Advanced Training for 5000m, 10000m, And Half-Marathon Races



By Clinton Lee Blacksmith

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Introduction

Introduction

This manual is the culmination of nearly three years of research during my time as a self-coached runner. I believe that a coach is an invaluable tool for running, but I recognize that some runners may find themselves on their own after graduating high school and not receiving scholarship offers to run in college. I intend for this manual to be a resource for these runners. By providing my own training schedule, I hope that others in the same situation will follow my example and continue running.

With that said, I must give a warning that the workouts and training loads included in this manual are intended for runners who have had at least three years of experience with running and racing competitively. The training schedule I have included may not work for everybody and that is why I urge the reader to consult other sources to research what works best for them and to make adjustments to the training plan. Some of the sources that have directly influenced my training philosophy include:

- Road to the Top by Joe Vigil
- Better Training for Distance Runners by David E. Martin and Peter N. Coe
- Lore of Running by Tim Noakes
- Daniels' Running Formula by Jack Daniels
- Winning Running by Peter Coe
- Hansons Marathon Method by Luke Humphrey
- Running to the Top by Arthur Lydiard



Billy Mills (left) and Ron Clarke (right during the 10,000m at the 1964 Olympic Games in Tokyo, Japan

Periodization 1

Periodization

In *Winning Running*, Peter Coe defines periodization as, "The planned application of training stimuli to produce a specific physical condition at a particular time or place." (Coe 73) By planning out when to do specific types of workouts, a runner will run their best at the right time instead of peaking early in a season and not improving, or even regressing as training load becomes too much for the body to handle. Periodization comprises four main periods: rest, transition, preparation, and competition. Within each of these periods are other smaller phases, but for the sake of this manual I will only focus on the main periods and provide quick summaries below.

Rest Period

Each new training cycle should begin with the rest period. This is a time for a runner to completely relax and halt all strenuous workouts. This period entails very easy running, or even no running at all. The runner decides on what he or she feels is necessary in order to recover from the previous season's demands. Any runner during this time should be done at slow speeds on soft surfaces such as a grass field. If using a heart rate monitor, the maximum heart rate should be 140 BPM (beats per minute).

Transition Period

The transition period focuses on easy workouts as a way to adjust the body to running again. This is when a runner returns to the actual routine of running everyday while steadily increasing weekly mileage. This period usually lasts between 4-8 weeks depending on how tired a runner feels when they resume training.

Preparation Period

In my opinion, this is the most important phase and is the period I place a lot of emphasis on because it stresses aerobic conditioning. Runners often refer to this period as the "base" phase because if one were to imagine all of training as a pyramid aerobic conditioning would be the very bottom level which all other levels build upon, The bigger the base, the larger the overall size of the pyramid will be. During this period, runners reach their maximum weekly mileage for the entire training cycle. The preparation phase is important because it focuses on developing the circulatory system's ability to transport blood to muscles during exercise. This process is called capillarization, and by improving the ability to move oxygen carried by blood to muscles, the body will recover from the stresses of the competitive phase much better.

The main workouts during this period are long runs that account for 20 to 30% of the total weekly mileage, easy runs, and threshold runs that are done at intensities (mainly a pace relating to what can be run for the distance of a marathon) to reach the body's maximum ability to produce energy by aerobic processes. At the end of the base period is when it is best to run a half marathon race

When training during the preparation period, it is important that the runs are done at paces that allow the body to maintain aerobic energy production. An invaluable tool in monitoring effort levels is to run with a heart rate monitor. A heart rate monitor provides instant feedback on how hard the heart is working to pump blood through the circulatory system and can alert a runner when they are running too fast to receive the intended benefit of a run. Below are various heart rate ranges and how their related effort levels:

Recovery Runs	<140 BPM
Easy Runs	130-155 BPM
Long Runs	145-160 BPM
Threshold Runs	160-170 BPM

