

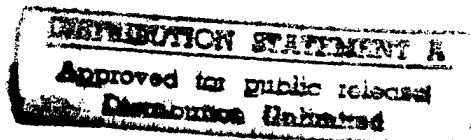
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Another reaction to the digital revolution comes from Major O.T. Edwards III, who was the S3 (Operations Officer) of Task Force 1-70, a digitally equipped outfit that fought the OPFOR at the National Training Center during Rotation 94-07.

Digital Battlefield Training and Insights of a User

The Good, The Bad, and The Ugly

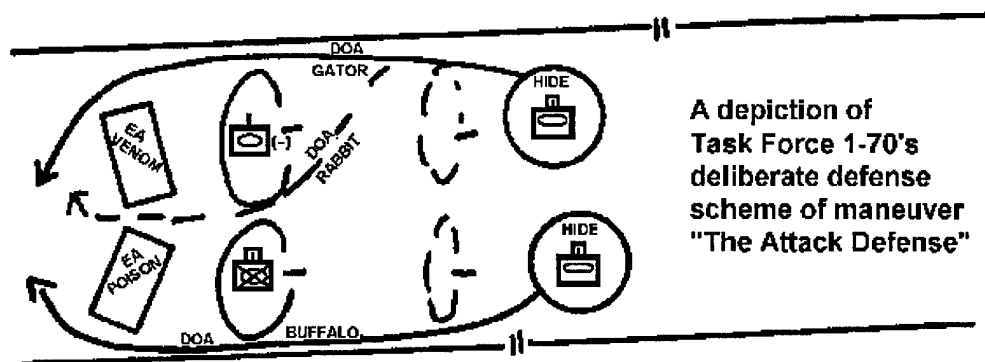
by Major O.T. Edwards III

(May-June 1995)

The views expressed in this article are the author's -- not TSM positions.

NTC Rotation 94-07 provided the Army with a superb support-by-fire position from which to overwatch the final push on Objective Force XXI. We all learned a great number of lessons, many the hard way. If we're surprised again during future digital advances, it's our own fault. Danger lies in overlooking or disregarding some of those lessons learned.

I had the great fortune to serve as S3 of Task Force 1-70 during the preparations for and execution of 94-07. As such, I was privy to a close-up, hands-on opportunity to experience first-hand the CAPABILITIES AND LIMITATIONS of current digital combat technology. This article attempts to pass on those insights for consideration by future "digital" combat leaders. I should note that some of the views expressed within this summary run contrary to current doctrine and Army leadership positions. But I still believe it's worth the time and flak to point out some issues. I would also note that many of the recent articles focusing on digital operations and lessons learned were written by soldiers with second-hand or observer experience.



While such warfighter insights are significant in their contributions, none, repeat none have fought a digital tank while trying to facilitate the command and control of a task force. I've had that experience. That's why I've chosen to publish my views. It's time that experienced users speak out. Our Army is about to cross the line of departure from testing and experimentation to a real-world digital combat capability by fielding our first M1A2 battalion next summer. This makes it even more compelling to highlight digital capabilities and, even more importantly, limitations.

We need to cross that line of departure with our eyes wide open, our heads in the game, and "looking over the top," as a former boss of mine is fond of saying.

I've organized my user insights into two broad categories: key training and leadership implications and tactical observations.

Training and Leadership

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- **In the event anyone has missed the point, tanking fundamentals at crew and platoon level still win battles!** Digital situational awareness leads to vastly increased levels of tempo and, potentially, to enhanced survivability. It's really almost impossible to fathom until you've experienced it in your tank. But accurate shooting is still king of the hill! Unless we can consistently put steel on target, improvements in command and control on the move are meaningless. It's easy for the task force and company leadership to become enamored and engrossed in the digital world at the expense of shooting and maneuvering fundamentals. Don't let it happen. Steel on target is still the difference between winning and losing!

