

APFT IMPROVEMENT PLAN

INDIVIDUAL PUSH-UP IMPROVEMENT ACTIVITIES

The following instruction is provided to those who either need to improve their capability to perform push-ups to achieve standards on the Army Physical Fitness Test -or- who wish to make maximum use of the time and effort expended -or- who wish to increase their personal performance to the maximum as efficiently as possible.

The instructions follow the "FITT" principles as outlined in FM 21-20 and reviewed below.

Frequency = a minimum of three(3) exercise sessions per week with adequate rest (48 hrs) between sessions.

Intensity = working until you achieve MUSCLE failure. Muscle failure can only be attained while actually lifting the weight. If you think you cannot do another repetition and quit without trying you HAVE NOT attained muscle failure. Be MENTALLY tough!

Time = how long you work each session. Maximum gains are made with high intensity (working as described above) exercise for short durations. Work hard and smart, NOT long and dumb.

Type = you must actually do the activity you are trying to improve if you are to make substantial gains. Lifting weights WON'T greatly improve your push-up ability.

THE PROGRAM:

Three (3) separate activities are detailed below. All follow the FITT principles while improving your ability in three separate ways. Together, they provide all the activity needed to allow your maximum progress. That is, unless YOU violate one of the FITT principles. Then you reduce the efficiency of the program by as much as 45%. Compromise two principles and your efforts net you 25% efficiency at best. BE MENTALLY TOUGH!

ACTIVITY #1

Technique Improvement is the primary purpose of this activity.

The most efficient technique for performing the push-up is to widen the spacing of the hands to the width of the elbows with arms extended to the sides while laying on your stomach. Several benefits are attained. First, you concentrate more of the effort on the large pectorals or chest muscles and take some of the effort off the much smaller triceps. Using the larger muscles will eventually allow you to perform longer and easier once they are trained to respond. Second, by widening you hands, you reduce the distance you have to move your body to complete a repetition. Third, most people have trouble making sure they go down low enough to achieve standards. Spacing the hands further apart will allow this to happen naturally once you are trained to perform in that manner.

Once a week, do one set of push-ups to TOTAL MUSCLE FAILURE with your hands spaced as indicated above. This takes no more than 2 minutes. Then, wait 2-3 minutes and do another set. As in the first set you must attain TOTAL MUSCLE FAILURE for the work to be of maximum benefit. You will naturally do less repetitions on set two than on set one. It is recommended that you hold yourself in the rest position (up position) and squeeze out as many repetitions as possible. This helps your rest technique during the APFT itself and ensures that you are working to total muscle failure. Remember, you can ONLY attain muscle failure while lifting the weight of your body.

**** The total time spent on push-up improvement during this day is no more than 7 minutes.
HIGH intensity & SHORT duration effort!!

REST 48 HOURS BEFORE WORKING ON PUSH-UPS AGAIN!!!

ACTIVITY #2

Endurance Improvement is the primary purpose of this activity.

To build great quantities of extra endurance, you must force yourself to endure. Once your mind and body realize that they can endure, they will do it naturally. This activity proves the capability while ensuring TOTAL MUSCLE FAILURE without any rest period. This activity IS ALWAYS POSSIBLE!!!!!! You may not believe it at first but if you work at not quitting, you soon will be a believer. Be MENTALLY TOUGH!

Once a week, do one set of push-ups with your hands spaced at elbow width until you cannot possibly do another repetition. Then, WITHOUT ANY REST, drop to your knees and immediately raise yourself into the "ladies" push-up position. KEEPING YOUR REAR END DOWN AND YOUR BACK STRAIGHT, COUNT DOWN EVERY PUSH UP YOU DID PREVIOUSLY UNTIL YOU REACH ZERO. Remember, this is always possible. You build endurance by forcing your arms and chest muscles to hold yourself up. Frequent rests in the up position may be required. Rest as often as every two or three reps are not uncommon. The main thing is DON'T ALLOW YOURSELF TO QUIT!!! BOTH YOUR MIND AND YOUR BODY MUST BE CONVINCED THAT YOU CAN DO THIS.