Competitive Period

The competitive period encompasses the transition from the base period all through the time when runners compete either races held on a track or the roads. Interval workouts become the main workout where paces range anywhere from 1,500m race pace to 10,000m and half marathon race pace. The three main ways to manipulate interval workouts are:

- Increasing/decreasing the distance run
- Increasing/decreasing the amount of rest between intervals
- Altering the pace at which the intervals are run

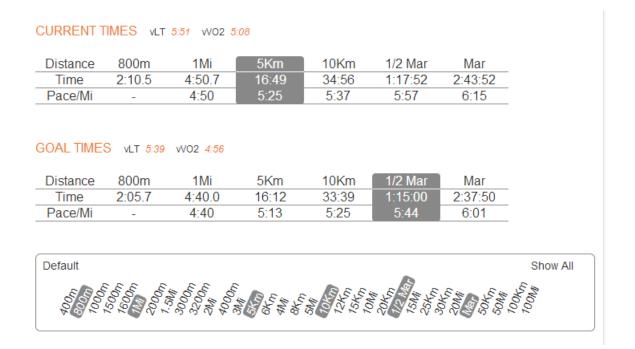
Periodization 3

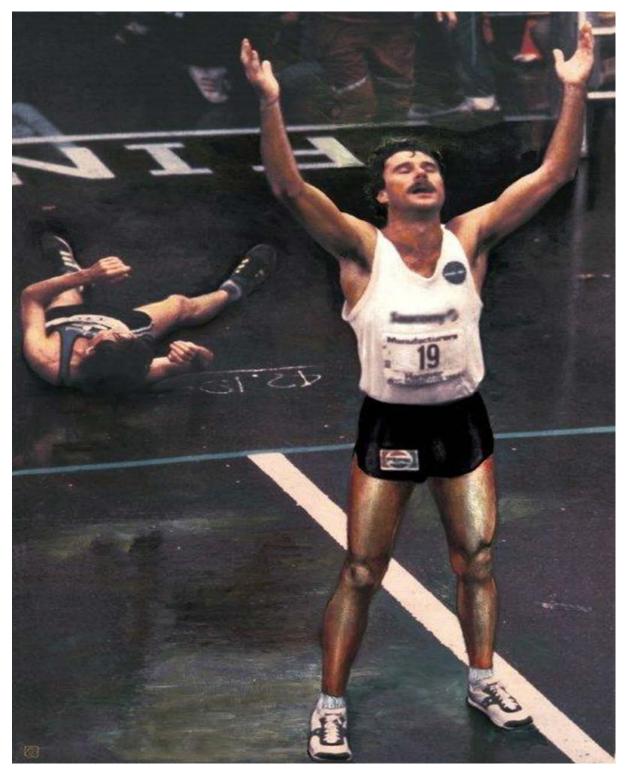
Calculating Training Paces

To calculate paces for interval workouts, I prefer to use the McMillan Running Calculator that can be found online at www.mcmillanrunning.com. To calculate training paces:

- Open a new internet browser window
- Enter <u>www.mcmillanrunning.com</u> into the address bar
- Select one of the buttons for the distance of your most recent race
- Type your time for that distance in the upper boxes that are labeled "Time"
- Select the distance for a goal race
- Type in a goal time below in the boxes labeled "Time"
- Click on the "Calculate My Paces" button

The resulting page should display a table such as the one below





Rod Dixon after winning the New York City Marathon in 1983

The Training Plan

The training plan on the next few pages chronicles 52 weeks' worth of training that I intend to follow. The schedule includes:

- 5 week transition period from April 15 until May 19.
- 20 week base period from May 20 until October 6 where the focus is increasing weekly mileage while tracking progress with heart rate tests on a treadmill as well as occasional 5K road races
- 9 week competitive period focusing on marathon pace work then progressing into half marathon pace workout that begins on October 7 and ends on December 8 with the Dallas White Rock Half marathon
- 2 weeks of active rest period where mileage is reduced from December 9 until December 22
- 8 week competitive period beginning December 23 that focuses on half marathon and 10K pace workouts in preparation for the Austin Livestrong Half Marathon on February 16, 2014.
- 1 week rest period from February 17 to February 23
- 7 week competitive period where the focus is interval workouts on the track at paces ranging from 1500m-10000m. This is the period in which I will aim to run the fastest times of the year. Competitions will be at area university track meets with the final one being either the first or second week of April 2014.

