

importance of weather and its effects on a round's trajectory. In fact, each rifleman is issued a marksmanship data book that he fills out every time he qualifies, and he continues to use it as a reference whenever he undergoes marksmanship training. This book, when properly used, greatly improves his overall marksmanship performance.

A known-distance range also serves as a multipurpose range that enables the rifleman to obtain a battlesight zero efficiently from distances other than the all-too-common field expedient 25 meters and gives him the opportunity to engage targets out to a range of 500 meters. Too, a known-distance range allows a pit crew to experience the sound of rounds snapping overhead.

During the field firing phase, the riflemen apply the fundamentals they have learned on the KD range. The field firing ranges serve a three-fold purpose—to incorporate the application of basic marksmanship fundamentals to the engaging of combat targets, to further build a rifleman's confidence in his weapon, and to reemphasize the importance of obtaining a battlesight zero.

The Army has progressed in this area with the development of the Multipurpose Arcade Combat Simulator (MACS) and the Weaponeer. Still, we must not regard these as substitutes for the KD

range, but as training aids in our overall marksmanship training program.

Over the past several years, the Infantry School has taken a more serious approach in its efforts to revitalize marksmanship training. The development of the marksmanship training units and the master's program for noncommissioned officers are two excellent additions to the Army's marksmanship program. But these alone have not completely solved our marksmanship and weapon proficiency problems.

The new version of Field Manual 23-9, Rifle Marksmanship, has considerably improved unit marksmanship programs, but marksmanship training should not be limited to the doctrinal framework outlined in regulations, circulars, and unit status reports. Our inability to accept and adopt innovative and realistic marksmanship training into our existing programs may well be the crux of the problem. There are several reasons for this, but the primary one is the mistaken perception that Army Regulations and Field Manuals prohibit certain exercises.

First, we should reinstitute the use of known-distance ranges and make this a mandatory phase of marksmanship training. When a rifleman goes directly from the preparatory phase to the field fire phase, he never really learns to use his weapon completely. The Weaponeer

does duplicate a KD range to some degree, but it does not include the effects of weather.

Second, the four basic firing positions—kneeling, sitting, standing, and prone—need to be included in all phases of Army marksmanship training. When we go to combat we won't have nicely prepared foxholes or neatly stacked sandbags. Our current marksmanship program focuses on defense rather than offense. We must change this mind-set and bring it into line with the spirit of the infantry, which is attack.

Third, marksmanship training should be included in every unit's mission essential task list (METL) to ensure that it routinely receives the necessary attention.

Finally, each division should conduct an annual marksmanship competition. This will not only stimulate interest and desire on the part of the individual rifleman, it will directly involve leaders at all levels.

Good marksmanship is a critical skill that the Army needs to emphasize more if it is to prevent further decay in this area.

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**Captain Philip K. Abbott** commanded a rifle company in the 4th Battalion, 22d Infantry, 25th Infantry Division when he wrote this article. He previously served as a battalion adjutant and assistant S-3. He is a 1982 ROTC graduate of Norwich University.

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# Marksmanship and the "New Focus"

**CAPTAIN J. MARK CHENOWETH**

I read with great interest Major General Carmen J. Cavezza's comments on the "new focus" on marksmanship (INFANTRY, November-December 1990, pages 1-2). While I agree whole-

heartedly that it is time for the infantry to move to precision marksmanship, I am concerned with the path we are taking to get there.

The new marksmanship program and

infantry one station unit training (OSUT) program of instruction (POI) should develop a more proficient marksman. General Cavezza says that "our infantry units will have to be far

better prepared and devote more time to marksmanship training than they are currently doing if they are to meet and sustain the planned higher proficiency levels in our infantry soldiers." The question is: How do we integrate those skills into our infantry units?

There are a number of obstacles to overcome if we are to improve marksmanship proficiency in our units. The first and most formidable obstacle is the lack of marksmanship skills among infantry leaders. If our officers and noncommissioned officers cannot shoot, how can they train their subordinates to shoot? This does not mean that a commander (at whatever level) has to be the best shot in the unit, but he does have to be proficient with the unit's weapons and with the fundamentals of marksmanship.

