

LETTERS

The TWGSS/PGS System: One Unit's Experience

Dear Sir:

I found General Bolte's article, "TWGSS/PGS: Combat Vehicle Gunnery Training Takes a Great Leap Forward" (Nov-Dec 96), to be a very good description of the TWGSS system. The "Men of War" of the 1-33 Armor Battalion at Fort Lewis just completed an extensive TWGSS gunnery and platoon STX exercise in which we became thoroughly, and sometimes painfully, acquainted with TWGSS.

We conducted gunnery tables VII, VIII, and XII, as well as offense and defense STX lanes, with the TWGSS system. TWGSS enabled us to greatly improve the realism and intensity of our home station gunnery training program. Given that Fort Lewis does not have any ranges capable of supporting M1A1 Tank Tables, TWGSS allowed us to conduct mounted gunnery training during a period we were not scheduled to deploy to the Yakima Firing Center to conduct live-fire ranges.

The following paragraphs cover some of the lessons we learned during our extensive training.

First, on the issue of compatibility of TWGSS and MILES for either force-on-force or panel gunnery with LTIDS, TWGSS is only truly compatible with MILES equipment when the target panels or vehicles are outfitted with TWGSS retro-reflectors, a fact mentioned only once in the TWGSS operator's manual, but borne out in our training. TWGSS does indeed send out MILES-compatible firing information; however, if MILES-equipped vehicles aren't equipped with retro-reflectors, the TWGSS system cannot compute accurate ballistic data to send out an accurate laser beam. TWGSS relies on its initial laser pulse to determine the range to the target and lead required. It then determines a ballistic solution and then fires the TWGSS round. Occasionally, TWGSS-equipped vehicles can "kill" MILES-equipped vehicles just as a non-boresighted MILES tank can occasionally kill another vehicle. We tried manually inputting battlesight ranges with a minor increase in effectiveness. Also, when TWGSS vehicles shoot at MILES-equipped vehicles without retro-reflectors, the Training Data Retrieval System disk in the tank does not record the point of impact and other gunnery information because the TWGSS tank never computed a ballistic solution. So, the crew loses a great deal of the potential feedback they would have received had all vehicles either been TWGSS-equipped or MILES- and retro-reflector-equipped. For panel targets, we mounted the retro-reflector with Velcro® in the center of the panel with the LTIDs arranged in a tight circle around the retro. For MILES-equipped vehicles, we found that retro-reflectors must be mounted on all

four sides of the MILES vehicles. Finding enough retro-reflectors to equip all vehicles like this is most likely not feasible.

Machine gun engagements with TWGSS are quite a challenge. First, the TWGSS system doesn't integrate the M2 .50 caliber machine gun into the system. We used a standard MILES transmitter on the .50 caliber machine gun for the "Simo" engagement. For the coax machine gun, we had a difficult time hitting troop targets composed of E-type silhouettes at Table VIII ranges (700-900 meters). We discussed the problem with a civilian technical representative from SAAB who was on-site during our Table VII, and he eventually shrugged his shoulders and wished us luck. He explained the TWGSS coax wasn't designed to hit that small of a target at the extended ranges required for Tank Table VIII.

The Training Data Retrieval System was an excellent tool in assisting tank crew evaluators in conducting after-action reviews. We found that hooking up a television set to the laptop computer better enabled us to display the information to the crew. For tank tables up to Table VIII, the TDRS system will show the location of the firing crew and the target, as well as point of impact and a variety of other data. However, for Table XII, when we used the "multiple card" function of loading data from four tanks, we found that the system wasn't designed to show the same gunnery data. Specifically, the system doesn't record point of impact and location of targets as it did for single disk operations. So, it was impossible to tell if the platoon was using correct fire distribution and control and hitting all of the targets with only the TDRS cards. The OC personnel had to watch targets go down as they were hit, a difficult if not impossible task at night. We worked around this decreased capability in our Tank Table XII AARs by loading single disks for representative crews, and then discussed their crew level gunnery.