This is all a general plan for how I intend to train for 52 weeks. The competitive phase is the most unpredictable period because a lot of the workout scheduling depends on when track meets will be held. The training plan also assumes that injury does not affect training and so the plan will most likely change along with other alterations due to travel and sickness that are nearly impossible to account for.

The 2400m Treadmill Test

During the base period, there are three "2400 meter (m) Heart Rate Tests" schedule approximately six weeks apart from each other. The purpose of these tests is to monitor progress based on the heart rate required to run certain paces for 2400m interval. The procedure and requirements for the test are as follows:

Equipment Needed:

- Heart Rate Monitor
- Treadmill

Procedure:

- 1) While fully rested after a period of easy running find a reliable treadmill
- 2) Adjust the heart rate monitor strap so that it receives a signal
- 3) Run 2400m on the treadmill while maintaining a heart rate of 140 BPM. Ensure that the heart rate stays below this level and run an even pace and adjusting the treadmill's speed as little as possible
- 4) Stop the treadmill for 90 seconds and record the time it took to run the 2400m.
- 5) Run 2400m again, but this time while maintaining a heart rate of 150 BPM the entire time.
- 6) Stop and record the time. Rest for 90 seconds
- 7) Repeat the 2400m again while maintaining a pulse of 160 BPM
- 8) Stop and record the time. Rest for 90 seconds
- 9) Run the fourth 2400m while maintaining a pulse of 170 BPM
- 10) Stop and record the time. Rest for 90 seconds
- Run the final 2400m while maintaining a pulse of 180 BPM

The results for this test should look similar to this:

Heart Rate	${f Time}$	Pace
$140~\mathrm{BPM}$	12:04	8:03/mile
150 BPM	11:31	7:41/mile
160 BPM	10:43	7:09/mile
170 BPM	9:48	6:32/mile
180 BPM	9:00	6:00/mile

How to Find Local Track Meets

Being a self-coached runner means that I am responsible for finding my own races. A large number of road races occur each week, but it is difficult to know if these races will draw the best competition. I find that the best competition occurs at college meets. The best place to find and register for these meets is DirectAthletics.com. To search for these meets:

- Open an internet browser window
- Type <u>www.directathletics.com</u> into the address and hit the Enter key
- Click the "Upcoming Meets" Tab near the top right corner and a search form will appear
- Fill out the "State/Province" box with the state you wish to race in.
- Choose the entrant type by clicking in the drop down box under "Entrant Type Allowed". Since you will be running as an unattached athlete it is best to click "Individual Athletes" since some meets do not allow unattached runners to enter.
- Click the "Search" button and results will appear on the next page.

Search for local track clubs, because they tend to run their own meets and will usually have a Facebook page or website where announcements are made. If there are no available track meets and road races are the only option, try to search for the previous year's results to see if the times were fast. Also, look for road races that offer cash prizes because nine times out of ten these will draw the best competition.