**** The total time spent on push-up improvement during this day is not more than 6 minutes.

REST 48 HOURS BEFORE WORKING ON PUSH-UPS AGAIN!!!

ACTIVITY #3

Strength Improvement is the primary purpose of this activity.

To improve your physical strength, you must lift more weight during an activity than you normally do if working for an extended period. Doing push-ups with your feet elevated will transfer more of the weight of your body forward to your arms, chest and shoulders. Since you are lifting more weight each repetition, you will naturally do less repetitions.

Place your toes on any solid elevated surface. A kitchen chair is ideal. The second step of a flight of stairs will work as will any solid platform approximately 12" to 18" high. Space your hands elbow width as you have been taught and perform one set of push-ups until TOTAL MUSCLE FAILURE. Rest for 2-3 minutes. Then, place your toes back on the platform and move your hands in toward the center of your body until they are under your shoulders. Now perform a second set of push-ups with your hands in this position until you again achieve TOTAL MUSCLE FAILURE. The first set tires the larger chest muscles. The second set, with hands spaced more narrow, concentrates more work into your triceps. Be MENTALLY TOUGH!

***** The total time spent on push-up improvement during this day is no more than 6 minutes.*

REST 48 HOURS BEFORE WORKING ON PUSH-UPS AGAIN!!!

SUMMARY

There you have the program. In total, the time spent to make MAXIMUM gains in your push-up ability is not more than 19 minutes per week. Three daily sessions of approximately 6 1/2 minutes each of high intensity, short duration effort is the key. Monday, Wednesday and Friday each week works great! The rest days between are also absolutely essential to success. Without the rest period for your muscles to recover and develop, you will actually get worse in you ability instead of better. So, on those off days, rest the muscles you worked so hard. If you want to run or do other activities not seriously taxing your chest, shoulder and arm muscles, that is okay. Just give the muscles you've worked so hard the chance they deserve. Rest 'em!!!

NOTE: The intensity of the program should cause you to get worse during the first week or two that you use this program. You should not begin to see gains until the end of week three. Stick with it. IT WORKS!

GOOD LUCK! AND NEVER COMPROMISE YOUR FITT PRINCIPLES.

DONALD R. GARLOW
CW4, AGR
Master Fitness Trainer

APFT IMPROVEMENT PLAN

INDIVIDUAL SIT-UP IMPROVEMENT ACTIVITIES

The following instruction is provided to those who either need to improve their capability to perform sit-ups to achieve standards on the Army Physical Fitness Test -or- who wish to make maximum use of the time and effort expended -or- who wish to increase their personal performance to the maximum as efficiently as possible.

The instructions follow the "FITT" principles as outlined in FM 21-20 and reviewed below.

Frequency = a minimum of three(3) exercise sessions per week with adequate rest (48 hrs) between sessions.

Intensity = working until you achieve MUSCLE failure. Muscle failure can only be attained while actually lifting the weight. If you think you cannot do another repetition and quit without trying you HAVE NOT attained muscle failure. Be MENTALLY Tough!!

Time = how long you work each session. Maximum gains are made with high intensity (working as described above) exercise for short durations. Work hard and smart, NOT long and dumb.

Type = you must actually do the activity you are trying to improve if you are to make substantial gains. Weight training won't appreciably increase your ability to do sit ups!

THE PROGRAM:

Three (3) separate activities are detailed below. All follow the FITT principles while improving your ability in three separate ways. Together, they provide all the activity needed to allow your maximum progress. That is unless YOU violate one of the FITT principles. Then you reduce the efficiency of the program by as much as 45%. Compromise two principles and your efforts net you 25% efficiency at best. Be Disciplined and MENTALLY tough!

