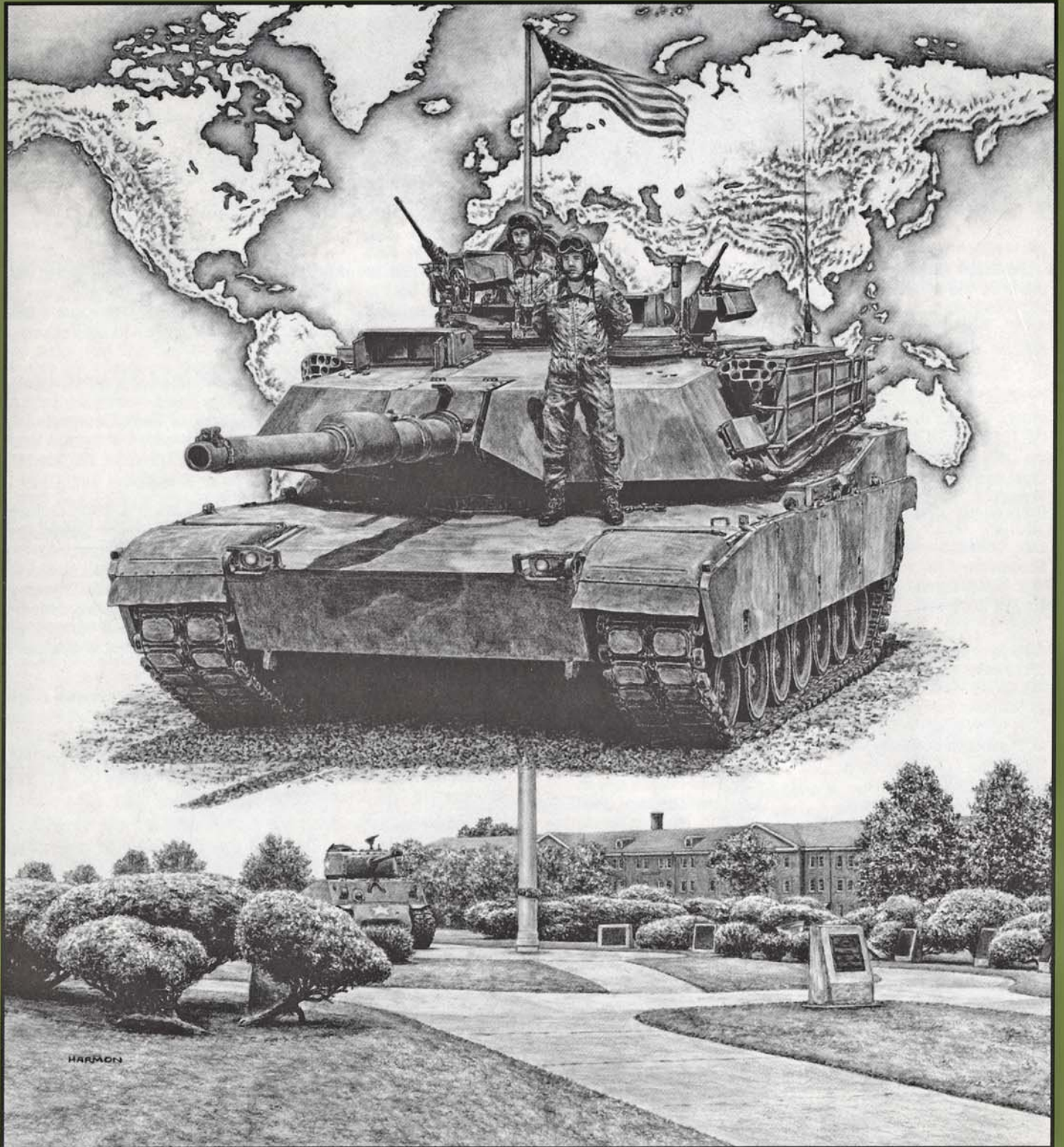


ARMOR



SPECIAL ISSUE: ARMOR REPORTS



The Saint George award program, in existence since 1986, provides the mounted force with a way to recognize outstanding performers, their spouses (Order of Saint Joan D' Arc), and Armor Force supporters (Noble Patron of Armor, with a newly resized, much larger medallion). The highest level of the Order of Saint George is the Gold Medallion.

Those who have received the Gold Medallion are a select group, as you will see if you ever visit the St. George Room at the Fort Knox Leader's Club, formerly the Brick Mess. Look at the gallery gracing its wall. There you will see portraits of each Gold recipient drawn by *ARMOR's* former artist, the late SFC Robert J. Torsrud, and Mr. Jody Harmon, our current artist. Frankly, it is an inspiring sight.

As one can see from the list below, the number of people chosen for this award each year is small indeed, befitting the high honor attached to receiving it. Each man was retired at the time of the award:

COL Jimmy Leach *May 86*
 LTG Robert Baer *May 86*
 MG Ernest Harmon *Sep 86*
 GEN James Polk *Sep 86*
 GEN Donn A. Starry *May 87*
 MG Lawrence Schlanser *May 87*
 GEN Bruce C. Clarke *Feb 88*
 COL Hap Haszard *May 88*
 1SG Patrick J. Rocco *May 88*
 GEN William A. Knowlton *Jul 88*
 LTG William R. Desobry *Mar 89*
 LTG Julius Becton, Jr. *May 89*
 CSM William Price *May 89*
 BG Phillip L. Bolté *May 90*
 GEN Glenn K. Otis *May 90*

MG George S. Patton *May 91*
 GEN Michael Davison *May 91*
 CSM Donald E. Horn *May 92*
 COL William Marshall *May 92*
 COL Jim Spurrier *May 93*
 BG Albin Irzyk *May 94*
 LTC Burton Boudinot *May 94*
 COL Fred Greene *May 95*
 MG Lewis Stephens *May 95*
 MG R. J. Fairfield, Jr. *May 96*
 MG Robert J. Sunell *May 96*
 MG Thomas Tait *May 97*
 Mr. Dick Hunnicutt *May 97*
 LTG Walter Ulmer *May 97*

I know there are other similarly esteemed and well-deserving people who have never been considered for the award because they didn't get nominated. It isn't anyone's fault, but in the previous ten years, word about the nomination process hasn't been known widely in the Armor and Cavalry force. There is a nomination process and a deadline for each year's nominations. If you are reading this, consider yourself now in-

formed that we are asking for nominees. The presentations will take place during the 1998 Armor Conference Banquet, being held 20 May at the Armor Inn at Fort Knox. That means the nomination packet must have a postmark prior to 20 February 1998.

I won't take the time here to lay out all of the qualifications necessary for the award, except to say that a nominee must be eligible for the other levels of the Order of Saint George to be considered. He must meet the criteria for both the Bronze and Silver medallions to even be in the hunt; however, he doesn't have to have received either or both to be eligible.

There are two important facts that will tell you if the person you are considering nominating is in fact a viable candidate. First, he must have a demonstrated record of **lifelong** service to the Armor Force. Of course, a superb record while in uniform is a given, but the nominee must also have continued to serve the force in later years. Second, barring an unusual circumstance, the nominee has to be able to attend the banquet to receive the award. A copy of the nominating rules is available by calling the Association at (502) 942-6219.

A note of caution: only a couple of people are chosen each year to receive the award from among the qualified candidates. Several of those on the list above were nominated several times before being selected. Also, the more nominations received, the more disappointed nominators there will be, and the stronger the field of candidates will also be.

A word of advice: Don't tell the person you are nominating that you are doing so, because you don't want to raise their expectations and then see the nomination fail. That said, please consider lifelong contributors to our force that you know, and give serious thought to nominating them to the prestigious Gold Medallion in the Order of Saint George.

A final note: Because of rising costs, the Armor Association has had to raise the price of the Order of Saint George to \$30 per bronze and silver medallion (vice the earlier \$25 price), beginning with nominations postmarked after 1 January 1998. But there is no cost involved in nominating a candidate for the Gold Medallion.

— TAB

By Order of the Secretary of the Army:

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 General, United States Army
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Joel B. Hudson
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 Secretary of the Army

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LETTERS

Audacious Exploitation: We've Done It Before

Dear Sir:

While I rarely respond to the numerous letters to the editor that my infrequent contributions to *ARMOR* seem to elicit, I feel compelled to answer LTC O.T. Edwards' letter in the July-August issue. It seems to me that he has failed to see the forest for the trees. This in no way detracts from his professional abilities; it just serves to highlight that this is indeed an area towards which we as an Army should devote some attention.

LTC Edwards provided us with a litany of admirable goals for the regular rotations to the CTCs. Nobody argues with his points, least of all me. But apparently what he has missed was the fact that in content, my article, "Training for Maneuver," encompassed all of his points about what CTC rotations "are about." In my article, in the very first paragraph, I stated that "the number one skill which our tactical echelons must perfect is how to destroy the enemy." Given that, how does one arrive at the conclusion that I am not in favor of "training for the tactical fight" or "training for the present" or "learning hard lessons?"

Moreover, somehow LTC Edwards got the impression that I advocated some sort of futuristic field of battle upon which these concepts should be employed. Far from it. In fact, had he only reviewed the skimpy footnotes which accompanied my article he would find no visionary, pie-in-the-sky theoretical sources, instead he might have realized that I was referring backwards, towards Sun Tzu, Clausewitz, and the historical precedent of our own 4th AD in World War II. I assure you, LTC Edwards, when MG "P" Wood drove the 4th AD hell-for-leather across France...OUT-NUMBERED...that he had not previously been "training units to fight on a digitized tactical battlefield that is still at best years away from reality." I am afraid that then-LTC Abrams and MG Woods had never heard of digitization. I am unclear on how you drew the conclusion that I was referring to the future, when the sole example that I provided was from 53 years in the past, but I assure you, what I suggest is possible today.

Next, lest it be forgotten, I will state it a THIRD time. I agree that the CTCs are about training to DESTROY at the tactical level. I am NOT advocating 100% "Free Play." What I do suggest is that in perhaps one scenario in five, perhaps just one in an entire rotation, at LEAST provide the **potential** that the bn/sqdn/bde/regt commander might exploit maneuver warfare. As an infantryman, I can assure LTC Edwards that I am no great fan of what he calls, "free wheeling cavalry charges." However, his assertion that we never do it is patently false. What else would he call the breakout from Normandy (which I cited in the article), or much of the attack (at the tactical level) across Iraq, (which I did not cite)? It would appear to me that indeed we

do execute "charges across the desert," often **without** the benefit of "perfect intelligence." That sir, is called "exploitation," and I contend that it is just about one of the most difficult missions to accomplish. Therefore, we should train for this mission. Currently we do not. You are not suggesting that we **not** train for a difficult mission, are you?

Finally, LTC Edwards suggests that I have advocated training LTCs and COLs on "operational art." Lest we all forget, "operational art" is tied to the operational level of conflict, which, according to FM 100-5 begins (usually) at the corps and above. He is mistaken. I am suggesting training LTCs and COLs, and most especially their staffs and units, on TACTICAL MANEUVER, not "operational art." One thing does worry me, though. He suggests that we have "other tools to do that" (train), such as computer simulations and classroom instruction at Fort Leavenworth, and that I and my fellow company-grade officers should "rest assured" that the LTCs and COLs will "gladly opt to hit the enemy's rear and flank." But then he follows that with "if, if, if..." That, sir, is EXACTLY what I am talking about. "if, if, if..." is the litany of the timid. Computer simulations do NOT create audacious leaders, training at the CTCs has the potential. **WE SHOULD TRAIN TO CREATE AUDACIOUS LEADERS.** Currently we are training to create efficient set-piece fighters, and this is good. We **must** have the ability to win in the close-in fight. But we are **not** training, at all, at any echelon, to be "audacious." Therefore, I suggest that my modest proposal that perhaps one in four or five scenarios at least provide the **potential** for this type of behavior is not at all out of line with our past and current doctrine and capability, let alone that of the future.

GARRY OWEN,

ROBERT L. BATEMAN
CPT, IN

An Author's Update

Dear Sir:

Since its development and publication in the September-October 1997 issue of *ARMOR*, some of the information contained in my article, "The Russian T-90S: Coming into Focus," has changed. The well-publicized sale of 320 Ukrainian T-80UD MBTs to Pakistan may be dead in the water. According to a variety of open sources, a total of only 35 T-80UDs were delivered to Pakistan in two separate batches in March and May 1997. These 35 tanks were reportedly drawn from Ukrainian Army stocks and had capabilities below the level agreed to by the two countries. According to Moscow's *Kommersant Daily*, this apparently caused the Pakistani government to cancel the sale.

The Russian government has been publicly against this sale from the very beginning, and

has repeatedly refused to supply Ukraine with critical components needed to build the T-80UDs. According to one source, while the more modern Ukrainian T-84 MBT is "80% Ukrainian-made," the T-80UD is "a largely Russian product." According to the Pakistani newspaper *The Hindu*, Pakistan has been assured by Ukraine that the contract for the T-80UDs would be honored in spite of pressure and lack of support from Russia. The remaining piece to this puzzle is the level of importance the Russians put on the supply of defense-related products to Ukraine. If it is determined that the Ukrainian market is important enough to Russian arms suppliers, maybe "quiet" support would still be possible. Without Russian support, its likely that the only T-80UDs to be seen in Pakistan will be those few already paraded through Islamabad.

JAMES M. WARFORD
Leavenworth, Kan.

Correction

Dear Sir:

I was using the spreadsheet (Road March Table) on page 9 of the September-October issue of *ARMOR* Magazine and noticed an error in one of the formulas.

The formula for CP Arrival Time {for cell G10} was:

= IF(\$B10="", (F10+G\$8/\$B\$4/60), "")

The correction is the insertion of a parenthesis between the comma and F10 to complete the formula. Just thought you and your other readers would want to know.

SGT JOHN SILBER
Schweinfurt, Germany

Maneuver Warfare: "Not Just Moving Around"

Dear Sir:

In his Jan-Feb 97 *ARMOR* article, "Training for Maneuver," Captain Bateman asks whether the U.S. Army embraces the techniques of maneuver warfare. However he does not actually answer the question, and concludes only that what he regards as maneuver warfare is not taught in training centers. And I think the question itself ought to be considered fully, for voices are now asserting that not only Army but Marine Corps doctrines are straying from and discarding maneuver warfare. A corollary question is whether the U.S. Army did, in fact, employ maneuver warfare techniques at the tactical, operational, and strategic levels, as set forth in FM 100-5 and other related doctrinal statements, in the Gulf War. In the opinions of not a few commentators, Operation Desert Storm was conducted more like a firepower slugfest than anything else, with "maneuver" most

often utilized to move and concentrate firepower directly upon the enemy to wear him down, which is not a manifestation of the maneuver of maneuver warfare.

It would certainly be revealing for the two questions I've posed to be analyzed and answered by persons deeply familiar with both U.S. Army doctrine and how Desert Storm was actually fought. Of course, doctrine is not dogma, and commanders should be permitted individual judgment, but there seems no point in developing and setting forth doctrine if it is cast aside and ignored as a source of guidelines in actual combat.

I expect an indignant, "But 'twas a famous victory!" objection to the suggestion that perhaps victory is not an automatic insulation from analyses which might suggest inadequacies, shortcomings, or more appropriate alternatives. But can learning take place without questions?

I understand that military analyst Steven Canby suggested the alternative approach to liberating Kuwait — shifting the Schwerpunkt to the Medina-Baghdad road and driving north to lever the Iraqis out. Was Canby's idea feasible? Reasonably derived from, and compatible with, Army doctrine? Ever seriously considered?

Returning to the text of Bateman's article, I disagree with his contention, "Simply stated, 'maneuver warfare' is the embodiment of Sun Tzu's... maxim that the essence of generalship is... to win the war having never had to fight a battle." And extrapolating from his Sun Tzu citation, Bateman goes on to describe maneuver warfare as "warfare that emphasizes avoidance of contact at any level in favor of positioning." I think Bateman's statements lead to the common misunderstanding that maneuver warfare means basically winning by just moving around. From the beginning of the maneuver warfare debate, people have seen the first word of "maneuver warfare," thought of movement, and misperceived maneuver warfare as essentially just moving around. I think Captain Bateman has been so influenced, given the titling of his article — "Training for Maneuver," rather than "Training for Maneuver Warfare." Actually, maneuver warfare involves both movement and firepower, and is more than flank attacks. It is not in contradiction of, or incompatible with, firepower or with hard fighting, and would in fact often involve hard fighting, and inflicting some attrition upon the enemy, though not winning through attrition.

Ideas more relevant to maneuver warfare from 500 B.C. Chinese military thinker Sun Tzu's *Art of War* are that movements should be like water, avoiding strong points and seeking weak points, and that one should know where and when to fight and not to fight.

Sun Tzu's statement about achieving goals without fighting appears to have been made regarding avoiding a war altogether, through strategic and grand strategy which balk the enemy's plans, rather than by actually having a war and not fighting in it.

Deeper into his article Bateman does demonstrate an appreciation of hitting the en-

emy's field trains, rear areas, his logistical underbelly, and his air defense. And he objects to the training center approach of "setting out to destroy the enemy's main body" in a "struggle to determine the strongest." Perhaps this emphasis derives from readily accepting the Clausewitzian stress on battles of mass v. mass.

JOSEPH FORBES
Pittsburgh, Pa.

Battleship Analogy Doesn't Apply to Tanks

Dear Sir:

I find Stanley C. Crist's article, "The M1A2 Abrams: The Last Main Battle Tank?," to be remarkably misinformed.

Mr. Crist argues for the missile to replace the tank gun so that the armor community will not "stay on the same dead-end street that doomed the battleship to oblivion." NOT SO!

First, the analogy is not there, i.e., ships to tanks. Second, what all combined arms combatants know is that you need a mix of both chemical energy and kinetic energy warheads on the battlefield to ensure the enemy cannot countermeasure you out of lethality. Third, there is still huge growth potential in guns and ammunition, both conventional, as represented by the XM291 long barrel 120/140 and, eventually, electro-magnetic or electro-thermal weapons. Guns and bullets provide the larger number of stowed kills needed in intense close combat that missiles can never equal, not to mention firing time differences.

How about the M1A3 Abrams, "The Next Main Battle Tank?"

D.S. PIHL
Lieutenant General
U.S. Army (Retired)

M113 Solution Wouldn't Protect The Gunner in a Firefight

Dear Sir:

The only flaw I see in Mr. Crist's advocacy of an M113 with a 106mm RCLR is the fact that the gun can't be fired from under armor. It is easy to picture an M113 in a duel with a machine gun bunker with the gunner pinned inside the vehicle. If you can't fire from under cover, the advantages of the rest of the armor are minimized.

The inability of air-dropping the M1 is only the beginning of the logistics difficulty. It weighs so much that it requires almost an entire C5 sortie per tank. This huge amount of airlift is unlikely to be used to bring more than a small handful of M1s to support the whole division.

Another possibility would be an ITV, which would be aided in this role by the development of an HE warhead for the TOW2. I am, however completely unsure whether this vehicle could be air-dropped.

Like the cancellation of the DIVAD, losing the XM8 does not get rid of the mission. I guess the fact that so much thought and ink is going into the debate over the weapons to equip the 3/73 is a measure of everyone's satisfaction with the M1 series in the heavy divisions.

JAMES AGENBROAD
Technical Information Specialist
U.S. Army Research Laboratory

His Experience Contradicts Criticisms of Guard Units

Dear Sir:

CPT Michael Kelly's letter to the editor in the July-August 1997 issue of *ARMOR* was simply disgusting and unprofessional. His insulting remarks about National Guard officers and the National Guard armor community may accurately reflect his personal bitterness with "the system," but they are far from reality. My 17 years of service in Cavalry and Armor have been split almost 50/50 between active duty service and the National Guard in two different states. I served as a cavalry troop commander twice in one of the highest profile active duty cavalry units (11th ACR) and am now commanding a National Guard tank battalion. I have had the opportunity to see both active and reserve component armor units from the inside.

The days of the stereotypical National Guard officer **are over**. With the implementation of a requirement of federal recognition for promotion, and the recent implementation of ROPMA, the "good old boy" promotion track in the Guard is a distant memory. All Guard officers are required to meet active duty standards for civilian and military schooling, height and weight, and physical fitness for promotion and command positions. The officers in my Guard battalion are every bit as dedicated, physically fit (yes, I said physically fit), and educated as officers I served with in the 11th ACR. One of my lieutenants (my scout platoon leader) set an APFT record at Fort Knox during AOB. A team of five of my officers beat some Marine Corps teams in the annual 10 km Obstacle Course/Mud Run at Camp Pendleton. One of my company commanders is a Master Fitness Trainer. All CPTs and above have four year college degrees (most LTs do as well), and there are five officers with postgraduate degrees. Four of the five company commanders are AOAC graduates. These young men are studs, they are educated, and they are leaders.

The only difference between the officer corps in the Guard and the officer corps on active duty is time — time on duty to gain experience, time to train soldiers, and time to plan. However, many of my officers have active duty experience, and I have a number of Vietnam and Desert Storm veterans in the unit. Further, we do have sufficient time to train individual, crew, and platoon tasks to

Continued on Page 57

MG George H. Harmeyer
Commanding General
U.S. Army Armor Center



19D and 19K Training In 1st Armor Training Brigade

The First Armor Training Brigade at Fort Knox, Ky., is organized with seven battalions, and has the diverse mission of conducting Basic Combat Training, 63E and 45T Advance Individual Training (AIT), and Career Management Field (CMF) 19 One Station Unit Training (OSUT).

The OSUT mission of training CMF 19 is conducted within three battalions, 1-81 Armor, 2-81 Armor, and 5-15 Cavalry. Training is the brigade's daily business, and, unlike other Army units, the brigade is always "Green." The brigade has made great strides in improving the quality of its training over the past several years, which is evident from posi-

tive feedback from the field. The Program of Instruction (POI) has been revised to incorporate changes in doctrine and force development. Additional changes incorporated into the POI result from TM changes, safety messages, and suggestions from YOU in the field. These changes are essential to keep our soldiers trained in the fundamental combat skills necessary to fight and win our nation's wars. Units or individuals that have a suggestion or comment on a particular task or lesson plan can provide feedback via the brigade's home page. The address is:

<http://knox-www.army.mil/school/1atb/1atbimo.html>

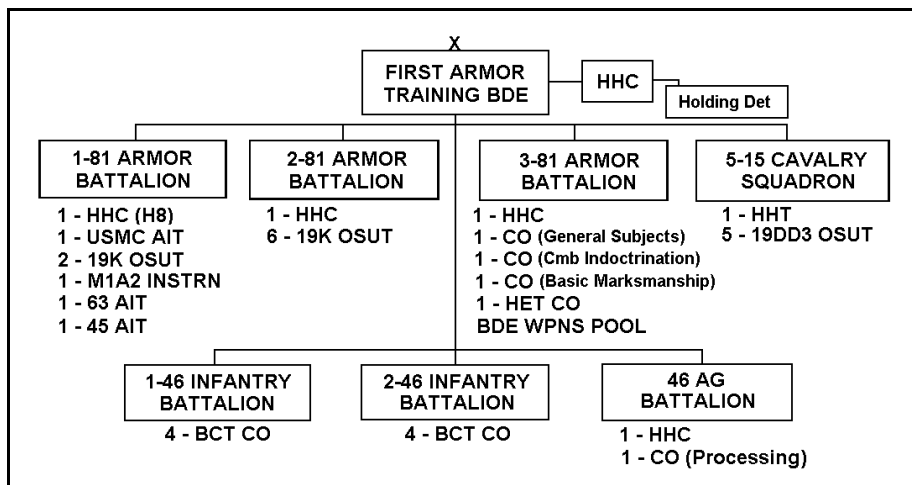
The brigade conducts a quarterly review to adjust its POI. Based on the results of this critique, we implement modifications to improve the course. The brigade has made numerous additions and deletions over the last two years, reviewing over 1,750 lesson plans and resulting in over 728 changes. Some of these changes include revisions that make good sense due to Fort Knox's particular needs, while others ensure the graduate is exposed to the skills required of a TO&E unit.

Several initiatives have been common to both 19K and 19D. These include the revision of the Excellence in Armor and Cavalry program, the re-introduction of job books, and the identification of friendly and threat vehicles via noun nomenclature.

This enables the cadre members to continually improve their instruction techniques. Both programs (19K and 19D) have made significant changes, and each need to be discussed individually.

Specific 19K Improvements:

Some of these changes include the addition of a tank crew gunnery skills test (TCGST) conducted to mirror the standards of the TO&E unit. Previously, the tasks were tested throughout the 14-week training cycle. Now, the testing re-



Continued on Page 56

CSM David L. Lady,
Command Sergeant Major,
U.S. Army Armor Center



NCO Restructuring Makes Its Impact On the Armor Force

As promised last issue, I am including several charts to show the actual changes being made to our NCO rank structure. These changes are due to the Change in NCO Structure (CINCOS) initiative adopted by the CSA on 22 July 1997 (and the subject of my last article).

As you can see, the master gunners paid the price on the TOE side. By 1 Oct 1998, tables of organization and equipment will show all company MGs as SSGs, all battalion/squadron MGs as SFCs, and division and separate brigade MGs as MSGs (in units where the operations sergeant is a sergeant major position).

On the TDA side, the reductions affected Ft. Knox IET instructors and other-TRADOC post range control personnel most heavily.

Since the CINCOS was adopted, the SFC-selection list has been published, and many Armor/Cavalry NCOs and

commanders are concerned with the selection rate. CINCOS impacted on the CY 97 promotion selections to SFC. At this time, there are 1,251 19K and 543 19D SFC positions authorized. In FY 99 there will be 1,051 19Ks and 513 19Ds authorized. The smaller selection rate (7.8% versus 9.4% in 1996) reflects the smaller need for SFCs in the restructuring force (we currently have about 1,368 SFCs on active duty). The good news is that the reduction in slots has already been factored; the bad news is that selection rates will be no greater for next year.

Having read the "Career Management Field (CMF) 19 Review and Analysis" of the board results, I am left with one very strong impression: **Those NCOs**

selected for promotion had succeeded as leaders in the traditional leadership positions. They had served in troop assignments prior to their selection for special duty and they returned to similar positions immediately on release from special duty. They stayed competitive with their peers, and maintained their PMOS and grade competency.

Secondary zone selectees had already succeeded in the leadership positions normally filled by sergeants first class. In addition, they have served or are currently serving in at least one specialty assignment, are in excellent physical condition, and have a very strong background in troop-leading positions.

Continued on Page 56

TOE Downgrades/Changes

- TOE Div/Sep Bde/Regt Master Gunners: If the unit has an E9 Ops SGM (-4 E9)
- Recoded Asst Ops SFC/SGT in Corps/Div/Bde from MOS 19K to 19D (+39 E5; +22 E7)
- Company master gunners (-146 E7)
- Battalion master gunners (-38 E8)

Proposed Change by MACOM

	MOS 19D			MOS 19K			MOS 19Z	
	E5	E6	E7	E5	E6	E7	E8	E9
USAREUR	+9		+5	-9	+30	-27	-7	-1
FORSCOM	+27	-3	+21	-26	+119	-106	-28	-4
PERSCOM							+1	-1
8TH ARMY	+3		+3	-3	+11	-11	-3	
TRADOC	+61	-33	-24	+61	-38	-87	-5	
TOTAL	+100	-36	+5	+23	+122	-231	-42	-6



Reports from
THE ARMOR CENTER

1997 ARMOR SCHOOL UPDATE

Relocation, Consolidation Mark Year of Changes

This has been an extremely busy year for the Armor School. We are continuing our pursuit in establishing the highest quality institutional training achievable, and the important initiatives we've introduced will ensure that we meet this objective. The first and most readily visible of these initiatives is the realignment of the School's infrastructure. The Armor School currently occupies the same number of buildings that it did in 1989, but due to Army downsizing that has occurred since that time, student enrollment has decreased over 40%. Naturally, this situation drives us to pursue more efficient, cost-saving methods of instruction.

We are now in the process of moving some departments and classrooms out of old, one-story wooden and masonry buildings and consolidating all Armor School classes into Skidgel, Harmon, Marshall, and Boudinot Halls. Staff and Faculty, Automated Instructional Management Systems Redesign (AIMS-R), and the International Military Student Office (IMSO) will join the school headquarters in Gaffey Hall. The Directorate of Training and Doctrine Development (DTDD) will join the Armor School Library in Harris Hall. The Master Gunners and gunnery instructors will move into Serio Hall (the old 194th HQs). The entire Noncommissioned Officer Academy will join the Armor School complex

and occupy facilities opposite Skidgel Hall. PLDC, BNCOC, and ANCOG will gain "state of the art" classrooms, refurbished offices with enhanced communication links, and modernized billeting for soldiers attending these NCOA courses.

The 1st Armored Training Brigade will inherit several of the buildings vacated by the NCOA and use them to house two newly constituted basic training companies and some headquarters elements.

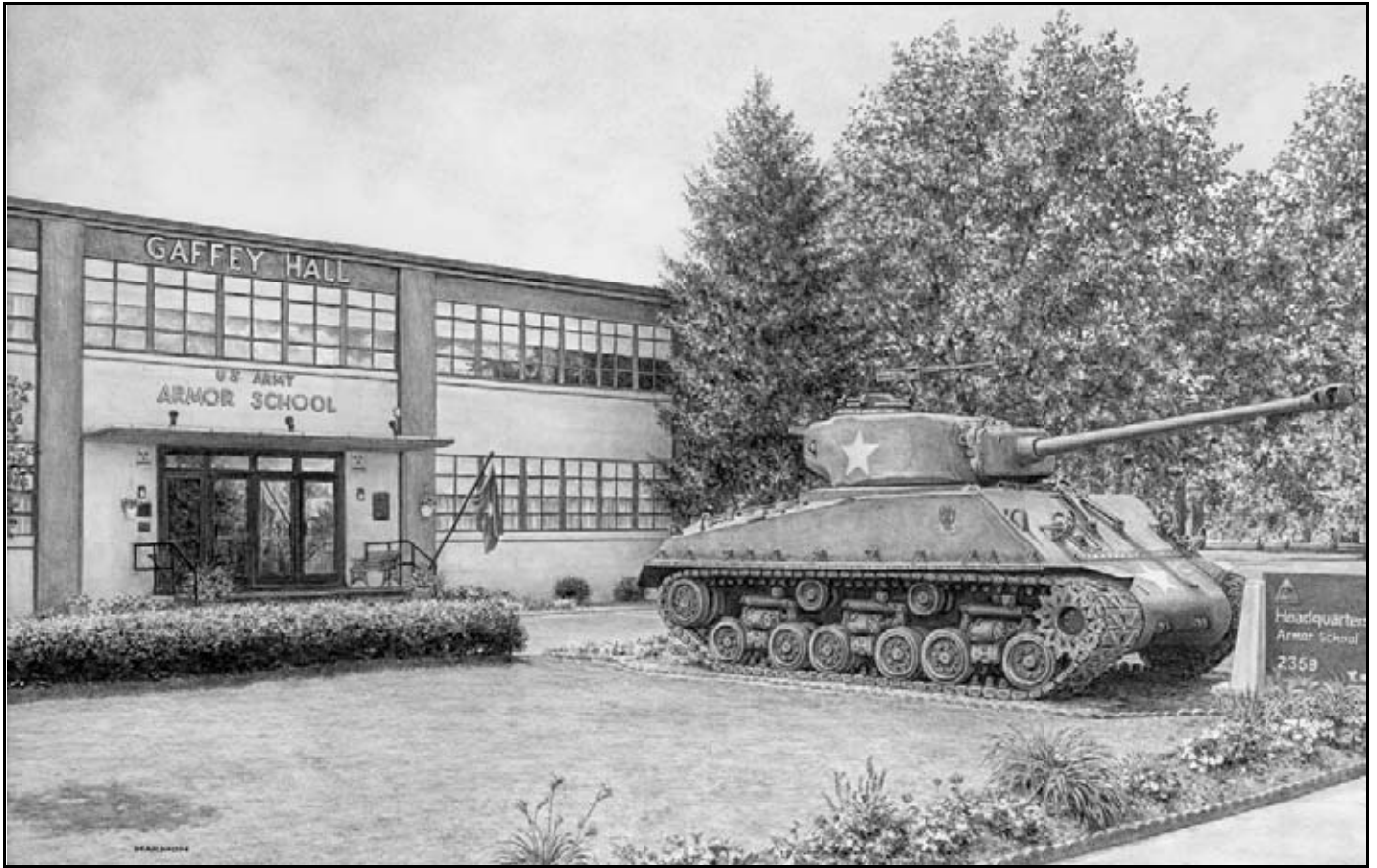
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Small Group Overview

Instructor ID: 21
 Instructor: Tim Kielpinski2
 Small Group: 4-1z
 E-Mail address:
 Total Number of Students: 17

Student Name	ID#	Diagnostic Test	Final Exam				Status of MA		
			1st Go	2nd Go	3rd Go	No Go	Done Diag?	Done MA?	Done Final?
Tim Kielpinski	4	8/ 50 Detail					Y		
Dave Nilsen	5	13/ 50 Detail					Y		
Bob	38								



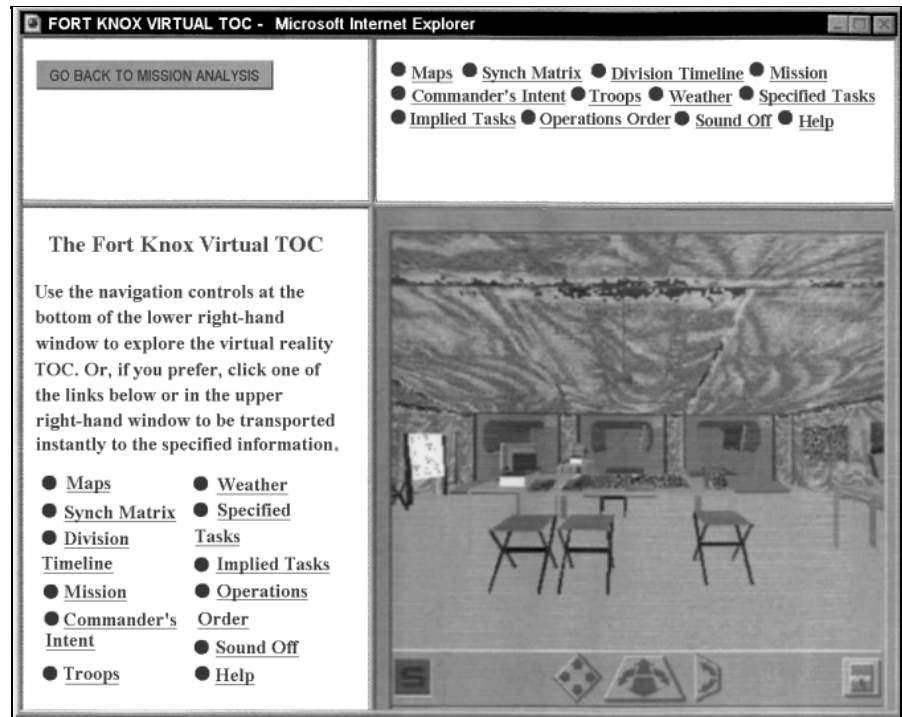
This new organization enables us to tear down 43 obsolete, inefficient buildings that used to house classrooms and offices. We will apply the money normally spent in maintaining these old structures to the upgrade and refurbishment of classrooms in the remaining buildings. The savings and benefits associated with this major project are indeed significant.

