In the meantime, break out the board games and adapt them to your training areas by using clear hex sheets over the map. Use BBS as a training tool for staffs to evaluate courses of action, and perhaps even sponsor some wargame tournaments in your units.

MICHAEL K. ROBEL  
MAJ, Armor, USAR  
Birmingham, Ala.

## British Mark VII Tank — First in Flight

Dear Sir:

In reference to the interesting article, "When Tanks Took Wings," by Colonel Raymond Battreall in the May-June 1994 issue, this was not "the first combat-operational airlift of tanks in the history of warfare" as claimed. British Mark VII Light Tanks, Tetrarch, were carried in Hamilcar gliders to Normandy on June 6, 1944. About half-a-dozen tanks were involved, including one that was reported to have fallen through the nose of its glider over the English Channel. Some of the Tetrarch guns were fitted with the coned-bore Littlejohn muzzle adapter which, firing special projectiles, doubled the armor penetration performance, but I do not know if any of those tanks taken to Normandy were fitted in this manner.

While on the subject of Normandy and D-Day, some American authors were critical of the Sherman DD (Duplex Drive) tanks because nearly all of those launched at Omaha Beach "sank like stones." Although the idea was to save tank landing craft from the risks involved close to shore, in the prevailing rough sea they should not have been launched 6,000 yards out. According to "Armoured Fighting Vehicles in Profile, Vol. 3" (1976), at Utah Beach 30 DD tanks of the 70th Tank Battalion were launched at 3,000 yards from shore with almost all reaching the beach. Although the rough sea delayed their arrival until after the infantry had landed, they did give vital support.

Certainly, the invasion demonstrated that armor is essential to effective infantry operations, but armor itself needs support vehicles. Reportedly, General Bradley was offered specialized armored vehicles by the British, but he declined to accept them. These vehicles, which included crab flail tanks (minesweeping tanks) and Crocodile flame-thrower tanks, were used effectively by the British and Canadians and would probably have reduced the casualties sustained by the Americans at their beaches. In the end, of course, it was the courage and determination of the Allied fighting men that carried the day, in spite of all the unforeseen adverse situations.

LEONARD E. CAPON  
Mesa, Ariz.

## More on MILES as IFF

Dear Sir:

It was with amazement that I read 1SG Hecht's letter about using MILES sensors as a part of an IFF system (July-August 1994 ARMOR). I had just that day spent a

great deal of time discussing the same idea with a colleague at work. I applaud the thought that has gone into this; however, I would like to make some modifications to 1SG Hecht's suggestions.

First of all, when I was involved with the OT III testing of MILES in Germany in 1979, I knew in my heart that this system was going to be an integral part of any Army training program in the future. If this was going to be the case, then why not integrate this into all vehicles produced for the field? Operationally, it doesn't detract from the vehicle, except when the laser systems are installed. Additionally, having the system integral to the vehicle would save on maintenance by not having to install and remove the system every time the unit went to the field for training (especially the onerous task of always having to reapply the Velcro to the vehicle!). Finally, the crew would be as familiar with the MILES system as they were with the vehicle itself, and would know how to fight their vehicle with either MILES or live ammo.

As for how to integrate this into an effective IFF system, this would involve several items:

First, all laser designator systems would have to have a basic IFF code integrated into them. There also would need to be another programmable code integrated into the system. This programmable code would be changed on a periodic basis and passed through IVIS or VINSON channels. The purpose of this additional code is that, should the base code be compromised (which given sufficient time will be, by either analysis or OPSEC violation), friendly vehicles could still be differentiated from enemy ones that might be able to detect and react to being lased. Also, for units operating on the flanks of divisional or higher units (where most fratricide incidents occur) some type of identification response would be received from these vehicles.

Second, a transponder would be required, either a return laser signal or a digital radio burst on a set frequency. In the first case, this could be done as an addition to the crosswind sensor and would consist of a rotating mirror synchronized to a laser that would pulse when the mirror was oriented in the direction that the original lase came from. In the second case, this would require either a separate system or integration into the IVIS network, with a separate protocol established within the system to handle this information.