	Total	36 miles	36 miles	45 miles	45 miles	40 miles	50 miles	56 miles
	Sunday	4 miles	4 miles	5 miles	6 miles	5 miles	6 miles	6 miles
	Saturday	8 miles	2 mile warmun. 2400m Heart Rate Test 2 miles çooldown.	10 miles	10 miles	2 mile systmup. Congress Avenue Mile? 2 mile cooldown.	ll miles	12 miles
	Friday	5 miles	5 miles	ó miles	5 miles	ó miles	7 miles	AM: 5 miles PM: 4 miles
	Thursday	4 miles	4 miles	5 miles	5 miles	5 miles	ó miles	7 miles
	Wednesday	6 miles	6 miles	S miles	6 miles with 2x(5x100m) strides 100m jog between strides/ 5 mile jog between sets	8 miles with 2x(5x100m) strides 100m jog between strides/ 5 mile jog between sets	7 miles with 2x(5x100m) strides 100m jog between strides/ 5 mile jog between sets	7 miles with 2x(5x100m) strides 100m jog between strides/ 5 mile jog between sets
	Tuesday	5 miles	5 miles		8 miles	6 miles	6 miles	AM: 4 miles PM: 4 miles
ay 2013	Monday	4 miles	4 miles	5 miles	5 miles	5 miles	2 mile svannun. 20 mile sooldown. 2 mile sooldown.	2 mile gyapmup. 20 mins.@ Mpace +10 2 mile cooldown.
April/May 2013	Week	April 15-21	April 22-28	April 29- May 5	May 6-12	May 13-19	May 20-26	May 27- June 2

June/July 2013	72013							
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
June 3-9	2 mile syapmyp. 20 mile cooldoom 2 mile cooldoom	AM 4 miles PM 4 miles	14 miles	AM 4 miles PM 4 miles	AM6 miles PM5 miles	2 mile wagnup. 2400m Heart Rate Test 2 miles cooldown.	4 miles	66 miles
June 10-16	2 mile syapmup. 30 mins.@ Mpace +10 2 mile cooldown.	AM4 miles PM4 miles	7 miles with 2x(5x100m) strides 100m jog between strides/ 5 mile jog between between sets	AM 6 miles	AM5 miles	11 miles	4 miles	50 miles
June 17-23	2 mile gracmup. 30 mins.@ Mpace +10 2 mile cooldown.	AM5 miles PM5 miles	8 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM 6 miles PM 6 miles	AM 6 miles	13 miles	4 miles	60 miles
June 24-30	2 mile warmup. 35 mins.@ Mpace +10 2 mile cooldown.		9 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets		AM6 miles PM6 miles	15 miles	5 miles	70 miles
July 1-7	2 mile szappup. 35 mins (® Mpace +10 3 mile csoldosun.	AM 5 miles PM 6 miles		#0 #g	6 miles	13 miles	6 miles	60 miles
July 8-14	2 mile syappup. 35 mile cooldown. 3 mile cooldown.	5 miles	9 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between sets		AM5 miles PM5 miles	14 miles	5 miles	65 miles
July 15-21	2 mile syapping. 35 mins @ Mpace +10 2 mile cooldown.		9 miles with 2x(5x100m) strades. 100m jog between strades/ 5 mile jog between sets	iles	AM 6 miles PM 6 miles	AM: 4 miles PM: 2 mile syappup. 2400m Heart Rate Test 2 mile cooldown.	5 miles	70 miles
July 22-28	2 mile szappup. 35 ppins,@ Mpace +10 2 mile cpoldossn.	AM: 4 miles PM: 4 miles	7 miles with 2x(5x100m) strides 100m jog between strides/ 5 mile jog between sets		AM: 5 miles PM: 4 miles	12 miles	4 miles	55 miles
July 29- August 4	2 mile syappup. 40 mins.@ M pace +10 3 mile cooldown.	5 miles	9 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM 5 miles PM 6 miles	AM5 miles PM5 miles	14 miles	5 miles	65 miles