- **Our soldiers can learn digital proficiency but require continual emphasis on default proficiency.** Soldiers default to their comfort zone in times of high stress. There's nothing new or startling in that concept, you might say, except that we cannot pay lip service to it! The bottom line is that digital command and control is a new task top loaded on an already full plate! Trainers must recognize this fact up-front and budget precious training time accordingly. This is where simulations can play a critical supporting role. Having said that...

- **Simulations are not a replacement for "old fashioned" maneuver training.** Say it again, simulation cannot replace the tough, dirty, and stressful field training environment. We hit the National Training Center without having conducted a full-up task force or company team maneuver exercise for over a year. We'd literally lived in a SIMNET world. At best, we were able to fashion a limited maneuver phase during our pre-rotation Table XII exercises. It showed. It took us the greater part of the rotation to catch up to the baseline. That adversely impacted on our ability to fully use our high tech battlefield force multipliers. Simulations just don't meet the full requirement for ground combat training. They play a supporting role. Get dirty!

- **Digital skills are relatively perishable! Crews must practice continually to attain default proficiency.** Crew Station Trainers are a major benefit in this aspect of training. Don't assume this challenge away. Incorporate digital proficiency training into all gunnery and maneuver training events. Have your tank commanders send digital contact and SITREPS during Table VIII runs and especially during Table XII. Consider incorporating a digital proficiency phase into your TCGSTs. It's that important!

- **Leaders still lead.** Task force commanders and operations officers still need a survivable, lethal combat platform that facilitates their presence in the close fight. Future battle command vehicles must be built around close combat systems that permit the commander to personally influence the close fight and continue to lead by personal example. We cannot confuse battle planning platforms with battle command machines. Task force commanders are not corps commanders! They lead their troops into harm's way, sharing the same dangers and perils. That has always been a cornerstone of our leadership philosophy. I have to believe that had Creighton Abrams' tanks been digitally equipped, he still would have led from the front.

- **It may be time to reexamine our leader development philosophy.** Digital combat may require enhanced stabilization of key leaders in order to attain and maintain levels of digital proficiency. This enhanced stability and readiness may have to come at the expense of diminished troop leadership opportunity but might prove essential to meet the mission of doing more with less and with exceptionally sophisticated combat machinery.

Tactical Insights and Implications

- **Old tactics plus new systems equal the same results.** Throwing a digital combat team into a forced deliberate breach still results in burning tanks in the enemy's fire sack! We've really got to find a better way to fight that fight in the absence of overwhelming fire support. Leaders need to live on the bold edge of audacity when it comes to the tactics, techniques, and procedures of fighting a digital force. Formations may be more of a hindrance than a help tomorrow. They may no longer be required. The tank company wedge may soon prove as obsolete as the flintlock. Think big and audaciously. Our most successful NTC fight came when we conducted a deliberate defense against a reinforced regiment. We

employed a scheme of maneuver featuring two simultaneous counterattacking tank heavy teams, and coined it the "attack" defense. Ask yourself the question, why dig in the most lethal offensive tank in the world and reduce it to a pillbox? Perhaps we defend on the move, advancing vice delaying. Attacking the enemy's advancing formations on the move. Think big!

- **If the unit is not digital-pure with a seamless C2 system, the task force battle staff and company team commander's work load is doubled.** Current systems do not permit seamless information flow of plans and orders. Separate systems are required to pass combat information to the maneuver and CS/CSS elements. When combined with a less than pure digital force, a high-low mix, this exacerbates the challenge as leaders must pass traditional graphics and orders to those without digital receptors. The effect is to double the workload and output requirements for the staff and company team commanders. You must incorporate this into your orders drill timelines.

- **User-friendly free text capability is a must!** Until we field a user-friendly (read tank and IFV/CFV commander), seamless, free text capability for the digital force, we're half-stepping it. While graphic plans are relatively simple to prepare and transmit to those interfaced with IVIS, free text is not available. When we get that capability, the frequency of FM voice transmissions will really plummet. To realize the full potential of digital battlefield tactical communications, we've got to easily transmit FRAGOs. We're not there yet by a long shot.