Overall, the TWGSS system enabled us to conduct some outstanding training. Having a system that reinforces good gunnery techniques using the entire fire control system during force-on-force operations rather than MILES "gunnery" was definitely an advantage.

CPT KENNETH R. CASEY
Cdr, B/1-33 AR
Ft. Lewis, Wash.

Main Gun on Elevating Pedestal Doesn't Solve "Top Vision" Need

Dear Sir:

The purpose of this letter is to offer a better solution to a major issue raised in the article titled "From the External Gun to the

Hybrid Tank" contained in the November/December 1996 issue of *ARMOR*.

In this article, the author, Robin Fletcher, attempts to make the case for a tank design that implements a main gun carried and reloaded while recessed in a cavity in the body of the vehicle hull. When brought into action, the main gun is to be raised above the top of the tank on a rotating pedestal in order to bear and fire on a target. Mr. Fletcher asserts in this article that by recessing the main gun within the tank body, the crew will regain the "top vision" lost in other future tank designs. Mr. Fletcher's assertion is in error.

The top vision that is lost when the manned rotating turret is eliminated can only be regained by giving the crew effective vision at an elevation equal to that achieved in the manned turret. Robin Fletcher's assertion that such top vision is essential to the effective operation of any armored vehicle is, of course, correct, but his proposed solution of lowering the main gun into the turret fails to provide the necessary elevation for a direct vision equivalent to (i.e. a replacement for) that which is found at the top of a manned rotating turret. Mr. Fletcher's hybrid tank concept neither solves the vision problem nor serves to simplify or improve operation, maintainability, or construction any more than a design implementing an external unmanned rotating gun turret.

A review of armored vehicle design literature over the past decade shows that no author has fully recognized the only possible solution to the conundrum posed by the need to more effectively protect the tank crew, while simultaneously reducing the overall size and weight of the vehicle, and equaling or bettering the combat effectiveness of current designs.

I believe that the only feasible way to retain or improve upon the vision system currently incorporated in today's main battle tank designs is to provide the commander and gunner vision from a point located on top of a rotating external gun. Current main battle tank designs incorporate very effective night vision and fire control, but only in the frontal arc of the tank chassis and turret. A limited 360° direct vision is normally provided to, at most, two crew members, and then only through the use of an arrangement of prisms located in hatch covers. The viewing angle obtained from such hatch prisms is very limited in the vertical plane, is unmagnified and not linked in any way to the vehicle's fire control system. There is no way to provide this type of 360° top vision when the gunner and commander are housed in the vehicle hull, as there is no practical way to physically position the commander's "Mk.1 eyeball" at the top surface of the main gun. The only possible solution available to designers today is to incorporate a "Virtual Reality" (VR) vision system that will give each crew member an independent 360° direct view at or

above the level of the top surface of the main gun.

We have available today both the computing power and solid state charge-coupled device (CCD) sensor technology to provide just such a vision system. In the past five years, advances in virtual reality software and associated electronics have been tremendous. By the year 2010, which appears to be the earliest date that the U.S. Army will be able or willing to field a new main battle tank, the then-available computing and sensors will be capable of producing VR vision which will be several orders of magnitude better than that which can be built today. It is clear that in the time period from 2000 through 2005, the U.S. Army will be able to obtain from commercial sources all of the components necessary to construct a military standard, combat survivable artificial vision system capable of presenting a substantially less limited 360° horizontal field of view equal to or better than what is currently possible in the M1A2. Additionally, by placing vision sensors on the top, front, sides, and rear of both the external armored main gun assembly and the vehicle hull, the designer can provide a fully computer-stabilized, lightweight, helmet-mounted, VR vision system giving each crew member an independent 360° hemispheric view. By implementing redundant sets of CCD sensors, sensitive to both visual light and thermal radiation, each crew member will have full day/night vision for automotive operations, target acquisition, and fire control. Further computer integration of the VR vision system with a fire control system and voice recognition may actually produce a main battle tank which can be operated and fought by a two-man crew. Another possibility of such a VR vision system would be synthetic vision enhancement (magnification) without the use of optical lenses.