Most senior NCOs learned to shoot at some time during their careers but have been too busy running the ranges to get down and shoot. If a commander asks his first sergeant or platoon sergeants to give him a quick, informal class on basic marksmanship, many of them will mumble something about the acronym BRASS (breathe, relax, aim, sight, squeeze) or the eight steady hold factors (though I doubt that many can name all eight). Few will be able to describe accurately how to zero an M16. This lack of knowledge is not solely the NCOs' fault; there has been no significant command emphasis on marksmanship for a long time, and NCOs have enough to do without taking on tasks that seem to be of little concern to their commanders.

The second obstacle is the over-

but they are not "the answer." The fact is that to learn to shoot well we have to shoot a lot of live bullets, and we can buy a lot of live bullets for the price of one Weaponeer.

A far less expensive alternative, though definitely not at the cutting edge of technology, is the use of quality air rifles on an indoor range. All of the fundamentals of marksmanship, in fact, can be taught, demonstrated, and practiced in a company area with only a small investment of training dollars. Other low-tech options include target-box, dime-washer, and dry-fire exercises. These are not just activities to keep the troops involved in concurrent training while the commander is at the range. Competitive marksmen spend countless hours dry firing to train their muscles how to shoot, to improve their technique, and to sharpen the mental concentration that is required to achieve marksmanship proficiency.

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**So let the wild circle of argument rage,  
on what wins, as war comes and goes,  
many new theories may hold the stage,  
but the man with the rifle knows. (From  
"The Man with the Rifle," author unknown.)**

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One way to achieve this is to require that all infantry officers wear their marksmanship badges. Army Regulation 670-1, Paragraph 32-16b(2), says, "at least one marksmanship badge will normally be worn by all personnel except those personnel exempt by Army regulation." I believe that if infantry officers had to wear a "bolo" badge they would become far more concerned with acquiring marksmanship skills and earning expert scores.

Another step to make sure officers can shoot is to require them to qualify with the service rifle even if their TOE positions call for them to be armed with pistols. Many of our officers have not fired rifles since they pinned on captain's bars. Marksmanship is a perishable skill that must be reinforced. (Officers often say, "I carry a pistol to the field for training exercises, but if a war ever starts I'm going to get a rifle." But they are only fooling themselves.)

reliance on technology. For too long we have assumed that it was the rifle's fault if we missed and that we should design one that wouldn't let us miss. We are looking for a tiny shoulder-fired guided missile that will seek out enemy personnel and kill them wherever they may be hiding. Although that sounds good in the movies, history is full of examples of the great things skilled marksmen with good rifles can do. In Afghanistan, for example, the Soviets learned that being technologically superior was no panacea. The Afghans used ancient bolt-action rifles and expert marksmanship with devastating effect. The British learned the same lesson from the Boers.

We spend millions of dollars on such devices as the Weaponeer and the Multipurpose Arcade Combat Simulator (MACS) looking for quick, easy, high-tech answers to marksmanship training. These are excellent tools and they do have a role in our training programs,

Optical sights, for a select few expert marksmen in each platoon, are an excellent idea, provided they are mounted in a manner that allows the use of the iron sights as well. Telescopic sights *do not* make a soldier a better marksman; they *do* improve his ability to aim more precisely under certain conditions. Their utility is severely degraded by inclement weather, though, and few are sturdy enough to take the beating that an infantryman's rifle is subjected to.

The AN/PAQ-4 infrared aiming light (INFANTRY, November-December 1990, pages 6-7) is another attempt to resolve through technology what we lack in training. Any device that emits infrared light can be detected. The metascope (AN/PAS-6), first generation technology that has been available for years, can detect infrared light sources from several miles away. A better answer may be to use the AN/PVS-7 night vision goggles to detect enemy targets and then engage those targets with a weapon equipped with AN/PVS-4 or AN/TVS-5 night vision sights. These devices are passive; they emit no light to be detected. They can also be used with a daylight filter to provide a telescopic sight for weapons 24 hours a day.

## SEMI-ANNUAL RIFLE MARKSMANSHIP WEEK

### PHASE I: Preliminary Marksmanship Training (14 hours)

#### 1. Mechanical Training

- Operator maintenance on rifle, magazine, and ammunition.
- Adjust sights on rifle.
- Load and unload magazine.
- Immediate action.

#### 2. Fundamentals of Rifle Marksmanship

- Four fundamentals of marksmanship.
- Dry fire exercises (target box, Riddle sighting device, dime-washer, M16 sighting device, Weaponeer).
- Effects of weather and ballistics (wind, light and temperature, mirage, trajectories).