With either of the systems, the operational scenario would be as follows:

The firing tank acquires the target and the TC initiates the fire command. The gunner lasers to the target. The TC must acknowledge and enter the range. If the target is a friendly that has both the base and programmable codes, it responds to the lasing with a proper coded laser or radio burst. A RED light would then show on the

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laser rangefinder and lock out the firing tank's firing controls. A manual override would bypass this lockout in case the TC could positively identify the target. If the target vehicle was friendly but didn't have a programmable code, the laser rangefinder would show an AMBER light, but not lock out the fire controls. If the target vehicle was in fact enemy, A GREEN light would be displayed and the rest would be, "FIRE!" "ON THE WAY" "TARGET, CEASE FIRE, DRIVER MOVE OUT."

1SG Hecht's suggestion of a tone generated in the CVCs of the targeted crew is an excellent one and could very easily be integrated into the system proposed here.

I'm sure that there are many other scenarios possible with the technology available today, but if we wait to evaluate all of them, we will probably lose more good tankers to fratricide. We have the technology. Let's finally put this problem behind us and concentrate on our real business, that of being prepared to close with and destroy the enemy by means of fire and maneuver and shock action.

MICHAEL MERGENS  
MAJ, Armor, TXARNG  
HQ, 49th Armored Division

## More on "Champagne Campaign"

Dear Sir:

I am interested to see that my "11th Panzers in the Defense, 1944" (March-April 1994 issue) has generated additional information about the 1944 campaigns, and I am gratified that several veterans have expressed an interest in contacting their foes of half a century ago.

It should be emphasized, however, that the article is not a detailed study of the various specific engagements, but rather an account of how the 11th Panzer Division attempted to carry out its missions under generally adverse conditions. There are a number of detailed studies for the Lorraine Campaign, especially Hugh M. Cole's outstanding official U.S. Army history *Lorraine Campaign*, published in 1950. But many readers may not be familiar with the recently published official history volume on the Rhône Valley campaign, Jeffrey J. Clarke and Robert Ross Smith, *Riviera to the Rhine* (Center of Military History, 1993).

Regarding the Meximieux fight on 1 September 1944, for example, (Clarke and Smith p. 177) list casualties for both sides, including 185 Americans "missing and probably captured," this referring to F Company, 2d Bn, 179th Regt (my p. 29); and that the 11th Panzer thrust did "disrupt preparations" for a 179th Infantry attack, which "was von Wietersheim's primary mission."

On 3 September at Montrevel, Troops A and B of the 117th Cav put up a coura-

geous fight, but lost 35 vehicles and 126 men captured (Clarke and Smith p. 180). VI Corps commander Major General Lucian Truscott was later critical of the cav squadron, but this was unjustified; he had simply assigned missions "that were beyond its capabilities," and his criticism may reflect his frustration at finding his flanking moves constantly thwarted. The official history notes that the 11th Panzer's "primary mission, protecting the retreating army's flank, had thus been accomplished" (p. 180), though it also was taking losses.

Nothing but credit is due the GIs and Germans who fought these stiff clashes up the Rhône Valley 50 years ago this autumn.

A. HARDING GANZ  
Ohio State University,  
Newark Campus

## Post-Mobilization TTVIII Would Lower Standards

Dear Sir:

Recently, I was able to see a partial after-action review for the 1st Army Armor Conference. One of the issues that was contained in the review had to do with the proposal of the National Guard Bureau to postpone Tank Table VIII to post-mobilization. This is disturbing because as it stands now, Reserve Component tank crews and platoons are supposed to maintain a crew level of proficiency at gunnery (TTVIII) and sustain the ability to fight/maneuver as a platoon. This has been reinforced by maneuver lanes training and the requirement to qualify tank crews at TTVIII every other year. By postponing crew-level qualification to post-mobilization, we lower the training standards and deviate from the "Band of Excellence" in accordance with FM 25-100.