Robin Fletcher, and virtually all other authors of articles on this subject, appear to be unaware of the current state of computing and visual reality technology and are perhaps unable to envision its use as a solution to some of the problems resulting from the elimination of a manned rotating turret. It should also be noted that these very same devices could easily be implemented on current M1A2 units or incorporated into future product improvement packages yielding at a minimum, significant increases in lethality.

I urge you to continue to publish the type of article represented by Mr. Fletcher's work. It is crucial that Armor personnel be exposed to discussions of not only the history and doctrine of armored warfare, but also of current and future armor technology.

JOSEPH F. MIGLIACCIO
President, Software Solutions Unlimited
Albuquerque, N.M.

Fostering Initiative In a Downsizing Force

Dear Sir:

Major Vandergriff's letter (Nov-Dec 96) is most interesting to me as he believes the Army must "encourage entrepreneurial soldiers as a revolutionary idea. Our Army must tolerate entrepreneurial officers — leaders, soldiers — as equally revolutionary," claiming the old system just doesn't work anymore. How right he is!

As a professor of entrepreneurship, and author of a book on the subject some time ago, I have long believed that with the changes in the battlefield environment, where small units are highly likely of being cut off and alone, unable to communicate with higher-ups, that more than ever we've got to identify, encourage, and willingly support entrepreneurially-inclined officers. This surely goes right up against the prevailing "brick wall" attitudes of senior officers where the emphasis has always been for junior officers to conform and obey. Those who challenge such a culture are doomed unless they happen to come under the protection of an influential senior willing to take a chance on them while they make mistakes during the learning period. Many senior leaders talk the talk about the importance of developing initiative, resourcefulness, and the like on the part of juniors, but they don't really believe in this, and they don't support it. Now, in today's Army, where seniors are looking for ways to weed out "undesirables" in meeting the continuing drawdown impositions, those juniors who dare to challenge are quickly spotted and as quickly riffed. Those who remain understand to follow orders.

Some years ago when I briefed the Chief of Field Artillery at Fort Sill, I urged him to consider requiring senior raters — LTCs and above — to show specifically how they had contributed to the development of their juniors, especially emphasizing the provision of opportunities for juniors to "show their stuff" without fear of condemnation for the type of mistakes that are inherent in this process. This does not mean that major careless or thoughtless errors should be tolerated. Seniors, in turn should not be pushed off the promotion track because some of their juniors make mistakes. There should not be penalties for honest and vigorous effort.

I did not achieve my objective on the OERs, but I still believe that what I proposed is most important. As best I can understand, current leaders — should we really call them that? — still practice the old ways and treat learning mistakes as unacceptable. We'll never develop juniors into competent seniors this way. How can we?

I believe that we still practice upper-level leadership in the manner of painting by the numbers.

Some years ago, I did a study on junior officer leadership shortly after Desert Storm, attempting to assess how juniors performed there, and how much latitude they had to demonstrate initiative in the command climate that prevailed. Did the leadership environment created by seniors encourage junior officers to forge ahead reasonably on their own? No. If you are interested in a brief summary of my study, I'll be happy to oblige.

DR. GEORGE G. EDDY
via E-mail

Counterreconnaissance: What It Is, and Isn't

Dear Sir:

In reference to the article in the November-December 1996 issue titled "Counterreconnaissance," I feel obligated to make some observations. I fully appreciate the two captains' desire to see units do well at the NTC, however, they must make sure that what they advocate is within the bounds of our current doctrine.

In the opening portion of their article, they state, "the task of conducting a counterrecon fight incorporates a screen, hasty attack/defense, zone recon, and the unique execution of tactical logistics, to name a few." This is the description of a guard mission. As I read the article, I could not determine what kind of security mission this mythical unit was conducting. I came to the conclusion that it was a guard mission.