August/September 2013	ptember	2013						
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
August 5-11	AM: 4 miles PM: 5 miles	2 mile wanny. 40 min. @ M pace +10 3 mile cooldown.	6 miles	9 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 5 miles PM: 5 miles	14 miles	S miles	64 miles
August 12-18	AM: 4 miles PM: 5 miles	2 mile wannum. 40 mins.@ 3 mile cooldown.	6 miles	9 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 5 miles PM: 5 miles	14 miles	5 miles	64 miles
August 19-25	AM: 4 miles PM: 5 miles	2 mile syappys, 40 mins @ M pace 3 mile cooldown.	5 miles	8 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between strides/ 5 mile jog between sets	AM: 5 miles PM: 5 miles	12 miles	4 miles	56 miles
August 26- September 1	AM: 6 miles PM: 6 miles	2 mile szappys. 45 migs, @ M pace 3 mile cooldown.	5 miles	10 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between strides/ 5 mile jog between sets	6 miles	2 mile warmun. 2400m Heart Rate Test 3 mile cooldown.	7 miles	72 miles
September 2-8	AM: 6 miles PM: 6 miles	2 mile szappus. 45 mila, @ M pace 3 mile cooldown.	5 miles	9 miles with 2x(5x100m) strides. 100m jog between strides/.5 mile jog between sets	AM: 6 miles PM: 6 miles	16 miles	5 miles	72 miles
September 9-15	AM: 4 miles PM: 5 miles	2 mile grappup. 35 mins. @ M pace 2 mile cooldown.	5 miles	8 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between strides/ 5 mile jog between sets	AM: 4 miles PM: 4 miles	12 miles	4 miles	56 miles
September 16- 22	AM: 6 miles PM: 7 miles	2 mile szappys. 50 mils (B M pace 3 mile cooldown.		11 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between sets	AM: 6 miles PM: 6 miles	18 miles	6 miles	SO miles
September 23- 29	AM: 5 miles PM: 6 miles	2 mile vzeppy. 50 mile (M pace 3 mile cooldown.	5 miles	10 miles with 2x(5x100m) strides. 100m jog between strides/. 5 mile jog between sets	AM: 6 miles PM: 6 miles	16 miles	5 miles	72 miles
September 30- October 6	AM: 4 miles PM: 5 miles	2 mile szappys. 50 mijs, @ M pace 3 mile cooldown.	6 miles	9 miles with 2x(5x100m) strades. 100m jog between strides/.5 mile jog between sets	AM: 4 miles PM: 4 miles	14 miles	5 miles	64 miles

October/November 2013	ovember	2013						,
Week	Ŋ	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
October 7-13		2 mile vzerpyy. 60 miya @ M pace 3 mile cooldony	6 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between sets	AM: 4 miles PM: 4 miles	2 mile syampy. 3 x 2400m @ HM pace Rest= 25 x time 3 mile cooldowy.	5 miles	60 miles
October 14-20	AM: 5 miles PM: 5 miles	2 mile warmup. 30 mina.@ HM+15 secs 3 mile cooldown.	6 miles	8 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 4 miles PM: 4 miles		AM: 4 miles PM: 5 miles	72 miles
October 21-27	AM: 5 miles PM: 5 miles	9 miles	6 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between sets	AM: 4 miles PM: 4 miles	2 mile syamun. 4 x 2400m @ HM pace Rest= 25 x time 3 mile cooldown.	6 miles	56 miles
October 28- November 3	AM: 5 miles PM: 5 miles	2 mile warmun. 30 mina @ HM + 15 secs 3 mile cooldown.	6 miles	8 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 4 miles PM: 4 miles		5 miles	64 miles
November 4-10	AM: 6 miles PM: 6 miles	2 mile 3/440ffup. 2000-1600-1200-800-400m @ 10K pace rest= 5 x time 3 mile 400Jd00yn	6 miles	8 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 6 miles PM: 6 miles	2 mile syampap. 4 x 2400m @ HM pace Rest= .25 x time 3 mile cooldown.	AM: 5 miles PM: 7 miles	72 miles
November 11- 17	AM: 5 miles PM: 5 miles	2 mile warmun. 30 mina @ HM + 15 secs 3 mile cooldown.	6 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between sets	AM: 4 miles PM: 4 miles	12 miles	5 miles	56 miles
November 18- 24	AM: 4 miles PM: 5 miles	2 mile 3/3400mg, 2000-1600-1200-800-400m @ 10K pace rest= 5 x time 3 mile cooldown	5 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/.5 mile jog between sets	AM: 4 miles PM: 4 miles	10 miles	4 miles	50 miles
November 25- December 1	5 miles	2 mile watmup. 4 x 2400m @ HM pace Rest= 25 x time 3 mile cooldown.	4 miles	5 miles	6 miles	5 miles	5 miles	40 miles
December 2-8	4 miles	Smiles	6 miles with 2x(5x100m) strides.100m jog between strides/.5 mile	4 miles	5 miles	3 miles	Dallas White Rock Half Marathon	40 miles