Another upgrade to the Armor School in 1998 will be the construction of six computer-enhanced classrooms on the second floor of Skidgel Hall. This is part of Classroom XXI and the Army Distance Learning Program. These are not merely classrooms equipped with computers, but rather a place to share student work products, access information from the Fort Knox local area network, the Internet, the Army Training Digital Library (ATDL), and other TRADOC schools and centers.

We also plan to begin the evolution to a paper-free classroom in 1998. Once given the funding, we will issue laptop computers to our students when they in-process into our schools. These state-of-the-art laptops will contain all the course materials the student will need, including a CD-ROM containing all manuals and texts needed during the course. Additionally, students will have the ability to

download updates to these manuals, whenever they occur, via the Internet. We believe that laptop computers will be a common management and training tool utilized by all units in the near future. In the future, we hope to allow students to

take their laptop "classroom" with them after graduating from their course; then we can ensure that units in the field will be directly linked to the schoolhouse at all times. Thus, we need to begin training tomorrow's leaders on computer ca-



NEW EMPHASIS ON MOUT TRAINING

It Takes a Village To Prepare for Urban Combat... And Fort Knox Is Getting One

pabilities and limitations today. Once funding for this concept is approved, we plan to start issuing them initially to AOAC students, followed by ANCOC, AOBC, and BNCOC.

Large-scale distance learning will arrive at Fort Knox in 1998. We have converted the Battalion Maintenance Officer Course (BMO) into an interactive CD-ROM, and the resident BMO will end here at the Armor School in the second quarter of 1998. Personnel wishing to take that course can receive the CD-ROM through a normal request to the Army Training Support Center (ATSC). We have begun the conversion of the Armor Officer Advanced Course to a distance-learning format for our Reserve Component officers. Our plan is to provide "Individual" Phase One instruction over the Internet, beginning in October 1998. Phase Two "Small Group" instruction, with emphasis on collective tactical tasks, will be in the video tele-training format beginning in October 1999. The Phase Three, two-week "resident" phase will begin at Fort Knox in the summer of 2000. Our goal is to phase out the current AOAC-RC course by FY00.

We plan to convert a portion of 19D ANCOC to distance learning in FY99, and we expect a relatively small TRADOC common core portion of BNCOC to be converted that same year. These distance-learning portions are oriented toward reserve component soldiers, offering them more and better opportunities to attain the same state of proficiency as their active duty counterparts. It is not our intention to attempt to convert "hands-on" equipment or initial entry tasks to the distance-learning format, now or in the immediate future. We intend to make the time spent on these critical "hands-on" tasks as the capstone training event of the courses.

Lastly, we expect to have our M1A2 Virtual Maintenance Trainer operational in Skidgel Hall in 1998. This device begins the initial mechanic training in a virtual world, transitioning them to a "hands-on trainer" for their validation training and testing.

The future of the Armor School is promising, and we will remain the best school of mounted warfare in the world. We will use emerging educational technology to our greatest advantage, knowing full well that the true test of our effectiveness occurs on the battlefield and not in the classroom.

by Robert S. Cameron, Ph.D.
Fort Knox Historian

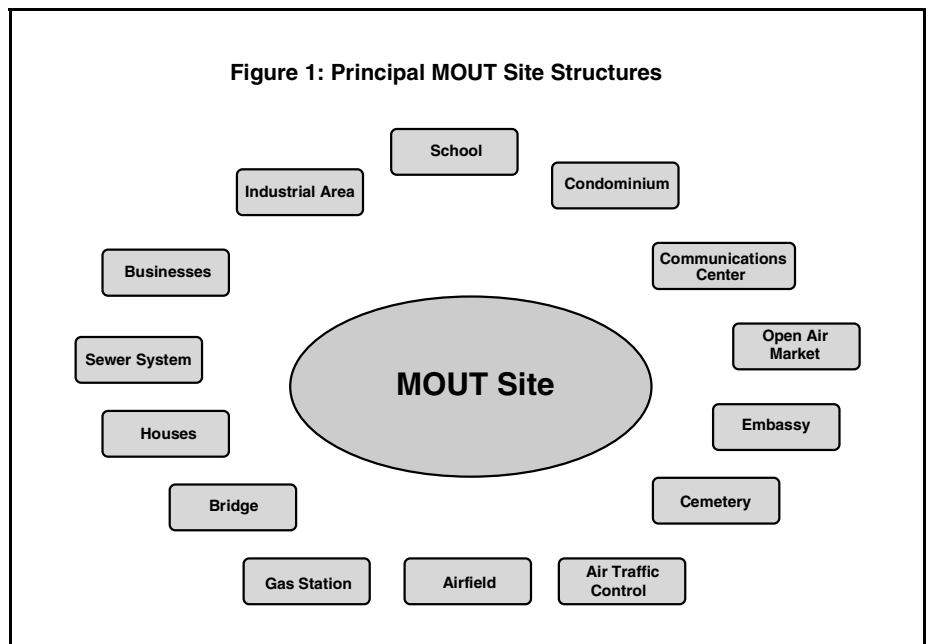
For the future, Mounted Forces must be ready to operate in urban settings. Many soldiers put urban operations in the 'too hard' box. Instead, mounted soldiers must begin to think of fighting in urban terrain as another battlefield condition, like cold weather or NBC. Traditional Armor practices of either avoiding urban areas or destroying them by indirect fire or long range direct fires are no longer acceptable. To meet the challenges that urban areas pose, the Army must develop doctrine, training, organizations, materiel, and soldier-leaders. At Fort Knox, a facility is arising to fill these gaps. This new facility, a test bed for Force XXI, will integrate heavy weapons and mounted forces in urban operations. By doing so, the site will reveal shortfalls in new technologies, organizations, and tactics. Finally, it will provide an un-

equaled opportunity for joint training across the spectrum of conventional and special forces.

The Urban Combat Problem

Operations from Somalia to Bosnia show that the U.S. Army must operate in urban settings. The Gulf War showed the effectiveness of armored forces in open terrain, but it did not represent either current or future military operations. Future battlefields will include city streets. Europe and Asia now have the highest densities of urban population. In 1983, an average American brigade sector in Germany included at least 25 villages and one town, and this number has since risen.¹ Data for Africa and Latin America shows rapid urbanization in these likely hot spots.² The increase in unconventional operations since the Berlin Wall fell underscores the need for MOUT capability. Actions in Panama City, Port-au-Prince, and Mogadishu proved criti-

Figure 1: Principal MOUT Site Structures



cal to Operations Just Cause, Uphold Democracy, and Restore Hope. Ongoing stability operations in Bosnia involve the use of mounted forces in and around villages. Cities like Sarajevo are important symbols and house key force headquarters.

Foreign and American experience shows that failure to prepare for urban conditions carries a high human and political cost. MOUT readiness proved a critical factor in Israel's 1982 invasion of Lebanon. The Israeli Defense Force (IDF) overran much of Lebanon to drive out the Palestinian Liberation Organization (PLO). The PLO withdrew into the cities where the urban setting offset its lack of sophisticated weaponry and suited its decentralized tactical leadership. With its force structure and doctrine ill-equipped for urban fighting, the IDF found itself trapped in a dilemma. It could use artillery and air power to crush resistance in cities still populated with civilians, or it could use scarce infantry in slow and costly clearing operations. Initial Israeli use of blanket firepower brought international condemnation.

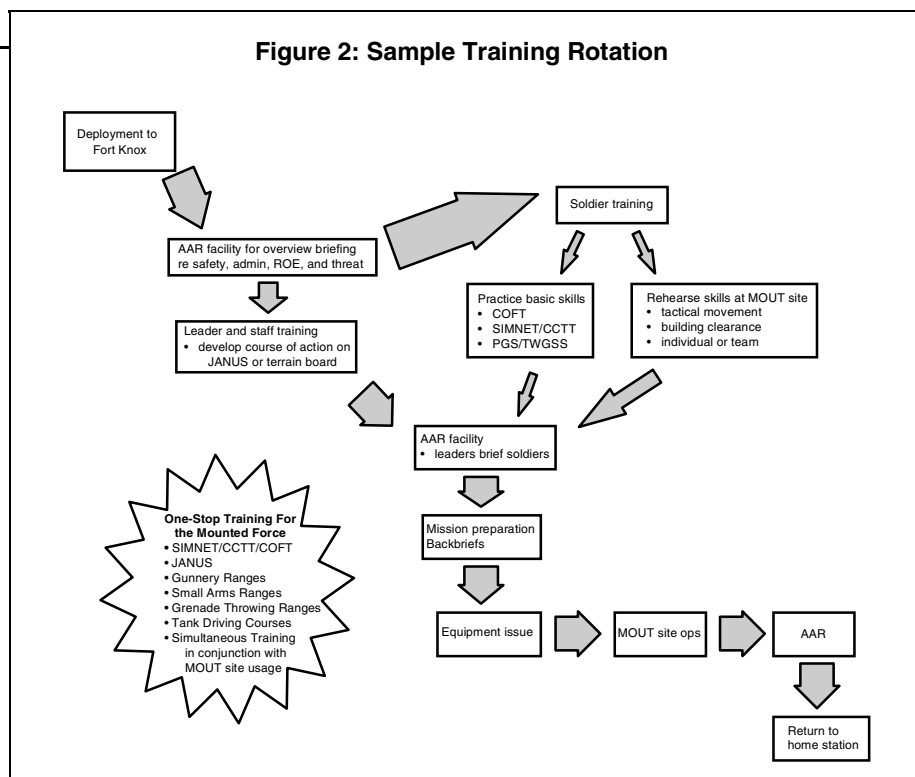
The IDF resorted to infantry operations that brought heavy casualties and political discontent at home.

By war's end, Israel found itself denounced by the international community as an aggressor nation, torn by internal political disputes, and dissatisfied with the conflict's military outcome.³ The unhappy results for U.S. forces in Mogadishu similarly showed the risk of sending unsupported dismounted forces into a hostile urban setting.

The U.S. Army is not well prepared for urban operations. World War II-era tactics shape the weak mounted force MOUT doctrine that exists. In WWII, MOUT doctrine encouraged tanks to avoid cities, since urban terrain increased their vulnerability when already outgunned and underarmored. Today, Armor units do not list MOUT as a primary mission. Consequently, urban training receives low priority.

The Army still considers the city fight to be the foot soldier's domain.⁴ The Army also lacks the facilities for developing and training new Mounted Force MOUT doctrine and matériel. Most CONUS MOUT sites focus upon dismounted operations and cannot support experimentation or training, since they cannot withstand tank and Bradley use. The lack of training facilities designed to handle the stress, weight, and impact of heavy armored vehicles encourages neglect of mounted force MOUT training.

Figure 2: Sample Training Rotation



Therefore, CONUS mounted training for urban conditions rarely occurs.

Steps Toward a Solution

For almost a decade, Fort Knox worked toward improved capabilities for urban operations. In the 1980s, Soviet interest in MOUT operations increased sharply, resulting in creation of the Operational Maneuver Group. This organization targeted key NATO command and control centers located in urban areas. Its creation led Armor Center Commander Major General Thomas H. Tait to identify the need for Mounted Force MOUT readiness. He recommended building a test bed at Fort Knox to develop doctrine. His vision resulted in a range facility known as the Wilcox Project. This design incorporated long range gunnery, maneuver, complex obstacle breach, and an urban combat training site.⁵ Despite funding delays, interest in the project continued into the 1990s. By 1997 Congress had provided \$13 million to build a Mounted Urban Combat Training Site at Fort Knox. This funding permitted completion of the planning and design work. Construction will begin this fall and training should start in early 1999.

Urban Combat Training Site

The new Mounted Urban Combat Training Site will give the Army an unequalled training and doctrine development capability. The site will be large and sophisticated. Plans include a 26-acre spread located on Fort Knox's

northern training area. A permanent staff of 13 military and civilian personnel plus an 8-man observer/controller team will operate the site. Its features will represent typical residential, municipal, and business districts found in cities (see Figure 1). Plans include specialized buildings for mounted soldiers to learn and practice basic tactical principles for any urban setting. Some structures will include working utilities, while others will represent rubble shells.

The building designs permit modification of their outward appearance to suit a given scenario. Interior rooms, closets, and furniture will increase realism and the complexity of training activities. Reinforced structures and roadbeds will handle the weight and bulk of tanks without need for costly range repairs, and a functional railroad will permit the operation of trains through deployment areas.

Site plans emphasize preparing soldiers for the chaos of urban operations. Today's cities are dirty and debris-strewn. The MOUT site will be no different. TRADOC's emphasis upon "training the way you fight" spurred the planners to create a town filled with trash, debris, and abandoned, burnt-out vehicles. In addition, soldiers will encounter fire, smoke, and noise indoors and in the streets. After reviewing special effects used by moviemakers, current plans anticipate using propane gas to generate explosions and flames throughout the mock town. The gas station, for exam-

ple, can be ignited to send streams of fire into the streets. Additions to the sensory chaos include reconfigurable buildings and a Class 100 bridge that can explode and burn. Amid such planned confusion will be pop-up targets of friendly, neutral, and hostile personnel. Such scenery tries to simulate the urban setting's assault upon the soldier's senses. Soldiers must learn to filter key information from these sights, sounds, and smells in order to survive in actual combat in built-up areas.

For use inside buildings, Range Control personnel devised a MILES machine gun. It emulates the sound and flash of a machine gun and can be deployed inside buildings to automatically sweep hallways. It fires when it detects motion and represents another hazard for the trainee already likely to be stumbling over furniture and searching through a maze of unfamiliar rooms. He can also expect to be shot at by another unique "weapon": a tracer shootback device. It uses fireworks similar to a Roman Candle and will be aimed directly at personnel, not the regulation 110 inches above the head for conventional small arms. The device produces a spectacular visual effect that simulates tracer ammunition, but carries a minimal safety risk. It does, however, force personnel to identify the source of the fire from among the buildings and debris and rapidly respond.

War games of modern urban combat anticipate Threat use of subways and sewers to provide subterranean mobility. Thus the MOUT site will include a sewer system. With adjustable water levels and floating debris resembling raw sewage, doses of commercially developed stink perfume will complete the impression of a real sewer. The individual soldier must focus upon protecting personal equipment. He will also need to respond to simulated biological and chemical agents. Finally, he will cope with a host of psychological factors likely to emerge after confinement in a dark and filthy atmosphere. For safety, the sewer plans include powerful overhead fans and lighting, and continuous visual monitoring to prevent accidents. Upon demand, the sewer can be flooded with light and the air cleared almost instantaneously.

MOUT operations do not require basic changes in leadership principles or doctrine; they do require wider coverage of details in planning. Dangling power lines, rules of engagement that prohibit destroying city blocks, and the sudden appearance of "real" trains carrying hazardous cargo such as propane tanks are all present in the MOUT site plans. Sce-

narios will force commanders to balance immediate tactical needs against the political impact of conducting operations in sensitive areas, such as the fake cemetery. The urban ambush threat to tanks from antitank weapons ranging from Molotov cocktails to ATGMs will be represented. Range Control personnel also plan to use paint-spewing .50 caliber and 37-mm weapons for added effect.

The constricted nature of the mock town requires special attention to fields of fire and gun tube elevation to engage targets in upper stories and basements. While buildings provide advantages to an attacker, the Mounted Force leader will have to assess the impact upon structural integrity before firing main guns or deploying tanks and Bradleys in buildings. Moreover, the varied height of buildings, the presence of a subterranean sewer system, and the expected close engagements will force coordinated planning of dismounted and mounted actions. Of considerable value across the force will be the enhancement of combined arms operations that results.

The MOUT site will exist to provide realistic experience in urban operations. While built to accommodate the Mounted Force, all interested active and reserve units plus law enforcement agencies can use it. A comprehensive set of scenarios will permit training from peace and humanitarian operations through mid-intensity combat.

The scenario mix can be continuously modified and expanded to reflect the environment in emerging trouble spots world-wide. Reflecting the importance of PSYOP and Civil Affairs actions during contingency operations, the site will include a communications building capable of radio and television broadcasts. Furthermore, the surrounding terrain permits airborne and river assaults upon the town.

The MOUT site has the capacity to support squad- through battalion-size operations. Four separate companies or a single battalion task force can train simultaneously. It can easily accommodate activities at the squad, team, or platoon level, including task-intensive training requiring only a single structure. The training unit determines the size and nature of the training activities desired. Current plans expect the MOUT site to be available 24-hours daily for 320 annual training days. Armor Center usage should account for about 40 percent of this time.

Arranging to use the MOUT site will follow the same process for other Fort Knox ranges.

A unit schedules the site at least six months in advance. During this period, the training unit's commander consults with the Armor School to link the unit's needs with training support packages and address any special requirements. He will also select the type of target interaction he wants. Options include force on force, using paint balls or blank fires, blank fires against a computer-controlled opponent, live fire in specially designated areas, or a mix of the above. Similarly, the unit commander will select simulation complexity, special effects, and the type of threat (i.e. — conventional force, paramilitary, or other). Figure 2 shows a sample training rotation.

The planned AAR capabilities parallel those of the major combat training centers. Eighteen video cameras — whose locations can be altered — recordings of all radio transmissions, and the computer records associated with both MILES and TWGSS/PGS operations capture data. Experienced observer/controllers will circulate through the training area and provide their personal observations and assessments of this data. Currently, the Armor School plans to conduct an AAR within four hours after a unit completes training. The unit's take-home package will include all compiled data, assessments of operations, and a video of the AAR itself. The latter will be conducted in a specially designed facility with state-of-the-art video and computer monitoring stations and a detailed model of the MOUT site.

MOUT site development will not end with its physical construction. Instead it will become a test bed to develop new tactics, techniques, and procedures for the Mounted Force. In this way it will address a deficiency clearly identified by Armor Center commander MG George H. Harmeyer at the 1997 Armor Conference as Armor School Commandant and proponent for the Armor Force. The site will support Armor School instruction, and it is expected to be incorporated into the POIs for Armor and Cavalry personnel. Co-located with the source of Armor and Cavalry doctrine at Fort Knox, the MOUT site offers an accessible medium for testing new concepts before their adoption throughout the force.

The MOUT site's experimentation value extends into the virtual arena. Future actions will link it with Fort Knox's Close Combat Tactical Trainer (CCTT) and Janus, and similar facilities on other posts. Interaction between virtual operations at other posts and the actions of a unit on the ground in the mock town will become possible by building upon concepts demonstrated during Advanced

Warfighting Experiment *Focused Dispatch*. This end state requires additional resources; particularly, urban databases must be designed for use in simulators. Currently, their complexity in comparison with rural areas and their creation costs make them unobtainable, but these obstacles are temporary. The technology already exists, and the Mounted Force can look forward to the benefits from linking live, virtual, and constructive training in a MOUT environment. The start point, however, lies in the physical facility planned at Fort Knox.

Notes

¹Paul Bracken, "Urban Sprawl and NATO Defense," *Military Review*, 57 (October 1977), pp. 33-34; TRADOC Liaison Office, Federal Republic of Germany, M-22-83, "Defense of Villages Applicable Today?" Analysis of 1944 publication of German Army, 7 December 1983, p.1.

²George Schecter, "Urban warfare poses substantial new military problems," *Defense Systems Review*, (April 1984), p. 30.

³See Eric F. McMillin, "The IDF, the PLO, and Urban Warfare: Lebanon 1982," University of Chicago Master's Thesis, May 21, 1993.

⁴FM 90-10-1: *An Infantryman's Guide to Combat in Built-Up Areas*, 12 May 1993; TC 90-1: *Training for Military Operations on Urbanized Terrain*, 30 September 1993.

⁵John J. Mahan, "MOUT: The Quiet Imperative," *Military Review*, 64 (July 1984), 48-50.

Note on Sources

Other than the sources identified in the footnotes, background information for this article came from discussions with Mounted Force personnel at the Armor Center and the specific sources listed below:

Briefing slides entitled "Observations" from Close Support End-to-End Assessment (CSEEA) MOUT Wargame Executive Session, February 28, 1997.

G3/DPTM, "Mounted Urban Combat: Meeting Challenges of Future Urban Combat Environment," Briefing prepared for LTG Leonard D. Holder, Jr., March 10, 1997.

Notes of interview with F.L. Andrews, Range Division Chief, March 31, 1997.

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Range Division, "Mounted Urban Combat Training Site, Fort Knox, KY," summary sheet, 1997.

Range Division, "Mounted Urban Combat Training Site, Wilcox Range, West, Fort Knox, KY," January 14, 1997.

Range Division, Chronology of Mounted Urban Combat Training Site, 1997.

Video Teleconference, CSEEA, February 18, 1997.

16TH CAVALRY REGIMENT

Fort Knox Cav Unit Trains Armor Force Leaders

The 16th Cavalry Regiment is the heart of the Armor School. The regiment aggressively stays engaged with the field to provide the best possible current, competent, and relevant instruction. Its primary mission is to train mounted force leaders in the operation, training, and maintenance of armor and cavalry weapons, equipment, and units from platoon through brigade. The regiment also provides technical overwatch and subject matter expertise in the development and evaluation of mounted force doctrine, training development, and force development; and it demonstrates excellence in mounted operations, capabilities, tactics, techniques, and procedures. The regiment accomplishes its mission by emphasizing task-based structured training on critical warfighting skills. It supports Army and TRADOC initiatives and is a leader in applying distance learning and Classroom XXI in institutional training. The regiment continues to improve digital instruction in all its POIs as the mounted force makes the transition from analog to digital. In addition, the 16th Cavalry is continuously refining the use of virtual and constructive simulations in POI training and in support of active and reserve unit training.

1st Squadron

The 1,100 soldiers in the 1st Squadron provide world-class soldier and equipment support to the Armor School and Ft. Knox. It is equipped with 116 M1A1 tanks, 20 M1A2s, 20 M3 Bradley Fighting Vehicles, 9 M113 APCs, 72 Light Scout HMMWVs, and over 250 other combat and combat service support vehicles. It maintains the equipment, trains the crews, and provides them daily to the rest of the Regiment and Fort Knox in support of training. Additionally, 1st Squadron teaches, and is the proponent for, the M1A1 and the M1A2 Tank Commander's Certification Courses (TC3).

M1A1 TC3 (2 Wks, 3 Offerings in FY98) has experienced a significant reduction in enrollment in recent years and has been converted to The Total Army Training System (TATS) format. The

resident course at Ft. Knox will be phased out during FY98. We expect this course to be picked up as a resident course by the reserve component.

M1A2 TC3 (3 Wks, 8 Offerings in FY98) is designed to train qualified M1A1 tank commanders on tasks specific to M1A2 tanks. 73% of the course is on the tank and 21% uses M1A2 training devices, including crew station trainers (CSTs), Advanced Gunnery Training System (AGTS), and Tank Weapon Gunnery Simulation System (TWGSS). The 2.51 M1A2 software update will be incorporated in FY98.

2nd Squadron

The 2nd Squadron's mission is to produce Armor and Cavalry leaders imbued with the warrior spirit and proficient in the fundamentals of tactics and gunnery, maintenance, and leader skills. The squadron accomplishes this by conducting the following courses: Armor Officer Basic Course, Scout Platoon Leader Course, M1A1/M1A2 Master Gunner Courses, M1A2 New Equipment Training (NET), and Bradley Organizational Maintenance NET, UCOFT, and AGTS Senior I/O and Bradley COFT I/O.

The Armor Officer Basic Course (AOBC) (15 Wks, 2 days, 11 Offerings in FY98) serves as initial-entry training for all Armor second lieutenants in the Army and Marine Corps, as well as for foreign students from 34 countries. The end state is an officer who is technically and tactically competent, capable of effectively leading combat soldiers, and physically and morally strong. He is prepared to assume command of a tank platoon immediately upon graduation. The program of instruction focuses on tactics, and gunnery, maintenance, and soldier/leader skills.

The focus of tactics instruction is the tank platoon. The student learns through a combination of classroom instruction, Tactical Exercises Without Troops (TEWT), and simulations, culminating in a six-day FTX. Students are exposed to all facets of tank gunnery, with the goal of producing confident and competent

tank commanders. Gunnery includes offensive and defensive engagements, preceded by a Tank Crew Proficiency Course (TCPC) utilizing TWGSS. PGT exercises are also incorporated into the course.

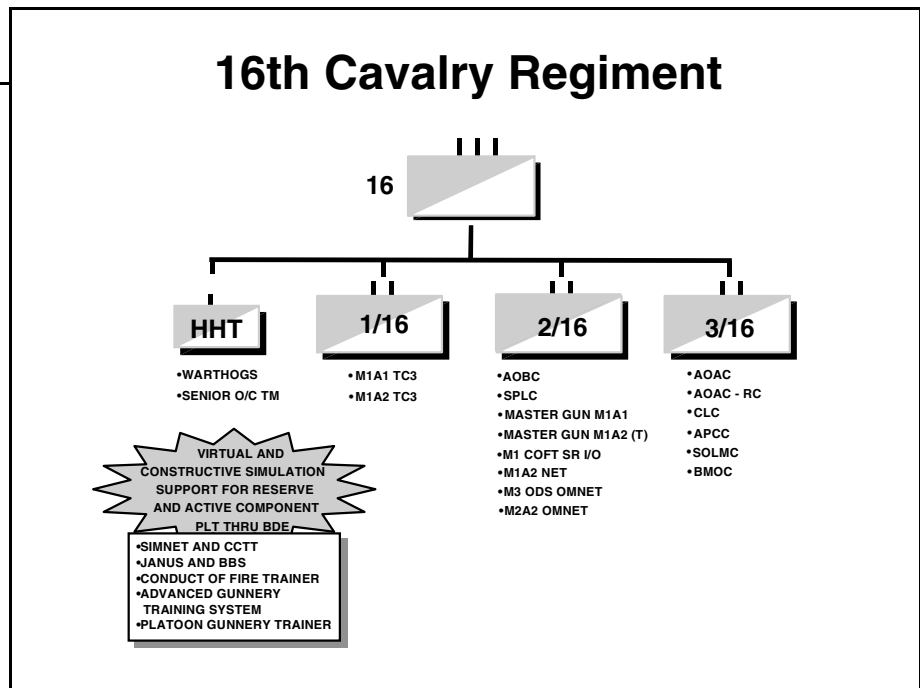
Students also receive extensive hands-on instruction on maintenance operations and PMCS. Soldier/leader skills instruction includes battle-focused training, terrain appreciation, common task training, troop-leading procedures, and the UCMJ.

Current initiatives for AOBC in FY98 include increasing the course to 17 weeks (currently, the shortest basic course in TRADOC). An additional 8 days will include job-specific equipment instruction and tactics to support the lieutenants' follow-on assignments in a cavalry organization, or in one of the M1A2 tank variants being fielded. This instruction is complementary to the instruction a student receives in the Scout Platoon Leader Course (SPLC), which focuses exclusively on tactics. Additionally, in keeping with the force's M1A2 fielding, AOBC will embed an M1A2 branch in the course in 3d Quarter FY98.

The **Scout Platoon Leader's Course (3 Wks, 9 Offerings in FY98)** prepares officers and Noncommissioned Officers to lead and employ heavy and light cavalry and scout platoons. Students receive two weeks of fast-paced classroom instruction, followed by a rigorous six-day field exercise. Instruction is primarily (97%) focused on critical scout skills, such as threat organizations and tactics, the IPB process, evaluation of routes and obstructions, platoon level obstacles, calculating and designating demolitions, and advanced reconnaissance and security techniques. Students are trained and evaluated on their ability to employ these skills during classroom practical exercises and mounted tactical training.

SPLC is changing the present prerequisite to include 19K30s in response to requests from the field. Also, shared training is conducted with the Cavalry Leader's Course and with D Troop, 1/16 CAV to broaden students' perspectives.

The **M1A1 Master Gunner Course (11 weeks, 7 Offerings in FY98)** continues to produce well-trained NCOs who can assist commanders in developing and executing a comprehensive year-round gunnery program. Course enhancements include assigning faculty advisors to each student, conducting video teleconferences semi-annually, and pub-



lishing a quarterly Master Gunner Newsletter. The course has also added a 40-hour block of instruction that certifies Master Gunners on TWGSS. Additional TWGSS instruction has been added to the M1A2 Master Gunner course. The **M1A2 Master Gunner Transition Course (3 Wks, 8 Offerings in FY98)** transitions M1A1 Master Gunners to M1A2 Master Gunners. This course continues to increase offerings in response to the needs of the field. The Master Gunner Branch communicates with the field through electronic mail distribution and is also located on the World Wide Web. Also, Master Gunner Branch has developed several videos now in local TASC offices, enabling soldiers to prepare for the course. Current tapes address Simplified Test Equipment (STE), Tank Crew Gunnery Skills Test (TCGST), Breakout Box (BOB), and boresight procedures.

Advanced gunnery training is further enhanced by the operation of tank and Bradley COFT facilities for visiting AC and RC units. Additionally, COFT personnel conduct **UCOFT and AGTS Senior I/O courses (3 Wks, 6 Offerings in FY98)** and the BFV COFT I/O course. **The M1A1 Master Gunner Transition Course (4 Wks, 2 days, 0 Offerings in FY98)**, which transitions M60-series Master Gunners to the M1A1, will not be offered after FY97.