- **We need a dedicated digital net.** FM voice and digital traffic compete for air time as currently configured. Automated position updates emanating from moving tanks cause a near constant "digital" chirping which, over time, becomes extremely annoying. Both player participants and observer controllers highlighted the need for a dedicated third radio net reserved for digital traffic. We found that when a unit is in direct fire contact, FM voice remains the option of choice for contact reports, etc. A dedicated digital net would permit continued digital traffic flow while maintaining the "human" element of voice contact.

- **Offensive digital combat operations.** The Armor Center is working on the development of a heads-up tactical display for IVIS. We desperately need it. A leader/tank commander now has two options. Either he maintains local situational awareness by disregarding his IVIS display while on the move or forfeits his close-in understanding by "riding down" to view the tactical display. We need a heads-up capability that, as a minimum, permits the leader to monitor the movement of friendly unit icons and recognize receipt of critical incoming digital reports. We won't get a true command and control on the move capability without a heads-up display.

- **Digitally enhanced tactical intelligence feed to the task force commander and staff.** A recurring theme heard during our rotation was that the commander needed a simple means by which to pull down needed intelligence data. But why should he have to pull anything down? Brigade and division staffs exist to provide the critical information the task force commander needs, and it's not where the enemy's second echelon division is! At the task force level, he needs more mundane data in real time, such as where the FD, FSE, and Main Body are, and how fast they're moving. Where are his long-range ATGMs? What's the time/space gap between first and second echelon MRBs, with continuous updates? Information like that will facilitate the kinds of lethal, fast tempoed, offensively-oriented operations described previously.

- **The M1A2 tank loader's contribution.** The leader tank loader, always a key player, has become even more critical. He now serves as a communications manager for the tank commander. Loaders must be selected for their ability to execute the traditional duties of gun replenishment and observation and for their ability to manage sophisticated digital communications systems. He's very much a digital co-pilot. Something to bear in mind as we develop our future main battle tank. Autoloaders don't perform these functions very well.

- **Digits "ain't" perfect, yet.** Caution is still critical to the digital leader! It's still vitally important to learn and teach terrain association, mounted land navigation, and the traditional orders process. Sophisticated communications and navigation systems are not failure-proof. When you lose your IVIS link, and with it your digital situational awareness, it's comforting to recognize terrain in your "AO" by

old-fashioned association. Don't let these fundamental skills perish.

Let me close with a few "non-digital" observations:

- **Scout platoon leaders belong on the command net.** Eavesdropping, whether by digital or traditional FM voice technique, cannot be replaced as a combat multiplier. Situational awareness is greatly enhanced when the company team and other key leaders can monitor the recon/counterrecon fight. The task force intelligence officer is only one player who benefits from the reports of good scouts. Get the scout platoon leader on the command net and keep him there. Everybody benefits from it.
- **Counterreconnaissance requires command presence.** Everybody talks the counterreconnaissance battle. If I learned one thing from our rotation, it was that effective counterreconnaissance doesn't happen without either the battalion commander's or S3's direct involvement, not just in the planning phase but during the actual fight itself. One of these two leaders must be forward in the fight, making things happen and coordinating all the battlefield operating systems. This can't be done from the TOC.
- **The M1A2 tank is superb!** For all the advanced systems we used during our rotation, nothing matched or even came close to the effectiveness of the M1A2 tank as a fighting and command and control platform. Its ability to put steel on target, coupled with the enhanced "hunter-killer" system and onboard navigation system, make it the class of the modern battlefield. It proved itself to be reliable, maintainable, and extremely effective from an operational effectiveness standpoint.

These are just a few observations from a year's effort in preparation and execution of the Army's latest leap forward into digital combat operations. I hope this article stirs more candid discussion among professionals in the mounted force. Remember, we field the first digital battalion this summer! That battalion, along with its sister non-digital units, could very well be in hostile action soon thereafter. We need to be ready! Train to fight and win!

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