### PHASE II: Basic Rifle Marksmanship (32 hours)

1. Shot grouping (25-meter, using the brown, back side of the cardboard E-silhouette; concentrate on front sight without an obvious aiming point; shoot five-round groups).
2. 25-meter battlesight zero.
3. 25-meter downrange feedback exercise (using scaled silhouette target NSN 6920-01-167-1398).
4. 400-meter known distance (KD) range familiarization firing.
5. 400-meter known distance qualification (50-shot course of fire using Rifle "D" Target, FSN 6920-922-7450, centers FSN 6920-922-7451).

### PHASE III: Advanced Rifle Marksmanship (25 hours)

1. Quick fire.
2. Rapid semiautomatic fire.
3. Automatic fire.
4. NBC fire (moving and pop-up targets).
5. Night fire (with and without night vision devices and NBC gear).
6. Field fire (moving and pop-up targets, multiple targets).
7. Record fire (same as current qualification range).

Qualification Standards: Combined scores of BRM KD Qualification (maximum score 250 points) and ARM Record Fire (maximum score 40) for a combined maximum score of 290.

|              |              |
|--------------|--------------|
| EXPERT       | 251-290      |
| SHARPSHOOTER | 216-250      |
| MARKSMAN     | 167-215      |
| UNQUALIFIED  | 166 or below |

The third obstacle is the weapon itself—the M16 rifle. The M16 is one of the finest rifles in use by any army in the world. Although my personal preferences lean toward a .30 caliber battle rifle, I understand and appreciate the capabilities of and the benefits offered by the M16. The M16A1 suffered from a number of shortcomings, most of which were corrected with the M16A2 and its heavier bullet. The biggest problem now is the trigger and sear assembly of the M16A2 and the abominable three-round burst. The three-round burst mechanism has three different sear engagements, which requires three distinctively different trigger pulls when the rifle is fired in the semiautomatic mode. This makes precision marksmanship extremely

difficult, because trigger control is the key to accurate fires.

Every infantryman does not need to be capable of firing a rifle accurately when it is set on full automatic. We have dedicated automatic riflemen we can train to do that. For example, we could give these soldiers M249 squad automatic weapons or selective-fire M16s for full automatic fire. At the same time, we could give the riflemen M16A2s equipped with trigger assemblies from AR-15 rifles. This would result in a fine semiautomatic-only rifle that could be used as a precision tool to deliver accurately aimed single shots. The "spray and pray" mentality of sending out a three-round burst and hoping one of them connects is counter-productive.

The fourth obstacle is our training

and qualification courses of fire. We have to get away from pop-up targets and get back to known distance (KD) ranges. A rifleman, to improve his skills, must have downrange feedback. He must know precisely where each bullet hits so he can determine why. If a commander really wants to know how well his unit can shoot, he should have them qualify on a KD range. He should also issue every soldier a scorebook and require that they record every shot they fire. Soldiers will be able to look at their targets and see exactly where the bullets hit, analyze all of the firing data (wind, light, temperature, mirage, ammunition lot, and the like) and really learn how to make every shot count. They will learn how to call their shots and attain the goal of "one shot-one kill."

The proposed training plan for a marksmanship week included here works best when conducted over a five- or six-day period, while the soldiers are bivouacked on a range. This "Range Week" concept allows total concentration on marksmanship skills, and it can be adapted to include concurrent training on other weapon systems. The plan can easily be modified to each unit's training requirements, and the times can be adjusted on the basis of the unit's level of training.

We must train infantrymen to shoot. To do that, all infantrymen, from the commander to the newest recruits, should start with the basics. We must teach the fundamentals, and we must practice. Imaginative leaders can make marksmanship training challenging, rewarding, and fun. There will be no excuses if we fail to produce infantrymen who can employ their rifles accurately.

As General Cavezza stated, "Regardless of the intensity of the conflict, the infantryman is the ultimate weapon."

**Captain J. Mark Chenoweth** is an assistant professor of military science at Norwich University. He previously served as company commander and staff officer in the 4th Battalion, 31st Infantry. He has attended sniper school and participated in the All-Army Marksmanship Competition. He is a 1984 ROTC graduate of Oklahoma State University.