Counterreconnaissance is not a mission. Counterreconnaissance is a subset or enabling task of the security missions of cover, guard, or screen. The authors may not appreciate this, but it is a fact. The basic problem is that if you state that "A/1-999 is the counterrecon force," does this mean everywhere within the unit area or just in the security area? If the answer is everywhere, then there must be a security force forward to protect the security area. If the answer is only in the security area, then it is not a counterrecon force unless it is a sub-element of a larger formation.

The BCBST program comes up against this issue in almost every rotation, and invariably the use of the term counterrecon is misunderstood and generally applied incorrectly. We must understand our doctrine and stick to it. No one person in the field can change it on a whim; that is why it is called doctrine and not a suggestion.

JACK E. MUNDSTOCK
LTC, IN
Maneuver BOS Chief
OPS GRP C BCTP

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LETTERS *(Continued from Page 4)*

Tank Modernization Plans Still in Formative Stage

Dear Sir:

This letter to the editor corrects some of the misperceptions found in CPT Todd Tolson's "Building Tanks at Lima" article in the November-December issue.

The Army Science Board Tank Modernization Study recommendations matched the independent Armor Integrated Concept Teams' recommendations in nearly every area. Neither recommended an evolutionary approach to a Future Tank. Both recommended (using the Abrams) the same set of high pay-off improvements to the Abrams. The Army Science Board, which did not consider affordability, recommended buying additional M1A2 tanks. The Abrams Integrated Concept Team stated that the Army's current procurement objective of 1,079 M1A2s was not based on an operational need and recommended that the Army Staff conduct a study to determine the right/affordable number.

The "Leap-Ahead Strategy" to a Future Combat System was decided by Senior Army Leaders (not Fort Knox). The Integrated Concept Team is in the process of providing definition to that decision.

Future Combat System operational requirements are far from being determined. Initial performance goals have been crafted to guide science and technology efforts. We will seek approval of a Mission Needs Statement in Fiscal Year 1997. Our timeline requires Operational Requirements Document approval no later than 2005. Future Combat System fielding is targeted to begin sometime between 2015 and 2020. The Program Executive Officer, Ground Combat and Support Systems, and the Chief of Armor jointly signed a tank modernization plan which provides the details of this strategy. The plan was recently mailed to senior leaders across the Force. We will publish excerpts of the Tank Modernization Plan in future issues of *ARMOR* so that all may understand and contribute.

JOHN F. KALB
COL, Armor
Director, Force Development
Ft. Knox, Ky.

You Can't Mothball Human Skills At Army Tank Plants

Dear Sir:

CPT Tolson's excellent article in the November-December issue, "Building Tanks at Lima" refers to a CBO study which recommended that the tank production facilities be mothballed to save money. My comment on that study is that it is an extremely

short-sighted approach. The most important capabilities to save are the human resources, not the machinery, and we can only do that by keeping open some limited production capability.

I go into this at some length in an article that I hope *ARMOR* will publish in the near future. (This article is in the early stages of production. -Ed.)

Robin Fletcher has done his usual, well-reasoned work in his article in the November-December issue, "From the External Gun to the Hybrid Tank," but I have several comments:

It is not correct to say that my article in the January-February 1996 issue, "The External Gun Turret: Often a Bridesmaid, Never a Bride," attributed the failure of the EGT concept to be adopted principally because of the absence of commander's direct "top vision." However important it is, it is only one of four reasons that I mentioned, the other three being: elevated gun position decreases survivability due to high silhouette and exposed mechanisms, excessive complexity due to the need to remote the operation of subsystems, and the loss of interior volume and mounting surface area. All are important, but the last is certainly the most under-appreciated.