Sit-ups are accomplished when your hip flexor muscles (Iliopsoas) and your stomach muscles (Rectus Abdominus, Obliques and Transverse Abdominus) are contracted to raise your upper body. In most individuals of average or slightly less than average ability, the Hip Flexor group of muscles is adequately strong to accomplish enough sit-ups to max the APFT. These muscles are usually so strong from our normal walking and stair climbing activity that we must take special precautions while training for the sit-up event. That is why the Army mandates that we perform the sit-up event with our legs bent 90 degrees at the knee. By bending the knee, we reduce the pull of the Hip Flexors on the vertebrae of our lower back without lessening their ability to assist us in the performance of our sit-ups. From this information, it is easy to see that we must concentrate our efforts of the Abdominal muscle group if we are to make the best possible gains in our ability.

Additionally, when working the muscles of the lower back and abdomen in any exercise routine which incorporates other strength training activities, the stomach and lower back muscles must always be the **LAST** areas trained. Injury to the lower back can easily occur if the muscles which make up our midsection are first fatigued through exercise and are later required to support the spine while performing other activities. It is therefore of critical importance that we not train the midsection until the final activities in any strength training routine.

ACTIVITY #1

Technique Improvement is the primary purpose of this activity.

When performing the sit-up, many people waste valuable strength and energy by slowly lowering their upper body to the floor. During this activity, practice throwing your body back down as rapidly as possible. Gravity will assist you. By developing this technique, AND CONCENTRATING on RELAXING the abdominals and Hip Flexors you rest for a brief instant between repetitions.

Another advantage can be gained if, when starting to raise our upper body from the floor, we snap our elbows forward as hard as possible. This technique will gain momentum from your arms that will assist in your efforts to raise the upper body.

A third advantage can be gained by repositioning the feet during the routine. Try moving the feet further apart if you start with them together. They can have a foot of space between them. Since the heels must remain in contact with the ground, try pointing the toes inward or outward to gain additional repetitions. Additionally, I can perform more repetitions with my toes well off the ground than I can with my feet flat on the floor. EXPERIMENT to find what works!

Once a week, perform the following routine concentrating on the information in the three paragraphs immediately above. Have someone hold your feet or hook them under the couch or other piece of heavy furniture.

Do one set of bent leg sit-ups until **TOTAL MUSCLE FAILURE**. As you begin the routine, concentrate on throwing yourself back to the floor. Then, as you feel yourself tiring, begin snapping your elbows forward to regain your momentum. When you start to slow down, pause at the top only long enough to reposition your feet. If you must rest at the top, concentrate to make sure you are ready to do another repetition and then use all your techniques to achieve it. **Never** go down unless you feel sure you can get back up. **Mental discipline** near the end will gain a few more repetitions. Now rest three minutes and do another set, concentrating on all the above techniques, until you again achieve **TOTAL MUSCLE FAILURE**.

****** The total time spent on sit-up improvement during this day is not more than 7 minutes.**

REST 48 HOURS BEFORE WORKING ON SIT-UPS AGAIN!!!

ACTIVITY #2

Endurance Improvement is the primary purpose of this activity.

To build great quantities of extra endurance, you must force yourself to endure. Once your body and mind realize that they can endure, they will do it naturally. This activity proves the capability while ensuring TOTAL MUSCLE FAILURE. Be MENTALLY TOUGH!

Once a week, perform the following routine without resting!! Place your lower legs over the seat of a kitchen chair. Keep your rear end approximately one foot from the chair legs. If you cannot do this because the chair seat is too high, find a lower object to elevate your legs. A short step stool or sturdy corrugated box will work as will many other items around the house. Begin doing sit-ups with your fingers interlocked behind your head and continue until you cannot do any more. Now immediately shift away from the elevated position and tuck your feet under a heavy object and continue your routine. Raising your feet isolated your stomach muscles and prevented your hip flexors from working to assist you. With your feet under the heavy object, those strong hip flexors will now help you do many more repetitions. Continue until you can do no more. But don't quit yet!! Now release your hands from behind your head and throw your arms forward in front of you as you continue to perform repetitions until you achieve TOTAL MUSCLE FAILURE. **DON'T QUIT!! FORCE YOURSELF TO ENDURE.**

**** The total time spent on sit-up improvement during this day is not more than 5 minutes.

REST 48 HOURS BEFORE WORKING ON SIT-UPS AGAIN!!!