The **M1A2 NETT** provides basic crew and organizational maintenance training to units receiving the M1A2. 3-8 CAV, 1-7 CAV, 1-8 CAV, and 2-12 CAV have been fielded. The NET for 2-12 CAV was a successful contractor pilot consist-

ing of 26 Tank Automotive Command (TACOM) contract instructors (all former armor NCOs/MGs) hired by General Dynamics, along with 14 TRADOC (military) instructors from the 16th Cavalry and augmentees from the 1st CD.

2-8 CAV and 1-12 CAV will complete the 1st CAV Div. OMNET begins in 1st Quarter FY98 and OPNET in the second. The M1A2 NETT is adding AGTS and more TWGSS training to the POI. The 16th Cavalry Regiment has conducted several monthly OMNET and OPNET classes for soldiers in the 1st CD going to units that already have the M1A2.

The **BFV OMNETT (our contribution to Bradley NETT)** trains active and reserve units receiving the BFV on organizational maintenance. The team trains three separate courses, a hull, turret, and a supervisors course. The team is currently at Ft. Stewart, training the 3rd Infantry Division on the M2A2 ODS (Operation Desert Storm) variant of the BFV. It recently completed training the 49th Division of the Texas National Guard on the basic BFV version. It will support NETT for subsequent variants of the Bradley, such as the ADA version (Linebacker).

3rd Squadron

Third Squadron's primary mission is to train and develop mounted officers to command and serve as staff officers at company, battalion, and brigade level. 3rd Squadron accomplishes this mission by teaching the Armor Officer Advanced Course, Cavalry Leader's Course, Senior Officer Logistics Management Course,

the Battalion Maintenance Officer Course, and the Armor Precommand Course.

The **Armor Officer Advanced Course (20 Wks, 4 Offerings in FY98)** prepares the mounted officer to command at company level and serve in a battalion or on a brigade staff with an emphasis on his role as a battle captain. The instruction includes tank gunnery, tactical training, logistical and maintenance procedures, training methods and techniques, leadership skills, and staff support functions. In addition to Armor officers, AOAC also includes officers from other combat and combat support branches, NG officers, Marines, and Allied officers from 34 countries.

AOAC is also changing to meet the needs of the mounted force in the 21st century. AOAC initiatives will include integration of BCB2 (Battle Command, Brigade and Below) and the five ATCCS (Army Tactical Command and Control Systems) instruction into the POI.

To further enhance task-based structured training, the POI will also begin to incorporate several Force XXI training products. These include a self-paced computer instructional package designed to train individual staff skills — the Brigade Staff Training System (BSTS), and a comprehensive brigade staff training package known as COBRAS.

The current AOAC is aligned with **CPT-PME Phase II**. Officers now attend the 6-week CAS3 after graduation (TDY at Ft. Leavenworth), then return to Ft. Knox to PCS to their follow-on assignments. Major changes to the FY98 course include increased brigade instruction, decreased planning time — increased amount of time for execution, refined SASO training, increased hours for battle-focused training, added brigade/battalion battle captain class, an R&S planning class, and additional hands-on maintenance instruction. In FY99 as part of CPT PME Phase III, the course will be reduced to 18 weeks. The regiment also offers an **AOAC R/C course (2 Wks, 4 Offerings in FY98)** which focuses exclusively at the company level.

The regiment is at the forefront of institutional training with several other initiatives in support of the Army and TRADOC's CLXXI and distance learning plan. The Military Decision-Making Tutorial (**MDMP TUTOR**), being tested with the Iowa National guard, uses the Internet and other computer- and instructor-assisted technologies to teach students in remote locations.

Classroom XXI - Starting in FY98, the second floor of Skidgel Hall will be remodeled into 14 small-group rooms, four level-III (hybrid) command posts to emulate FBCB2 and ATCCS, and a central room for recon/rehearsal visualization of the battlefield. All systems will be laptop-based and will also be able to tie into Janus/BBS and SIMNET/CCTT for exercises. Ultimately, students will also be able to link in with other TRADOC advanced courses, and graduates will be able to access a complete suite of doctrinal and instructional material from anywhere in the world.

The **Cavalry Leaders Course (3 Wks, 4 Offerings in FY98)** prepares Advanced Course graduates for assignment to cavalry units as troop commanders and squadron operations officers. Instruction includes tactical employment of cavalry troops and squadrons in economy of force, reconnaissance and security missions, planning and directing these operations, and the integration and synchronization of combat power and combat service support. Current initiatives in CLC include the formation of Mobile Training Teams (MTTs) that teach at unit home stations.

The **Senior Officer Logistics Management Course (1 Wk, 10 Offerings in FY98)** is a survey course on current policies, procedures, methods, and concepts used to achieve an effective unit-level logistics management program. It is focused on senior-level field grade officers. Current initiatives include the formation of MTTs. Certain classes can be tailored to the specific needs of the post.

The **Battalion Maintenance Officer Course (4 Wks, 2 days, 6 Offerings in FY98)** prepares company grade and warrant officers for assignments that are directly related to maintenance responsibilities at the unit level, with emphasis on management and supervision of battalion maintenance operations. Instruction includes organizational maintenance forms and records, administrative control of licensing and dispatch, use and control of tools and test equipment, repair parts (to include PLL), material readiness, and familiarization with vehicle systems and power generating equipment.

Current initiatives include the creation of a Multi-media Distance Learning (MMDL) CD-ROM version of the course. Version One of the CD-ROM will be sent to the field by the 2nd quarter FY98. The course will be phased out

of resident instruction at Ft. Knox during FY98.

The **Armor Pre-Command Course (1 Wk, 3.5 days, 5 Offerings in FY98)** is designed for officers selected to command armor battalions and brigades or armored cavalry squadrons, or regiments. Armor officers selected for garrison commands and those selected for acquisition commands also attend the course. Instruction includes tactics, CS/CSS planning and operations, training management, tank weapons, maintenance communications, and fratricide avoidance. Students visit the NTC to observe tactical operations and participate in the Leadership Training Program (LTP). They also participate in VTCs with JRTC and CMTC, and in shared training with an AOAC in session. Future initiatives include the formation of class elective tracks for those LTCs and COLs identified for garrison/BSB commands and in acquisition.

WARTHOG

Observer/Controller Team

The **Virtual Training Program (VTP)** trains active and reserve component armor, mechanized, and cavalry units from platoon through brigade level using virtual reality and constructive simulations. The three key components of the VTP are the Mounted Warfare Simulations Training Center (MWSTC), the Observer Controller (OC) Team and Training Support Packages. This very successful program has grown significantly in the last several years for both active and reserve component units.

The MWSTC is the site of the VTP and houses the (SIMNET), comprised of 41 M1 tank simulators, 10 Bradley Fighting Vehicle simulators, and 10 desktop reconfigurable simulators (which can be used as either HMMWVs or M113s). Thirteen Observer Controller Workstations (OCWS) allow training to be observed, controlled, and recorded. The exercise can be played back for AARs. The current mix of simulators and workstations enables simultaneous training of 12 platoons, four companies, one armor task force or one brigade in CFX mode. The MWSTC also includes two Janus suites and one BBS suite with a STOW – A Hub.

The Task Force Observer/Controller Team, made up of quality officer and NCO observer/controllers and civilian exercise controllers (E/Cs), is designed to provide Combat Training Center (CTC)-quality AARs. The O/Cs have ex-

tensive field experience at their level, and many are experienced CTC O/Cs. The E/Cs manipulate the computer hardware and software to induce battlefield effects and control the Opposing Forces (OPFOR) to meet the commander's training objectives.

The Senior Observer Controller Team (SOCT) assists the active and reserve force in improving their brigade-level operations competencies with compressed, task-based, structured training (battalion and brigade). The SOCT are civilian contractors, retired senior officers, and NCOs with combat and CTC experience at the battalion and brigade level. The SOCT also mentors Armor Officer Advanced Course students in brigade tactics, techniques, and procedures, providing a level of experience not available anywhere else in the Armor School.

The training support packages that support the VTP enable the training unit to focus on execution with limited planning and preparation. The structured tactical exercises include scenarios, operations orders, and operational graphics that cause specific tasks to be trained and observed to meet the unit commander's training objectives. Current scenarios include movement to contact, deliberate attack, and defense in sector, all on the National Training Center database.

Scheduling is through the Ft. Knox G3/DPTM. A unit normally receives advance materials in a training support package six months before its VTP rotation, enabling it to conduct troop-leading procedures prior to its arrival at Fort Knox.

Conclusion

The 16th Cavalry Regiment is committed to providing highly trained leaders for the mounted force. If you have an officer or NCO who would be able to make a significant contribution to the mounted force as either an AOB or AOAC instructor, an O/C in our Virtual Training Program, or an instructor in one of our other courses, please contact Armor Branch.

We, like the rest of the field, continue to find ways to operate more efficiently; what we have not done is sacrifice the quality or rigor of the training we provide. We will continue to provide the mounted force the best possible armor and cavalry leaders. To that end, we remain responsive to the needs of the mounted force in the field. If you have comments, suggestions, or questions please direct them to our web site at www.knox.army.mil/school/16cav.

Development Mission: Getting The Best "Stuff" For Mounted Force Soldiers

MISSION: The Directorate of Force Development, U.S. Army Armor Center, Fort Knox, Kentucky, conducts combat and force development functions for the Armor Force that provide soldiers and commanders the equipment and organizations to decisively win on the 21st century battlefield.

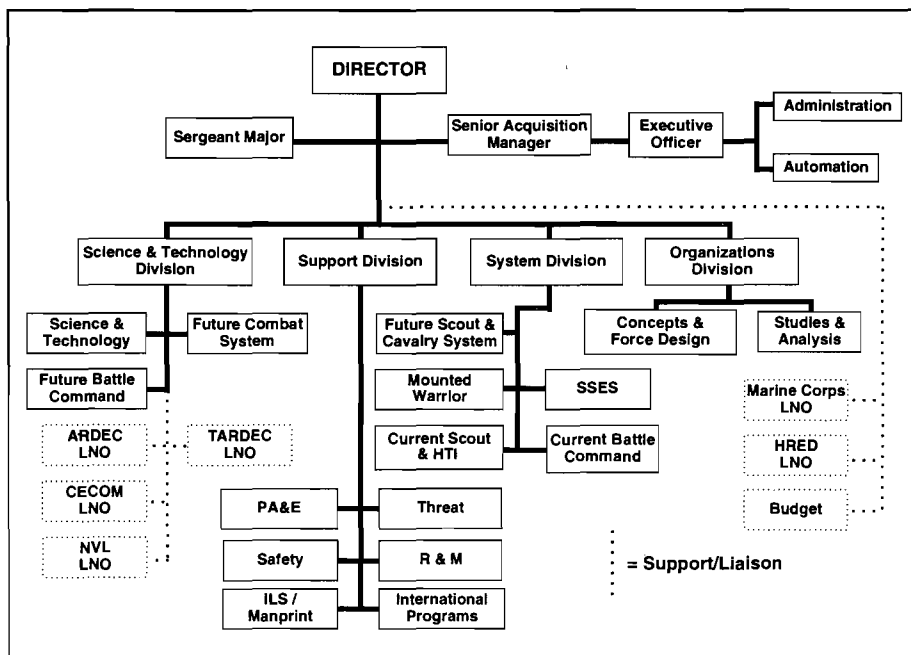
SYSTEMS DIVISION. The Systems Division is responsible for the development and management of programs that result in the fielding of new items of equipment for the mounted force. The division chief is LTC Groller.

Suite of Survivability Enhancement Systems. SSES is an integrated combination of detection, hit, and penetration avoidance measures to enhance the survivability of ground combat vehicles. The technologies that contribute to SSES are signature management, sensors, countermeasures, and armor. Two approaches for the application of SSES exist: an incremental and a total suite application. An Integrated Concept Team (ICT) was established to develop a CRD. Current efforts evolve around the TRA-

DOC Survivability ICT and staffing of the draft CRD for SSES. The TRADOC Survivability ICT is focused on establishing a total force survivability requirements list. POC is CPT Taylor.

Future Scout and Cavalry System Team. FSCS is the replacement combat vehicle for the M1114 HMMWV in armored and mechanized infantry battalion scout platoons and the M3A2/3 CFV in division and regimental cavalry squadrons. FSCS is targeted for fielding in 2006. It includes a sophisticated sensor system, survivability technology, a self-defense gun, and a three-man crew. POCs are MAJ Begeman, CPT Pulford, and Mr. Bair.

Long Range Advanced Scout Surveillance System. LRAS3 is a sensor system that will replace the current UAS11 on the HMMWVs in armored and mechanized infantry battalion scout platoons and will be a part of the FSCS. LRAS3 is targeted for fielding in 1998. It includes, 2nd-generation FLIR, high definition TV, eye-safe laser rangefinder, far target location capable, chemical de-



tection filters, integrated GPS, and it will be mounted/man-portable. POCs are CPT Jones, SFC Wagner, and SFC West.

M1114 Up-armored HMMWV. The M1114 Up-armored HMMWV will replace the M1025/M1026 HMMWVs currently used by armored and mechanized infantry battalion scout platoons. A conditional release was granted to TF Joint Endeavor, but full fielding authority is still pending. The M1114 includes 7.62mm ballistic protection, 155mm overhead protection, 12 pound HE mine protection (front) and 4 pound (rear), 190-hp turbocharged engine, central tire inflation system, strengthened frame, lift points, drive train, and air conditioning. POCs are CPT Jones, SFC Wagner, and SFC West.

M3A2/3 Cavalry Fighting Vehicle (all variants). The M3ODS/A3 models of the Bradley Fighting Vehicle are the fourth and fifth generation of the Bradley CFVs. First Unit Equipped (FUE) is 3ID in FY00. The M3ODS/A3 includes a driver's vision enhancer (DVE), GPS with digital compass (far target location-capable), eye-safe laser rangefinder, Battlefield Combat ID System (BCIS), missile countermeasure device (MCD), digital comms, core electronic architecture, ballistic fire control, commander's independent viewer (CIV), and Improved Bradley Acquisition System (IBAS), both with second-generation FLIR. POCs are SFC West and SFC Wagner.

Command and Control Vehicle. The C2V is a Bradley Fighting Vehicle-derived chassis, providing inherent mobility with the fighting force, as well as significantly improved survivability compared to the M577/M1068 command post vehicles that it will replace. The vehicle is equipped with a 43-kw primary power unit, a 40,000-BTU heating and cooling environmental control unit, and an NBC overpressure system. A 10 meter telescoping mast antenna enables the crew to quickly increase its communications systems, line-of-sight while at the halt. The mission module accommodates four work stations, electrical and LAN connectivity for key automation and communications systems, and seating for two additional personnel. The C2V has a unique inter/intra communications capability which allows staff officers to communicate digitally or by voice from one work station to another within the same vehicle, or between vehicles via a wireless local area network, as long as vehicle separation distance does not exceed 500 meters. POC is Mr. Spencer.

Soldier Systems Team. The Soldier Systems Team is responsible for issues

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SSG Ainsworth	4-4794	Ainsworr@			

dealing with the individual equipment used by crew members of mounted combat systems. The team chief is Mr. Larry Hasty. Current programs being addressed by the team are:

- **Advanced Protective Eyewear System.** This system consists of goggles that are compatible with all military headgear and provide ballistic, sun, wind, and dust protection to the wearer. The system will also provide the capability for optical inserts. POC is SFC Sumpter.

- **Mounted Warrior.** MW is an integrated ensemble composed of modular subsystems that will improve the combat vehicle crewman's lethality, survivability, sustainability, and C4IS (command, control, communications, computers, intelligence and sensors). The MW system will significantly enhance the crewman's ability to leverage host platform capabilities while mounted or dismounted. MW will also provide improved biological and chemical protection and the ability to remotely monitor host platform NBC sensors.

MW clothing and individual equipment will consist of protective boots, a coverall with quick MEDEVAC capability, cold weather coverall liners, individual armor protection, small arms holster, a tailorable load-carrying capability, directed energy eye protection, wet weather protection, cold weather head and face protection, and safety/cold weather gloves. MW will also provide the crewman the ability to leverage host platform communications and computer capabilities. Modular MW components will provide for the wireless use of platform radio and intercom systems while the crewman is dismounted. POC is SSG Ainsworth.

- **M25 Stabilized Binoculars.** 14x binoculars with a stabilized optical feature for better target identification and battle damage assessment while on the move. POC is SSG Ainsworth.

SCIENCE & TECHNOLOGY DIVISION. The Science, Technology and Programs Division provides centralized management, DA-wide coordination, identification, prioritization, and integration of armor force requirements, and management for technology base programs supporting materiel systems. The division chief is Mr. Winknehofer.

Science and Technology Team. The S&T branch provides synchronization between the Armor/Mounted Force Future Operational Capabilities and the basic and applied research and advanced technology development. The S&T branch also creates Armor's input into the Army S&T master plan and the DOD tech area plan. They review and support science and technology objectives and individual work packages in basic research. The Concept Experimentation Program (CEP) is a vehicle for experimenting with new technology and ideas within the mounted force. The Advanced Technology Demonstration (ATD) is the Army's process for demonstrating the military feasibility of mature technology. The Advanced Concept Technology Demonstration (ACTD) is a joint-service effort to demonstrate the operational capabilities of mature technology in user-dominated environments. POCs are Mr. Martin Bosemer and SFC Arnold.

Future Combat System. The FCS is a revolutionary, "leap-ahead" system to form the centerpiece of the Army's ground combat force beginning in FY

2015. It will be a highly mobile, deployable, lethal, and survivable platform, incorporating advanced technology components to enable a significant increase in combat effectiveness. POC is Mr. Butler.

Force XXI Battle Command Brigade and Below. FBCB2 is the consolidation of C2 requirements for brigade and below systems to provide battle command information on the move, and in real time or near-real time to tactical combat, combat support, and combat service support leaders and soldiers. FBCB2 is the key component of the Army Battle Command System (ABCS); it also seamlessly interfaces with the Army Tactical Command and Control System (ATCCS) at the battalion level. POC is MAJ Bronaugh.

Research Development, Engineering Command's (RDEC) Liaison Officers (LNOs). Four major Army Materiel Command subordinate elements have assigned LNOs working with both this directorate and the Mounted Warfighting Battle Laboratory. Mr. Paul Barns is

TARDEC and AMC HQ LNO, DSN 4-7193, barnsp@cc.tacom.army.mil. Mr. Johnny Wright is the on-site ARDEC LNO, DSN 4-2239, and Mr. Jim Garrett is the ARDEC contract LNO, DSN 4-4152, jgarrett@pica.army.mil. Mr. Dick Ardisson is the contract CECOM LNO, DSN 4-7152, ardisson@ftknox-mbb1-lan.army.mil. Mr. Dave Moody is the NVL LNO, DSN 4-2068, dmoody@nvl.army.mil.

ORGANIZATIONS DIVISION. Organizations Division is responsible for concepts, analysis, structure and force design. The division chief is Mr. Charles Shepard.

Division Redesign. A TRADOC study to redesign the heavy division. POCs are LTC Rose and Mr. Mayer.

ACR Redesign Strategy. A design and analysis effort to modernize and/or redesign the ACR. POCs are Mr. Vowels and Mr. Mayer.

Armor Functional Area Assessment. Identifies significant problems in the Ar-

mor force and recommends solutions for decision by the Vice Chief of Staff, Army. POC is Mrs. Teegarden.

Army After Next Mounted Force Concept - Brigade and Below. Integrated Concept Team to identify capabilities needed in the mounted force. POCs are LTC Rose and Mr. Mayer.

SUPPORT DIVISION. This division provides specialized support to future and on-going projects within the Directorate and the Armor Center. The division chief is Mr. Dale Stewart. POCs are:

Intelligence Team. CPT(P) Meyer

Programs & Analysis. Mr. Dibble

MANPRINT/ILS. Mr. Conners

Systems Safety. Mr. Skaff

Reliability & Maintainability. Mr. Dewitt

International Programs. Mr. Stewart

DIRECTORATE OF TRAINING & DOCTRINE DEVELOPMENT

Mission: Developing Armor Training

You're in the TOC eating one of those m-m-m-good Meals Ready to Eat, and you're looking for something to read. You pick up a field manual. And you wonder, who wrote this thing? You might even say, "Hey, whomever wrote this did a pretty good job; wish I had read it before." Then, maybe you wondered how to get in touch with the people who write your armored force doctrine and develop the strategies for the training you were conducting. After reading this short piece you will know who that group is, how to get in touch with them, and some of projects that currently occupy most of their time.

Even though it is a fairly new directorate here at Fort Knox, the Directorate of Training and Doctrine Development (DTDD) nevertheless encompasses activities familiar to anyone involved in armored force planning and training. It was created about 1½ years ago to address a training and doctrine shortcoming identified by schoolhouse and field people alike — namely, that the two needed to be more closely linked. DTDD today performs this service by accomplishing the following mission:

Lead the United States Army in Armor/Cavalry training development, doctrine development, publication of ARMOR magazine, and the Force XXI Training Program, while improving synchronization of training and doctrine for combined arms units in the Total U. S. Army.

Of the various projects currently underway, one of the most important is the formulation of course of action training strategies by the **Training Development Division**. These DA civilians and green-suiters have created a coherent tool for commanders that, for the first time, intelligently links training aids, other resources, and time. Commanders at many levels within the Army should find the tools useful as aids to their own training synchronization and helpful in readiness reporting.

The Automated Systems Approach to Training (ASAT) is a database application fielded to proponent service schools for managing tasks, developing task-based training materials, developing doctrine, and managing resources. The Ar-

mor Center has used ASAT to develop training products, such as the Scout Platoon ARTEP Mission Training Plan, the Tank Crew Training Plan, and the forthcoming 19K Soldier's Manuals. The Army Training Support Center (ATSC) developed ASAT and continues to add enhancements. For example, ATSC will field an ASAT module for developing Combined Arms Training Strategies (CATS) in February 1998. ASAT is fully compatible with the Standard Army Training System (SATS) 4.0 and 4.1.

The Standard Army Training System (SATS) is a database application fielded to units for analyzing training, determining unit training strengths and weaknesses, verifying unit resource allocations and consumption, projecting future requirements, producing after-action reviews, and scheduling training. ATSC developed SATS and plans to field the latest version, 4.1, in November 1997. Units can load MTPs and Soldier's Manuals into SATS by accessing a DA Internet web site called the TRADOC Executive Management Information System (TEXMIS). For further information

on SATS, contact ATSC at 1-800-201-SATS.

The Force XXI Training Program (FXXITP) was designed to create an environment of integrated virtual and constructive simulations in which the mounted units of the heavy force could train using structured training programs to achieve and sustain combat readiness with minimum reliance on live field training. Current FXXITP products are focused on enhancing brigade and battalion staff training by developing methodologies to produce structured staff training support packages. TSP development is broken into three areas: individual staff officers, staff groups, and complex staff exercises.

The products that have been developed are: Battle Staff Training System (BSTS); brigade staff vignettes (COBRAS Vignettes); and brigade staff exercises (COBRAS Staff Exercises). Staff Group Trainer (SGT) is still under development as are desktop reconfigurable simulators.

BSTS provides a structured training package made up of paper based products and computer based instruction and allows individual staff officers to learn individual skills and staff responsibilities. The brigade staff vignettes were designed to provide command and control training to selected members of the brigade staff. They are a series of independent, controlled exercises that allow brigade staffs to isolate a small group from the staff in order to practice integration and synchronization processes in the context of a single mission event.

Most are paper based and can be executed anywhere. Two exercises use Janus and BBS. The brigade staff exercises were designed to provide command and control training to selected members of the brigade staffs, but unlike vignettes, these exercises involved the entire battle staff. They are structured, simulation-based, scenario embedded program that requires integration, and synchronization among the members of the staff in order to accomplish the mission. It provides all materials, from BBS tapes and associated documentation to scenarios and orders. This part of the program is being expanded to include multi-echelons and staff training in the constructive and virtual environment (STOW).

The Staff Group Trainer is being developed to link individual skills developed in BSTS to staff skills in battalion and

brigade staff groups and command post staff.

DTDD's Doctrine Division is grille-door deep in working on FM 71-1, *Tank and Mechanized Infantry Company Team*, (which has recently undergone a successful Doctrinal Review Advisory Group (DRAG) process). It will shortly be fielded to units throughout the world. The author's draft of Field Manual 71-3, *The Armor and Mechanized Infantry Brigade*, is currently being written and is expected to be ready for distribution around April 1998. The Doctrine Division is also looking at future doctrine and grappling with the following question: if the M1A2, with its revolutionary capabilities, has wrought changes on the battlefield, how do we best capture these changes in our tactics? We are also looking at the issue of brigades. How do they fit on the current battlefield? The future battlefield? What is their role now, and what should it be?

The Doctrine Division is working on tactical doctrine for the Future Scout and Cavalry System (FSCS), and a great deal of energy is going into an examination of the cavalry and reconnaissance framework to show how units can have a coherent, executable plan. The Armor School and DTDD are also cooperating on an effort to further define and refine opportunity tactics, sometimes called the "recon pull" approach. And the directorate has a joint effort underway with the Mounted Maneuver Battlespace Battle Lab to examine the next tactical operations center—everything is on the table and up for review.

The **ARMOR Magazine Division** continues to do what it has been doing since 1888, provide the cavalry and

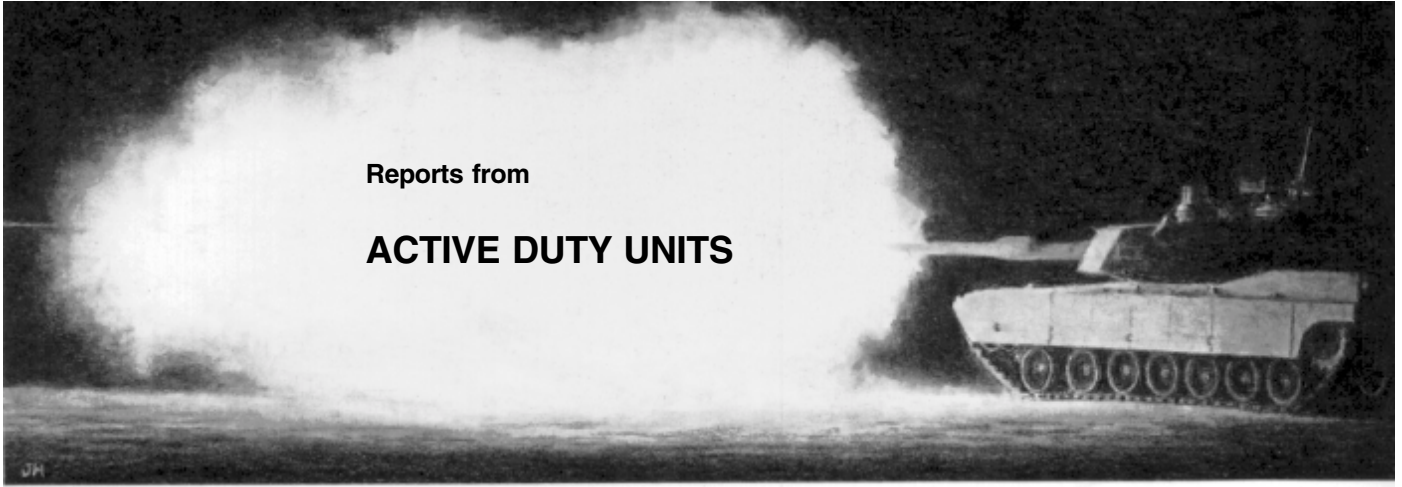
armor force with a forum for professional discourse on all aspects of war-fighting. You should have noticed by now, that you are holding the biggest issue ever, as we have expanded the number of pages. The reason? Because so many people have been writing great articles during this revolutionary period in our branch's history. If you have any comments on this issue please send them via email or regular surface mail to the people listed on page two.

In short, you can see that the manual you have in your hand, the software you are using to manage your training, the branch magazine you are reading at this moment, and the staff training tools you are implementing as part of your CTC train-up, all result from the hard work of a small group of dedicated soldiers and Department of the Army civilians who comprise DTDD. Enjoy your applesauce!

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Reports from

ACTIVE DUTY UNITS



3rd ARMORED CAVALRY REGT.

From Bliss to Carson's Canyons

*3rd ACR Trains, Modernizes
And Gets Adjusted
To Its New Home*

At right, a 3rd ACR M1A1 maneuvers in Fort Carson's vast Pinon Canyon Area.



PHOTO: Fort Carson TASC

On order, 3rd ACR deploys by sea, land, and air with its own or prepositioned equipment to a designated area of operations, occupies a staging area, and prepares for combat. On order, the 3rd ACR moves to its assigned mission area and conducts combat operations as part of III (US) Corps, a designated contingency corps, or a joint task force.

That is the mission statement of the 3rd Armored Cavalry Regiment, the only heavy cavalry regiment left on active duty. Exceptional combat power, provided by a diverse array of organically integrated combined arms, sets the 3rd ACR apart from other units.

The 3rd ACR consists of five squadrons and five separate companies. (See figure, next page.) The three ground squadrons each consist of three cavalry troops with organic mortars, a tank company, a howitzer battery (Paladins), and an HHT. The aviation squadron consists of three air cavalry troops (Cobra and Kiowa hunter-killer teams), two attack troops (Apaches), a lift troop and medevac company (Blackhawks), AVUM troop, AVIM company, and HHT. The support squadron consists of transporta-

tion, medical, and maintenance troops, along with an HHT. The separate companies include engineer, MI, and chemical companies, an ADA battery, and a regimental HHT.

The 3rd ACR moved from Ft. Bliss, Texas to Ft. Carson, Colo. in the 1st quarter of FY96. Since settling in, the regiment has been training, innovating, and modernizing while focusing on the wartime mission and METL.

Training. FY97's many significant events have helped hone the 3rd ACR's sharp readiness posture. The regiment completed full Level I and Level II gunneries during FY97, to include all squadrons and separates. The howitzer batteries fired quarterly, culminating in an externally evaluated "Horse Artillery Shoot." The aviation squadron accomplished two aerial gunneries and trained special munitions targeting with regimental COLTs and elements of the 10th SF Group, also stationed at Ft. Carson. Additionally, CAS/JAAT live-fire week involved the coordination of the aviation squadron, the ground squadrons' FSEs, howitzer batteries, and mortars, and the

13th ASOS (3rd ACR's supporting Air Force liaison element).

The 3rd ACR's reserve partnership unit is the 278th ACR from Tennessee. The regiment facilitated the 278th train-up with ADA Stinger live fire, tank and Bradley gunneries, and GSR training. 3rd ACR concluded this year's AC/RC relationship by evaluating the 278th during their Training Assessment Model (TAM).

Ft. Carson's extensive maneuver box was utilized throughout the regiment for platoon, company, battery, and troop FTXs and EXEVALS. Additionally, 25 OPTEMPO miles are given quarterly to troop commanders for their own training. The aviation squadron conducted air cavalry troop evaluations embedded within ground troop EXEVALS to continue training habitual air-ground relationships. The regiment's attack helicopter troops deployed to Ft. Hood for their EXEVALS. One armored cavalry troop deployed to JRTC to train with the 101st Airborne Division. Other maneuver training included regimental COLT and ADA scout certification and aerial insertion, and an engineer BRIDGEX. Spe-

cialty training involved the MI company's ACE and ASAS standardization and integration to improve the regiment's composite intelligence picture. Maneuver training was planned and executed, developing from individual and collective tasks, to squadron and regimental missions, and climaxing with a month-long regimental deployment to the Pinon Canyon Maneuver Site (PCMS) in southeastern Colorado. PCMS was used to execute troop and squadron lanes in preparation for any deployment contingency, training, or real-world.

At regimental level, numerous command post exercises (CPXs) and fire control exercises (FCXs) were fully developed. 3rd ACR also played a critical role in III Corps' CPX "Phantom Saber," fulfilling a Southwest Asia scenario with Iraqi OPFOR; as well as 1st Cav Division's "Warfighter" CPX and III Corps' "Ulchi Focus Lens" in a North Korean environment.

The NTC's Leadership Training Program (LTP) helped to further develop key personnel in preparation for NTC rotation 98-01. The regiment has been focusing training and resource management to ensure readiness, and constantly reinforcing the Big 5 critical battle tasks at each level that provide the underpinning of all METL. The deployment to NTC Rotation 98-01 will validate the year-long deployment and tactical training methods and serve as a challenging test of our wartime mission focus.

Innovating. The financial squeeze felt across the Army has modified the way the ACR trains. The aggressive use of simulation has helped to overcome budgetary shortcomings. In particular, the increased use of FCXs, CPXs, TSFO, GUARD-FIST, flight simulators, COFTs, and battle simulation exercises have enabled the regiment to continue to prepare for combat.

