

Better yet, they can see that he is taught about personal conditioning so he can tax himself.

PT sessions are not the only way to ensure unit physical fitness. Variety is important too. Company teams for such sports as basketball, flag football, softball, and volleyball is another important esprit builder. Leaders might take the company to a 10-kilometer run in a local community, to the local swimming pool, or to a nearby beach. They should also have the unit practice to win battalion sports day competitions. An infinite variety of options are available, with master fitness trainers and FM 21-20 to help.

Soldiers, especially those who have not had an opportunity at home or in school, need to learn about the complete spectrum of physical conditioning and health, and leaders must make sure that they do. And they need it early, because

it's easier to develop good habits than to break bad ones later.

Once soldiers are aware of the principles of overload and progression, they can incorporate these principles into their personal workouts. The leaders need to set the example by their own performance in PT formations and by their behavior the rest of the time. Outside the PT formation, leaders can also teach personal conditioning and health by their example. (What is a soldier to think about a leader who is a heavy smoker or drinker, or otherwise abuses his body?)

But when it comes to PT, it should be done by the numbers, as a unit, in uniform, with the leaders giving commands and leading by example, and with the guidon out in front.

On a future battlefield characterized by high volumes of fire and a lack of

distinct FEBA or FLOT trace, many small units and task forces may find themselves either bypassed or encircled. Small units—if they are to cope with the extended fronts, violence, confusion, lethality, and dynamics of this kind of battlefield—will have to be more cohesive than ever before.

And the leadership and cohesion of PT is important in building that kind of unit cohesion. Combat is, after all, a team sport.

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Commander's Fitness Program

CAPTAIN SAMUEL J. PADGETT, JR.

Physical fitness is a primary concern for all commanders. To succeed in combat, they must get their soldiers to the right place at the right time with the right weapon. This means the soldiers must be able to footmarch, carry loads, and move equipment.

A commander's responsibilities in regard to fitness are to assess his unit's fitness levels; establish realistic goals; develop unit training programs that prepare his soldiers for combat; conduct well-planned, innovative, physical training; and lead by example.

To assess his unit's fitness levels, a

commander systematically averages the scores that his soldiers earned on each event of the company's Army Physical Fitness Test (APFT). He then plots the point averages of each event on a graph. This should permit him to see his unit's strengths and weaknesses and to set his goals accordingly.

For example, if the company's average on push-ups is 74 points, the commander can establish goals of 80-84-86 and higher for all soldiers as the company progresses. Although some of the soldiers may not reach the 80+ points on push-ups or sit-ups, the commander must

set a standard that fits his mission and then program remedial physical training for those who fail to meet it.

The first thing a commander should do in planning a unit fitness program that will achieve his goals is to become familiar with the exercise principles in Field Manual 21-20, Physical Fitness Training. Those principles are regularity, progression, overload, balance, specificity, variety, and recovery.

After a commander establishes his goals, he should focus on what he wants to accomplish and how he wants to go about it. A sample program is shown in

SAMPLE FITNESS TRAINING SCHEDULE

Monday	Push-up improvement, sit-up improvement.
Tuesday	Long run (ability groups), speed play, or interval training.
Wednesday	Circuit training used in conjunction with push-up and sit-up improvement or sports activity.
Thursday	Long run (ability groups) or footmarch.
Friday	Push-up improvement, sit-up improvement, weight training (if available) or partner-resisted exercises (for trained individuals).
Saturday	Long run.

the accompanying box. (Since the soldiers can do timed multiple sets of push-ups and sit-ups at their own pace, dividing them into ability groups during these sessions is not necessary.)

A commander must ensure that his program focuses on what his soldiers will be expected to do in combat. A light infantry unit, for example, should periodically conduct long tactical foot marches of 5, 8, 10, and 12 miles. Artillery personnel, on the other hand, since they must move heavy artillery projectiles, should work on muscle endurance activities.