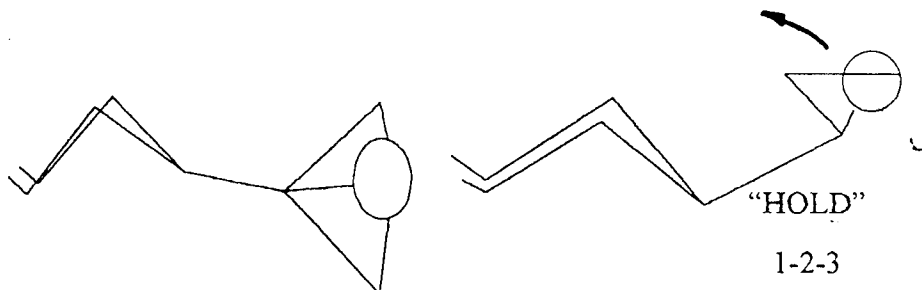
ACTIVITY #3

Strength Improvement of the isolated abdominals is the primary purpose of this activity.

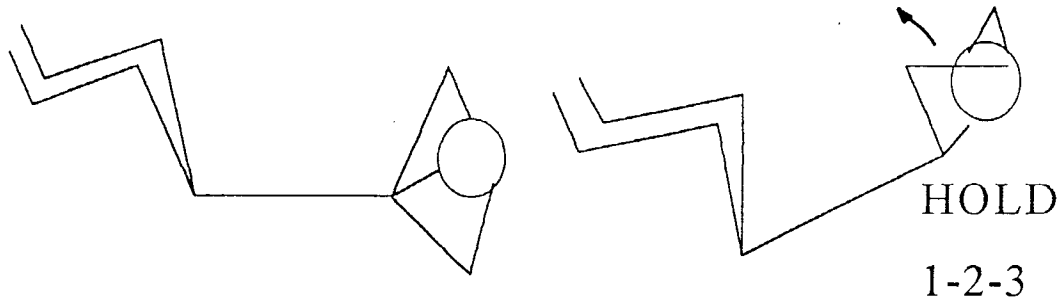
Follow the instructions and refer to the "stick figure" sketches to assist you until you learn this routine.

Begin by lying on the floor with your legs bent. DO NOT place your feet under an object or have them held in any way. Place your hands behind your head in the normal manner. Now raise your upper body HALF WAY and hold in that position for a "three count" and lower your body back to the floor. Immediately repeat the procedure until you have done 15 repetitions.

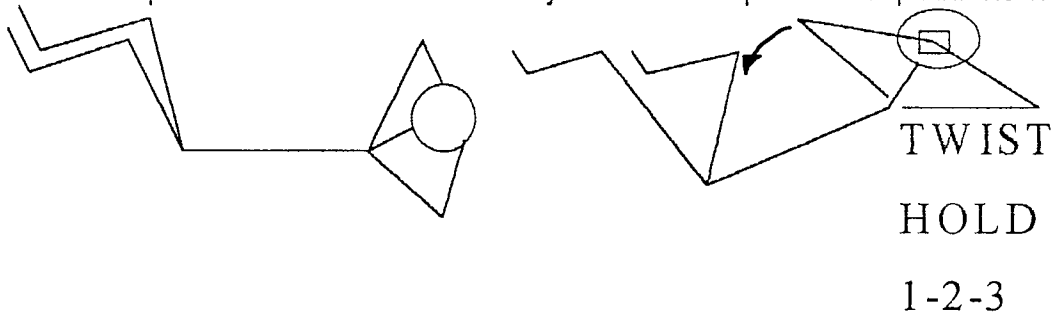
NOTE: A "burning" sensation in your abdominals is normal. Be MENTALLY TOUGH and keep working! DON'T Quit when you feel the "burn"!