I just don't believe that an advanced "tank," or any advanced combat system, will result from fooling around with how the gun is mounted. The horse cavalry was at the logical end of its development when it was replaced by the airplane and the armored, tracked vehicle; which were **real** new technology, not just a rearrangement of components. If I may resort to *reductio ad absurdum*, there was no possibility of a then-year "AHCS" (Advanced Horse Cavalry System) to result from fooling around with rearranging how the cavalryman was mounted — say by mounting the saddle under the horse's belly and forcing the rider to ride upside down. Such a system, which makes about as much sense to me as the EGT, would have the theoretical advantages of both reduced silhouette and "decreased crew vulnerability" because the rider is under the horse and less likely to be shot. Direct "top" vision would be missing because of the rider's position, but since it doesn't now bother the advocates of the EGT, it shouldn't have been a handicap for the AHCS. We can just assume that, like the FCS, the technologists will solve the problem, given enough time and money — which they will be glad to do; that is, use the time and money. Results are another thing.

Focusing on the gun mounting is looking through the wrong end of the telescope. What we need to concentrate on is how to achieve the improved lethality at the target end of the engagement. Speaking of that subject, I also believe that all the concepts being considered for the next generation system may well be wrong in that they con-

centrate on a heavy, high-velocity, high muzzle energy, high recoil force, flat trajectory, humongously long telephone pole of a weapon. CPT Pryor has written two fine articles ("M1A2s, Smart Ammunition, and Time and Space Theory," January-February 1996; and "Part II, The Offense," November-December 1996) for *ARMOR* about the potential for the use of the Smart, Target Activated Fire and Forget round (STAFF). Is anyone listening? STAFF doesn't need a very high velocity launch to work; and with a reduced need for a high muzzle velocity, the projectile trajectory can be curved enough to fire from a turret defilade position, making the vehicle much less vulnerable to flat-trajectory fire. Wouldn't this be a good way to reduce the weight of the armor? I hasten to add that, yes, since the target is moving, STAFF needs enough muzzle velocity to still have a high hit probability. My only point of disagreement with CPT Pryor is that the firing vehicle he discusses is always a currently-configured tank, specifically the M1A2. STAFF doesn't need to be fired from a tank to be effective.

The variety of gun mountings shown would need both space allocation design work and some thought given to how the structural loads will be reacted. Complying with both sets of needs can result in unanticipated weight, volume, complexity, and cost growth.

DON LOUGHLIN
Bellingham, Wash.

Clarifying the TF Commander's Role in Fire Support

Dear Sir:

I have read the September-October 1996 issue of *ARMOR* with great interest. I was struck by several of the articles and will respond to each in turn. My first target of opportunity is LTC Leiferman's piece, "The Task Force Commander's Role in Fire Support Planning."

LTC Leiferman almost has it right. Indirect fires are too important to be left solely to the artillerymen. What he doesn't pay close enough attention to is:

- The absolute need to assign someone to execute the brigade commander's targets,
- The use of a sequence of fires to assist in the synchronization of the direct and indirect fire battles,
- The true limits of indirect fires in a 30-minute fight
- The criticality of patience and discipline to the entire execution phase of the fight.

COL (Ret.) BRUCE B.G. CLARKE
MGDL, Tabuk, KSA

Downsizing of Heavy Force Isn't Over Yet

Dear Sir:

I need to take a little bit of issue with your editorial in the November-December 1996 issue.

- **Downsizing** is not, I say again, not "near the last step." Point in process aside, the "heavy force" is going to get smaller by at least a division if not by two by the end of FY00. That is a lot of 19Ks, Ds, and 12-series AOCs from an already reduced number. Not to mention the 11 and 13 MOS types. Fighting the war of "diminishing returns" may be tougher than any probably short- or near-term enemy. We will reach a point where training devices and weapon systems (remember the AGS) costs will outweigh their benefit because of our small number — not need. Remember what bean-counters count; it is not soldiers, regardless of what they say. They, too, have careers, and focus is awfully hard to maintain when you're sitting on the flag pole, wherever it is planted — especially when bullets are not flying.