In a typical training period, the soldiers begin with a warm-up that consists of stretching and walking slowly to increase their heart rates. Then they do some muscular strength and endurance work—either push-ups and sit-ups or a cardio-respiratory activity such as a two-mile run. They end the period with a slow walk to cool down and slow their heart rates, and then stretch the specific muscle group they have been using.

In the push-up improvement event, the soldiers do four different types of push-ups: wide-arm, regular, close-arm, and diamond. This allows them to work the upper, mid, and lower pectoral (chest) muscle groups, thus increasing the number of push-ups they can do. They execute all exercises first from the elevated-foot position, then from the regular position, and finally from the knee position.

These exercises are conducted in sequence and in multiple sets of four. Each set is timed as follows:

- During Weeks 1-4—Set 1, 30 seconds; Set 2, 20 seconds; and Set 3, 10 seconds.

- During Weeks 5-13 (or more)—Set 1, 45 seconds; Set 2, 30 seconds; Set 3, 15 seconds.

For best results, push-ups should be

done at least three times a week, with at least one day of rest between sessions. (These recovery periods are important in building strength.) Once a soldier has reached muscle failure with the push-ups, he moves on to the sit-up improvement sequence.

Training for sit-ups should use the twist (Rocky) sit-up, the curl sit-up, and the regular Army sit-up. These should be done in timed multiple sets (as in the push-ups) from the elevated-foot position (feet resting on another soldier's back or a chair), and the regular position. (See paragraph 11-7, FM 21-20.)

The sit-up improvement sequence should be done at least three times a week, and the sessions should be concentrated and challenging. The commander should ensure that push-ups and sit-ups are not done the following day, but should emphasize a run instead.

The soldiers should train for the two-mile run by increasing the duration (time or distance) and the frequency (number of workouts).

Dividing the soldiers into ability groups for runs is a good idea in a company-sized element. The commander programs the soldiers into groups according to their times on the two-mile run, as shown on their APFT score cards. This enables the faster soldiers to start with a fast group and improve, while the slower soldiers avoid running injuries by beginning with a slower group. Fewer soldiers drop out, because each soldier is running with a group at his own pace. A leader should be with each group to provide encouragement and supervision, and to encourage all soldiers to move to a faster group as soon as possible.

Once the company is divided into ability groups, the commander can slowly increase the duration of the run from 20

KEY POINTS FOR SOLDIERS

Push-ups

- Use the correct form (see paragraph 11-6, FM 21-20).
- Always go to full extension.
- Use the same rhythm as on the APFT.
- Never hold your breath.
- Increase your repetition or times periodically.
- When you cannot do any more, do negative push-ups. (Rest your knees on the floor and return to the starting position; then let yourself down slowly to the count of eight.)

Sit-ups

- Use correct form.
- Use the same rhythm as you would on the APFT.
- Never hold your breath.
- Place a mat under your tailbone to prevent injury.
- If possible, do not anchor your feet.
- Do negative sit-ups when you are unable to do any more. Use your hands and arms to get back into position; then lower yourself slowly to the count of eight.)
- Pace yourself to take advantage of the full two minutes.
- Stretch the abdominal and hip flexor muscles before and after the exercise.

Runs

- Stretch the muscles of the legs and lower back before and after running.
- Do not run too fast at the start, or you may not be able to finish.
- Run and breathe naturally, rhythmically, and deeply.
- Move your arms back and forth faster to help you increase your pace.
- Run with someone of equal or slightly better ability.
- Keep time when you practice and stay within those times; if you have extra energy, you can speed up in the last half to quarter mile.
- Never sit down or stop after the run; walk for five to ten minutes to prevent the pooling of the blood to the legs.

minutes to 45 minutes or the distance from two miles to five. Gradually increasing the distance or speed helps avoid common running injuries such as shin splints, ankle sprains, torn ligaments, Achilles tendonitis, and the like. A company should spend at least three weeks running three-mile sessions. Additionally, soldiers should run on a track or soft

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

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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