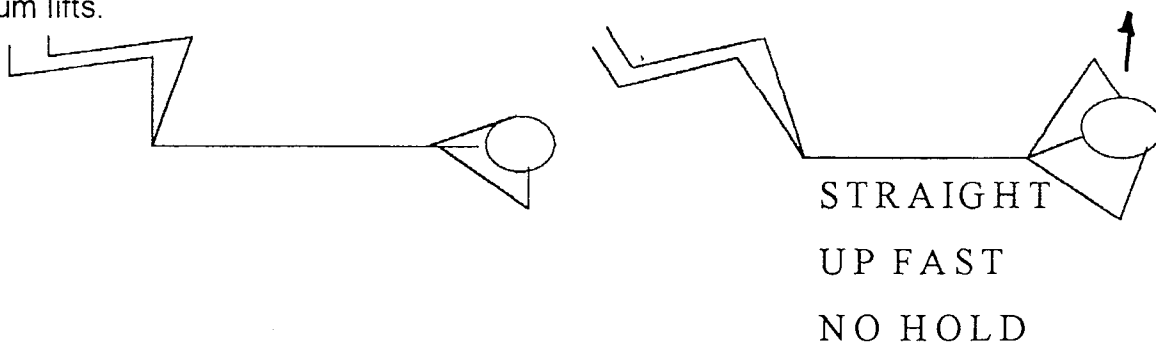
Now, without resting, bend your knees and raise your feet off the floor and hold them there. Again raise your upper body as before, holding for a "three count". Continue for 15 repetitions.



Immediately, check the position of your legs. Your UPPER legs should be pointing straight up at the ceiling. Without allowing your legs to change position, raise your upper body and twist it to the left. Try to touch your right elbow to the outside of your left knee. When you can raise no higher, hold for the "three count" and lower back to the floor. Now raise again attempting to touch your left elbow to the outside of your right knee. Hold at the top as before and then lower. Repeat to alternate sides until you have completed 8 repetitions to each side.



The final series in this routine is done rapidly and must be done with precision. You will not hold for a three count during this series. With your legs still bent and elevated and your hands still behind your head, concentrate on raising your forehead and shoulders as high as possible **STRAIGHT UP!!!!** DO NOT ALLOW YOUR CHIN TO MOVE TOWARD YOUR CHEST BUT KEEP YOUR FACE POINTED TOWARD THE CEILING. Perform 15 rapid, maximum lifts.



This completes the routine. Work to master the technique and check the instructions and diagrams frequently until you're sure you have it down pat.

ADD REPETITIONS IN EACH SERIES AS YOU GET STRONGER.

**** Total time spent on this activity is not more than 4 minutes.

REST 48 HOURS BEFORE WORKING ON SIT-UPS AGAIN.

SUMMARY

There you have the program for sit-up improvement. In total, the time spent to make MAXIMUM gains in your sit-up ability is not more than 16 minutes per week. Three sessions on alternate days of approximately 5 minutes each using high intensity, short duration activities is the key to success. Monday, Wednesday and Friday works great! Initially, without the rest period for your muscles to recover and develop, you will actually get worse in ability instead of better. So, on those days off, rest the muscles you worked so hard. If you want to run or do other activities that do not seriously tax your abdominals, that's okay. Just give the muscles you've worked so hard the chance they deserve. **Rest 'em!!!**

NOTE: Recent tests indicate that after 2 weeks of work on alternate days as discussed above, even faster gains can be accomplished by:

1. Work three (3) days straight without a day off.
2. Rest one (1) day.
3. Repeat #1 Repeat #2

Additionally, you do not have to do your sit up improvement at the same time of day that you perform push up improvement work. Split it up or combine with other activities as you need.

JUST DO IT!!

DONALD R. GARLOW
CW4, AGR
Master Fitness Trainer

APFT IMPROVEMENT PLAN

INDIVIDUAL RUNNING IMPROVEMENT ACTIVITIES

The following instruction is provided to those who need to improve their running capability to achieve standards on the Army Physical Fitness Test. The information provided will also be beneficial to those who are presently capable of passing this event but want to improve their ability toward the maximum end of the performance scale. The techniques described follow the Army's FITT principles as outlined in FM 21-20 and reviewed as follows:

Frequency = a minimum of three (3) exercise sessions per week with adequate rest (48 hrs) between sessions.