The requirement for training the individual, crew, section, platoon and up is obviously recognized, and multi-echelon training is the standard whenever possible. We embed comprehensive subordinate units' training within larger-scale exercises as a matter of routine.

Additionally, in order to save on OP-TEMPO miles, HETs transport the tanks and Bradleys to and from the field, as well as between ranges and training events. In spite of tight fiscal limits, 3rd ACR continues to prepare for deployment.

Although the regiment as a whole has not deployed during FY97, the diversity of MOSs within the regiment provides great potential for mission support. The 3rd ACR currently has soldiers deployed all over the world in support of missions in Bosnia, Kuwait, Southwest Asia, Honduras, and Haiti. Pilots, air crews, and linguists are particularly susceptible for overseas taskings like these.

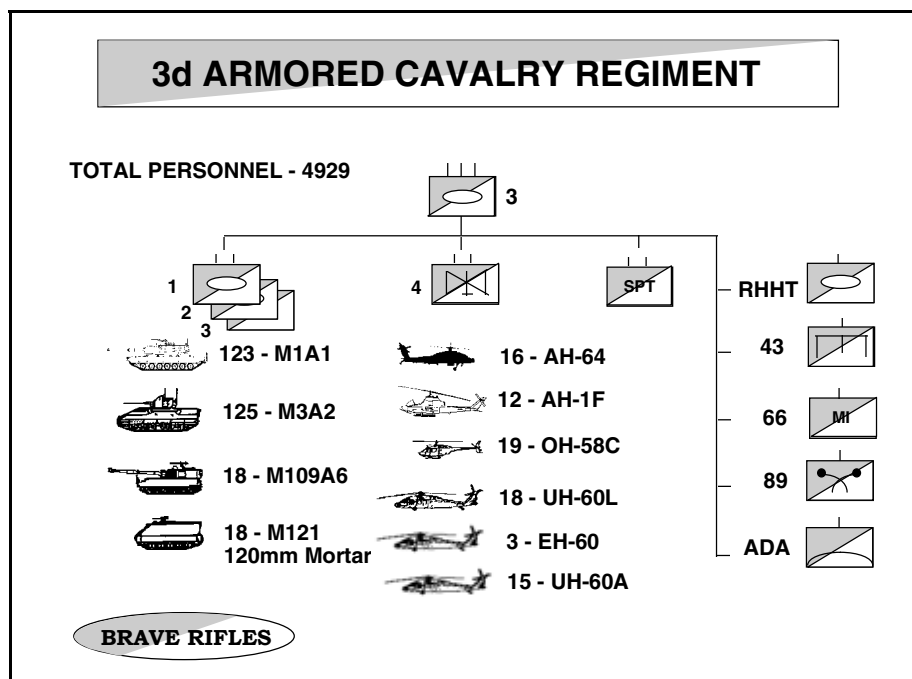
Modernizing. During FY97 the 3rd ACR continued to modernize with numerous acquisitions and improvements in the fleet. All a and b model SINCGARS were replaced with the new c and d models to facilitate data transmission, a step towards Force XXI. The Vietnam-era VIC-1 intercom systems on the M1A1s and Paladins were replaced with the greatly improved AN/VIC-3 systems. The M1A1s also fielded the External Auxiliary Power Unit (EAPU), a bustle rack-mounted generator that conserves fuel and quietly maintains battery charge. The Bradleys received multiple TOW 2 upgrade MWOs. Troop-sized units acquired the Army Field Feeding System (AFFS), a HMMWV-mounted field kitchen to support decentralized operations. The Aviation Mission Planning System (AMPS) was fielded to the aviation squadron, laying the groundwork for



3rd ACR Bradley in the Pinon Canyon maneuver box.

the OH-58D Kiowa Warrior transition planned for FY 98. Additional equipment upgrades which took place include: improved PLGR software and database, new M21 Chemical Alarms, new M969A2 5,000-gallon tankers, M249 SAWs, M4 Carbines, and many others. The regiment modernizes continually, and especially looks forward to fielding the M1A2, starting in FY98.

In a year of changing threats and varying potential deployments, the 3rd ACR has made the most of training and resource opportunities. The regiment looks forward to the challenges and improvements it will encounter at NTC 98-01 and in the future.



Museum Commemorates 150-Year History Of the 3rd ACR

by Specialist Jamie J. Arundell

The dust from the road rose in thick and choking clouds in August, 1847. The members of the Regiment of Mounted Riflemen, enroute from the Battle of Contreras, Mexico, made their triumphant march into Mexico City. When the commander of American Forces, General Winfield Scott, rode up with members of his staff, he recognized the unit by their distinctive uniforms and weaponry. Choked up with emotion over the valor of his men, the General removed his hat, bowed low, and proclaimed: "Brave Rifles-Veterans! You have been baptized in fire and blood and have come out steel!"

Now, 150 years later, the "Brave Rifles," known today as the Third Armored Cavalry Regiment, continues to serve the nation and preserve the regiment's unique history. The 3d Cavalry Museum, founded at Fort Meade, Maryland in 1963, and now located at Fort Carson, Colorado, depicts 150 years of the Regiment's distinguished service to the nation as the second oldest regiment still in active service.

When the museum began over thirty years ago, it was just a simple regimental trophy room. However, the treasures it maintained, such as the Goodrich Riding Trophy and the most complete collection of regimental standards and doctrines,

were very unique to the Army. The museum also included the regimental adjutant's log that documented the earliest and most elite officers of the regiment, such as Jeb Stuart, John C. Fremont, and Samuel Walker.

Setting foot in the museum today, you will marvel at the elaborate collection of authentic exhibits and memorabilia of the Third Armored Cavalry Regiment. They include the treasured 150th Anniversary painting of the Regiment's victory at the Battle of Contreras by noted military artist Don Prechtel. The painting, entitled *Brave Rifles-Veterans*, displays the Regiment's victory at the Battle of Contreras, Mexico in 1847. Completed for the 150th Anniversary observance last June, the painting was unveiled and prints were made available during the ceremonies in the regimental area.

The main gallery features the permanent exhibit, *Track of the Regiment*, which traces the history and tradition of the Brave Rifles from its inception to the present day. Undoubtedly, the most valuable article in the collection of the Third Cavalry Museum is the original flag, created by the Ladies of New Orleans to honor "that gallant regiment which has been foremost in every battle... sustaining by the valor and sacrifices of its officers

and men the flag of our beloved country." The flag has been conserved to ensure it will remain a source of pride to the regiment for generations to come.

In addition to the permanent exhibits, displays change in the temporary gallery of the museum, ranging from art exhibits to special traveling exhibits on specific topics. For animated vis-



ual entertainment, the museum also features the "AIEEYAH!" theater, named after the regimental battle cry. The theater presents short films and slide presentations on cavalry and regimental history.

The museum also features an impressive outdoor display, the armored vehicle park, where you can view the vehicles used by the regiment since its mechanization prior to World War II. Within the larger armored vehicle park is the Desert Storm Park, which includes weapons and vehicles captured by the regiment in Operation Desert Storm. The combination of the outdoor and indoor exhibits takes you through the regiment's 40 campaigns in nine wars.

Since 1963, that small trophy room has matured into one of the finest museums in the country, certified by the United States Army and accredited by the American Association of Museums. The 3d Cavalry Museum has restatedion three times in the last 30 years; to Fort Lewis, Washington; Fort Bliss, Texas; and its present home: Fort Carson, Colorado. Through three moves and 150 years, the museum has evolved into a complete and accurate collection of Armored Cavalry's past; an exhibition of history definitely worth visiting. For more information and touring times, contact Mr. Paul Martin at (719) 5261404.



11th Armored Cavalry Regiment (BLACKHORSE) 1997

A Unique Mission: Portraying the Enemy

The 11th Armored Cavalry Regiment, stationed at the National Training Center, has one of the most unique and demanding missions in the Armor Force. The Blackhorse Regiment acts as a world-class opposing force (OPFOR), a capabilities-based enemy for the United States Army. The mission of the 11th ACR is to *conduct combat operations as the 60th Guards Motorized Rifle Division in order to provide a free-thinking, robust opposing force that trains the principles of Army operations and challenges all battlefield operations of visiting U.S. Army brigade combat teams.*

As a member of the National Training Center's training team, the regiment performs this very important and demanding mission with a sense of pride and purpose recognizable to all Blackhorse veterans.

The regiment is currently organized with three maneuver squadrons and a support squadron. 1st Squadron (Ironhorse) is equipped with 51 visually modified (VISMOD) M551 Sheridans (T-80) and 9 BMP-1/2 reconnaissance vehicles. 2nd Squadron (Eaglehorse) is equipped with 116 VISMOD M551 Sheridans (BMP). An air defense artillery battery and an antitank company are attached to the squadron. The regimental support squadron (Packhorse) provides logistical and administrative support to the regiment. The 58th Engineer Company and the 511th Military Intelligence Company provide combat support functions and are attached to the RSS. The 1st Battalion, 221st Armor (Nevada Army National Guard) (Wildhorse) is war-traced to the 11th Armored Cavalry Regiment as a round-out battalion, and is a full member of the Blackhorse Team. Its mobilization mission is to fight as an OPFOR independent tank battalion and to go to war when the 11th ACR deploys.

Task organization and combined arms is a way of life in the OPFOR. The basic maneuver unit is the motorized rifle battalion (MRB). An MRB is formed by combining a tank company of 10 T-80s and a motorized rifle company of 28 BMPs. Four MRBs, along with combat and combat service support elements



Photo: SGT Mark W. Erwin

OPFOR BMP-2 operated by the 11th ACR maneuvers at Fort Irwin's National Training Center.

combine to form the famed 32nd Guards Motorized Rifle and 125th Guards Tank Regiments, which have roamed the Mojave Desert since 1981.

The OPFOR participates in 10-11 training rotations a year, each of which is focused on training a U.S. Army brigade combat team (BCT). A standard rotation will involve two MRR offensive missions and three MRB defensive operations. The OPTEMPO level of nearly 2,500 miles per year enables the OPFOR regiment to maintain its incomparable reputation as "the best mounted fighting force in the world." Throughout the year, the regiment is constantly in a state of preparation for battle, fighting, recovering, and training for the next operation. The 11th Armored Cavalry Regiment is truly a unit in which troopers of all ranks and military occupational specialties learn their profession.

In addition to its battlefield role, the regiment contributes much to the rest of the Army by sharing its tactics, techniques, and procedures through the OPFOR outreach program. As one of the Army's best trained tactical units, the Blackhorse is always willing to assist commanders Army-wide in improving their training and readiness posture through the Leader Training Program (LTP), mobile training teams, 11th ACR web page, an aggressive ride-along program, and through face-to-face contact with rotational unit leaders.

One of the highlights of 1997 was the OPFOR's unique participation in the Army's Advanced Warfighting Experiment (AWE). The AWE rotation was one of the largest and most complex rotations ever conducted at the National Training Center. The 11th ACR served proudly, fulfilling its mission of being the toughest opponent the Experimental Force (EXFOR) would have to face. Through 14 days of near-continuous operations, the OPFOR regiment challenged the EXFOR and helped provide important insights into the equipment and doctrinal capabilities of a Force XXI Army. Although armed with low-tech equipment, the OPFOR demonstrated the power of confident, well-trained, and determined soldiers who possess uncommon experience in warfighting. The Army's Chief of Staff, General Dennis Reimer, summed up the AWE best by stating that "when we combine the tactical skill of the OPFOR with the technical capabilities of the EXFOR, then we truly have a Force XXI!"

As one of the Army's legendary units, the 11th Armored Cavalry Regiment takes great pride in its long and distinguished lineage. In August of 1997, the veterans of the Blackhorse regiment gathered for their annual "Round-up" reunion in Las Vegas, Nevada. This marked the first time a Blackhorse reunion was held near the regiment's home station. Blackhorse veterans visited the

National Training Center to see how today's troopers are serving their Army and their country. The event was a resounding success, with troopers showing off their equipment and facilities, and talking with veterans, learning first-hand of the *esprit de corps* that is unique to the Blackhorse.

Equipment modernization is among the regiment's top challenges. The OPFOR is charged with providing a realistic and challenging opponent for every BCT training at the National Training Center. The M551 Sheridan, the standard platform for OPFOR combat systems, is quickly reaching the end of its usefulness. Although the regiment recently ac-

cepted M551A1s from the inactivated 3rd Battalion, 73rd Armor at Fort Bragg, allowing many OPFOR T-80 tanks to replicate the thermal imaging equipment found on these weapon systems, the Army realizes this is but a temporary fix. Beginning in FY 1998, the regiment will accept the first OSVs (OPFOR Surrogate Vehicle). The OSV, based on the M113 Armored Personnel Carrier, will portray an infantry fighting vehicle manned by Krasnovian forces. It will be armed with a 30mm cannon, AT-5 SPANDREL anti-tank missiles and can carry six dismounted soldiers, which enables the OPFOR to portray a more realistic enemy mechanized infantry capability.

Additionally, the Army is examining proposals for a future OPFOR main battle tank (MBT). Although only in the concept stage, the OPFOR MBT will add a more realistic enemy tank to the NTC battlefield that is also economical to operate.

The 11th Armored Cavalry Regiment (Blackhorse) looks to the future with confidence, knowing it will continue to set the standard as it did in Virginia, the Philippines, Mexico, Monterey, France, Vietnam, Fulda, and now the Mojave Desert and the National Training Center. ALLONS!

2nd ARMORED CAVALRY REGT.

Back from Haiti, Then On to Bosnia, The Army's "Light ACR" Remains "Always Ready"

2nd ACR peacekeepers patrol the streets of Port au Prince during deployment that ended this year.



The 2d Armored Cavalry Regiment (Light), the longest continually serving unit on active duty, has had a demanding and challenging year, with deployments to Bosnia, Hungary, the NTC, and reconstitution following its deployment to Haiti.

The regiment trained up for and executed a December '96 NTC Rotation, supported the Partnership for Peace exercise, COOPERATIVE NUGGET 97, in June, executed a Mission Rehearsal Exercise as part of a JRTC rotation in July for its Bosnia deployment, and deployed to Bosnia in support of Operation JOINT GUARD. In August, the Regimental Headquarters Troop deployed to Germany to participate in a CMT Rotation with 1st Armored Division, making it the only unit in the United States Army to go through all three Combat Training Centers in one year.

The 2nd ACR, a "light" armored cavalry regiment, is a unique unit. The "2d

Dragoons" primary mission is to serve as the XVIII Airborne Corps' armored cavalry regiment. In that role, the regiment is structured along the lines of a traditional "heavy" armored cavalry regiment, but is equipped with "light" combat systems that facilitate rapid strategic deployment.

The regiment is organized with three ground squadrons, an aviation squadron, and the regimental support squadron, along with separate engineer, military intelligence, chemical reconnaissance companies and an air defense artillery battery.

Each ground squadron is made up of three cavalry troops equipped with HMMWVs mounted with M2 .50 caliber machine guns, MK-19s, two 120mm mortars, and TOWs. The squadron also has an antitank company equipped with HMMWV-mounted TOWs and an organic M198, 155mm towed artillery battery of eight guns. With a total of 72

TOW missile systems, the regiment is the most lethal antiarmor force in the corps.

The regimental aviation squadron, our 4th Squadron, is equipped with 36 OH-58D Kiowa Warriors and 16 UH-60 Blackhawk helicopters. The Kiowa Warriors provide the regiment not only a superior aerial reconnaissance capability, but also lethal strike power when loaded with Hellfire missiles and 2.75-inch rocket pods. The Kiowa Warrior is also a valuable observation platform for the regimental fire support system as an executor of conventional artillery fires and COPPERHEAD missions.

The highlight training event for 1996 was the regiment's National Training Center rotation. The entire regiment, minus its 2nd Squadron, deployed to the NTC. We also received several attachments from XVIII Airborne Corps, including two artillery battalions, an engineer battalion, a signal company, and

elements of a corps support battalion. This allowed the formation of a lethal regimental combat team and the exercise of the complete wartime command and control structure. To the surprise of many, the regiment proved itself to be every bit as lethal as a heavy armored cavalry regiment, and executed one of the best deep battles seen at the NTC, destroying the lead battalions of the OPFOR regiment through the combined use of attack helicopters, CAS, and indirect fires far forward of the ground squadron's main defense line.

After the first of the year, the regiment began preparation for its deployment to Bosnia in support of Operation JOINT GUARD, under the command of the 1st Armored Division. As part of the preparation, Department of the Army accelerated the move of 4th Squadron from Fort Benning to Fort Polk, reuniting all the units of the regiment on one post, greatly facilitating our train-up, and enhancing our ability to provide quality family support to our deployed troopers.

All deploying troopers received individual readiness training (IRT) to train them on the skills they will need to operate in Bosnia. The final day of training culminated in the troopers running a base camp, complete with guard towers, barbed wire, gates, and situational training involving tasks ranging from dealing with media to operating checkpoints, observation posts, and coordinating patrols.

We then conducted troop STX lanes to exercise the command and control between the troops and squadron tactical operation center. The troop lanes focused on the essential tasks identified for Bosnia: checkpoint operations, handling of refugees, weapon storage area inventories, as well as force protection issues.

The capstone of our deployment training was a mission rehearsal exercise (MRE) for the entire regiment. This was conducted at Fort Polk in July and was run by the Joint Readiness Training Center (JRTC). The two-week exercise tested the regiment in all areas of command and control, and challenged the troopers in the execution of required tasks. The base camps in Bosnia were fully replicated, along with the

realistic simulation of political and economic conditions which make this peacekeeping mission unique and challenging. Refugees seeking resettlement within contested areas, as well as personnel indicted for war crimes, were simulated to create the realism reflecting the conditions in which the 2d ACR will be operating. The civil military affairs elements were fully simulated, to include non-governmental organizations/international organizations and other agencies which are currently working in-country. This gave troopers and commanders the experience needed to deal with the non-military portion of the mission. The level of conflict trained during the MRE ranged from peacekeeping through active faction fighting between the former warring factions.

The 2d ACR deployed into country in two main elements. The first elements departed for Tazar, Hungary, August 13-15, and deployed into Bosnia during the last two weeks of August. The second movement arrived in Tazar during the

last two weeks of September and included the aviation squadron, regimental support squadron, and remainder of the deployed force. 1st Squadron remained behind at Dragoon Base, Fort Polk, to continue support of the JRTC and care for the families of the deployed soldiers.

The notable exception to this deployment schedule is the regimental HHT, which flew to Frankfurt, Germany on 16 August for a command post exercise (CPX) and MRE in conjunction with the staff of 1st AD at the Combat Training Maneuver Center in Hohenfels. MOUNTAIN EAGLE V was conducted from 17-28 August, integrating the staffs of 1st AD and 2d ACR in preparation for joint work in Bosnia.

The 2d ACR is now conducting peacekeeping operations in Bosnia. The remainder of the year will see us continuing to enforce the peace in Bosnia and keeping in mind the Regiment's motto, "Toujours Pret" (Always Ready).



New LAV Variant for Light Forces

General Dynamics was to begin delivering this new vehicle, the LAV-AD, to Marine light armor units this fall. The Blazer turret includes a forward-looking infrared targeting sight, a laser rangefinder, and the option of employing either Stinger missiles or the rapid-fire GAU-12/U 25mm Gatling gun. The Marines are buying 17 of these systems for their extensive LAV fleet.

Building a Lions' Den in Bosnia

by Lieutenant Colonel Randy Anderson and Major John Hadjjs

On 15 January 1996, TF 2-68 Armor (reflagged as 1-35 Armor) established its headquarters in Olovske-Luke, and began peace enforcement operations in Bosnia-Herzegovina. The task force chose a war damaged truck repair facility at a former Serbian outpost. The site chosen sat astride the Confrontation Line Zone of Separation (ZOS) agreed to by the former warring factions under the Dayton General Framework and Agreement for Peace (GFAP).

The truck facility and the surrounding area had been party to some of the war's fiercest fighting. Destroyed cars littered the parking lot; trash and filth a meter deep filled the maintenance bays; windows were blown out; and many buildings still had unexploded ordnance (UXO) and mines inside of them. This article's purpose is to share ideas and techniques on how the task force converted a war-ravaged faction outpost into a fully functional task force headquarters, complete with maintenance areas, a forward surgical hospital, and offices, housing, and recreational facilities for over 1,100 soldiers. We certainly don't have all the answers, but hope to provide armor leaders facing a similar situation in the future a leg-up.

Site Selection

Mission analysis led us to locate the lodgment area where we could send a clear message as to the Implementation Force's (IFOR) determination to separate the former warring factions and enforce the GFAP. Nested in that mission analysis was force protection. The task force commander measured every potential site in light of identified force protection concerns and the management of those risks. Against those constraints, we applied the considerations for an assembly area taught at the advanced course and in our doctrinal manuals. What was the vulnerability to mortar attack, car bomb, or sniper fire? Was there sufficient area for vehicle parking, hardstand for maintenance areas and supply storage, and room for a helicopter landing zone (LZ)? Were internal routes and suitable entrances and exits available, and how easy



Photo courtesy CPT Al Dean

A 2-68 Armor M1A1 on the perimeter of Lions' Den, a base set up on the Tuzla-Sarajevo road.

were they to secure? Finally, did the area support track movement and did it have adequate drainage?

Beyond what we've learned from our doctrine, we applied some tests specific to our mission and how we wanted to execute it. Was there a plentiful source of water? We knew that water would be critical to sustaining the force for an extended period of time. Could we find a lodgment site that was close to the main supply route (MSR)? Assigned the southernmost sector in Task Force Eagle and being almost two hours from the BSA in good weather required we look for opportunities to shorten our lines of communication (LOC). The task force commander placed a premium on choosing a site that would cause the least disruption to the local populace. Displacing persons from the often makeshift shelters they had lived in during four years of war would have shown not only a lack of humanity, but would also have alienated the very people we were trying to win over to a tenuous peace agreement. Finally, the lodgment area had to be close to the headquarters of the former warring factions and refugee centers to facilitate our constant contact with both.

The concept we applied mirrored the cold war paradigm of a regimental cav-

alry unit with a garrison kaserne and forward operating base camps from which it conducted surveillance along the old Inter-German Border. The task force commander's analogy was, "This is Bad Hersfield (the lodgment area) and that's the border (the ZOS)." What we wanted to capture was the economy of scale that the old border camps gave a unit, by concentrating the life support, maintenance and supply functions, and recreational facilities for the task force at one location, while the task force conducted its missions throughout sector.

Establishing a major camp with the bulk of support functions located there while the companies operated in the ZOS helped us maintain the flexibility to shift tactical postures commensurate with mission requirements and force protection concerns. During the early days of the deployment, the lodgment area's construction was subordinate to the GFAP D to D+45 requirements of separating warring factions, acquiring data on faction minefields, monitoring areas of transfer, and establishing the joint military commission process. The bulk of the task force was continually manning checkpoints in the ZOS to monitor GFAP compliance. Having ensured compliance with the GFAP D+45 require-

ments, the task force commander could reduce to two the continually-manned ZOS checkpoints.

We considered ease in supporting our mission the most important criteria in site selection. The immediate mission was to separate the warring factions and clear the ZOS of all faction units and heavy weapons. The task force's initial entry force (TF commander, S3, battalion forward command post, and the scout platoon) discovered a Serbian out-

"...We took great care to hire as many of the local populace as possible for jobs that would support the camp's construction and operation. You can create leverage for force protection with jobs..."

post astride a major north/south roadway in the middle of the CFL. It would be an ideal place to position an armored task force, sending a physical and symbolic message that IFOR intended to forcefully carry out its mandate. The Serb outpost had enabled them to disrupt the major north/south road between Tuzla and Sarajevo. Occupying the outpost only opened the road to commercial and civilian traffic and sent a powerful message to the factions. Borrowing from the old REFORGER theme of making full use of the infrastructure in built-up areas, the former truck stop offered additional advantages. It had maintenance bays and ample hardstand. The surrounding abandoned homes offered a unique fixer-upper opportunity to the enterprising ISG. An abandoned home makes a great company "house" complete with orderly, supply, and arms rooms and an area to conduct training meetings. A small river ran by and, with help of a Reverse Osmosis Water Pump Unit (ROWPU), could provide a ready supply of potable water. Finally, the site was large enough to accommodate the inevitable expansion caused by the introduction of additional units and services.

The task force commander's vision for the lodgment area was that it should look like Camp Doha in Kuwait. He had deployed the battalion to Intrinsic Action and recognized up-front the need to have an adequate place to set up living, maintenance, and recreation areas. In retro-

spect, hardstand, and the superior drainage became two of the site's most valuable attributes. Both enabled the Silver Lions to win the war against the Bosnian mud. Getting out of the mud was a tremendous victory for readiness and quality of life. Maintenance is easier and better on a vehicle not covered in mud. Soldiers feel more positive about themselves and their equipment once they are no longer mired in slop.

Force Protection

Force protection is more than gate and perimeter security. It is all measures a unit takes to preserve its combat power. It encompasses defense of the perimeter, operations security (OPSEC), field sanitation and vector control, containment of environmental hazards, and risk assessment to do everything as safely as the mission will allow.

Force protection includes considering how combat multipliers from slice units supporting your task force can assist, and incorporation of local civilian governmental agencies and police forces. As it turned out, the brigade positioned two of its Q37 radar units in our sector (one at our base camp, and one at a checkpoint that we operated). The radar sets were tremendous assets in alerting us to the location of any hostile artillery or mortar attack. We also had a counter intelligence team that lived at our base camp. As an additional duty, we tasked them to do regular inspections and assessments of our own force protection posture.

From the first day, we established a professional working relationship with the local mayor, police chief, and the plant manager of the town's largest prewar factory. By dealing with the local elected officials and centers of influence, we communicated our intent to recognize the legitimacy of the political institutions and their authority over the former warring factions' military units. We took great care to hire as many of the local populace as possible for jobs that would support the camp's construction and operation. You can create leverage for force protection with jobs, because the local populace become stakeholders in the success and security of your operation.

Staying involved in the community enhances force protection. The task force commander's guidance was clear. Being evenhanded in our enforcement of the GFAP with the former warring factions

did not mean we could not be good neighbors. We made a conscious effort to schedule our logistical convoys so they did not disrupt civilian traffic, and the command group held regular office calls with local authorities and businessmen. One particularly effective technique was the CSM-led Sunday morning coffee patrols. Weekly, the CSM led a dismounted patrol through neighborhoods that bordered the base camp. He often distributed clothing and school supplies donated by family members from the task force. Soon he was the best known soldier in our base camp, and his patrol was a visible symbol of the discipline, professionalism, and caring attitude of the American soldier. Many times he received valuable information about faction activity that impacted on our camp's force protection as he shared coffee with a neighbor.

Security at a lodgment area begins with secure gates. Our intelligence preparation of the battlefield (IPB) yielded three principal threats: unruly crowds, car bomb attack, and drive-by shootings. We chose to meet any potential threat with overwhelming combat power. To enhance our security and to ease crowd control and personal searches, our camp's main entrance had both an inner and outer gate. We positioned an M1 tank at the outer gate of the main entrance. Additionally, two dismounted soldiers manned a guard shack. The sergeant of the guard and two more soldiers manning a .50 caliber machine gun positioned themselves at the main entrance's inner gate. When local national employees or visitors reported to the outer gate the guards conducted a visual and physical search and reported to the SOG by hand-held PRC127 radio. The main command post monitored gate guards and roving patrols by eavesdropping on the PRC127 frequency. An M2 Bradley and soldiers in a second guard shack secured the alternate entrance off the main supply route (MSR). Armored vehicles provide more than firepower; they send a clear signal of offensive capability and are an excellent first layer of protection because of their survivability. Big and imposing, they make superior roadblocks. Just starting one draws the attention of a crowd or passersby. Another measure we took against drive-by shootings was speed bumps. Fashioned out of angle iron they proved very effective. The Bosnians had no experience with speed bumps. They didn't even have a word in Serbo-Croat to describe them, although the locals quickly took to call-

ing them “silent police.” Word traveled fast to slow down, especially after a general officer ripped his BMW’s muffler off by driving over the bumps at an excessive speed.

Our standard operating procedure (SOP) was to man the main entrance gate with five guards in addition to the tank crew and an interpreter. Interpreters are a must, as is a good training program for your guards. Guard duty in peace enforcement operations is graduate level stuff. While your soldiers may have ex-

“...Force protection is a concern for every leader, but by having one leader overall in charge, the task force commander had a “go-to” guy for immediate feedback on how well we were doing and what we needed to improve. ...”

perience checking gate security in your motor pools, every day is an adventure at the gate in Bosnia. Locals will bring armed mines to the front gate as gifts. Drunks demanded compensation for their damaged cars after they slammed into a speed bump. People came with all kinds of medical needs, from the most routine to the gravely serious. United Nations personnel or foreign diplomats will rant and rave about your search procedures.

A few pieces of equipment make the job simpler: mirrors to inspect under vehicles, badges for all non-U.S. military to display while they are at the camp, metal detectors for individual searches, hand-held radios with brevity codes, and tire puncture spikes made out of metal tent pegs.

Two special concerns for your gate guards will be how to adequately and professionally search women, and the correct procedure for evaluating civilians desiring medical attention. When at all possible, use female soldiers for same-gender searches. Otherwise, caution your male soldiers to use the metal detectors so they can conduct a thorough and professional search without engendering fear of sexual harassment. Next, ensure that triage of civilians desiring medical care takes place at the gate, not in the compound. Finally, establish a guest

parking area outside the camp. All movement in Bosnia required a minimum of four vehicles. You quickly overwhelm your guards’ ability to adequately search by allowing every vehicle to enter the camp, and it is an unnecessary security risk.

Our perimeter measured 2,350 meters around, and consisted of a row of triple-strand concertina, tangle foot, and a second row of triple-strand concertina. We used more than 30 of the 40-foot containers used to ship unit equipment to build a perimeter wall on one side of the camp.

Probing by locals intent on stealing was our biggest concern, so it was imperative to have a well-lighted perimeter. Tank and Bradley company MTOEs don’t support the kind of lighting you require, so you have to be imaginative. Tent lights make an acceptable alternative. Additionally, we procured Air Force generator light sets used to illuminate runways to provide light to parts of our perimeter and to our maintenance area. Finally, we received lights on poles as part of a task force plan. Funding limited how many lights we could buy, but like any defensive position we continued to improve our position by scrounging. We found some lights that were not being used at another camp and employed them.

Base camp gate and perimeter lighting are your biggest deterrent to probing and theft in stability operations, and they represent a paradigm shift from years of “own the night with thermal sights,” and light discipline measures drummed into us from our conventional operations thinking. We also added security lighting within the camp to provide a measure of safety for female soldiers to move at night with less concern for rape or assault.

Fire prevention is a critical part of force protection. Our first step was to put our ammunition holding area (AHA) away from our lodgment area near one of our manned checkpoints in the ZOS. This was done to avoid a Doha-like incident and to minimize risk. As per SOP, we left fuelers unlocked so that we could move them quickly in the event of a fire. Our Mobile Army Surgical Hospital (MASH) filled Hesco Bastions around their oxygen and gas storage areas to act as a firewall. The added security from the Hesco wall also would have enabled the MASH to treat wounded during an

attack on the camp, if required. Finally, we made sure to get plenty of the large, wheeled 150-pound fire extinguishers and then rehearsed the movement time from their locations to likely fire sites. Task Force Eagle provided us with a HMMWV vehicle-mounted firefighting pump that gave us our own fire truck.

Our technique for unity of command in force protection was to put that effort under our command sergeant major. Force protection is a concern for every leader, but by having one leader overall in charge, the task force commander had a “go-to” guy for immediate feedback on how well we were doing and what we needed to improve. Once procedures and measures are in place, force protection becomes largely a discipline issue. The CSM is in charge of enforcing discipline, so he is a natural CINC Force Protection.

Quality of Life

Quality of life is a force multiplier. Soldiers are essentially on duty 24 hours a day during a deployment. Provide them an outlet for physical, mental, and spiritual fitness. Recreation is critical to maintaining soldier well-being and preserving combat power.