If anything, we should try to make a platoon-level gunnery a requirement for those RC tank platoons. It could be done via sub-cal fire, MILES, or, for those lucky few, by SIMNET. A live-fire TTXI or TTXII is probably not feasible with current budget restraints. This would allow post-mobilization training to progress further and shorten times to deploy should that become necessary. We need to maintain ourselves at a higher level of proficiency if the Total Force is to be a reality.

Crew-level proficiency is a must, and lanes training is an excellent training tool for platoons for gunnery and maneuver. Let us keep up that level of training and even improve it by having tank platoons showing up at mobilization stations fully ready to move on with training.

JEFF M. ALSTON  
2LT, Armor  
Wisconsin ARNG

## What Can We Do About the Vulnerable Antenna?

Dear Sir:

I continue to read about all the amazing things digitalization of the battlefield will do for the Armored Force, but we seem to have forgotten the oldest, most poorly-protected component in this whole marvelous system — the antenna.

All those boxes full of state-of-the-art electronics and those advanced, multi-color display screens will be useless when the antennas get blown off the outside of the vehicle! One accurate and cheap artillery airburst can neutralize a million dollars in gizmos in the blink of an eye.

With all the portable telephones, transmitters and remote speaker systems that are available today on the commercial market, there must be some kind of unbreakable antenna out there that can be easily converted to military use.

Or, would it be possible to make the antenna(e) part of the vehicle/turret structure?

Could it be made retractable? It would unreel from its stowage area for burst transmission, and then go to minimum extension for reception.

A tank is only as good as its tracks, gun, and radios. If the radios can't send and receive because the antenna is easily damaged or destroyed, then digitalization is a waste of money.

GREGORY J. SAMSON  
Clinton TWP, Mich.

## Bring Back the Blues

Dear Sir:

Captain Barber's article, "Bring Back the Blues" (Jan-Feb 93 issue), hit a spark in my spurs, so to speak. I had to convey my thoughts on this crucial reconnaissance subject. You see, it is not an emotional plea on my part for the past, but it was a reality for me back in June 88-June 90. I was a squad leader with a long-range reconnaissance platoon assigned to HHT 1/9th U.S. Cavalry, 9th ID (Motorized), Ft. Lewis, Wash. Our MTOE consisted of a 28+1-man platoon with equipment varying from three cargo Hummers, one armored Hummer, six UH1Hs, and 24 250cc motorcycles. This platoon was a squadron reconnaissance asset, sometimes used by the brigade. The missions and capabilities of the platoon would cover all types of reconnaissance, to limited raids and ambushes of high priority targets deep across the FLOT.

The platoon in general would operate 5-15 kilometers across the FLOT with 24-hours active reconnaissance, unlike avia-

## Battalion Motor Officer Course Prepares Officers For Unit-Level Maintenance Positions

tion aircraft which are limited by weather, pilot fatigue, and the increasing cost of maintenance. This platoon allowed the squadron and brigade commander to develop a mission plan much faster, with accurate intel being updated by the minute, and painted a more accurate picture of the situation developing. This intel update was not possible with the LRSD teams because they worked for the MI battalion which, in turn, updated the division commander. The division cavalry needs that intel first, being the most forward combat unit in the division. Our brigade commander, COL Crews, saw this need, as did our squadron commander, LTC Tadonnio. This superb leadership started at the platoon level with 1LT Johnson and later 1LT Barber, both Ranger qualified. Our PSG, SFC Lincoln, 1SG Kaminski, and CPT Drumm allowed us to grow militarily, by far the best chain of command anyone would envy.

I am not trying to plug these men, but saying that it was this ideal command climate that allowed SGT Johnson and me to train our men to standard. Even knowing we were 19Ds, we lived by the Ranger Handbook and related publications. With the MTOE the way it was, our platoon did not have to beg for support from other units, such as our helicopter support. Our platoon used this asset for 85 percent of all our insertions; this would not have been possible if not organic to our squadron. Our pilots were so good that a CW4 with some engineering background fabricated mounts on the birds to carry two motorcycles on each aircraft. This gave each OP team a fast, mounted reconnaissance asset to recon all NAI's. With this well-proven concept, the 3d Brigade and Task Force Saber deployed to the NTC and, as noted from the OPFOR command general, did to the OPFOR what the OPFOR reconnaissance has been doing to the Blue Forces for years.