Intensity = working at the proper heart rate to achieve best results while insuring safety. Unless you work hard enough to raise your heart rate to the proper level, you will not improve your running capability. A very simple way of testing to see if you are working at a high enough level is to stop during exercise for a ten second pulse count. During that ten seconds, your pulse count should be between 23 and 28 beats. If you are just starting to work, begin at 23-24 beats in ten seconds. Those in fair condition can probably work at the 25-26 beats per 10 second level. Persons of advance aerobic conditioning should be easily capable of working at the 27-28 beats per 10 seconds.

Time = how long you work each session at the proper training heart rate. If you raise your heart rate but do not keep it elevated long enough, you will not improve your running capability. Minimum working time for any improvement is 20 minutes at the proper intensity level. 30 Minutes at intensity is recommended for the best gains compared to the time and effort you will expend.

Type = you must actually perform the activity you are trying to improve if you are to make substantial gains. Other exercises which elevate the heart rate for the proper period of time can be used to provide variety and add some training value toward improving your running capability. But the simple truth is that you must run if you are to improve your running capability. How you run (how fast, how far and how you combine these two factors) must be varied to provide the best rate of improvement.

THE PROGRAM:

Three (3) separate activities are detailed below. All follow the FITT principals while improving your ability in different ways Together, they provide all the activity needed to allow your maximum progress. That is unless YOU violate the FITT principles stated above. When you compromise one of the four principles, you reduce the efficiency of the program by as much as 45%. Compromise two principles and your efforts net you 25% efficiency at best. Be MENTALLY Tough!!

ACTIVITY #1

Endurance Improvement is the primary purpose of this activity.

To build great quantities of extra endurance, you must force yourself to endure. Once your mind and body realize that they can endure, they will do it naturally. This activity provides the vehicle to increase your cardiorespiratory endurance. **You must increase your endurance to provide a reserve of energy to draw upon if you are to run more effectively.** This activity also provides the additional benefits of more efficient metabolism and weight loss or redistribution. The activity is the Long, Slow Distance run or LSD.

Once each week, cover a five mile course without stopping. AS the term LSD implies, you should strive to cover the distance at a reduced pace from that which you normally run. At first, it is perfectly allowable to start out at a reduce jogging pace and, as you run out of steam, alternate rapid walking and jogging to finish the course. As you improve, you will naturally jog more and walk less until you will eventually be jogging all the way. You should check your pulse rate as you go and keep it in the 23+ beats aerobic range as described above. **You must force yourself to finish the course.** Remember, increased endurance is the goal of this activity. The fact that you will burn the calories in the food you eat more efficiently instead of storing them as fat and the fact that you will loose inches and quite possibly pounds is simply added benefit.

DON'T ALLOW YOURSELF TO QUIT!!! BOTH YOUR MIND AND YOUR BODY MUST BE CONVINCED THAT YOU CAN DO THIS.

******* The total time spent on this activity will again be determined by your ability. AS above, you will get better and spend less time as you do. 45 minutes or less is the norm.***

REST 48 HOURS BEFORE RUNNING AGAIN!!!

ACTIVITY #2

Technique Improvement is the primary purpose of this activity.

Any runner who is truly capable must be able to vary his pace and technique. Capable runners don't just simply run at the same old plodding pace minute after minute, mile after mile. As an example, they run up hills by dropping their hands lower and pumping them to gain momentum for each stride. In this way, they can maintain the pace and not work their legs any harder than they would on level ground. When going down a grade, the capable runner concentrates on increasing the length of each stride thereby allowing gravity to increase their speed. When running on flat surfaces, the capable runner will vary both the length of stride, longer then shorter, as well as making minor changes in speed. Most of those changes are slight increases in speed. The capable runner recognizes that they will naturally slow this more rapid pace to their normal pace over a distance. Thus, they constantly remind themselves to make slight speed **increases** all throughout their run. Some runners choose to never consciously run faster. They accomplish the same result by simply reminding themselves to increase the length of their stride by a small distance each step. A one inch increase in stride

length each step save steps during the run and thus saves time. Experiment with all these techniques to see which ones work for you as you perform the following run.