We made the decision early on to consolidate our morale, welfare, and recreation (MWR) assets to better serve the needs of the community at large. The containers we received to live in came with designated recreation rooms for each company-sized element. We consolidated them to make the MWR facilities for the lodgment area. We built a movie theater with elevated seating for 175 soldiers, complete with refreshment stand. We showed movies four times a day, beginning at noon, to accommodate the work schedules of soldiers on guard or on night shifts at command posts. Putting all the foosball, pool tables, and ping-pong tables in one building gave us a fully functioning pool hall. Normal operating hours were 1200-2300 daily. Soldier power to run the facilities came from a special duty roster run by the CSM. After an assessment concluded that the living container floors would not support weightlifting equipment, we converted an abandoned house into a weight room. After flooring, lighting, and windows and doors were repaired, it was as good as any gym in Baumholder. We separated aerobic activities (rowing machines, LifeCycles, and step classes)

by putting them into their own tent or container. One building became the AFN house, and another the sports lounge, so we never had arguments over whether to watch "Friends" or football.

Combining two recreation rooms created one of the largest post exchanges in the Task Force Eagle sector. LA Linda sat astride a major Allied Ready Reaction Corps (ARRC) MSR and only an hour north of Sarajevo. The PX drew shoppers not only from the tenants at Linda, but also from the multinational IFOR units to our south. On any given day, you could hear more than three languages being spoken. Guest shoppers had all been subjected to our extensive gate security procedures and therefore received a subtle message about how seriously we took force protection. A large PX means a greater sales volume. Greater sales enable the facility to diversify its selection, benefiting soldiers assigned to the base camp.

Community Life

Building a lodgment area means creating a community, and you need the people to do the job. Our solution was to create a garrison staff with the XO as the Garrison Commander and representatives from the dental clinic, hospital, unit representatives, the LOGPAC camp manager, camp education counselor, and the MWR specialist. We created one position, camp mayor. The mayor's job was to work for the XO as the action officer to coordinate all camp events, coordinate with Brown and Root (the government's construction contractor), and oversee the management of camp operations and facility use. The garrison staff attended the task force command and staff meetings and briefed issues that affected life at the base camp.

Feedback is essential to providing the best services possible. The feedback mechanism we used was the town hall meeting. The task force XO and CSM hosted these biweekly events. The panel included representation from Brown and Root, Food Service, AT&T, MWR, and AAFES. Soldiers (specialists and below) represented each of the tenet units on post. Town hall meetings were a forum for both complaints and suggestions. Given an opportunity, soldiers can generate some great ideas. Multi-roll toilet paper dispensers for the latrines solved the problem of ensuring that sufficient paper was on hand without being strewn

around the latrine. U.S.-only lines at the PX during designated hours were the result of a suggestion at a town hall meeting to deal with the problem of making a purchase during the busy lunch hour and weekends when the camp was generally visited by international officers. All acceptable suggestions were recorded in the meeting minutes, and responses and action taken published in the camp newspaper.

Stressing the nature of community is most important. Your goal is not to build a base camp, but a post. Base camps are stopover points for future operations. Posts are start points for tactical operations, but they are also where people live, work, eat, and recreate. Town hall meetings go a long way toward transforming a base camp into a post. Reveille and retreat have an equal effect. Nothing is more readily identifiable as part of life on an Army post than reveille and retreat. We erected a flag pole and conducted reveille and retreat daily. Soldiers pausing from their duties at the camp to render honors at the end of a busy day in Bosnia helped the feeling of community take hold.

LOGCAP

Working with a LOGCAP, (in our case Brown & Root) appears to be a reality for units involved in deployments in the near future. These folks want to be members of the team, and you should treat them as such. Many of the camp managers or expatriate employees have some military experience, so you often start with a common lexicon. What isn't so well understood to the average commander is what the LOGPAC provider can do contractually, and how his compensation package works.

The evaluation system for Brown and Root operations in Bosnia was based on quarterly formal evaluations. Evaluation employed a numerical grading system covering the full range of services and missions for which the contractor was responsible. It is imperative that the officers making the evaluation (BN XOs, and BN CDRs) understand the incentive system, and that the brigade clearly define the "senior rater profile" so all evaluators can be consistent and fair.

We considered our camp manager our DPW (Directorate of Public Works). He briefed at our command and staffs and attended all town hall meetings. Doing this helped make him a member of the

team. Establishing that rapport works to everyone's benefit. The contractor feels comfortable raising issues that need the military leadership's attention, and enables him to anticipate your requirements. Our camp manager even assisted in our deception plans to support our operations in sector, by scheduling his shifts and routine deliveries in such a way as to mask our tactical intent. Brown and Root is a stakeholder in the camp, but you make money when they become a combat multiplier in helping you conduct your mission. Your base camp manager can create leverage in force protection by providing infrastructure improvements to enhance security. He also is a great source of intelligence as to the tenor of the local population's attitude because he is a major employer. Work with the camp manager to win the loyalty of his local national work force. It is not only a neighborly thing to do, but is also a force protection measure. Something as routine in our Army as presenting task force certificates along with photos to the local national work force not only builds goodwill, but makes the local work force part of your team.

Dealing with the Host Nation

The single most important key to success with interacting with the host nation is your civil affairs team. They must be self-starters and have your full support. Think combined arms when you employ them by attaching psychological operations (PSOYPS) and CI teams, your chaplain, and sometimes scouts. Attaching other teams enhances force protection and makes every encounter with the host nation an opportunity to tell your story and gather intelligence. Start establishing your relationship with the local community from the first day. Seek out the mayor, police chief, and other local officials.

In Bosnia the factions are responsible to maintain the provisions of the GFAP. IFOR was just the force to implement the treaty and monitor compliance. By dealing with the local officials, you send a subtle message to the faction militaries that you expect them to acquiesce to civilian control, just like your force does.

The positioning of the Civil Military Information Center (CIMIC) is critical. We

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Reports from the Field:

THE RESERVE COMPONENTS



Tank Battle at Gowen Field, Idaho Prepares the 116th Cav Brigade For Its Rotation to the NTC

Ask who shall fight America's next war, and the answer will depend on who you talk to. Right now, over 50 percent of the Army's combat arms are in the National Guard. Some active component generals would like to change that. They believe combat arms should be the realm of the active army. National Guard leaders say they have tradition on their side. They say America only lost one war — a war for which the National Guard was never activated.

After Vietnam, the Army adopted the "Total Force" concept. This plan, sometimes referred to as the Abrams Doctrine, called for the quick call-up and use of Reserve Component soldiers in future wars. As everyone knows, this doctrine received mixed reviews after Desert Storm. Thousands of Reserve Component soldiers were called up and sent to the desert war, but some high-profile National Guard combat arms units languished at mobilization stations in the United States while active duty soldiers liberated Kuwait.

Why those National Guard units never made it to the fight is still being debated. But that debate is now being overshadowed by something much more serious. The new debate strikes at the heart of America's warfighting plans. Put simply, the question is, who should fight our country's next war: the active army or a total force?

With the defense budget shrinking, military planners on all sides are looking

for ways to increase their share of the pie. National Guard leaders believe the active army has targeted the Guard as a whipping boy. "Guard units can't cut it on the battlefield, so high-visibility, well-funded combat arms units ought to be taken away from this quasi-military organization," or so the argument goes.

Take a look at the headlines in a recent *National Guard* magazine, and you'll see the seriousness of this struggle. "TAGS Unite in Face of Active Army Leaders' Continued Attacks on ARNG Force Structure... Governors and Guard Leaders Call for Presidential and Congressional Intervention... We Don't Like It and We Won't Take It."

The 116th Armored Cavalry Brigade, a high-profile National Guard unit, is scheduled for a rotation at the National Training Center next summer. To prepare for this important test, the brigade recently went through a dress rehearsal at Gowen Field, Idaho. The exercise involved more than 4,000 soldiers, including OPFOR from the NTC. In this case, the OPFOR was the 1-221 Armor, a National Guard roundout battalion for the 11th Armored Cavalry Regiment.

Most soldiers in the tracks at Gowen Field didn't pay much attention to all the commotion and politics swirling around them. They fought battle after battle, day and night, for two weeks straight. During the first week, the OPFOR repeatedly bloodied the 116th. But by the second week, the brigade improved dramatically.

After-action reviews (AARs) followed every engagement. In this particular battle, three OPFOR M1s (modified to look like T-80s, complete with reactive armor, barrel-mounted searchlights, rear deck fuel barrels, snorkels, and sans track skirts) and five Bradleys (BRDMs) took on 12 of the 116th's Bradleys. The OPFOR zeroed out the 12 Bradleys while losing only two BRDMs and a T-80.

Fifth Army soldiers from the 1st Regional Training Brigade at Ft. Carson, Colo. led the after-action reviews. This AAR is recorded exactly as it took place. It may seem somewhat disjointed, but everyone there knew the op order, the terrain, etc. The discussions were fluid and spontaneous. Judging by the 116th's performance, the AARs were effective as well.

5th Army Advisor: Do you think you were prepared when you approached the battle?

TC #1: No, they caught us totally off guard.

5th Army Advisor: What could you have done differently?

TC #1: Prepped the hill.

5th Army Advisor: What else could you have done?

Platoon leader: We could have moved one section up to the butte to suppress fire, and pushed out west and come up where they were from the back side.

5th Army Advisor: Well, we know what happened. Let's talk about what didn't happen.

TC #2: I was the lieutenant's wingman when that T-80 came around us.

5th Army Advisor: Did you cross-talk with the platoon to tell them that something was coming around the side?

TC #2: What happened was, we were dead so quick.



Nevada Army National Guard soldiers in their OPFOR uniforms show off an M1 tank they modified to look like a T-80. The M1's skirts were removed, "reactive armor" blocks were added, along with drum-like auxiliary fuel tanks, a searchlight, and a snorkel tube at rear of turret.

TC # 3: We were right next to the lieutenant's element. We couldn't see anything off to our right except the rest of the element engaging, and so we looked to the left. Then a BRDM popped up right in front of us, twelve o'clock.

5th Army Advisor: Once you noticed everything dying out there you should have realized something was taking your guys out and started cross-talking with the platoon. "We got something out here. I can't see it. No eyes on it, but it's killing us." Once you notice everyone starts dying, you need to cross-talk! If you can't see anything, you need to talk.

TC # 3: And then a BRDM popped up on us. We called in; we engaged and destroyed it. Then a T-80 pulled up right next to the BRDM and caught us in the open. We fired; they fired. We got killed.

5th Army Advisor: Back up to the BRDM. You called in?

TC # 3: Yea.

5th Army Advisor: Once it pops up and you identify it in front of you as not one of yours, engage it.

TC # 3: Right. The T-80 that killed us was the one that no one could see.

5th Army Advisor: Once the T-80 came around and killed two of your Bradley's...

TC #2: Three...

5th Army Advisor: Did anyone call in?

Platoon leader: Roger that. Just before he died, White Three told me to get my butt out of there. I turned around and saw a lot of smoke and a big-ass barrel. I took off and tried to engage on the run. I got to a place where I could stop. Tried to engage with the TOW. We had a missile

failure. We were on the run again. I called Red One, and let him know where I was at.

5th Army Advisor: So you were on the run, trying to get away, reporting back when they got you.

TC # 3: After they killed our Bradley, we were looking at our casualty cards when a T-80 pulled up toward our position. Our dismounts spread out. He didn't even double check us and our Dragon team lit him up.

5th Army Advisor: Did your dismounts have a radio?

TC # 3: Yes.

5th Army Advisor: Were they on the platoon or company net?

TC # 3: Platoon.

5th Army Advisor: Did you call up to your platoon leader?

Platoon leader: I was already dead.

TC # 3: Didn't make any difference. Just about everybody was dead.

5th Army Advisor: Don't wait to call forward. Call in artillery. If just about everybody is dead, you may be the company commander.

Soldier: I was the dismount leader. We were just about to call for artillery when they "endexed."

5th Army Advisor: What was the key event?

TC # 1: We pushed the LD time back an hour, which allowed the OPFOR to move much farther than we expected them to be. That was the difference.

5th Army Advisor: Another key event?

TC # 2: I was in the middle. Most of the action was to the left and right. I tried to move up and help the lieutenant out on the left, and then they came right toward us down the middle. They caught us. It was like they pulled a quarterback sneak.

5th Army Advisor: Another key event.

Platoon leader: Once we went down-range, we tried to find their Viper team. We dismounted and spent too much time trying to find the Viper team. We focused too much on that. We should have blown right through there.

5th Army Advisor: Give me an improvement.

TC #2: We need to work on our avenues of approach. We were sitting ducks. Everywhere we went, they popped up, and they were right there. We had nowhere to go. They caught us in the middle of no man's land. There's not much out there, but we need to haul ass and use the terrain better to mask our movements.

5th Army Advisor: Another improvement?

TC #3: We could have called up artillery. If nothing else, we could have had smoke to cover our movement. I think today shows how important it is to have eyes forward. I don't think they would have caught us like this if we had sniper teams out in front of us.

5th Army Advisor: OK. Let's learn from the mistakes. These Nevada guys do this for a living. You need to be at the LD for the next iteration at 19:00.

(This report was prepared by COL Phil Gustafson and CPT Terry L. Conder)



Mine plow-equipped M1A1 rolls down the lane at Gowen Field.

PHOTO: SGT George F. Johnson, Idaho ARNG

Innovation, Simulation Stretch 116th Cav's Resources

Innovative, flexible, and determined are words that best describe the 116th "Snake River" Cavalry Brigade as it changes forever the way the Army National Guard trains.

This 8-year-old roundout-enhanced brigade, headquartered at Gowen Field, Boise, Idaho, was chosen in 1993 as one of two brigades to participate in the experimental Simulation in Training for Advance Readiness (SIMITAR) project. Congress chartered SIMITAR to find high-payoff, advanced technology solutions outside the Defense Department's normal life-cycle procurement and development processes to overcome the traditional barriers to quality National Guard training — time and distance.

The Guard has only 39 training days each year. Project SIMITAR took each day and made it a more effective training period by limiting soldier travel time through maximizing the use of training simulation devices at local armories, by balancing gunnery and maneuver training through Abrams and Bradley compressed gunnery programs, and by utilizing simulation devices to prepare and

complement, but not to replace, live-fire training.

The success of the SIMITAR program was demonstrated this year during the largest and most complex annual training (AT) ever conducted by the brigade. This AT was a rehearsal for next year, when it will be the second enhanced brigade and SIMITAR participant to train at the NTC.

The 2-116th Cav and 3-116th Cav changed the Guard's training paradigm by completing most of Tank Table VIII qualification during drill weekends and beginning Tank Table XII qualification by day three of AT. In the past, it took almost the complete AT period for crews to qualify on Tank Table VIII, and rarely did platoons shoot Tank Table XII. During this annual training, all platoons shot Tank Table XII. It was the soldiers' dedication to the SIMITAR's Abrams compressed gunnery program that made the difference.

The gunnery program balances training time at home station, with simulation devices, with live-fire training time on the range. It also balances gunnery and ma-

neuver tasks training. The devices used are the Conduct-of-Fire Trainer (COFT), Simulation Networking system (SIMNET), and Abrams Full-crew Interactive Simulation Trainer system (AFIST).

AFIST was specifically designed by the Guard so full crews can train on precision gunnery skills and basic maneuver skills at the unit armory, or wherever unit tanks are stored. Each crew member trains at his station within the tank, so a high level of training realism is achieved.

The AFIST computer simulation system is attached to an M1A1 tank and is a simple matter to install. [ed. See *ARMOR*, March-April 1996.] Installation requires only one crescent wrench and one Allen wrench.

The optimum use of AFIST at home station requires four systems to allow for the entire platoon to train together. While one platoon trains on the AFIST, the other platoons rotate through maneuver training using SIMNET, or COFT, or tank maintenance training on actual tanks, and individual crew skills training.

The Guard's training paradigm was also altered by the 1-163rd Infantry Battalion, which was just organized and completed its Bradley New Equipment Training last year. This year, it completed most of Bradley Table VIII qualification during drill weekends and conducted Bradley Table XII midway through AT. It was the first time Bradley Table XII was performed at the Orchard Training Area.

The 1-163rd Mech Battalion's achievement was due in large measure to their innovation and dedication to the SIMITAR's Bradley compressed gunnery program. This program closely follows the Abrams compressed gunnery program with one exception. The Bradley program uses a Full-crew Simulation Trainer which includes the dismounted infantrymen (Bradley-FIST) system.

This system did not exist until the SIMITAR trainers identified the need for a simulation device that simultaneously trained mounted and dismounted troops. In the past, mounted troops went to one location and the dismounted troops went to another location for training. Now, Bradley-FIST allows both mounted and dismounted troops to train together in

one location. It is the only simulation device like it in existence.

The Bradley-FIST is appended to a Bradley that is integrated with the Engagement Skills Trainer (EST). The EST is a computer simulation device that allows dismounted troops to engage targets portrayed on a video screen.

The resourceful 116th Cavalry Brigade again broke new ground by field testing an innovative Combat Service and Support version of Janus. It was created at the request of the Brigade's BMMO and S-4. The brigade has a resident Janus programmer who improves and adapts the Janus database system to meet the brigade's needs.

The refined war simulation program now includes an extensive service and support database. This addition allows commanders to use the program to train units in combat maneuvers as well as providing food, fuel, ammunition, parts, equipment, personnel replacements, and medical support to combat units.

The CSS "play" begins when commanders request supplies and evacuation of injured personnel and damaged equip-

ment. Each commander (down to company level) can actually "see" the extent of damage to his or her company via icons on the digital battlefield display. Icons represent items such as broken vehicles and injured personnel. Depending on what they see, leaders generate the necessary equipment and personnel reports and send them through the proper channels. Commanders and staff can also watch each individual support elements move on the simulated battlefield and witness the results of their decisions, just as they would in reality.

The training achievements of the Snake River Brigade are closely monitored by the National Guard Bureau. With money and training areas becoming less available, all National Guard units will need to learn how to utilize these scarce resources better. The programs and strategies developed in the Snake River Brigade, through SIMITAR, will help these units meet the challenge of "doing more with less."

(This article was prepared by 1LT Dia Logan, 116 CAV PAO.)

49th ARMORED DIVISION

Overseas Deployments, Modernization, And a Mobilization Study...All Part of The Texas Guard's Training This Year

FY97 Overview: FY97 was an exciting year for the 49th Armored Division. With shrinking training budgets, division training had to be innovative and cost-effective. The division commander, MG Federico Lopez III, tasked his commanders and staff to "Do Less Better," instead of doing more with less. To this end, the decision was made to leverage armor and infantry training at platoon and company team level with simulation whenever possible at the crawl or walk stages of training. Several units conducted either weekend training or annual training at Ft. Knox to take advantage of the excellent simulations available there. The division also took advantage of opportunity training whenever possible to help decrease OPTEMPO requirements, saving these dollars for gunnery and mission training.

MOB Study: The division staff was very busy in early FY97 with a staff study sponsored by the Institute for Defense Analysis. The study was to determine how long it would take to mobilize

and train the division using a set of assumptions established by the Institute. Using all current Army doctrinal manuals and an MS Project program to determine the critical path for accomplishing all training down to platoon level, the study determined that the division could be prepared for deployment within 134 days. This study was presented to the Undersecretary of Defense for Reserve Affairs and submitted for consideration in the Quadrennial Defense Review. A validation of the study results is being considered for FY98.

Modernization: New equipment fielding and MTOE changes were numerous in FY97. The Bradley Fighting Vehicle NET Team completed fielding of the M2 BFV to 1-141 IN, making the 36th Brigade completely modernized with the M1 Abrams and the M2 BFV. The division cav squadron began its M3 fielding in July and is scheduled to complete the NET in May 98. The remaining two infantry battalions will complete M2 fielding by August 98. NET for the M1A1 is

currently scheduled for February 98. In FY97, the division gained an engineer brigade and an MI battalion. It also fielded the upgraded version of the Integrated Fire Support Automation System (IFSAS).

Overseas Deployments: The division was very active overseas in FY98, including two deployments to Bosnia, several overseas deployment training (ODT) missions to Germany and an LRS deployment to Australia. In November 1996, sections of Btry E, 133 FA (TAB) deployed to Bosnia, followed in July 1997 by an FSE (Fire Support Element). In March 1997, members of the LRS Detachment, 143d IN deployed to Australia and conducted an airborne insertion into country while participating in Operation Tandem Trust, a joint exercise with ARNG, USMC, and Australian troops. One company from 3-112 AR, two companies from 3-144 IN, and two CSS companies deployed to Germany throughout FY97 to support various

ODT missions at Hohenfels and Grafenwohr.

CONUS Deployments: The engineer brigade was busy in FY97, sending elements of the 111th and 386th EN Battalions to California for annual training to work with JTF6 on Operation Southwest Border, building a fence to stop drug trafficking. The 111th EN Battalion also sent one company to the NTC to support the 11th ACR.

Gunnery Training: During FY97, the division conducted crew gunnery qualification in the M1 Abrams, AH64 Apache, and AH1F Cobra. Three units were scheduled to qualify TTVIII in the M1. They were 1-124 Cav, 1-112 AR, and 5-112 AR. In addition to M1 gunnery, the 1-124 Cav deployed its air cav troops to Ft. Bliss to fire AH1F gunnery. The two tank battalions followed an aggressive training plan to fire TTVII, VIII and XI (TWGSS), all during annual training. Both battalions were very successful in TTXI, and the TWGSS system proved to be an outstanding training simulation. In addition to testing the TWGSS, all of the TTXI scenarios and evaluation packets were developed using the Training Exer-

cise Development System (TREDS). The units conducting TTXI moved directly into SIMNET when they finished TTVIII to conduct a TTXI in simulation prior to doing it on the range. This combination was very effective at providing recovery time for the crews, as well as time for equipment maintenance. The 1-149 AV fired AH64 Apache gunnery at Ft. Hood with 1-4 AV from 4th ID. This relationship proved to be mutually beneficial to both units, and we expect a continued AC/RC partnership between these units.

Lanes Training: The 36th Bde conducted platoon lanes training at Ft. Hood in June with 3-141 IN and 4-112 AR. This training utilized the PRIME system in the lanes as the run stage of the training, with SIMNET as the walk stage. This combination of virtual and live training saved OPTEMPO costs while still providing quality training for the units. 3-112 AR conducted its entire annual training in SIMNET at Ft. Knox in April 97. Once again, the OPTEMPO saved by simulation went toward successful completion of other lanes training and gunnery.

ARNG Unit Support: The 49th Armored Division has the mission to provide OPFOR support to the 256th Bde, LAARNG. In FY97, the 2d Bde provided two balanced co/tms, one from 2-112 AR and one from 1-142 IN, to conduct this mission at Ft. Polk, La. In December 1996, the division headquarters sent a division response cell to Ft. Polk to support the 256th Bde BCBST.

Mil to Mil/State Partnership for Peace: Texas has the distinction of having the highest population of Czech descendants of any state. Because of this, the Texas Army National Guard was selected as the partner state for the Czech Republic in the State Partnership for Peace and the Mil to Mil exchange program. In FY97, the 49th Armored Division conducted 12 exchange visits with the Czech Army and Civil Defense organization. These exchanges primarily focused on staff procedures, chemical training, and field artillery. This partnership has helped the Czech Military understand our staff and training procedures in preparation for their eventual admittance to the North Atlantic Treaty Organization.

SOUTH CAROLINA ARNG

Armor, Cav Components of 218th HSB (Mech) Train for the NTC While Unit's HHC Takes the Cake in Army-Wide Competition

This year's training focused on preparing the 1-263d Armor for deployment to the National Training Center, Fort Irwin, California, in the Year 2000. Training was supported and evaluated by a variety of units IAW the new (GFRE) Ground Force Readiness Enhancement concept described in AR 350-2. The battalion Resident Training Detachment (RTD) provided lane training, and the 2d Regional Training Brigade (RTB) evaluated task proficiency. The proficiency of specified platoon collective tasks for TY-97 were derived from the requirements of the FORSCOM NTC Certification Matrix (Appendix 1). The matrix identifies training proficiencies that must be met in prescribed time frames in order for enhanced brigades to receive approval for attendance at the NTC.

Training Year 1997 was an eventful year for the South Carolina Army Na-

tional Guard armor force. The 1-263d Armor and tank platoons from Troop B, 202 Cav — both elements of the 218th HSB (M) — conducted aggressive tactical platoon lane training, culminating in the firing of modified gunnery on Tank Table VI. Meanwhile, the combat service support personnel of HHC, 1-263d Armor were heavily involved in a national competition for the Philip A. Connelly Award for Excellence in Army Field Feeding.

The first two quarters of Training Year 1997 saw aggressive platoon maneuver training, with platoons executing collective tasks that supported the company METL. An intense combination of SIMNET training and mounted tactics culminated in an external evaluation by the 2d RTB during Inactive Duty Training (IDT) in March. The evaluation became an excellent tool for gauging the

strengths and weaknesses of the junior officers and their platoons. The training began with rehearsals during Readiness Management Assemblies (RMAs)/Training Meetings. The platoons conducted their next series of IDT periods mounted, on HMMWVs the first weekend, and on M1A1s the following weekend to provide more realism. The platoons spent the next IDT in the SIMNET to sharpen tactical skills, with the 2d RTB's evaluations on the following IDT. Although the objective of the evaluation was to achieve a "T" or "P," the key issue was the realization that effective management of crew duties and responsibilities lead to a successful evaluation. The success of the platoon lay in the hands of the noncommissioned officers, from the gunner to the platoon sergeant.

The annual training (AT) period was devoted to platoon maneuver training

and selected company/team tasks. The 15-day AT period included one day of deliberate company/team breaching, one day for CSS certification lanes, a day for platoon defense training; and one day to train platoon attack. Five evaluation days included three days of company/team STX, one day for a platoon movement to contact STX, and one day for a platoon defense STX. The remainder were travel and vehicle/personnel maintenance days.

Offensive and defensive STX evaluations would have produced more "T" and "P" ratings if the training had been conducted on the day prior to the evaluation. However, the limited number of trainers and other resources would not support this demanding training matrix. Future operations should allow for offensive training lanes followed by offensive STX evaluations, and defensive training lanes followed by defensive training STX evaluations.

Annual training in 1997 allowed company/team commanders to integrate combat multipliers into their planning and execution. Engineer and FIST assets greatly enhanced the skills of commanders and platoon leaders. The ultimate test was the deliberate breach operation.

One of the highlights of the 1-263d Armor training year was winning the Philip A. Connelly Award for Excellence in Army Field Feeding. HHC, 1-263d Armor had competed in the annual event since 1993. The unit received the coveted trophy in August during ceremonies in Baltimore, Maryland.

The Reserve Component training goal is to produce a force trained to Army standard that can promptly mobilize, achieve METL proficiency at the level organized, effectively and efficiently deploy, engage the enemy and win anywhere in the world, and redeploy on order. The armor force of the South Carolina Army National Guard has adopted this goal and strives for its implementation since its National Training Center Rotation in 1986 and its mobilization during Operation Desert Shield/Storm.

(Article prepared by CPT Rayford J. McDowell, commander of D-1-263d Armor, SCARNG.)



An M1A1 Abrams fires at the Miller Complex range.

Photos: SPC Clinton Wood

MINNESOTA ARNG

Drive In, Taxi In, or Drop In... Camp Ripley Ranges Are Flexible

by Major Pauline Geraci,
PAO, Camp Ripley, MNARNG

What started out as a single farm field in the 1930s is now one of the finest training range complexes in the United States, a range complex that units dream about. A unit can literally drop in by parachute and start training, or it can land in a C-130 at a nearby airstrip, check out tanks, and commence maneuvering. These are a couple of the options available at the Miller Range Complex, located at Camp Ripley, Minnesota.

The support the Camp Ripley staff provides on the range is what makes it a site worth traveling to. "We try to do a better job to suit the needs of the unit training here," commented MSG John Stewart, Range Control NCOIC at Camp Ripley. "What makes Camp Ripley a little better is the support; logistically, everything is closer together. The M1 tanks are right here, so a unit could fly right in, draw its tanks, and start firing. The logistics support package is really good, especially considering the shrinking training dollars. This makes Camp Ripley more economically viable for the unit," added Stewart.

Another feature that Camp Ripley can provide is more targets. "We can put up a range anywhere," stated SPC Greg Dezurik, range mechanic.

The Miller Complex design evolved from the training requirements of the modern combined arms team made up of the tank (M60A3 and the M1 Abrams), M2/3 Bradley Infantry Fighting Vehicle (BFV), and the Attack Helicopter AH-1 (Cobra). It now consists of four ranges: The West, East, North, and Center ranges.

The West Range is a fully computerized Multi-Purpose Training Range (MPTR). The range covers an area approximately 1,600 meters wide by 3,000 meters in length and is a "state-of-the-art" MPTR. Units can fire Table VII or Table VIII using HEAT or sabot ammunition. Tactical maneuver training can be conducted on a firing course in a woodland setting. Infantry elements can utilize this type of terrain to conduct Live Fire Exercises (LFXs) and Situational Training Exercises (STXs). The target systems also support two lanes of 50 cal. machine gun qualification and a 1/2-scale range capability.

Equipment at the West Range includes 22 hard-wired Remote Electronics Target System (RETS) target lifters, 20 portable target lifter emplacements, and two Armored Moving Target Carriers (AMTC). The target systems include a variety of enhancements, such as thermal targets, hostile fire flash, and smoke simulators. The target area supports the firing of all non-dud-producing ammunition.

The West Range, like the other three ranges, offers excellent support facilities. Each range has an all-weather tower equipped with radios, telephones, thermal sights, and simple weather stations to record barometric pressure. Each tower also has video capabilities for sight and sound that can be replayed for after-action briefings in all-weather classrooms. In addition to the tower on West Range, there are two Mobile Conduct of Fire Trainer (MCOFT) pads with integration shelters. Within walking distance is a company assembly area that has a two-bay covered maintenance shelter. The North Range is a multipurpose range that covers an area approximately 1,000 meters wide by 1,700 meters in

depth. North Range is laid out to favor defensive operations, but offensive missions can be accomplished as well. The range can be used as the starting point for gunnery operations. North Range provides training on gunnery skills or tables that can be accomplished on a 1/2-scale range. Firing of sub-caliber devices and machine guns up to .50 caliber can be used for LFXs. STXs can be set up using the Multiple Integrated Laser Engagement System (MILES) devices with Laser Target Interface Device System (LTIDS) attached to the targets to register the simulated target hits.

Targetry equipment included on the North Range includes portable, radio-controlled target-lifting systems that portray infantry and armored vehicles. The target systems offer a variety of enhancements, to include thermal targets, hostile fire flash, and smoke simulators.

In addition to gunnery operations, infantry units can conduct training on squad/platoon level STXs using MILES, or conduct LFXs and integrate indirect fire into an adjacent impact area.

The Center Range is best suited for gunnery, starting with screening and proceeding through Table VII, squad-platoon level offensive and defensive LFXs, as well as TOW missile firing. Center Range covers an area 800 meters wide and 3,000 meters in length. The range layout provides for long offensive runs of up to 900 meters with engagements up to 2,700 meters. The target configuration provides a minimum of two emplacements every 100 meters for engagement opportunities from 100m to 2,800m. The target array supports gunnery using MILES, 1/2-scale sub-caliber or full-up gunnery using both HEAT and sabot ammunition. Infantry elements can conduct squad-platoon LFXs or MILES STXs on the range. In addition, engineers for digging operations can be integrated into the scenario. The target systems include a variety of enhancements, such as thermal targets, hostile fire flash, and smoke simulators.

Camp Ripley's premier training range is the East Range. According to SGT Chad Daniels, gunner for A Company of the 1st of the 94th Armor from Hibbing, Minnesota, "I think it's a great range. There is a lot more depth and a lot more possibilities. It's so multi-purpose."

East Range is a fully computerized, state-of-the-art range that combines the capabilities of Table XII gunnery and an infantry platoon battle course. The focus of the Camp Ripley staff for East Range is to provide the most realistic battlefield environment possible for STX, LFX, and Combined Live Fire Exercise (CALFEX) exercises using MILES or live ammunition. This can be accomplished through a unit scenario. The unit provides the scenario to Range Control and they proof it out. An added feature to the scenario proofing is the secondary target. Normally the unit chooses a primary target but Camp Ripley goes one step further to provide a secondary target just in case there is a problem with the first. "This enables the



MEDEVAC landing zone at the Miller Range Complex, Camp Ripley, Minn.

unit to keep going without stopping to see what is wrong with the target. Units only have so much time to get soldiers qualified, so time is of the essence," commented Stewart. The main area of concern is safety. "If we can safely do it, you, the unit can do it," remarked SGT Richard Green, Shift Sergeant, Range Control.