- **Leadership/Competency** at all levels cannot be measured by the Persian Gulf episode. For those who were there, it was war, and there are always individual benefits from combat, regardless of how many participated, for how long, or who the enemy was in the fight. However, as an Army, those benefits are not that great because of those same factors when compared to other wars (declared or not) we have fought. The experience factor I think you are talking about is based on the training done before the action — wherever, whenever, or whoever. Therefore, based on our most recent use, as true individual soldiers, our training methods and leadership development programs are serving us very well, as best can be judged, based on that operation. Again, we cannot let economics reduce that by even 1 percent.

Having made these points, your final analysis is correct. We break things real good. That is our prime objective. We need to make sure that is understood, not only for the Armor Force, but the whole U.S. Army.

JOSEPH C. KOPACZ
COL, AR, USAR (Ret.)

Filling Needs Quickly With Foreign Equipment

Dear Sir:

I read with some interest Stanley C. Crist's letter, "Peacekeeping Vehicles"

(Nov-Dec 96), referencing COL Charles Lehner's "Bosnia Report" (May-June 96). I believe a few things need further clarification. Since the BV-206 is already in the Army inventory as the M973A1 SUSV, using the vehicle in Bosnia should not pose a maintenance and supply challenge over any other vehicle. The BV-206S uses many of the same components as the older vehicle, so that vehicle should not present a greater challenge either. As the Army's IPOC for the Foreign Comparative Testing (FCT) Program, we are looking at emerging requirements to use the BV-206S in Korea and Bosnia. At the present, we have a proposal to conduct a FCT project with limited tests in the 10th Mountain and 2nd Armored divisions to verify the vehicle's use for their peacekeeping and/or wartime requirements.

In reference to Tom Buonaugurio's comment, "If a requirement for the (armored) BV-206S does emerge," yes, I agree with Mr. Crist's statement, that vehicles in a scouting and patrolling role need armor protection, and while this is obvious, it does not make it official. That requirement needs to be in writing at an Army level such as a CINC Mission Needs Statement or a TRADOC Operational Requirements Document. Even that sometimes does not always ensure that, once tested successfully, the Army will procure it. I can refer to a recent FCT project for the 25mm Breakup Ammunition manufactured by NWM De Kruitvoorn B.V. of the Netherlands. This cartridge allows the live firing of the 25mm Bushmaster on a much reduced live-fire range, offering some new opportunities for training, especially at the National Training Center, and check firing the Chain Gun.

This project began with a signed requirement from the 24th Infantry Division. As the project progressed to testing, sponsorship of the requirement was withdrawn. The project proceeded, considering that much of the cost was not recoverable, and a new user could be solicited. The cartridge completed the testing successfully, and has a lot to offer the Army and Bradley Fighting Vehicle users, but there have been many stone walls encountered in the search for an alternate user. The problem right now is generating an interest in the user community to procure this cartridge, especially when the user has so many other things to worry about, one of them being the funding of their ammunition budgets. That problem has already been resolved at the Deputy Chief of Staff-Ammunition level. Funding to procure the cartridge is guaranteed for the user who comes forth with a written requirement justifying the need for this cartridge. The user will benefit from the capabilities gained from this item, and the United States will gain on the political front from the foreign purchase.

We will continue to work the issue with the BV-206S. Funding will always be an issue in these austere times. Mr. Crist is cor-

rect: we should provide our soldiers in the role of international policemen in peacekeeping operations the right tools for the job, and do it now. The user community can help do that with justified and supported requirements, and the FCT program can help by providing equipment, albeit foreign non-developmental items, that meet those requirements in the shortest time possible.

ROBERT J. LEPITO
Aberdeen Proving Ground, Md.

Clarifying the Components Of Bosnia's TF Eagle

Dear Sir:

In the May-June 1996 issue of *ARMOR*, you published an article written by Colonel Charles Lehner (Ret.) entitled "Task Force Eagle's Armor and Cavalry in Bosnia." The article was very interesting, but there were some mistakes, which we would like you to correct.