As far as the men go, we could not find more than 20 or so troopers who could keep up with the high state of physical fitness necessary to perform our mission. The training was constantly demanding, with PT runs exceeding six miles daily and never-ending road marches. All this was necessary, given the extreme distance and loads we had to carry. I do not understand why the Army has not kept this organization alive in the division cavalry. In my experience, this asset is not only needed, but required in today's cavalry. I do wait with excitement to the day the Army realizes its mistake and brings back the blues. This SSG stands by with a 4187 in hand for another chance to do it all over again. "Scouts Out."

SSG CHRISTOPHER AUDETTE  
Cavalry Scout  
Korea

The Battalion Motor Officer Course (BMOC) is designed for Active Army, Reserve Component, and National Guard units. The primary students are CPTs and LTs who have completed the Officer Basic Course and have been in the field for more than six months, warrant officers, and allied nations officers. BMOC is designed to prepare these officers for maintenance positions at the unit (battalion and below) level, with emphasis on management and supervisory operations.

The compact four-week, two-day course is designed to give incentive to commanders to allow the Active and Reserve Component officers attending BMOC on TDY status to complete the course. Many commanders are hesitant to release officers for a nine- or six-week course, but are more willing to let them attend a four-week course. The new, shorter course will also help RC and NG officers who must leave a full-time job to attend, because many civilian employers also find it difficult to release employees for the longer courses.

The BMOC is now starting its 30th year of operation. The Organizational Maintenance Officer Course #1 was held in 1964. This course was an out-growth of the Armor Maintenance Officer Course, which was revised to create a course geared to all maintenance officers, regardless of branch. In January 1972, the course became the Motor Officer Course. It was shortened to four weeks and two days in 1992.

The BMOC course currently consists of 160 hours of instruction, and is divided into two areas: 104 hours of classroom instruction and 44 hours of specific instruction on five different vehicles. Students receive training based on the type of vehicle at their assigned unit. The five vehicles used in training are the M1A1 Abrams tank, the M2/3 Bradley Fighting Vehicle, the M113 Armored Personnel Carrier, the M977 Heavy Expanded Mobility Tactical Truck (HEMTT), and the M998 High Mobility Multi-Purpose Wheeled Vehicle (HMMWV). The program of instruction emphasizes the use of hands-on training and practical exercises. Classroom lectures are used to teach the proper maintenance procedures and the use of standard Army forms, but most learning occurs in the maintenance bays on actual vehicles.

The main topics covered in classroom instruction are: Army Maintenance System, operations records and dispatch procedures, maintenance records, maintenance publications, Materiel Condition Status Report, repair parts supply, tool and TMDE equipment, light schedule service, heavy schedule service, preventive maintenance indicators, hazardous materials, automotive electrical systems, safety, Unit Level Logistics System (ULLS), direct vehicle recovery, and power plant troubleshooting.

CLASS	REPORT	START	END
05-95	23 Jan 95	24 Jan 95	23 Feb 95
06-95	14 Feb 95	15 Feb 95	17 Mar 95
07-95	6 Mar 95	7 Mar 95	5 Apr 95
08-95	27 Mar 95	28 Mar 95	26 Apr 95
09-95	11 Apr 95	12 Apr 95	11 May 95
10-95	4 May 95	5 May 95	6 Jun 95
11-95	30 May 95	31 May 95	29 Jun 95
12-95	19 Jun 95	20 Jun 95	21 Jul 95
13-95	10 Jul 95	11 Jul 95	9 Aug 95
14-95	31 Jul 95	1 Aug 95	30 Aug 95
15-95	21 Aug 95	22 Aug 95	21 Sep 95
01-96	4 Oct 95	5 Oct 95	3 Nov 95
02-96	25 Oct 95	26 Oct 95	24 Nov 95
03-96	13 Nov 95	14 Nov 95	15 Dec 95

For more information, call BMOC CW3 Peyton or SFC Snyder at DSN 464-8119/7756 or (502)624-8119/7756.