The East Range target and maneuver area covers approximately 1,000 meters wide by 2,300 meters in depth. Four fire and maneuver trails 600-900 meters long are furnished with 17 tiered defensive positions. The four trails are divided into two lanes, with two trails each. Each trail is capable of Table VIII qualifica-



A C-130 lands at Camp Ripley, Minn.

tion. When all four trails are used, Table XII platoon qualification, various LFXs, STXs or other tactical tables can be accomplished.

Rolling terrain on the East Range enhances the training offered to infantry squad and platoons. The range has various grouped military objectives that can be used for offensive and defensive operations. Training realism is enhanced by bunkers, trench lines, pop up infantry, and an assault/defend house. All targets can be thermalized. In addition, demolition can be done like the Canadians did last year using Bangalore torpedoes to breach concertina wire. Also, call for fire can be simulated using flash-to-bang simulators. These features, capabilities, and target array offer a challenging and wide variety of options for the trainer.

The East Range also is equipped with adjustable hit sensors for live fire or (LTIDS) for use with MILES. Units can also request through-sight video, which is attached to the firing vehicle. Whatever the gunner sees is recorded on tape in the tower for after-action reviews. Support facilities include a tower with two levels equipped with radios, telephones, VCR, camera, and a thermal sight for efficient tower operation. The all-weather support building provides a large multipurpose room, AAR debrief room, and latrines. A MCOFT pad with an integration shelter is on site. In addition, a helicopter pad for medical evacuation is located approximately 400 meters south of the range.

Conducting realistic training is a challenging business, and so is providing it. Camp Ripley more than meets that challenge by providing first-class training ranges and staff support to units.

If you would like further information about the Miller Complex, call Operations at DSN 871-7346 or commercial (320) 632-7346. You can also write for more information to: Post Commander, ATTN: Range Control, P.O. Box 150, Camp Ripley, Little Falls, MN 56345-0150.

A Year of Training and New Equipment Transition

As the Armor component in the Georgia National Guard's 48th Infantry Brigade (M), the 1-108th Armor Battalion successfully completed another year of challenging training focused on our vision of what the unit should look like on Mobilization Day. Our goal was to train the battalion so that it could effectively make a seamless transition to active duty, if called, with soldiers as equally skilled as their active Army counterparts.

Highlights were a successful gunnery cycle, effective integration and training on new equipment like the 120mm mortar, and the scout platoon's transition from Bradleys to HMMWVs armed with the 40mm grenade launcher.

The battalion's mission is to prepare for mobilization and deployment to a contingency area of operations as part of the 48th Infantry Brigade, GA NG.

Our vision focused on a unit manned at 100% or better with soldiers who are deployable, competent, and confident in their bedrock skills of fighting their M1A1 Abrams tanks at the crew, section, and platoon level. The battalion commander stressed training the objective, measurable skills necessary for success, a goal we reached with the help of heavy use of the UCOFT, nearly double the UCOFT time logged last year. The M-COFT and the unit A-FIST simulations were also invaluable in meeting our training goals. Each of our armories had M1A1s available to our soldiers, which gave depth and flexibility to our hands-on training.

The training also reflected lessons learned in our 1996 NTC rotation and efforts to remedy shortfalls that were revealed in that exercise. We reformatted our tactical SOP and trained hard in employing it. We needed to improve planning and preparation for decontamination operations, developing detailed



Georgia Guard M1A1s roll through the pines on maneuver training.

plans and fully integrating the chemical officer/NCO into staff planning. MOPP discipline also needed to improve. Similar fixes were stressed to upgrade our air defense preparation and fire support planning.

Although our maintenance platoon personnel put in a strong performance, maintenance at the crew level needed improvement. We cross-attached with maintenance personnel from our infantry battalion, which was not equipped with BFV parts, and by cross-attaching early, we were able to work through this issue and establish effective PLLs.

As many units discover in the intensive training at Fort Irwin, battalion staff plan-

ning moved too slowly, with the staff taking too much time to produce a product. We established upfront, habitual relationships with special staff officers (FSO, ADA, Engineers) as a way to help them develop as a more effective combined arms team.

We introduced a new logistics SOP which expedited logistics planning, but in practice, logistics execution still took too long. We needed to better incorporate CSS battle tracking into Janus exercises at home station.

The payoff came at Fort Stewart, Ga., where we successfully completed maneuver lanes training and Tank Table VIII qualification gunnery.

The mortar platoon, making its transition to the 120mm weapon, is now fully mission capable on this armament.

Although a seamless transition to active duty is a "road that never ends," unit leaders felt that the battalion's soldiers have developed into dedicated, motivated soldiers fully capable of employing the tools of their profession. Our mission continues.

Strike Swiftly!



The 1-108th Armor Battalion's scout platoon transitioned this year to the HMMWV with 40mm grenade launcher.



Tanks and Bradleys from the 3d ACR's C Troop teamed up with 101st Airborne "lightfighters" in a recent JRTC rotation.

Light and Heavy Work Together at JRTC

by Scott Seyler, Ft. Polk PAO Intern

Recent missions have made versatility and adaptability watchwords of the modern Army. A wide variety of low-intensity conflicts and varied peacekeeping duties have put a premium on the Army's ability to quickly mesh diverse units with divergent missions and highly specialized equipment into finely calibrated forces.

The Joint Readiness Training Center's March rotation reflected this new emphasis. C Troop, 1st Squadron, 3rd Armored Cavalry Regiment, a key element of the Army's only active "heavy" ACR, linked up with the 2nd Brigade, 101st Airborne Division from Fort Campbell, Ky., to forge a multifaceted brigade task force capable of some serious firepower.

"Integrating light and heavy forces is the direction the Army is going, and the JRTC was the best possible environment to prepare us for our most probable role: to support smaller, low-intensity operations. There are not many places that can field the size forces that we are designed for on a battlefield at any given time," said C Troop Commander Captain Thomas Cipolla.

C Troop, bolstered by M1A1 Abrams tanks and Bradley Fighting Vehicles, normally spearheads III Corps operations. Integrating into the 101st was a unique challenge, Cipolla said.

"The 3rd ACR is normally the reconnaissance and security element for the entire III Corps. Except for any Special Operations forces, we are the first ones in," explained Cipolla. "We have to go out and find and figure out what the enemy looks like."

The exercise marked the first JRTC stint for nearly all of the soldiers of C

Troop, and performing detailed reconnaissance for an unfamiliar unit in

wooded terrain greatly tested the heavy unit's combat mobility.

31st Separate Armored Bde.

M1A1, Bradley Modernization Highlight Alabama Unit's Training Year

The 31st Separate Armored Brigade, headquartered at Northport, Alabama, fielded several new weapon systems this year and met most of the training requirements of an enhanced brigade while spending 25 percent less than an enhanced brigade's budget and doing without the typical enhanced brigade's complement of full-time support personnel.

The brigade had quite a year if only for all of the new weapons systems it fielded. Major end items new to our soldiers were the M1A1, along with the Bradley Fighting Vehicle, the 120mm mortar, and the Palletized Loading System.

The 31st's six battalions include 1-167 Infantry, 1-131 and 1-152 Armor, 1-117 FA, the 31st Support Battalion, and — as of this year — the 145th Engineer Battalion, which was added to the task organization in August. The brigade also includes two separate companies, Troop E Cav and HHC HQ.

The infantry battalion transitioned to the Bradley, providing new equipment training (NET) for 58 crews and 23 alternate crews, while also fielding the 120mm mortar. In April, the unit conducted Mobile Conduct of Fire Training (MCOFT) at Pelham Range in Anniston, Alabama. The two armor battalions fielded the M1A1 and qualified on Table

VIII, with 1-131 shooting at Camp Shelby, Miss. and 1-152 at Eglin AFB, Fla. Both unit's mortar platoons also transitioned from 4.2" mortars to the much more capable 120mm mortar. The 1-152 also conducted close combat training at Fort Knox.

Troop E Cav was part of the same M1A1 fielding as the rest of the brigade and shot TT VIII at Elgin AFB, while 13 crews completed Bradley NET at Camp Shelby. The 1-117 FA Bn. completed NET on the Interim Fire Support Automated System, fielded the PLS, and completed Tables III through V. The brigade's new addition, the 1-145 Engineers, spent annual training in MOS qualification after joining the brigade.

Subunits also supported several overseas commitments. The 31st Support Bn., which supported the brigade's year-round training missions, also supported the CMTC at Hohenfels, Germany, while the HHC's MP platoon supported a mission in Panama.

Other activities included Stinger qualification for the ADA section at Fort Stewart, Ga., support of a 5th Corps ODT, a BCBST at Fort Leavenworth, Kan., and a BBX at Camp Shelby.

(Information for this report came from CPT Danny Higdon.)



Report from Armor Branch

A Branch Chief's After-Action Report:

Managing Career Progression In a Smaller, Higher Tempo Army

by Colonel Mark Hertling

I learned a lot about the personnel business during my two years serving at Armor Branch; but more importantly, I learned a lot about the people who make up our force. I will primarily focus on three elements: what's going on in each of the grade plates, lieutenants through colonel; two new programs in the personnel arena; and finally, some comments concerning professionalism in the Armor Force. Interspersed will be recommendations concerning other issues, but the majority of comments will address generalities versus the intricacies of personnel administration.

Since the Army began downsizing in the early '90s, Armor has taken significantly more cuts than other branches. While the rest of the Army was reduced by about a third, we were losing over 40 percent of our Armor and Cavalry operational flags. We were once one of the largest branches; today, we are the third smallest combat arm (Special Forces and Air Defense Artillery are smaller). Without debating either the disadvantages of these reductions or how our size may influence the major warfighting capabilities of our Army in the future, the repercussions of these reductions for each of the grade plates — second lieutenant through colonel (and beyond) — is noteworthy. For example, without as many Armor and Cavalry units, the opportunities for command and branch qualification — learning the trade and serving in

the jobs that attracted most of us to Armor — are reduced. In 1990, Armor had 30 brigade-level commands; today we have 16. That same year, we had 91 tank battalions or cavalry squadron commands with nearly 200 branch-qualifying positions for majors; we have 47 battalion-level commands and only about 90 positions for majors in 1997. During Desert Storm, Armor had 422 company or troop command opportunities for our captains, but today we only have 239 guidons.

Knowing this, we face a very precise challenge: with a smaller force and the same requirements (some would say we have more requirements, due to TDA structural overhead, AC/RC requirements and a growing joint bill), we must continue to access the best people; we must efficiently manage careers to secure the professional development they need and which will contribute to the combat readiness of the force; and we must ensure that Armor is represented at the correct level in assignments that make a difference. Here are some examples of how that is done at the different grades:

Lieutenants. Maintaining a solid young Armor officer corps is essential to the health of the branch. Lieutenants are truly those at the point of the spear; therefore, how they are brought into our culture is critical. To access the right Armor lieutenants, we need the right role

models at the various ROTC programs and at West Point. With strong Armor captains, majors, and lieutenant colonels assigned to these institutions, we ensure the Armor view is established early in those who will chose our branch and who will lead Armor units on the future battlefield. In most instances, all those assigned to train and influence these future Armor officers combine exceptional tactical experiences with strong scholastic backgrounds, and these individuals have done exceedingly well at getting some of the best and brightest young men interested in our branch. Statistics over the last three years have shown a strong accession rate for Armor from Cadet Command, with Armor consistently ranking in the top three preferences at the majority of schools. Additionally, over the last two years, Armor has been one of the top two combat arms of choice (the other being aviation) during branch selection at the Military Academy. The result is heartening: the best cadets in ROTC and USMA are making Armor their first choice, and the officers assigned to those programs to "recruit" for our branch through their example are making the big difference in Armor receiving the very best of the new breed.

However, there is a down side in the area of accessions: minority cadets are not choosing Armor at the rate we would like. We started some initiatives to im-

prove this shortfall, and in fact there has been slight progress in increasing our numbers during the last few years. But frankly, we just do not currently have enough minority officers to act as role models and mentors. Specifically, we do not have the ability to assign Armor officers in the numbers we would like to the various ROTC programs and USMA that would provide us with a stronger recruiting base so that African-American and Hispanic-American cadets chose Armor. So, until this situation improves, we must depend on ensuring a good experience for those minority cadets attending Cadet Troop Leader Training and during the ROTC/West Point Summer programs at Fort Knox and Fort Lewis.

Accessions are important, but professional development is where we grow our lieutenants. There are three programs that influence the development of our young officers that many may not know about: 1LT to Korea, Branch Mix Advance Courses, and Tank-Cav Round-out.

As many know, the normal tour length for most officers assigned to Korea is one year; the majority of 2LTs assigned to that theater leave just prior to their promotion. With a shortage of 1LTs, the specialty platoons and executive officer positions in this important area of operations had, in the past, gone unfilled. But a few years ago, Armor Branch began giving officers who had already completed a 24-month tour at a FORSCOM installation the opportunity to serve in these positions. By doing so, these officers moved directly into a key organizational slot in one of the armor units in Korea. They were also able to complete an overseas tour prior to attending the Advance Course (key, as the reduction of forces in Europe means a decreasing opportunity to serve overseas after attendance at the course). And, upon return from Korea, many of these officers provide up to a year service in the training base at Fort Knox prior to attending the Advance Course. This benefits the training units, as they receive the advantage of experience, and it further adds to the professional development of the officer. Bottom line: This is a great program.

Between 36-48 months of service, all officers are scheduled to attend their next round of professional military schooling. Attendance at the Advance Course has several requirements. Primarily, the officer must be in a promotable-to-captain status. Additionally, in early 1996, LTG Holder brought back the mixed advance course program. In this program, Armor is asked to send either one or two representatives to the Infantry, Field Artillery, ADA, Engineer, and

Aviation Advance Courses. While many volunteer to represent Armor at another course, the branch is always looking for recommendations from commanders as to who are the best candidates for this program. With the new and significant changes concerning the follow-on attendance at CAS3 from the Advance Course, the formal professional military education of each company grade officer is concluded during this break between the lieutenant and captain years.

“...There are some in our ranks who disagree with the philosophy of using alternating assignments as a tool for professionally developing our young officers in the branch. In my view, they need to further analyze their rationale...”

Finally, one of the programs that is a priority concerns the mixing of the armor and cavalry experiences of young officers; we attempt to avoid “single-tracking” in either armor or cavalry as we look to assign our officers. For example, there are many factors that determine follow-on assignments of officers out of the advance course (joint domicile concerns, operational requirements, overseas equity, type of unit, etc.), but Armor Branch pays particular attention to mixing experiences. If an officer had served in a Cavalry unit overseas while a lieutenant, Branch attempts to ensure a tank assignment in the continental United States as a captain. Similarly, if he had served with an Armor battalion in CONUS, Branch attempts to get him to a cavalry squadron (usually a tougher proposal, given the number of cavalry organizations in the force) either OCONUS or CONUS. Most in Armor Branch are supportive of this policy, but there are some in our ranks who disagree with the philosophy of using alternating assignments as a tool for professionally developing our young officers in the branch. In my view, they need to further analyze their rationale, as a single-track policy hurts our branch and stunts the professional growth of the officer.

Captains. The sheer number of requirements and the importance of the jobs held at the grade of captain make this the toughest grade to assign. During my two years at Armor Branch, we had tremendously talented captain assignment officers (AOs) working these assignments, even though their task was not

well understood, open to misinterpretation, and extremely difficult.

Principally, captains graduating from the Advance Course are assigned to locations where we know they can command soldiers as quickly as possible, and sometimes that does not coincide with the “desires” of the officer. Continuing the model discussed earlier, suppose there is an officer at the Advance Course who has just completed 40 months with a tank unit in Germany. During his interview with the assignment officer at the Advance Course, he states he wants to expand his professional development with an assignment to a cavalry unit, preferably the 3ACR at Fort Carson. However, a look at the charts for 3ACR (which the captain AOs manage at PERSCOM) shows the next troop command opening 16 months after the officer arrives. As an alternative, the 2ACR appears to have earlier opening command opportunities. Considering needs of the Army and professional development requirements, this assignment becomes a near-perfect fit — tank to cav, OCONUS to CONUS, allow for earliest possible command opportunity. Obviously, the only factor not considered is the officer’s desire for location, but meeting professional development and the needs of the Army are always the priority in assignment considerations.

One of the more misunderstood policies is the company command policy directed by the Chief of Staff of the Army. Because of the overwhelming need for branch-qualified captains, that policy states that officers should command for 18 (+/- six) months, a span considered essential for professional development, but a period within which battalion and brigade commanders have the flexibility to determine when that officer is prepared for other challenges, or when operational requirements might necessitate either early or later departure. Too many senior commanders focus only on the “18-month” requirement, attempting to plan company/troop changes of command to the day, when that was not the intent of the policy.

Additionally, the CSA believes a select group of officers should be afforded the chance to command twice; the policy states that those “heavy” commands are limited to the headquarters unit within the battalion or squadron, and the division headquarters company. Additionally, the CSA says the total time in command will not exceed 24 months. Those selected for command of a second unit must be approved by the Branch Chief and the Combat Arms Division Chief at PERSCOM. The reason: ensure only those with the best files are afforded this

opportunity and prevent future career or timeline conflicts, especially with those heading toward functional area schooling or assignment.

Perhaps the toughest issue at the captain grade plate is the assignment of those who are branch qualified (BQ). With 239 guidons at the company level, and with command tours varying between 12 and 24 months, we found that we "produce" approximately 115-130 BQ captains per year. However, the Army's appetite for those who are now uniquely qualified is much larger. Observer/controllers at the various training centers, small group instructors at the service schools, West Point faculty, ROTC cadre, USAREC command, functional area assignments, and Acquisition Corps designations all need quality captains.

Since 1990, the initiation and growth of the Congressionally-mandated Active Component to Reserve Component (AC/RC) training program has drawn the most BQ captains. Armor has been a priority branch — we have now leveled-off with 154 officers in designated positions — because of the number of Armor units in the reserves. Our officers (and NCOs) assigned have done a magnificent job improving the readiness of the Reserve Component, and the great majority assigned have reported positive experiences. But even though assignment to the program has provided both professional development and improved readiness, Armor Branch and the Armor Center worked hand-in-hand to provide rationale — to the highest level of the Army — to reduce the manpower requirements of the AC/RC program. It appears that is forthcoming.

Majors. Placing majors into branch qualifying positions is critical. However, the Military Education Level, 4 (MEL-4) distribution requirements and the Officer Distribution Plan (ODP) both significantly influence the branch's ability to assign majors to the limited number of BQ positions now available in our Armor and Cavalry units.

Each year, between 45-50 Armor officers graduate from the Command and General Staff College, and the Major's AO distributes these officers according to needs of the Army and the officer's professional development requirements. Given that there are 93 S3/XO positions in the various TOE and TDA units in the Armor Force, and most majors are assigned to any given location for two years, BQ opportunities are quickly filled. Additionally, the demands of "fair-sharing" other commands with officers in the grade of major (various staffs,

TDA organizations, functional areas, AC/RC, etc.) under the ODP are such that officers who are not MEL-4 qualified — either through the resident or non-resident course — are assured of not being assigned to a unit in one of the desired BQ positions (since the ODP for non-troop units demand a fair share, and this subsequently impacts on the ODP at troop locations). For that reason, Armor Branch has repeatedly suggested that officers who have not been selected for the resident CGSC after the first look enroll and complete the non-resident instruction. While not guaranteeing an immediate assignment to a branch qualifying position, chances improve significantly.

Numerous officers whose performance at the major's grade indicate battalion command potential will receive offers for duty in joint headquarters after becoming branch qualified, for two reasons. Primarily, if the officer is eventually selected for battalion command, the major years are the most opportune time to receive joint qualification. Secondly, joint experience gained during the major years will allow the officer to receive later assignments in joint critical billets, those more senior assignments that require previous expertise in joint operations. The point is this: becoming "joint qualified," while necessary for reaching flag rank, is not a requirement for all officers. The AOs at Armor Branch are very selective in placing those with the most potential in these joint billets, and will discuss the rationale for such with each officer.

Lieutenant Colonel. LTCs who wear Armor brass are usually interested in only one thing: What is my potential for command? While understanding that command is considered by most to be the pinnacle of success — and it is that position most should strive toward — availability of these key positions in Armor is limited, and those who are selected are an extremely fortunate and privileged lot. Let me explain.

For the FY98 Command Board, Armor had 27 available commands. There was a total of 217 eligible for those limited number of opportunities, and 71 officers were considered for the first time. Of those eventually chosen, several were second-, third-, and one was a fourth-time select; in effect, all files received equal consideration. Being intimately familiar with all of the files, and knowing most of the officers selected, it is my opinion that we have extremely capable and worthy officers scheduled to command our nation's soldiers in 1998. But I will also contend that we had a boatload of great officers not selected for com-

mand who will continue to serve the Army and the branch in other important areas. The issue boils down to numbers of flags available and the size of our force. The numbers for the odd-numbered fiscal years are even more restrictive; for FY99, there are a mere 19 armor battalions and cavalry squadrons opening.

However, two new initiatives will add to that number of command opportunities. The CSA recently approved a recommendation made by the OPMS XXI study group to add USAREC battalion commands to the command selection list (CSL). As with garrison and base support battalion commands, USAREC commands will be distributed among branches to level command opportunity; Armor should receive at least a few of these units. The CSA has, in effect, made clear the importance of selecting quality officers to command USAREC battalions and lead officers and NCOs in building tomorrow's Army. Additionally, the CSA has also approved a test program to place active component officers in command of National Guard battalions under the AC/RC program. This test will begin with two FY 98 commands (one Armor and one Field Artillery). By the time this article is published, the fortunate Armor officer who will command this great unit will have been chosen, and my belief (and hope) is that this program will expand.

But what about those not receiving the nod to command? I can honestly say that during my tenure at Branch, those officers who were not selected, but who "soldiered on" doing the tough jobs that keep our force viable, were some of the most professional. AC/RC battalion commanders, USAREC battalion commanders, ROTC PMSs, senior staff officers and joint warfighters serving tough tours in higher headquarters and in short tour areas, and others all continued to selflessly serve our force. Those who were not expert in some functional area knew their potential for further promotion was limited, but they all contributed to operational readiness and in most cases it was the Armor officers who — by their nature — remained the linchpin in most organizations.

Colonels. While I was assigned to PERSCOM as the Armor Branch Chief, I had very little influence on the assignment of Armor colonels; that was under the responsibility of Colonels Division, a separate directorate in the headquarters that managed the assignment of all Army colonels. But as I departed Armor Branch, the dissolution of the colonel's assignment branch within PERSCOM was nearing completion. In effect, the

plan was for all the various branches to regain the files of their O6s. While this was initially an administrative migraine for the new branch chief, LTC Joe Orr and his colonels' assignment officer now report this system has several advantages. Primarily, managing the colonels' assignments provides the branch the ability to seek the specific jobs that will contribute to the health of the branch while these officers also continue to serve the Army — there is a better match in getting the officer to the right job at the right place. This is a critical requirement in advantaging our Armor colonels for their further professional development; it helps them to reach the general officer level that will, in turn, advantage the force as a whole.

New Programs. While the majority of any Branch Chief's time is consumed ensuring the professional development and proper assignment of the force, several related issues concerning personnel management came to the forefront during my tenure in PERSCOM. Two of these new matters require some discussion: the new OER and the potential implications of the recently approved OPMS XXI study.

Within the last few months, many raters and senior raters have been busy completing close-out Officer Efficiency Reports, using the DA 67-8 for the final time. Those who know the history of that form are aware that it has served our Army well, lasting over 15 years, far exceeding all expectations and previous iterations of efficiency reports in staving off inflated ratings. But a few years ago, with the downsizing of the Army and a continuing rise in inflated ratings, that began to change, and a small team started on the design of a new efficiency report. Since May 1997, Mr. Jack Miller and the team charged with creating the new DA 67-9 have been thorough in marketing this newly designed form. They have sent briefing teams all over the world to ensure officers, raters, and senior raters have had the chance to ask all the pertinent questions and become familiar with the new rating system.

As the briefing teams completed their scheduled visits in early September, PERSCOM began using other tools to continue educating the Army on the new system. Unit training programs with CD-ROMs were mailed to all units. Senior leader training packets were sent to all general officers, and this initial distribution will be followed by more packets sent to major activities, field commanders, personnel service battalions, military personnel divisions and all installation video libraries. *The OER Guide*, DA

PAM 623-105, will be published as a "how-to" manual for the new evaluation system, and it will be distributed to all Army, joint and DOD activities. Additionally, the "OER Home Page" was established as a sub-directory of "PERSCOM On Line" in late August (www.perscom.army.mil). Certainly, the transition from the old OER to the new DA 67-9 has been the most advertised in the history of the form, and the training packets have been the most extensive.

"...We have seen a lot of strange things in the area of official photographs. For example, close to 50 percent of our 1LTs going before the promotion board for captain in 1997 did not have an official photo..."

The new OER form addresses all those shortcomings that needed "tweaking" in the old OER. The new form also has some very innovative characteristics that will improve on the old report. But its success will depend on the ability of leaders — officers who are rated, raters, and senior raters — to do the things they are supposed to do. Those who are supposed to counsel, train, and translate our culture to new officers must do so with vigor and dedication. Those who are charged with rating and senior rating officers must take the time for mentoring and educating subordinates as to what is expected of them. Everyone knows many paid lip service to our responsibilities during the life of the DA 67-8-1; we cannot afford to do the same under the new system.

But even before the new form was published and the briefing teams began their travels, I began receiving queries concerning the new system for the "block check." Specifically, some folks wanted to know what I thought about the new OER, and if I had figured out a way to "beat" the system. I told them that I believed the new OER was well-designed, that I could not see any way of "beating" the new block check system, and that the new form will allow senior raters to differentiate between those who they believed were their very best without disadvantaging the others. Additionally, I told those asking, the new OER had some other improved features — such as the section to comment on where the officer could best serve the Army and an expanded section to comment on potential, values, and professional competen-

cies — that would supplement the block check.

Having said that, will the new OER cause the majority of our officer corps to receive other than top block ratings? By design, yes. Will this, in the short term, cause anxiety and concern among officers who have always received top block reports? Absolutely, but unnecessarily so. Having seen mostly inflated OERs with top-block center of mass reports that did not help — and in many cases actually hurt — some of the very best in our ranks during my two years at PERSCOM, it is time for everyone to tell it like it should be told. The very design of this new form — which has myriad features by which to judge competence and potential and which levels the playing field throughout the Army — will not disadvantage anyone. It will, however, allow senior raters to differentiate between the very best and everyone else, and that will only help our officers have a more accurate feel for where they stand. The new OER is a good one, and it will be a winner.

OPMS XXI. In July 1996, General Reimer convened the Officer Professional Management System (OPMS) XXI Task Force to review and update the Army's way of conducting personnel management. In a nutshell, their purpose was to ensure OPMS would remain responsive to future challenges. During the last year of my tour at PERSCOM, all in Armor Branch were actively involved in providing information and sustaining dialogue with those on the task force. As with any task force gathering information, there were times when Armor (and other branches) was able to forward issues and these suggestions were incorporated in the plan, and there were times when the members of the task force did not accept our proposals. Regardless, the CSA approved the new concept in July 1997, and as of 1 October 1997, the OPMS Task Force began implementing the program.

OPMS XXI will change the details of how officers are managed, developed, and promoted. Specifically, there will be designations of "career fields" with distinct grouping of branches and functional areas that will reflect what the task force considered to be the needs of the Army today and into the future.

All Army Competitive Category Officers will be assigned a career field after selection for promotion to major. Additionally, several new functional areas will be created (and FA 54 and FA 41 will be eliminated) to address changing requirements in the Army of the 21st Century.

Officers will compete only with officers in similar career fields for promotion to lieutenant colonel and colonel. All officers promoted to major will undergo some type of resident MEL-4 education, and all officers selected to colonel will attend some type of resident MEL-1 course. While these are the primary concepts presented during the redesign, the intricacies of the details associated with each concept and the timeline for incorporation are still being developed by the members of the planning group. Obviously, the OPMS Task Force is coordinating its ongoing actions with those who will be charged to execute the new system, those who work assignment and professional development within PERSCOM (i.e., the branches).

A word of advice for all Armor officers: Stay acquainted with what is occurring as the OPMS XXI process moves forward, as career satisfaction will depend on making informed choices. The OPMS XXI Task Force has an excellent web page (www.army.mil/opms) with great information, and their public affairs effort is extensive. It is critical that all Armor officers know the influence that schools, assignments, chain of command counseling, comments on the new OER, career field designation, and functional area preferences will have on eventual career patterns and — most importantly — career field assignment and service to the nation. Do not let a short-term advantage potentially influence your long-range career desires.

In the May-June 1997 issue of this very magazine, *ARMOR's* editor made an interesting commentary in his "Stand To" column concerning the system and culture we currently have for judging our officer corps. If something as simple as the official photograph has become a key discriminator for judging the quality of our officer corps, LTC Blakely seemed to be saying, then we're going to have problems bringing about the cultural change we need for our 21st Century Army.

To an extent, I concur with LTC Blakely's assertion. However, the official photograph is only an indicator of an officer's professionalism, pride, and attention to detail. The same is true of the quality of his entire file, the correctness of his officer record brief (ORB) and his eagerness to do the things — duty well-performed, required, or additional institutional professional development — believed to be necessary characteristics for the leaders of our nation's soldiers. Having said that, none of these things — not even something as seemingly trivial as an impeccable official photograph — will take care of itself.

We are all taught from commissioning that we are "our own best personnel managers." From my experience, this boils down to two requirements: take care of the details, and serve well in whatever duty assigned. I would like to address these two requirements in more detail.

Taking care of administration is relatively simple. First of all — probably much to the chagrin of LTC Blakely and others — I would suggest that everyone ensure they have a current official photograph that shows your professionalism and your pride in service to the country. Wear a good looking uniform, ensure all your awards and decorations are straight and are in accordance with the regulations, and have a friend (or preferably a meticulous NCO) check it out before sending it to Armor Branch. I know this is surprising to our warriors out there, but we have seen a lot of strange things in the area of official photographs. For example, close to 50 percent of our 1LTs going before the promotion board for captain in 1997 did not have an official photo. Some of our major's — who had great files — going before the LTC board last year still had black and white 1LT photos as their most recent. Additionally, many who only get their photos updated before promotion boards do not understand they are sometimes used for things other than these boards (like nominations for assignments). I have a few stories about Armor officers who did not get a great job because they could not get us an updated photo on time.

Just as important, ensure your Officer Record Brief paints the correct picture of your career progression; these, too, are used both in promotion boards and in assignment considerations. Ask for a copy of your OER microfiche to ensure all your reports are appropriately filed and in sequence. Finally, when completing your DA 67-9-1 (and related forms under the new OER system), do more than just copy the form handed down by the officer who served in the position before you. Remember that the majority of those who sit on promotion and command boards are not of our branch, so they must have a complete picture of the demands associated with any Armor or Cavalry assignment. By the way, I believe that our leadership should become a little more involved in "checking" the details" for their subordinates in all of these administrative areas.

Now, serving and doing your duty in whatever assignment you receive is another requirement that I believe needs discussion within our ranks. On several occasions during my tenure as Branch

Chief, I received phone calls from individuals who wanted to know what they "should do next to help their promotion potential" or to complain that an assignment was not "good for their career." I was always interested in what they thought their promotion potential currently was, or why they thought the particular assignment they were in line for was not good for their career. I received some interesting replies.

The point is this: ambition is a great thing in a professional soldier, as long as the ambition is linked to talent and preparation and is directed at serving the nation. As the branch chief, there were occasions when I saw officers blinded by ambition alone, and that is not a good thing for our force or our profession. As I said earlier in the article, there are many requirements for Armor officers. During the two years I served at Armor Branch, I never saw one that did not contribute significantly in some way to serving our nation. All are important, and if performed well, all will contribute in some way to further professional development. No job — in and of itself — will serve as a detriment to promotion or career advancement. Armor officers need to continue to focus on how to do well in whatever assignment they are given, not what that next assignment is.

Another interesting phenomena I observed was an increasing occurrence — especially at the more junior ranks — of officers asking for "help" in the assignment process. When not satisfied with an assignment or a location, or in attempting to gain an advantage before an assignment is even offered, a growing percentage of our force is requesting senior officer influence and involvement in the assignment process. In my view, this is totally unprofessional and shows a lack of honesty and trust. As long as selfless service to nation — and not personal gain — remains the primary reason our Army exists, those wearing the Armor brass must lead the way in stomping out this type of careerism.

