

TRAINING HEART RATE

THR - Training Heart Rate
 MAX HR - Maximum Heart Rate
 RHR - Resting Heart Rate
 HRR - Heart Rate Range

INTENSITY PERCENTAGES:
 60% - Low
 70% - Average
 80% - High

MAX HR = 200 - age
 RHR = number of heartbeats in 10 seconds while lying or sitting, and multiply by six
 HRR = MAX HR - RHR
 THR = Intensity Percentage X HRR + RHR

Exercise Intensity Level

- Count the number of heartbeats for ten seconds immediately after the exercise.
- Multiply by six.
- This is your current intensity level.

surface for two or three weeks before running on a road.

Because this type of running is demanding, it should be done only once a week. Once the soldiers have developed a good running base, they can begin interval training and speed play.

Interval training involves running quarter miles, half miles, and miles at a

faster pace. Each soldier or platoon can do eight quarter-mile runs, four half-mile runs, or two one-mile runs. The pace must be fast enough to make the soldiers breathe harder than they would on a normal run. Then the soldiers should recover by walking until they catch their breath.

Speed play involves running at a mod-

erate pace, then quickening the pace for a certain time (30 seconds to six minutes) or a certain distance (50 yards to one mile). After running at the faster pace, the soldiers should slow down until they catch their breath, but they should never stop or walk during the exercise unless they are in pain or feel ill.

The accompanying chart will help a soldier determine his training heart rate for running and exercising.

Overall, in planning and conducting physical fitness training, it is important for leaders to understand FM 21-20 and use it correctly.

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Close Combat Training

CAPTAIN DARRYL W. DAUGHERTY
CAPTAIN DREW WATSON

During the past four years, more has been written about close combat and the need for close combat training than at any time since the end of the Vietnam War. *That is all to the good, because the need for our infantrymen to become proficient in close combat skills is as great now as it has ever been.*

It is no secret that today's infantrymen are more intelligent and independent than any soldiers in our nation's history. These men volunteer for the infantry anticipating the discipline, pride, and reputation associated with the crossed rifles.

They expect tough training, fair treatment, and increased responsibility that is based on their potential. If their leaders train them properly, they will do the right things in combat.

Unfortunately, in today's environment of high technology weapons and an anticipated fluid battlefield, we have neglected the most basic of infantry fighting skills. We have ignored the basic fact that the individual soldier, armed with rifle and bayonet, still must close with and ultimately destroy his foe.

We must do away with the idea that the

stand-off ranges of our direct fire weapons and the tenacity of our supporting arms have eliminated the requirement for fighting at close quarters. If a soldier feels that he can take care of himself in a close combat situation, he will be more effective at that most crucial moment in any battle—the assault—because he will be eager to close with the enemy and to drive home his bayonet if he must. In the defense, this same soldier will be more inclined to hold key terrain even if the enemy has penetrated his unit's position.

One of the highest priorities for all

combat and combat support units, therefore, is to develop a comprehensive and systematic close combat training program. The training should be conducted in accordance with Field Manual 21-105; the instructor must be an expert in close combat fighting; and the training must be aggressive in spirit and progressive in nature. The program should be concerned with three particular forms of close combat: rifle with attached bayonet, knife and bayonet fighting, and unarmed combat.

Although safety must be considered in all three of these forms of training, the safety restrictions and devices should not be prohibitive or expensive. The ultimate objective is to create an aggressive, bold, confident, and ruthless soldier. Ruthlessness is probably the most important quality, because in a close combat situation the combatants fight to ensure their own survival.

How does a unit go about creating the proper setting and training area? Here are a few ideas:

Pugil stick training is quite suitable for simulating close combat using a rifle with attached bayonet. Football helmets, mouthpieces, lacrosse gloves, and groin protectors are normally used to protect the combatants from serious injury. One end of the pugil stick is colored to represent the bayonet end of the weapon, which is helpful when awarding points for a kill or an injury. The training itself can be held in any open area with squads and platoons pitted against each other in man-to-man bouts. This type of training boosts small unit spirit almost immediately, and unit cohesion is strengthened proportionately.

Dulled and blunted polymer knives can be used for training in bayonet and knife fighting. The blades should be coated with shoe polish or any other marking material that will leave a "fingerprint" when it meets its mark. For safety reasons, the soldiers should wear plastic eye protectors or face-protecting helmets.

This form of combat is difficult to judge, and to come up with a clear winner the trainer should consider using two judges during each bout. This training should start in a gymnasium on a padded floor before being moved outside. At



Soldiers who receive hand-to-hand combat training will be confident that they can take care of themselves in battle.

first, the rules of engagement must be strict and rigidly enforced. Then, as the soldiers gain experience, the tight rules can be relaxed.

Although unarmed combat training is the easiest of all to conduct, it may be the most difficult to control. This training may include boxing, wrestling, oriental martial arts, or any combination of these. Here again, the soldiers should use head protectors, gloves, footpads, and groin protectors. A padded gymnasium floor or an outdoor area covered with

sawdust or sand is an ideal place for this training.

As the training goes on, it will become obvious who needs the most work, and grouping soldiers by abilities can reduce the possibility of injuries. At least two judges or "seconds" should be available during each bout to stop it quickly when time is called.

An actual fight on the battlefield usually lasts less than 15 seconds, and the winner is usually the one who has the training, experience, and confidence that

he needs to act instinctively. Therefore, close combat training should be simple but challenging and realistic. And it should not always be conducted in an open field or a gymnasium. Once the soldiers have progressed beyond the basics, urban combat facilities, trenchlines, and individual fighting positions should also be used.

To aid in realism, the training should not be limited to daytime or favorable weather conditions, because it is not likely that an enemy will surprise you or get

too close to your positions on a warm sunny day. If the training is aimed at conducting noncombatant evacuation operations, for example, pitting one soldier with a pugil stick against two unarmed foes in a dimly lit room is a great stimulator.

Close combat training is an excellent opportunity for an infantry leader to exercise his duties as a commander—to challenge his men and prepare them for combat today so that they will be able to win on the battlefield of tomorrow.

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The Bayonet Commonsense Lessons

MAJOR ROLAND J. TISD, JR.

No weapon inspires the infantryman quite like the bayonet. And in this age of sophisticated systems, this simple but deadly weapon, in the right hands, can still decide a battle. To make the most of it, though, Infantry leaders must remind their soldiers of the bayonet's purpose, teach them how and when to use it, and emphasize that it is not just an impressive ornament to be used only when going through an occasional bayonet assault course.

During a recent live fire platoon assault exercise, I saw a platoon leader expertly maneuver his squads through a course that was laid out over difficult terrain. The course itself was infested with numerous "enemy" bunkers that simulated fire with pneumatic machineguns. The soldiers were heavily laden with ammunition but overcame most of the bunkers by using maneuver and high rates of sustained overwatching fire. In some cases, though, the soldiers advanced to within 20 meters of an "enemy" position before they engaged it. As the ammunition be-

gan to run low, it was apparent that if the platoon had been engaged in a real fight, close combat could equate with contact at bayonet point.

After suggesting to the platoon leader

that he should have his men fix bayonets, I noted his surprise at such a thought. Then I watched the excitement level rise as each soldier attempted to respond to his order, "Fix bayonets."



Soldiers who train with fixed bayonets will not hesitate to use them in combat.