First select at least three running routes of approximately three miles. The routes should be varied if possible. One should ideally be flat. Another should incorporate some small hills. The third may require you to run on sand or soft surfaces if you normally run on a paved course. The basic idea is to time yourself as you complete each course the first time by running in your normal manner. From that point, each time you travel one of the courses, work on a different technique and see what effect that technique has on your time. Try one technique at a time to determine which ones benefit you and by how much. The goal is to improve on your best time on a course each time out. Mental toughness to force yourself to do better each time is critical. If you can improve your time on a three mile course, just think how much better you can do when only running two miles!!

*****The total time spent on running improvement during this day will vary according to your ability. As you improve, the time you spend will naturally decrease. One half hour or less is the norm.**

REST 48 HOURS BEFORE RUNNING AGAIN!!!

ACTIVITY #3

Speed Improvement is the primary purpose of this activity.

IF YOU CANNOT JOG THE FULL FIVE MILES DESCRIBED IN ACTIVITY 1 ABOVE, DO NOT PERFORM THIS ACTIVITY. YOU NEED AN ENDURANCE RESERVE TO DRAW UPON TO GET MAXIMUM BENEFIT FROM THE ACTIVITY TO FOLLOW. Until such time as you can jog the full five miles, repeat ACTIVITY 1 or 2 or you can bike or do aerobics for at least 30 minutes at the proper heart rate (intensity).

Subject to the paragraph above, perform this activity once per week. As with the above activities, some course design is required initially. Select a **flat** course where you can measure or pace out intervals of at least 250 yds. The course may cover a circuitous route or be a straight line distance that can be retraced over and over. The important factor is the minimum distance of 250 yds that can be covered without possibility of interruption. You are going to alternate jogging with sprinting during this activity. Your course should not cross streets where you may be interrupted by traffic during your sprint phases. Interruption during the jogging phases is permissible in that you can simply jog in place to allow traffic to pass.

To begin the activity, jog at a normal pace for at least 1/4 mile to insure warm up. Once you hit the first 250 yd interval, begin sprinting and continue at this elevated pace for the entire 250 yds. Once the interval has been covered at the accelerated pace, return to your normal jogging pace for at least 250 yds or approximately the sprint distance. Then, sprint for another 250yd interval and again return to a jog for at least 250 yds. Continue alternating sprints and jogging until you have run at least 8 sprints. Always finish with a slow jog of at least 500 yds and then walk to cool down.

****** The total time spent on running improvement during this day is approximately 20 minutes.**

REST 48 HOURS BEFORE WORKING ON RUNNING AGAIN!!!

NOTE: This is an extremely demanding activity! It requires great discipline and mental toughness to force yourself to perform the last sprints to maximum ability. DO NOT eat within 90 minutes of performing this activity. Some people loose their lunch due to the intensity. BE MENTALLY TOUGH! This activity is the real key to tremendous gains in your two mile time!

SUMMARY

It is okay (and recommended) to perform your running activity on the days you are not doing push up or sit up work.

There you have the program. It combines technique improvement with endurance and speed training to provide **MAXIMUM** gains in your running ability. It also provides the most critical aspect of overall physical well being and longevity. **Cardiorespiratory efficiency.** Aerobic activity on a regular basis is the key. While many aerobic activities can provide cardiorespiratory efficiency, this program has been strictly designed to allow soldiers in the Army to improve their running capability to the maximum at the same time.

The total time spent each week on this program should not exceed 1 hr and 40 minutes. The time spent gets shorter as you get better. The increased overall health benefits alone are well worth the effort.

GOOD LUCK! OF COURSE YOU WON'T NEED LUCK ON THE NEXT APFT IF YOU ARE WILLING TO PUT IN THE TIME TO IMPROVE.

DONALD R. GARLOW
CW4, AGR
Master Fitness Trainer