This article has been a long one, and it only touches on some of the demanding issues addressed during the two years I served at Armor Branch. In tackling many of the challenges during that time, I learned a lot — sometimes more than I wanted to know! But the best education I received came every day talking to the great Armor and Cavalry officers who make up our force. They are preparing for the day when they are asked to fight for our nation, because they know that when Armor and Cavalry are on the ground, America means business!

Lion's Den (Continued from Page 29)

placed it where it was the first building after entering the front gate, and kept it manned throughout the day and through an on-call system at night. It was not uncommon to get seven calls from the command post a day to have a civil affairs representative meet someone at the gate. From OSCE to United Nations High Commissioner for Refugees, to the local police, to persons making property claims, to a woman wanting to deliver a baby the following month at the MASH, civil affairs saw it all.

Teardown

If you build it, you will tear it down. In Bosnia, Task Force Eagle transferred nine of its base camps to the covering force and closed the remainder. Lodgment Area Linda was designated for closure. Key to closing a camp is the same thorough mission analysis and planning you used in building it.

Training and planning are the foundation to a successful base closure. Brigade published an extensive fragmentary order for redeployment and camp closure. From the specified and implied tasks in their order, we published our own matrix-type order and developed training objectives. Even though your task force engineer will have the lead, the tear-down order must get a good look by your entire staff. The engineer is your technical expert. He'll develop the PERT chart and determine the critical path to completing the mission on time and within budget. Task Force Eagle conducted formal training for all base camp mayors on base camp operations, property accountability, and base closure. The training our mayor received at this course was invaluable.

We established a small command and control headquarters led by the task force executive officer, and a captain and SGM from the battalion S3 shop. Nightly, we conducted a meeting that served as a patrol planning session and an after-action review for the day's activities. We also used the meeting to plan tasks to be completed over the next 72 hours. That way we could continually update our execution matrix, allocate resources, and identify requirements at least three days prior (a technique much appreciated by higher headquarters and the combat service support community). Brown and Root attended the nightly meetings, which ensured that we synchronized our activities.

Our training objectives gave us goals to attain. First, we wanted to be safe and not damage any equipment. People are your most sensitive items and tear-down operations are inherently dangerous. We demanded that NCOs conduct risk assessment prior to conducting each mission. They then actively sought ways to reduce the risk, and we knew to cease work when it became unsafe. We wanted to meet or exceed every time line and schedule, and do so while maintaining stewardship of our property and protecting the environment. Finally, we wanted to continue to protect the force. We practiced medical treatment and evacuation, worked to reduce fire and accident hazards, created a new perimeter as we collapsed the old one, and increased our roving patrol and stationary observation posts.

Recovery of as much government property for reuse as possible must be the goal of every Army leader. This requires a mind-set change. We have not been profligate in the past, but when on deployment we never considered recovering Class IV and Class II equipment for re-use. Our goal was to recover greater than 90% of the force protection material we had employed. We nearly made that goal. At final count we had recovered some 200 pallets of concertina, 150 pallets of pickets, 10,000 sand bags, and several short tons of lumber for use throughout the Task Force Eagle sector or at the Combat Maneuver Training Center (CMTC) at Hohenfels.

Continually refining our execution matrix, anticipating requirements, and motivating our soldiers enabled us to meet our scheduled closure date on budget

and on time. Closing a base camp isn't a METL (Mission Essential Task List) task, but it is important duty requiring leadership involvement, staff planning, and risk management.

Conclusion

Operating from base camps appears to be standard operating procedure, at least in the near future, for armor units conducting conventional and peace enforcement/stability operations. Building, operating, and closing a base camp are not skills taught in any formal Army school, but every Armor officer has been taught these skills in the basic and advanced courses, and in our doctrinal manuals. Bottom line: As with any mission, even a non-standard one like building and operating a lodgment area, you should employ the foundations of doctrine for planning, preparing, and executing your non-standard tasks. We hope we have provided you some tactics, techniques, and procedures to flush out your kit bag as you take on the mission.

LTC Randy Anderson commanded TF Silver Lions (TF 2-68 AR) during deployments to both Kuwait (Intrinsic Action) and Bosnia (Operation Joint Endeavor). After serving as ACofS, G3, 1AD, he is currently a student at the National War College in Washington, D.C.

MAJ John Hadjis served as XO, TF Silver Lions (TF 2-68 AR) during Operation Joint Endeavor and is presently S3, 2Bde, 1AD.

The authors would like to thank MAJ (P) Kelly Fisk and CPT Will Davis for their help in preparing this article.

Final Part Of Three-Part Article Will Appear Next Issue

Because of space considerations, we've had to reschedule the final installment of the three-part article on a proposed Future Combat System, by Dr. Asher H. Sharoni and Lawrence D. Bacon. The article will appear in the next issue.

- Ed.



Tactical Vignette 97-2

“Ambush at Dogwood Crossing”

Situation

Terrain (see Fig. 2, Battalion graphics)

Obstacles - Dogwood Creek is a natural obstacle which will restrict tactical movement because it offers only three fording sites within the area of operation.

Avenues of Approach - Axis California is a high speed avenue of approach that will allow maneuver to be masked by the high ground nearby and the wood line to the east of CP 5. Route Kayla is a dismounted avenue of approach that provides outstanding cover and concealment up to CP 6. Occupation of CP 6 will allow dismounts to engage suspected enemy armored vehicles to their flank, causing disruption to the enemy COA.

Key Terrain - Dogwood Creek is key terrain since the creek can restrict or impede friendly maneuver. The ridge line on PL Yorktown is key terrain because it affords outstanding observation to the north, which will provide an advantage to friendly or enemy forces.

Observation and Fields of Fire - The ridge line along PL Yorktown provides great observation and fields of fire because it is the high ground that dominates the terrain within the area of operation.

Cover and Concealment - The high ground near CP 5 and the wood line to the east of CP 5 provide great cover and concealment as friendly forces maneuver along Axis California.

Enemy. The enemy is conducting a defense out of contact. The 13th MRD has deployed a forward detachment (MRB) ahead of the division to secure a key logistical site five kilometers north of PL Yorktown (airfield). The forward detachment has been establishing hasty fighting positions and protective obstacles for the last 24 hours in preparation for the arrival of the main body within the next 12 hours. Our task force (TF 1) will attack against an MRC (along PL Enterprise) that the forward detachment has deployed forward to provide early warning and to disrupt and attrit enemy forces that enter their engagement area. The MRC is currently at 70% strength. The MRC has been identified by a UAV that flew over their positions two hours ago. The defending MRC deployed a CSOP



2-3 kilometers forward of its main defensive belt (along PL Yorktown) to provide early warning and call for indirect fire to harass enemy maneuver. The CSOP is an MRP which is reinforced with a tank.

Friendly.

Brigade

Mission: 1st Brigade attacks in zone 230630SEP97 to destroy enemy forces vicinity OBJ Amanda in order to allow

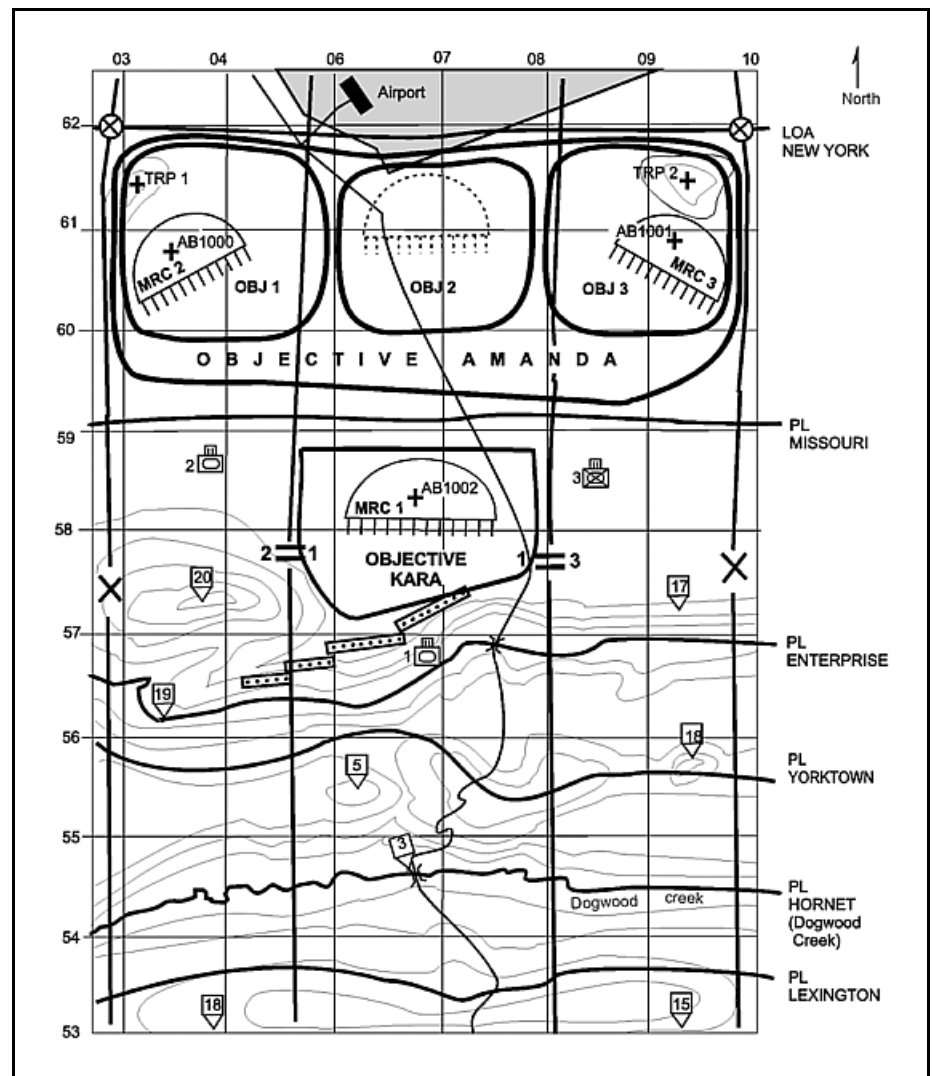


Figure 1. Brigade Graphics.

2nd Brigade (the division's main effort) to maintain freedom of maneuver as they attack north to seize key logistical site vicinity OBJ Brittany.

Intent: (Purpose) The purpose of this attack is to allow 2nd Brigade to attack north maintaining freedom of maneuver to seize the airport vicinity of OBJ Brittany. The airport allows the division to provide more responsive logistical support within the area of operation. We will accomplish this mission by conducting an attack with three TFs attacking abreast, enveloping enemy forces from the east and west. This will prevent the enemy from massing fires, forcing him to fight in three directions.

(End state). At end state, enemy destroyed in zone vicinity OBJ Amanda allowing 2nd Brigade to maintain freedom of maneuver as they attack north to seize OBJ Brittany (see Figure 1. Brigade Graphics).

Tasks to Maneuver Units:

TF 1 - Task: Seize OBJ Kara

Purpose: allow 1st Brigade to maintain freedom of maneuver to destroy enemy forces vicinity OBJ Amanda.

On order, continue the attack north to destroy enemy in zone to LOA New York

Responsible for triggering brigade artillery target AB1002. Priority of artillery up to PL Enterprise

TF 2 - Task: (Brigade main effort) Seize OBJ (Amanda #1)

Purpose: To protect 1st Brigade's western flank

Responsible for triggering brigade artillery target AB1000. Priority of artillery at PL Enterprise

TF3 - Task: (brigade supporting effort) Seize OBJ (Amanda #3)

Purpose: To protect 1st Brigade's eastern flank

Responsible for triggering brigade artillery target AB1001

Task Force 1

Mission: TF 1 attacks in zone along Axis California 230630SEP97 to destroy enemy forces vicinity OBJ Kara in order to allow 1st Brigade to maintain freedom of maneuver and maximize its combat power as it attacks to destroy enemy forces vicinity OBJ Amanda. On order, continue to attack north to LOA New York, destroying enemy forces in zone.

Intent: (Purpose) The purpose of our attack is to destroy enemy forces in zone. This will allow 1st Brigade to maintain freedom of maneuver and maximize its combat power as it attacks to destroy enemy forces vicinity OBJ Amanda. We will accomplish this mission by conducting an attack enveloping

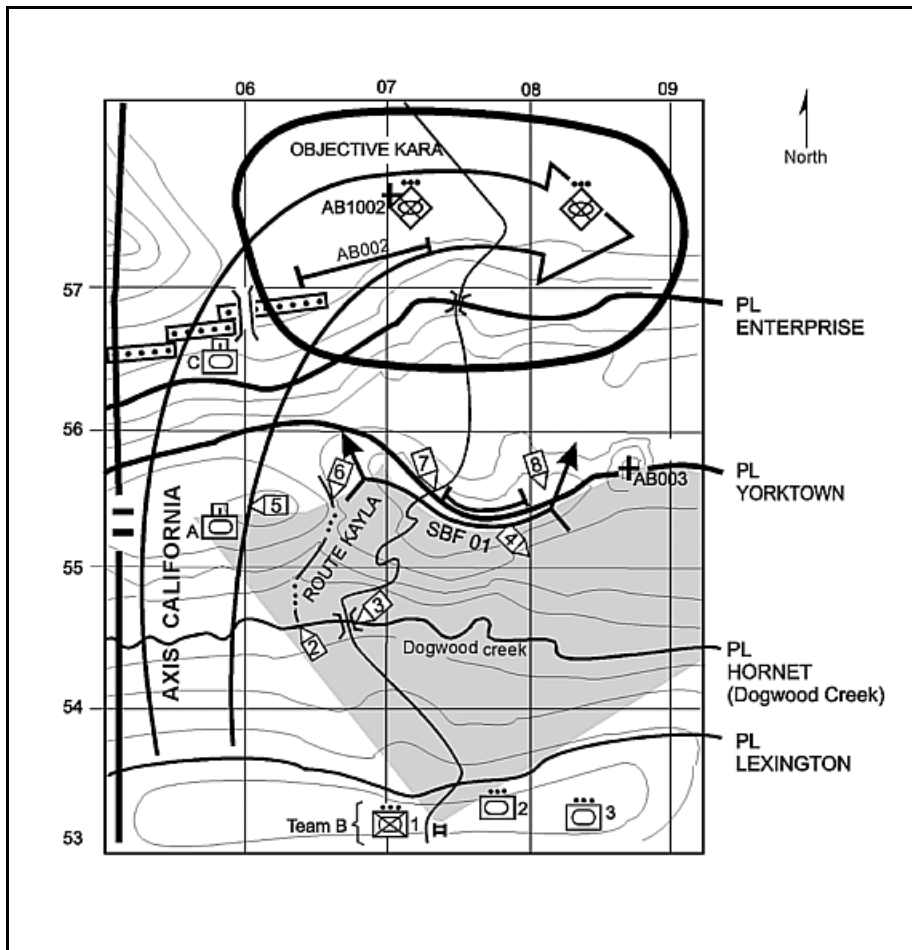


Figure 2. Battalion Graphics.

enemy MRC 1 from the west. (End state) At end state, OBJ Kara has been seized, and TF conducting consolidation and reorganization operations in preparation to continue the attack north to LOA New York.

Tasks to Maneuver Units:

TM A - Task: (TF main effort) Seize OBJ Kara.

Purpose: Prevent MRC 1 from attacking into the flank of TF 2 or TF 3

Assault force during TF breaching operations

Responsible for firing one green start cluster at PL Enterprise to signal TM B to lift fires

Responsible for triggering artillery targets AB1002 and AB002

Priority of fires at PL Yorktown

Accept one tank platoon from TM C to maximize combat power to seize OBJ Kara, effective immediately

TM B - Task: Support by fire

Purpose: To suppress enemy forces on OBJ Kara in support of TM A's attack

Occupy terrain vicinity SBF 01, which will provide effective suppressive fires on eastern MRP

Lift your fires as TM A fires one green start cluster as they pass PL Enterprise Support force during TF breaching operations

Responsible for triggering mortar targets AB001 and AB003

Initial priority of fires up to PL Yorktown

TM C - Task: Breach

Purpose: To clear a lane for TM A's attack to seize OBJ Kara

Attached assault and obstacle platoon effective immediately

Responsible for identifying point of breach

Detach one tank platoon to TM A effective immediately

Company Situation

You are the commander of TM B (tank heavy). Your team is attacking in zone as part of a three-team task force attack. TM B is the support force. You are responsible for establishing a support by fire position (SBF 01) to suppress the enemy MRP on the eastern side of OBJ Kara. You have priority of mortar sup-

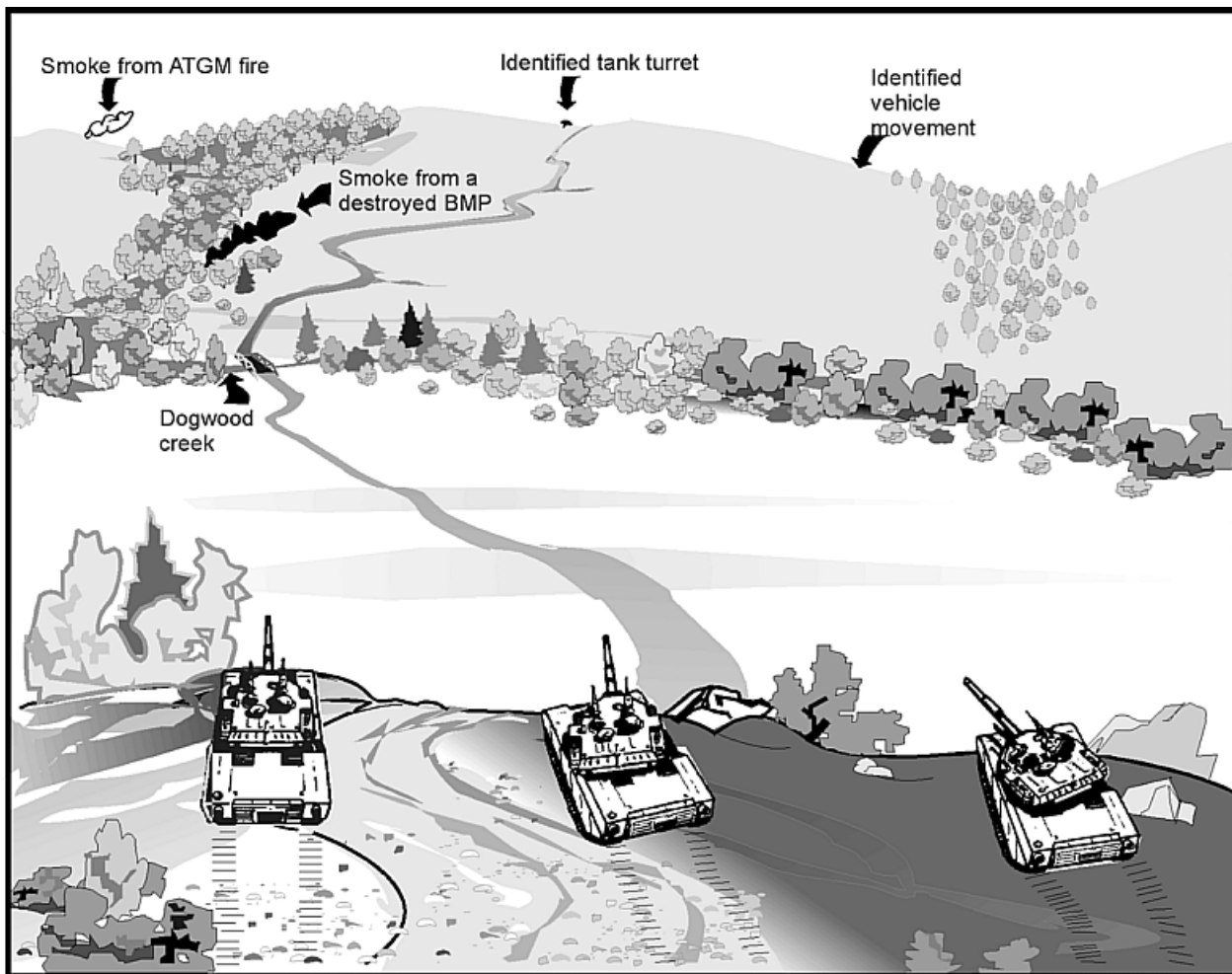


Figure 3. Commander's view from his turret (Area visible from turret is shaded in Figure 2).

port throughout this operation and are responsible for triggering AB001 and AB003. Your team has just deployed along PL Lexington in anticipation of contact with the enemy CSOP (see Figure 2. Battalion Graphics).

You direct that 2nd platoon (tank) and 3rd platoon (tank) establish an overwatch while 1st platoon (mech) bounds forward towards CP 2. You direct 1st platoon to focus its observation from CP 5 to CP 3, 2nd platoon from CP 6 to CP 7, and 3rd platoon from CP 7 to CP 8. During 1st platoon's bound, they receive fire, and 2nd platoon reports seeing a signature from a firing BMP east of CP 5. As the team continues to develop the situation, it conducts the following actions and gains the following information:

3rd platoon conducts a reconnaissance by fire and reports a vehicle moving vicinity of CP 8.

2nd platoon initially identified a tank turret west of CP 7; the tank has since backed down into a defilade position, leaving only its antennae visible. The platoon additionally identified and destroyed a BMP vicinity NX065550 (see Figure 3. Commander's View from Turret).

Requirements

In five minutes or less, choose a course of action and issue a FRAGO. The end

state of the COA must have the remaining enemy to your front destroyed and have the company team arrayed to conduct its support-by-fire position task. Readers wanting to submit their solutions to the scenario should provide the following: fragmentary order to the company team, the rationale behind the decision, and a sketch of your COA. Mail your solution to ARMOR, ATTN: ATZK-TDM, Fort Knox, KY 40121-5210, or send your solution by e-mail to:

ThompsonM@ftknox-dtdd-emh5.army.mil

In the next issue of *ARMOR*...

In the January-February issue, we will include some of the solutions sent in by readers to the September-October issue tactical vignette, "The Battle of Durango Valley," along with the author's proposed solution. Suggested solutions for this vignette will appear in the March-April issue. - Ed.

COMMANDER'S HATCH (Continued from Page 5)

flects the tasks, conditions, and standards of a combat unit. To accomplish this, the training schedule required some adjustment to ensure classes and reinforcement time would occur, thereby giving the new soldier ample time to prepare for his test. Another initiative currently being piloted within the 19K community is the Accelerated Insert Training Program. This program is designed for the specialists and NCOs that have been reclassified into CMF 19. This accelerated training program takes all of the 19K MOS training from a standard 14-week training cycle and condenses it into a 6-week course. This keeps training on tank subjects throughout the cycle instead of receiving training only two or three times a week, as in the first several weeks of OSUT. Expect a report on this program within the next several months.

Other initiatives include establishing graduation criteria with the Tank Driver Simulator to ensure all soldiers meet a certain competence criteria, and the enhancement of basic pistol marksmanship, which resulted in a 100% increase in the number of soldiers firing expert.

19D Improvements:

Like MOS 19K, the 19Ds have made significant enhancements to their POI. One of most important is the development of a Scout Battle Book that incorporated various individual and collective tasks from various FMs, to include FM 17-98, FM 7-8, and STP 17-19D 1, 2, 3 and 4 into a single document. These battle books are now issued to all Cavalry

troopers as they progress through their training. You can expect to see these books as your new soldiers arrive at their gaining unit. Other initiatives include increasing the amount of driving a 19D receives by four hours on the Bradley and HMMWV, ensuring future scouts are proficient in their basic driving skills. Recognizing the need for all scouts to be proficient in call for fire, the POI has increased the amount of training a new soldier receives with the indirect fire trainer by four hours. This is also true for land navigation, where all soldiers are now trained in both mounted and dismounted navigation utilizing GPS.

Essential to the success of all these initiatives is communication with the field. Recommended changes to the POI are staffed and, when approved, pilot lesson plans are developed. As the pilot is conducted, AARs ensure lessons learned are captured and then incorporated before a final change is made. This process involves the entire chain of command, including drill sergeants and instructors. The end product is a POI that focuses the minds of the leaders and ensures that our soldiers will be trained and ready to meet the demands of the 21st century.

Of equal importance is the sustaining of the cadre's warfighting skills. Normally, the demands of Initial Entry Training severely limit most forms of cadre training and certification. The POI provides an opportunity (e.g. STXs, UCOFT, gunneries) to take advantage of key training events to facilitate the sustainment training of our cadre's war-

fighting skills. This training occurs through simulations and hands-on training. The force-on-force scenario allows the cadre to fully prepare, plan, and execute small unit tactics and techniques in a simulated combat environment. The cadre serves as the tank commanders, section sergeants, and platoon sergeants, providing the leadership for the trainees. The OSUT environment provides a unique forum by providing constant feedback to the new soldier.

In the future, the Armor Center expects to digitize the POI and Training Support Packages and load them into a server here at Fort Knox. This will improve standardization and consistency here in the brigade and throughout the Total Armor Force, improve the review process, and allow us to incorporate approved suggestions in the field in a timely manner. It will also allow Armor unit trainers to download desired training documents on an as-needed basis.

A second initiative will improve the coordination of first-quarter fills with TRADOC and the Total Army Personnel Center (TAPC), thereby improving the training of soldiers who must interrupt training for the mandated Christmas holidays.

As always, the Armor Center strives to bring motivated citizens into the Armor Force and provide the field with competent scouts and tankers ready to join effective combat crews and platoons.

FORGE THE THUNDERBOLT!

DRIVER'S SEAT (Continued from Page 6)

While a future article will discuss in greater detail what I will emphasize when briefing all three centralized promotion boards, the results of this board track with what I think Armor/Cavalry

needs: proven, successful leaders who set a HIGH standard while leading their soldiers from the front.

So, good and bad news aside, the great news is that 123 staff sergeants are now

promotable! Congratulations! The Armor/Cavalry force will benefit from your leadership.

"SERGEANT, TAKE THE LEAD"

Other TDA Changes (Outside Ft. Knox)

- 7th ATC NCOA: Dep Cmt, E9 to E8
- Fort Stewart Range Div: Range Ops NCO
- Fort Carson Ed Center: Ed Cen NCO, E6 to E5
- Fort McPherson Range Mod: MG/Range E8 to E7

	SGT	SSG	SFC	MSG	SGM
19D	+4	-5	+7		
19K	+2	+9	-13		
19Z				-3	-1

Fort Knox Changes

	SGT	SSG	SFC	MSG	SGM
19D	+85	-31	-55		
19K	+112	-71	-104		
19Z				-5	NC
TOTAL	+197	-102	-159	-5	NC

LETTERS (Continued from Page 4)

standard. On the positive side, time is the precise reason Guard armor units are such a great investment, as a Guard battalion only costs a fraction of the amount to operate an active duty battalion for a year. After mobilization, reserve armor units can come up to par on company and battalion tasks within a short time frame (depending on who you talk to, the range is 40-90 days).

Both active duty and Guard leaders must recognize and accept the role of the other. Our branch of service is far behind the other services, such as the Air Force and USMC, in this mutual recognition and cooperation for the overall good. It is an indisputable fact that we cannot execute our current national strategy of fighting two "nearly simultaneous" regional conflicts without Guard armor and cavalry units. In light of current force structure, we could not fight one regional conflict (on the Desert Storm model) without Guard units. Do you realize we had more soldiers in Saudi Arabia in Desert Storm than we currently have on active duty? Having armor and cavalry units in the Guard is a cost efficient, smart way to provide a force which can follow active component forces into regional conflicts, "beef up" combat power, and provide a strategic reserve. If we do away with Guard armor and cavalry units, we are forcing future CINCs to fight defensively in regional conflicts due to lack of combat power. Further, the armor forces on active duty would likely be parceled out between the two theaters, preventing the concentration of forces necessary to win both campaigns.

In any event, CPT Kelly's letter reflects a lingering "us versus them" attitude which does not do any of us any good. We should focus on important issues, like funding for training, force structure, and modernization of the entire Army (versus the other services and defense appropriations), rather than internal sniping and bickering.

KRIS P. THOMPSON
LTC, Armor, CA ARNG
Commander, 2-185th Armor

History Supports Strong Role Of Guard and Reserve Units

Dear Sir:

Rarely do you hear an ax grind as loudly as that of CPT Michael Kelly in his recent letter (*ARMOR*, Jul-Aug 97). You must understand that any man or woman who will willingly lay aside their civilian pursuits and take up arms to defend our freedom has a special place in the roll call of honor among freedom-loving people of this world. The truth is that the citizen soldier has, and always will be, the backbone of our nation's defense. From Bunker Hill to Bosnia, they have proven their worth.

While I understand some of your frustrations, CPT Kelly, it is at your level that the most significant changes can be made. Take the soldiers in your charge, and train the living hell out of them. Teach them every trick of the trade. Impart to them your hard-won com-

bat experience. Ignore what other, perhaps less qualified, officers do. Do not wait for some "magic bullet" personnel system to reform the Army or the National Guard. Just make your piece of the action the best that it can be.

One day you, as we all must, will dismount at Fiddler's Green. When you do, look around. You will see some familiar faces. Soldiers like Light Horse Harry Lee, William Barrett Travis, LTC Teddy Roosevelt, CPT Bucky O'Neil and millions of other long-forgotten troopers. These were the citizen soldiers who marked the bill "paid in full." While you're there, be sure to stop by the bivouac of the 192d and 194th Tank Battalions. As they proudly show you the combined total of six Presidential Unit Citations earned on Bataan, I want you to see their faces when you tell them that, after all, they are not real tankers. You have a lot to learn, young man.

CHARLES W. TREESE
LTC, USAR (Ret)
Colorado Springs, Colo.

If the Guard is Broken, Stay Around and Fix It

Dear Sir:

I am writing an angry response to CPT Michael A. Kelly, Texas National Guard, who wrote to you concerning the personnel system "driving good people out of the active Army and the Guard. *ARMOR* - July-August 1997, Page 4.

Our Army has gone through a series of ups and downs over the years. We had the great draw-down in forces after World Wars I & II, Korea, Vietnam, and the Gulf War. The RIFs (Reductions in Force) during the late 1950s and early 1970s released thousands of quality officers with only 90 days notice. I remember the "zero defect/hollow Army" of the post-Vietnam War, and the Reagan administration's build-up that allowed us to fight Desert Storm. Outstanding armor officers like Generals Abrams, Starry, Saint, Franks, and Doyle (to name only a few) didn't quit! They stayed and worked to fix the Army prior to Desert Storm, as did thousands of other good armor officers.

The armor officer who is worth his salt will recognize problems, hold to the course, and work to make his part of the Army the best that he can make it. It is easy to point fingers and say "the good ol' boys rule the world so, I quit!" It is another matter to stay in your unit, either AC or RC, and do the very best you can to make it the very best in the Armor Corps. If an officer can't do that, we don't need him!

Both the Active Army and the National Guard occasionally have weak leaders in units. We fix those problems as they surface. In both the Active Army and National Guard, you will find strong leaders who lead by example, are technically and tactically competent, and get the job done. To those officers who were "driven out," I say "Good riddance.

I wish I could have been there to give them a ride to the back gate!" The *keepers* in Armor will stay in to take our branch and the Army (AC/RC) forward.

MATT D. MCKNIGHT III
COL, CAV
278th Armored Cavalry Regiment
TN ARNG

TERM-like Munitions Detract From Tanks' Direct Fire Role

Dear Sir:

While the Tank Extended Range Munition (TERM) concept is technically interesting, it is doctrinally flawed. TERM fulfills an artillery, not an armor role. Tanks are built to fight the close, direct-fire battle. They must survive frontal hits and have very lethal, rapid firepower. Ammunition loads, crew size, and numerous other factors are traded off in order to ensure the smallest size practical to reduce exposure and signature while also keeping down weight and maximizing mobility. Tanks are expensive to build and costly to operate, but nothing else can fulfill their role on the battlefield. Why try to make them into artillery, when such already exist?

The TERM technology is readily applicable to existing or developmental mortar, artillery, or missile systems. The tank (and mech infantry) battalion already has a heavy mortar platoon. It has a fully-developed fire control and communication architecture that can be expanded as needed. The platoon is, or can be, fully integrated into the higher level direct and general support artillery assets of the brigade, division, and corps. Regardless of the technical limitations of TERM (mortar, missile, or cannon) armored self-propelled launcher systems could easily be developed. They, too, can be assigned to the tank (and mech infantry) battalion as an organic fire support element.