It was mentioned that the Swedish Battalion is responsible for the NW sector of the Task Force Eagle AOR. However, this is not true. In fact, the Nordic-Polish Brigade, to which the Swedish Battalion belongs, operates in this area. The NORDPOLBDE is a multi-national brigade containing approximately 3,500 soldiers from 10 different nations (Denmark, Finland, Norway, Sweden, Poland, Estonia, Latvia, Lithuania, Iceland, and the USA).

The brigade consists of:

- A multinational HQ
- A multinational HQ company (M113 and SISU XA-186 APCs)
- A multinational MP company (M113 APCs)
- A Danish mechanized infantry battalion (M113 APCs, Leopard 1A3 MBTs)
- A Polish paratroop battalion (BMP-1 CIFVs and BRDM-2 recce vehicles)
- A Swedish mechanized infantry battalion (PBV302 and SISU XA-180 APCs, BV-206 SUSVs)
- A Finnish construction battalion (SISU XA-180 APCs, NASU SUSVs)
- A Norwegian logistic battalion (SISU XA-186 APCs)
- A Norwegian medical company (SISU XA-186 APCs)

The Danish Leopard tank squadron was attached to a Swedish UN battalion in the area prior to 1996, but during Operation Joint Endeavor, the squadron has been part of the Danish battalion.

M. KOLBJORNSEN
LTC, ACoS G2
NORDPOLBDE

Maneuver Warfare Initiatives Are Still at Risk

Dear Sir:

CPT Bateman, in his article, "Force XXI and the Death of Auftragstaktik" (from *Issues in ARMOR* homepage), raises a very critical concern to the maneuver warfare community. We may soon lose the one thing that truly sets us apart from those on the attrition side of the table: independence of action by the subordinate commander.

It would appear that the wealth of information available to the battalion and brigade commanders would allow them to make better, safer, more effective decisions and place the forces necessary to defeat the enemy where they are needed most without the input of the company commander. This, on the surface, is a great leap forward in tightening the OODA loop. However, if we are not institutionally careful, it may prove to become our Achilles' heel.

The captain is correct in assuming that the dimension of independent leadership at the front line will atrophy, much like old-style land navigation skills have as the broad use of GPS has become more popular. We must be very careful to exercise the competence and self-esteem of the junior

leadership so we do not lose this valuable resource.

We must not pooh-poo the idea that battalion and brigade commanders will indeed leave their subordinates in the lurch and become directive micromanagers. I have seen by my own account that battalion and brigade commanders have little time, energy, or patience as it is to nurture and train junior leaders to thrive in a maneuver warfare environment, even before the advent of Force XXI technology. They just have little or no trust. Rare are the commanders today who give a mission, an intent, and allow their finely trained subordinate leaders to run with the ball. Force XXI will kill that notion outright.

If we surrender the independence of action for subordinate leaders completely, and develop them into nothing more than so many robots waiting on the next program from the master operator, what will happen when General Murphy and the Gremlin brigade descend upon U.S. Force XXI elements in the next hot conflict? What will happen when the comlinks fail? What will happen when the enemy turns our high-speed technology into expensive junk via his REC assets? Where will the LT Rommels and CPT Pattons be? They will be sitting in their turrets with their ears pressed firmly to the radio awaiting the next commandment from a battalion commander whose plan went out the window when his

30-inch color LCD screen went belly up. Their entire OODA loop will be shot to hell and we will probably be handed our next Task Force Smith.

We must now, more than ever, strive as an institution and as individuals to develop junior leadership that will lead from the front, with or without orders. We must slap the wrists of the commanders who lapse into micromanagement in garrison and in the field. We must not only pay lip service anymore to maneuver warfare tenets and truly practice them. If we do not, the death of Auftragstaktik may prove to be our death.

JOHN S. WILSON
CPT, IN
Arkansas ARNG

Correction

A caption on page 15 of the January-February issue incorrectly identified the M60A3 tank as using the Shillelagh missile system. The M60A2 tank used this system, not the A3.

— Ed.