For study purposes, I suggest modeling the battalion heavy mortar platoon. As variations, consider a turreted mortar; a missile launcher something like ADATS (Air Defense Anti-Tank on an M113 or M2 chassis); and a self-propelled howitzer (based on the 105mm M108 or the 155mm M109 howitzer).

This approach is fully compatible with current doctrine, while taking full advantage of TERM's leap-ahead technology. You will very quickly be able to quantify any combat multiplier effects of TERM without the countless distracters, not the least of which is questioning the fundamental role of the main battle tank.

The obvious debate will be whether you will need as many tanks (and infantry) in a given situation. Should the battalion TERM platoon be expanded into a battery as a trade-off for a tank or mechanized company? Or, should each company trade one tank or mech platoon for a TERM platoon. Or, should a TERM battery or battalion be assigned to the brigade? Whatever; to be determined! The key is to start with a reasonable, doctrinally sound

operational concept, and let the analysis begin.

CHESTER A. KOJRO
LTC, AR, USAR
Rolla, Mo.

Borrowing Marines' TDG Approach Proved a Useful Training Tool

Dear Sir:

I am not sure if my comments should be addressed to you. If not, please forward them to the appropriate address.

I wanted to congratulate *ARMOR* for addressing the use of Tactical Decision Games in the May-June 1997 issue ("The Tactical Decision Game (TDG): An Invaluable Training Tool for Developing Junior Leaders" by CPT James D. Gonsalves, USMC). I participated in a number of TDGs while attending the Marine Amphibious Warfare School in Quantico, Va. They were conducted in both small group and large group environments. Although the instructors attempted to distract us by constantly speaking to us, I did not experience the banging trash cans CPT Gonsalves refers to. After 10 minutes, several students were chosen to present their solutions/FRAGOs. On every occasion, the solutions presented sparked enough debate to fill several hours of class time. The debates were encouraged and proved to be very educational as they raised many options I had not originally considered.

As one of the six Army officers, but the lone Army Armor officer, in my class, I took note of the potential and applicability of these TDGs to training my future lieutenants and platoon sergeants. I am convinced that they can be a valuable tool for leaders willing to invest a small amount of preparation time. As with any training tool/device, it only benefits those who utilize it. In the age of shrinking budgets, this is a quick, inexpensive tool to throw in the CVC bag.

I hope Army leaders, specifically Armor leaders, will not cast aside the ideas presented in CPT Gonsalves' article simply because of his branch of service. The source of these good ideas should be irrelevant. The results of these ideas should be the focus.

The Marines publish one or two TDGs and a couple possible solutions in every issue of their *Marine Corps Gazette*. Many of their junior leaders use those TDGs to train their platoons and squads. Please consider a similar entry for *ARMOR*. A regular TDG section would only improve a great magazine and possibly increase the audience to more junior leaders of all branches.

CPT TODD A. TAMBURINO
Currently Maneuver Officer
G3 Training, 1ID
Wuerzburg, Germany

(See the first in a series of TDGs in our last issue. If there's interest, we'll keep them coming. -Ed.)

An Author Replies

Dear Sir:

In reading Captain Hall's review of *Tank Aces*, I noted his curiosity about the Axis atomic research and the documentation. It was submitted with the manuscript for publication, but was left out because of a production error. This will not be allowed to happen in the future because I'll be using end-of-chapter notes. I am enclosing that information for you to send on to him. The main atomic references are:

Vengeance by Philip Henshall, Sutton Publishers, ISBN 0-7509-0874-2

The German Atomic Bomb, David Irving, DaCapo Press, ISBN 0-306-80198-1

Japan's Secret War, Robert Wilcox, William Morrow & Co., ISBN 0688041884

I have just checked with Barnes & Noble, and all three are available and have extensive bibliographies. The Henshall book, for instance, has full coverage of the V-3/A-10 launch sites. I would also recommend John Hershey's classic, titled *Hiroshima*, for one reason. Directly after the blast, Japanese scientists arrivedwith Geiger counters. They knew exactly what had been done, which fact pretty well proves my contention that there was a nuclear arms race embedded in WWII.

The attitude of *Tank Aces* reflects the feelings of the times. Some of the men mentioned survived the Bataan Death March, and they are not happy about it to this day, nor are the tankers who opened up the V-2 factory and found slaves working on missiles that could reach America.

My book was designed to transfer combat technique from one generation of soldiers to another, and it should not be confused with a formal, scholarly work. It was written for the combat crews and small unit commanders who are going to have to go out and make history in the future. There is an international version in progress, due out late next year, which has even more combat examples. It will be considerably more objective, due to the differing points of view. In addition to American and British, there will be German, Russian, and Japanese tankers and their roles in history.

Thirty-odd years of studying history have shown me that there are avoidable cycles in military affairs, and we seem to be trapped in one of them. The problem of the use of vehicle/infantry teams goes all the way back to the battle of Qadesh. We did not have sufficient infantry in 1968, and Ramses II had the same complaint in 1275 BC. Three and one quarter millennia is a damn long time for one lesson to be ignored, and a problem to be left unsolved. If you don't have skirmishers, some unwashed hostile will cut your harness traces — or put an RPG in your grille doors.

While I note that Captain Hall appreciates my selection of vignettes, he also makes several comments which I would like a chance to answer in print. To set the record straight, many of those vignettes where there is no credit given, were created by me from original

research. Much of the Bataan story, for instance, came from documentation from "Doc" Sartell who was in the 192nd, and who, after an extensive phone interview, shipped me several copies of their newsletter. Most of the two Jima story was told to me by a pair of Marine tankers who fought and lived through it. The amtank story was created in part from phone interviews and from the personal unit history sent to me by Cordell Smith, who wrote it working from his memory, combat diary, and the memories of the rest of the men in those units. That is also how I assembled *Tank Sergeant*, from my own memory.

This is the way I work, and I feel fortunate indeed, to have been able to find those old tankers and swap combat stories with them. My own personal experience is my qualification for doing this kind of work, as well as my extensive study of history. If I were not a professional whose work sells, I would never have been approached for the task by my publisher. Neither Presidio Press, McMullen, Omega, or Simon & Schuster's Pocket Books have ever had cause to complain about my ability to deliver accurate and acceptable manuscripts on schedule and on budget.... And I have been selling my writing since 1981.

RALPH ZUMBRO
Ava, Mo.

Blitzkrieg and "Blatant Myth"

Dear Sir:

MAJ David P. Cavaleri's article, "British Tradition vs. German Innovation," in the March/April *ARMOR*, continues a long tradition of reinforcing popular misconceptions about both armored force developments during the inter-war years and the famed German Blitzkrieg. Based on historical hindsight, the British are continually chided for having failed to realize the full potential of tanks, while the Germans, and particularly General Heinz Guderian, receive full credit for perfect vision of an armored future. The facts are different.

MAJ Cavaleri cites the British leadership's continued belief in the dominance of the infantry-cavalry-artillery combination as if, at that time, it should have been intuitive that tanks would outgrow the infantry support role in which they had been introduced and supplant the cavalry arm. Based on an assessment of their operational performance in World War I, such was not patently obvious in the years immediately following the war. Moving at speeds below 5 miles per hour and extremely vulnerable to both direct fire from larger caliber guns as well as mechanical failure, early tanks were incapable of the cavalry missions of pursuit and exploitation, which required speed and agility. Indeed, the great tank assault at Cambrai was designed only to effect a penetration; cavalry waited in the rear to be passed through to exploit the breach once it had been achieved. Granted, the British probably should have paid closer attention

as the tank's reliability and combat potential grew, but lest one assume the Germans were far ahead, of the *Reichsheer's* ten total divisions, *three* were cavalry, and Guderian's "victory" in introducing tank formations into the German army was by no means the foregone conclusion it seems in hindsight. Had Adolf Hitler not been something of a "technology nut" and had not Guderian finally gotten a superior (General Lutz) who supported his "madness," it is probable the Germans would have followed the same course as Great Britain in failing to realize the tank's true potential. I submit that in the context of the 1920s and 30s — the only context in which the actions of those individuals can properly be judged — the future of tanks was not as obvious as it seems to us in the post-World War II era.

MAJ Cavaleri also falls to expounding on the "doctrine of Blitzkrieg" according to Guderian, a persistent view marred only by the fact that *there was no "Blitzkrieg doctrine," nor were there specific "Blitzkrieg tactics"* (indeed, even the term *Blitzkrieg* was coined by Western journalists, not the Germans). German tactical doctrine evolved in the early- to mid-1920s, while memories of failure in the position warfare of the World War were fresh. Under General Hans von Seeckt's brilliant guidance, the Germans returned to a doctrine of maneuver warfare; fluid tactical operations characterized by decisive concentrations along a narrow front and employing massed firepower to overwhelm the enemy and penetrate or outflank him, exposing his lines of communication to exploitation. *This is the same doctrine with which German forces went to war in September 1939; Reichswehr maneuvers long before the creation of the Panzerwaffe had exhibited adherence to these principles.* It is notable that the Germans did *not* go back and "rewrite" the doctrine following the introduction of the tank, based on the "new technology." (We, on the other hand, are wont to do this, failing to recognize that *doctrine* is not specific to the *technology* with which it is executed. Worse, the U.S. Army now seems intent on acquiring technology and *writing doctrine for it.*) The offense-oriented doctrine the Germans developed was not dependent upon gadgets and gewgaws, and Guderian's genius was not in inventing new doctrine, *because he didn't.* Rather, he was able to integrate tanks into the already-existing doctrine, establishing in the process the irrefutable fact that tanks were a better way to execute decisive tactical offensive operations. The elegance — and subsequently-proved correctness — of German doctrine is a correct tribute to those who wrote it *before the Panzerwaffe* (Armored Force) *ever came into existence.*

The vision of Blitzkrieg recounted by MAJ Cavaleri — a mental picture of massed armor rolling over terrified defenders in a mad dash to the enemy's rear — remains irresistible to any Armor soldier. It is, unfortunately, blatant myth; the observations of untrained observers reporting what they believed to be seeing (mostly journalists, since Germany was at war with most of the Western nations which could have provided competent military observers

to assess the process). Sadly, we continue to believe it, even knowing that such tactics do not work in the "real world"; massed tanks cannot break through fixed defenses. Whether with normal infantry or armor, the Germans attacked in *exactly* the same fashion: following location of an enemy weakness (designated the *Schwerpunkt*) by reconnaissance forces, the location was isolated by fires and obscurants while the *infantry, the only arm capable of seizing and holding terrain,* made and held the initial breach. With the enemy front pierced, follow-on forces were passed through — tanks worked very well, but infantry could — and very often did — do that job. Where the tank came into its own was *past* the breach, in the role cavalry had once played, covering vast distances rapidly to cut off and surround the enemy, disrupt his communications, and destroy his reserves. The combined arms *Panzerdivision* wrapped all the capabilities needed for both the initial breakthrough (armored infantry *Schützenregimenter* supported by tanks) and follow-on operations (tanks protected by accompanying armored infantry) into one neat package, supported by responsive artillery and CAS from the *Luftwaffe.* MAJ Cavaleri notes that British neglect had handicapped their armor development, citing as an example the Crusader, weighing just 18 tons, mounting an "ineffective 37mm cannon" and still employing riveted armor. Interestingly, many of the German tanks were markedly worse; the Pzkw. I, many of which were used in the Battle of France, mounted as main armament only *two 7.92mm MGs.* Yet, such tanks proved quite effective in that campaign because they were being used in the role Guderian had envisioned — the traditional cavalry pursuit and exploitation, not the destruction of enemy armor forces. (Rommel's 7th *Panzerdivision,* equipped almost exclusively with captured Czech 38t tanks, got a nasty surprise when it bumped into the Royal Armor Corps near Arras, rapidly discovering that engagement with other tanks was not something necessarily to be sought.) By 1942, the "lightning victories" were over, and issues such as "main gun effectiveness" and armor thickness became crucial as the tank evolved into something for which it had *not* been designed nor envisioned before or during the early stage of the war an *antitank* weapon. For the Germans, the Blitzkrieg phase was over forever.

We must continue to assess current trends and future likelihood against what we know from the past. Unfortunately, the past is of little help — indeed, becomes a *liability* — when we fail to confirm or understand facts and begin making value judgments on glorified historical fiction. Myriad mistakes as well as successes marked the path via which the tank came of age; while I agree with MAJ Cavaleri the issues facing the Armored Force today are *similar* to those of the inter-war years, inaccurate accounts which fail to consider all the factors do not serve us well in assessing today's issues. Lessons from the German, British, French, or even our own contemporary experiences are of little use if not understood in context; the "corporate culture" of those armies was not the same as

that of the U.S. Army on the threshold of the 21st Century, and the concept and purpose of Guderian's *Panzer* force was very different from our current reality. Those who fail to heed the lessons of history may indeed be doomed to repeat its mistakes, but one must *first* accurately understand those lessons before viable conclusions may be drawn.

LOUIS H. BROWN
LTC (Ret.)
Kensington, Md.

Your Duty: Train Soldiers to Survive

Dear Sir:

I was stationed in Germany four years in a Hawk unit as a 16S. I was older than most going in and saw things differently about the way our troops were being handled. Basic training was a joke. The DI's had instructions to run every NoGo back through enough times so their numbers indicated a high success rate. The fact I was not headed to an infantry or an armor unit made our infantry training light at best.

The hardest part of AIT was learning Aircraft Rec on 136 different aircraft from a 5k aspect. I would have liked more than eight hours of hand-to-hand instruction. I would have liked survivability skills to be taught for those who, having fired the last primary weapon, must turn foot soldier.

I remember going to K-town and Baumholder for Stinger trainer use. The troops stationed there had a presence about them as a unit. I would listen to them running PT in the morning and they were thunderous! An American could not hear that power and cadence and not be moved in some fashion. They were a part of the Army I wanted to be in, and wondered why the ADA (and I am sure others) was not like those soldiers. We were not taught to be so; from the start to "our time was up," our motivation was not nearly as high. It would really be sad to think that basic training is that way for all troops. I would ask that all those officers who have a part in the conduct of training to make a special effort to teach the correct way to do things and teach them to survive.

I am out of the Army now, and would hope that we never need to spill the blood of any man. If we do need to raise arms against another country, I would hope the shirt and tie group would let you folks get knee deep and make it quick. I didn't go to the Gulf; the troops from our unit that did go never fired a round but came back all swollen, as if they had done something. The armor, mech inf, air units, and many others are to be awarded thanks from me and my family for doing a darn smooth job of it.

Thanks for listening to the ramblings of an ex-Army person. Keep your powder dry.

PAUL HICKOX
via e-mail

Books

Innovating at the JRTC

The Battle for Hunger Hill by Daniel P. Bolger, Presidio Press, Novato, Calif., 1997. Hardcover, 363 pages, \$24.95.

Lieutenant Colonel Bolger's sixth book continues his trend of producing highly valuable works which belong on every professional's bookshelf. This time around, he relates his experiences and lessons learned from two rotations to the Joint Readiness Training Center (JRTC) while he commanded 1st Battalion, 327th Infantry Regiment of the 101st Airborne Division. He writes simply and clearly, explaining acronyms and soldiering in such a way that a civilian with little or no military background could pick up his book and follow along. More importantly, his work differs from many self-aggrandizing authors in that he is brutally honest about both his mistakes and successes. He points out the many failures of his first rotation, from his own capture to the failure to evacuate casualties (which gave the book its name: Hunger Hill was the location of the casualties who only received one Meal Ready to Eat (MRE) a day until they were recovered).

What makes the book even more valuable is LTC Bolger's straightforward writing style. He tells it like it is, and if he doesn't like something or agree with a certain doctrine, he doesn't show any niceties. Some traditionalists might call his attacks on the planning process blasphemous, but few can argue with success.

Perhaps LTC Bolger's most important offering is his plethora of lessons learned on everything from leadership to the planning process to tactics. Many of his lessons and solutions are so creative that he can be called a visionary. He developed ways to simplify complex concepts for soldiers, and used unconventional methods to overcome obstacles in the way of success. Some particularly notable concepts are a very good mnemonic for the rules of engagement and his "ten commandments for JRTC," which are a guide on what to do when no guidance is available. LTC Bolger also attacks the current planning process, called the Deliberate Decision Making Process, as futile and totally inefficient. During his second rotation, he forced his staff to adhere to Patton's premise, that a good order is one which fits on one page, is readily understood, and has a sketch. During his second rotation, his staff established two tactical command posts (TACs), as opposed to one large Tactical Operation Center (TOC). With two TACs, he was able to establish a viable rest plan (which is a monument in itself), and when the situation dictated, use one TAC to control the battle while the second planned for a future mission. To further assist in controlling the battle, he used the excess members from the old TOC as white teams, basically honest brokers who accompanied his line companies with the purpose of reporting to the TAC. This allowed

commanders to control the fight, rather than be tied to the radio giving situation updates.

LTC Bolger also provides good examples of empowerment and leadership. He assigned an S5 who commanded a task organization called Team Golf, based around a civil affairs team, a loudspeaker team, and a counterintelligence agent. This group was highly successful in both gathering intelligence and preventing the local population from assisting the enemy. He and his command sergeant major also espoused the lesson of "leadership by subtraction," eliminating poor quality or non-deployable soldiers.

The book's one major flaw is the extremely poor quality and quantity of its maps. They were too small and not detailed enough to allow the reader to visualize what was happening. Additionally, each map covers too many events, confusing the reader and causing him to have to constantly flip back many pages to try to follow along as the battle progressed.

LTC Bolger's *The Battle for Hunger Hill* is a brilliant low intensity conflict match to his book covering his National Training Center experiences, *Dragons at War*. All military leaders, regardless of branch, will benefit from LTC Bolger's book, especially from his creative, unconventional solutions to overcoming tactical problems. More leaders should follow his example and be willing to experiment with solutions which are not doctrinal, or do not follow the conventional wisdom. In particular, Armor or Cavalry leaders will benefit both from his insights into fighting a low intensity conflict and from LTC Bolger's willingness to use the unconventional approach.

CPT FRANK SOBCHAK
Fort Bragg, N.C.

Preserved Tanks in Russia by Trevor Larkum and Jim Kinnear, Published by Armour Archive, PO Box 440, Northampton, NN3 9JL, England. ISBN 0-9523293-4-4. Price £8.95, direct postage £1.05 in the UK, £2.05 overseas.

At one time, any information on armored vehicles in Russia was only available by chance, through official news agencies, or from Western intelligence sources. That has now changed, but the new "openness" does not help anyone wanting to know what the huge area covered by the former Soviet Union has to offer the AFV enthusiast. Some details on the major collections have appeared, some of it useful and some confusing, but a definitive guide is welcome.

Trevor Larkum has added this account to his Armour Archive series to list those tanks which a visitor to Russia can expect to see. In asso-

ciation with Jim Kinnear and several enthusiasts in the CIS and elsewhere, he has produced this listing of what is where. As can be expected, a large part of the content covers the NIIBT collection at Kubinka, detailing over 250 tanks, and another 40 at the Central Armed Forces Museum in Moscow. That still leaves another 300 elsewhere, in large and small collections or individually as memorials to past battles or exploits. And this is just tanks and self propelled guns on tank chassis; many other infantry vehicles are briefly listed but are not included in the totals.

Each of the book's geographical sections has an introduction to the location and in many cases background of the major Second World War battles which led to memorials and museums being set up. Photos show something like half the vehicles, although the small size of these only allows a general view. Another drawback is in the movement of vehicles; some pass from collection to collection from time to time, and others are removed for possible restoration or sale abroad. One arrived on display when intercepted by customs officials as it was being smuggled — if that is the right word? — abroad, and another's whereabouts was uncertain at the time of going to press as it is rumored to have been stolen.

Coverage of each vehicle gives details as to what mark it is, and also its current state of preservation. A number have been restored, often with more enthusiasm than knowledge, while others are just rotting away. This may well save many wasted hours going to visit a vehicle which is not what it is expected to be. We even have faked vehicles, with KVs being made up from IS-2s and T-34s produced for film work or display using later components.

Not just Russian-built vehicles are included; most people will be surprised at the range of vehicles displayed. While there are many T-34-85s and IS-2s and 3s, there are a remarkable number of British Mk V heavy tanks and WW2 Japanese vehicles, as well as many contemporary German types. Some of the wartime non-Russian vehicles were captured or obtained through Lend-Lease, but the story of how some later tanks arrived where they now are would make a book in itself. One drawback, which some may find annoying, is that while German WW2 vehicles are listed, anyone wanting details of them is referred to the two previous volumes of German tanks. This does save duplication, however, and these guides are valuable to the enthusiast.

As with any guide, this is a snapshot of things as they were when the information was collected. The author admits that listing all the vehicles is an impossible task, but he has done a good job of trying, and his requests for new information show that he is interested in keeping the listing up to date. In the meantime, anyone wanting to know more about tanks preserved in Russia, or planning a visit

there to seriously tank hunt, or just happen along a tank or two when there as a tourist, will find this an invaluable guide.

PETER BROWN
Dorset, England

The Oxford Illustrated History of Modern War edited by Charles Townshend, Oxford University Press, New York, N.Y., 1997. 354 pages. \$49.95 hardcover.

"Oxford Illustrated History" of anything conjures at least three words to my mind: good, definitive, and expensive! *Modern War* is, of course, all of these, and more. It is a compilation of work by historians across the world that traces the evolution of modern war and analyzes its elements. *Modern War* is based on the supposition that modern war and modern society are inextricably linked. It attempts to answer the following questions: How has war shaped society and vice-versa? How has war changed over the centuries due to technology? How and why is war waged today, and how and why will it be waged tomorrow?

Part I, The Evolution of Modern War, is a primer on the history of warfare from approximately the 1600s on. Part II, Elements of Modern War, analyzes the nature of warfare in the same time period. This is the heart of the book, with chapters on technology, sea and air warfare, the social impact of war, women in war, and postmodern war. All of these subjects were a refreshing read for a company grade officer whose focus is generally echelons below anything considered in this book, most notably the last chapter on postmodern war. Some disturbing (for an armor officer) assertions on the capabilities of conventional versus "subconventional" (unconventional) forces are made, not without historical evidence. This book left me with the feeling that great challenges are ahead, and that we cannot afford the too often made historical mistake where we "train for the last war." *Modern War* is a good book, well-documented, illustrated, and edited. At \$49.95, I recommend it for serious historians; for the rest of us, five minutes spent in the library on the last chapter will definitely give you food for thought.

CPT JERRY A. HALL
Ft. Knox, Ky

The Encyclopedia of the Third Reich edited by Christian Zentner and Freidemmann Bedürftig, Da Capo Press, New York, N.Y., 1997, 1,162 pages. \$50.00 paperback.

I found this exhaustive study impressive, mainly due to its all inclusive format. Almost anyone or anything related to or affected by

National Socialist Germany can be found described here, with over 3,000 entries written by 36 of Germany's best historians. Going beyond its primary focus on 1933-45 Germany, it also covers other nations and their citizens who were touched by the Third Reich, whether through occupation, alliance, resistance or collaboration. Although I wouldn't classify it as a "picture book," there are over 1,200 photos, posters and drawings, adding a visual dimension and giving a face to the many interesting, and in some cases obscure, biographies.

The vast array of subject entries range from Marlene Dietrich to Volkswagen, from the "Bullet Decree" of 1944 to *Signal Magazine*. The Encyclopedia also covers lesser-known aspects of life under Hitler's regime, including state control of entertainment and entertainers who stayed in Germany, marriage laws, and the roles of women.

Originally published as a hardcover, two-volume set a few years ago, this one volume monolith is an invaluable library addition to anyone interested in this most infamous period of German history.

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Czolg w Boju (Tanks in Battle) No. 4, Ciezki Czlog KW (KV Heavy Tank) by Janusz Magnuski, Pelta Press (Poland), 1997. 56 pages, \$12.00. ISBN 83-85314-12-1.

Pancerne/Armor in PROFILE No. 1 by Janusz Magnuski (Polish text) and James Grandson (English text), Pelta Press (Poland), 1997. 32 pages, \$8.00. ISBN 83-85314-11-3.

The advantages of these books are their fresh material, new color, and English summaries. Disadvantages include the fact that not all material is translated. But these books are recommended for modelers, armor buffs, and Soviet fans.

Since 1989, there have been a number of changes in Eastern Europe, and one of the best, for those of us interested in Soviet and other Eastern European armor, is the rise of publishers and model companies east of the Oder River. Poland has been among the most active of the former Warsaw Pact states, and Pelta - Poland has emerged as one of the leaders in this area.

Pelta covers a wide range of items, including all sorts of military and modeling subject books. It is the umbrella agent for at least 26 smaller model kit producers in Russia, Moldova, Poland, and Ukraine. They are exported under trade names like RPM and Plastyk, but the kits and books are also available directly from Pelta via direct mail or the Internet.

The two books listed above were provided by Pelta - Poland as review samples, and they bode well for the future of the company. Most armor modelers and historians are familiar with the works of Janusz Magnuski, and he continues to do excellent research into Eastern European armor subjects and provide good, solid works about his subjects. The first book listed above is a new history of the KV-series tanks, from the SMK and T-100 through the KV-1, KV-2, KV-1s, and KV-85. New photos of the various intermediate prototypes are included, such as the frankly weird, multigunned KV-6 and KV-7, and the unhappy KV-13 "T-34 killer" which the Kirov plant was sure would be the standard Soviet medium tank from 1943 on.

Unfortunately, while contributors to the book include Russian Mikhail Baryatinskiy, Bob Fleming from the UK, and Steve Zaloga, all of the text is in Polish. This would be very disappointing if Pelta was not quite aware that money is to be made in English-speaking countries, and as a result, a very handy English synopsis of the book is included. This covers the core of the text, basic technical parameters, and translations of the captions of all 132 photos and drawings. There is also a full-color cross-section of the vehicle by Krzyshtof Cieslak in the center of the book, which is handy for interior detail fans.

If you are a "Klim" fan, this is a good book to pick up and worth the money. The only thing I miss is that, while I read Russian, I do not read Polish. However, due to some commonality of Slavic languages, I can pick up a few words, and some of the text seems to cover the shenanigans of the various personalities at the Leningrad Kirov Works. I would like to have seen that in English!!

The second volume is the first in a new series of general armor profiles and covers five different vehicles in short overviews: the British Infantry Tank Mk. III Valentine, the Polish 10TP cruiser tank, the Soviet SMK heavy tank, the Hungarian 40M Turan, and the French SOMUA 35. Each tank rates six to seven pages, either 1/35 or 1/48 plans, and a color foldout cross-section. Unlike the KV book, this one uses parallel Polish and English texts. While the subjects are not covered in tight focus, the material is clean and neat, and the plans and color views are handy for modelers. This should be a "modelers' companion" series, and the reasonable price is hard to beat for value.

All in all, these are worthwhile efforts, and should be available from either Pelta or larger stores in the U.S. and Europe. Thanks to Marek Machala of Pelta for the samples and catalogue. By the way, Pelta's address is Pelta-Poland, 16 Swietokrzyka Str., 00-050 Warsaw, Poland. Telephone/FAX are 0048-22 827-66-14 or 826-91-86. Their Internet site is at <http://www.pelta.com.pl> for those with online access.

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Three Things I Learned in the Army

by Colonel (Retired) Paul Baerman

I've been retired from the Army now almost three years, and while working in civilian life, I've had a chance to reflect on the 26-plus years of service and its acquired knowledge and experience. So for the younger readers of *ARMOR*, I thought I'd put some ideas down for consideration.

Since most things in life come in cycles of three, it only stands to reason that there are three things of utmost value that I learned in the Army. Of course, there are many important lessons, but these three things seem to me to be central to the core of being a good soldier and living a worthwhile existence.

Consider The Source. Army life is a series of judgment decisions, none more important than those made on the battlefield. Part of the decision-making process is assessing the validity of the information received and where it came from. How many times have you received a spot report, only to question the information it contains? Who sent the report, and was the reporter in the right place to observe? How much training and experience did that person have? Could he tell the difference between models of enemy equipment? Could he read a map?

These sorts of questions evolve into more specific, personal rules of thumb. Let me give two examples. First, in a crisis, never believe the first reports because they're usually wrong. People don't have enough information, or don't see the whole picture, or they're too excited. They want to report something, but remember, not all information is good information. Better to hear them say, "we have a situation developing here," than for them to fill the air with bogus reports. Second, remember what you hear and apply your own experience. In this manner, when I heard someone report their vehicle down and that they'd be back on the road in one-half hour, I always multiplied the estimate by three and then added forty-five minutes. Thus I knew I could expect them, in this case, in two-plus hours.

By the way, "consider the source" also means listening to the troops. Often, it is the younger troops and officers who have some of the best ideas, and their input is important to the organization. Hence a leader should be out listening a lot.

This principle of "consider the source" also applies to one's self. Can those who receive your word trust it completely? What's your track record? As an officer or an NCO, does your word mean something? If it doesn't, you're in the wrong business. Do you do everything in your power to ensure that once your word is given, the task will be accomplished?

Never Hire Ms. Buxley As Your Secretary. Now this may appear to be flippant, talking about the lovely Ms. Buxley, General Halfrack's secretary in *Beetle Bailey*. There's a larger principle at work here, and one not necessarily connected to the sexual crises in the Department of Defense today.

Officers and NCOs are expected to be upright and conduct themselves appropriately. I like to use the phrase, 'be squeaky clean.' They are in leadership positions, and expect soldiers to follow them. If a leader doesn't do the right thing, how can he expect the organization to do the right thing? We take on a considerable burden when we are leaders. Leadership by example should mean something, both in our personal and professional lives. Too many leaders seem to separate the two, when in fact they are inseparable and, as important, the troops know it. Concentrate on your profession, and do the right thing.

We are called to a higher standard and should do our best to meet it. I remember participating in a training exercise in which the leadership decided that the particular training was too difficult for the cadets, who were in great shape and highly motivated. The boss wanted to crank the training back a couple of notches

so everyone could complete it. This sort of approach is the lowest common denominator approach to training, and is directly opposed to training that challenges the soldier. What is the lesson learned by the neophyte leader undergoing the training? Well, it might be that if this is the toughest training I am called upon as a leader to receive, surely I can't ask more of my soldiers when I get in a position of leadership. Thus starts the slippery slope of allowing training standards to slip.

Don't Pick Up Anything Man-Made on the Battlefield. There are a lot of ways to look at this principle. The most obvious is beware of booby-traps or unexploded ordnance. But more important is the concept of discipline. The battlefield is a dangerous place for all sorts of reasons, and the Army is serious business. If a soldier is not disciplined and well trained, when sounds and sights and smells of a heretofore unknown nature happen all around him, he is in trouble. That's why the Army has SOPs, battle drills, rules of war, etc., to help when all hell breaks loose.

Good leaders stress these procedures and tough training and then throw in different conditions to see how their soldiers react to change. An infantry squad about to embark on a practice patrol could instead be taken to the post swimming pool and told to make a stream crossing. How does the squad leader react to the unexpected? Can he get everyone to the other side? Does he get rattled? What does he learn from the challenge and about himself?

On another level, an old platoon sergeant once taught me a very important lesson involving this principle. The battlefield is nasty and different, and most normal people react to it with some amount of shock, even with the best discipline and training. Before, during, and after the battle, leadership plays its role. The importance of leadership before and during is quite obvious. But after the battle, its presence is equally significant. The leaders must make the rounds of their soldiers and look each one in the eye, see how they're doing, and tell them what happened. The leaders should point out that a certain amount of shock and withdrawal is normal, and that the soldier's training and discipline is working. The leaders help the soldiers recover from the shock of battle and prepare them to continue. I think human touch here is most important, holding onto a soldier's shoulder while talking to him and making sure he's all right. That human presence and touch keeps the soldier on an even keel and gives the leader a chance to assess his unit's condition.

It's impossible in such a short piece to say all that needs to be said. But soldiers should take great pride in their service. In a small way these three principles indicate what leadership in the Army is really all about.

My sainted mother would probably have added an Irish principle to this list, "Our reward is not on this earth." It's a good one for Army life, but that's for another day...

Colonel (Ret.) Paul Baerman was commissioned in Armor from the United States Military Academy in 1968. He has served as an armored cavalry platoon leader, troop XO, and troop commander in Vietnam with the 11th ACR. He has commanded a tank company and a cavalry troop in CONUS and a tank battalion and armored brigade in USAEUR. He has also authored a number of articles for ARMOR and other military periodicals.