December	2013/	December 2013/January 2014	+					
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
December 9-15	4 miles	4 म्योडड	4 miles	4 miles	Smiles	5 miles	4 miles	30 miles
December 16- 22	4 miles	5 miles	6 miles	4 miles	Smiles	8 miles	4 miles	36 miles
December 23- 29	6 miles		Smiles	6 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	6 miles		Sailes	48 miles
December 30- January 5	AM: 5 miles PM: 5 miles	2 mile warmun. 30 mins.@ M pace 3 mile cooldown.	6 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 4 miles PM: 4 miles	2 mile syampy. 4 x 2400m @ HM pace Rest= 25 x time 3 mile cooldown.	6 miles	56 miles
January 6-12	AM: 5 miles PM: 5 miles	2 mile warmy. 30 mins @ HM+15 secs 3 mile cooldown	6 miles	7 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets			5 miles	64 miles
January 13-19	AM: 5 miles PM: 5 miles	2 mile warmup. 3 x 3200m @ HM pace Rest= 25 3 mile cooldown.	6 miles	strides. ween le jog		14 miles with last 20 mins, @ M pace	4 miles	64 miles
January 20-26	AM: 5 miles PM: 5 miles	2 mile warmy. 30 mins @ M pace 3 mile cooldown	6 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 4 miles PM: 4 miles	2 mile wasmup. 4 x 2400m @ HM pace Rest= 25 x time 3 mile cooldown.	6 miles	56 miles
January 27- February 2	AM: 5 miles PM: 5 miles	2 mile waannup. 2000-1600-1200-800-400m @ 10K pace rest= 5 x time 3 mile cooldown.	6 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 4 miles PM: 4 miles	16 miles with last 30 क्रांग्रह இ M pace	4 miles	60 miles

February/March 2014	March ;	2014						
Week	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Total
February 3-9	Smiles	2 mile warmup. 1x3200 @ 15K pace rest= 37 3x1200 @ 5K pace rest= 75 3 mile cooldown.	4 miles	5 miles	6 miles	5 miles	5 miles	40 miles
February 10-16	4 miles	5 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between sets	4 miles	5 miles	3 miles	Austin Livestrong Half Marathon	40 miles
February 17-23	4 miles	4 miles	4 miles	4 miles	5 miles	Smiles	4 miles	30 miles
February 24- March 2	AM:4 miles PM: 4 miles	2 miles systemys. 5 x 1000m @ 10K pace Rest= 5 2 mile cooldown.	4 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	4 miles	2 mile warmup and stretching 5000m Track Race 3 mile cooldown	6 miles	45
March 3-9	13 miles	AM: 4 miles PM: 6 miles	8 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/.5 mile jog between sets	4 miles	2 mile grapmup. 3 x 3200 @ HM pace 3 mile cooldown.	5 miles	56 miles
March 10-16	5 miles	ractum. m @ 5K pace 5 jogging m @ 3K pace 0 jogging	5 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	4 miles	2 mile syamup. 3000m Track Race 3 mile cooldown.	AM: 4 miles PM: 6 miles	45 miles
March 17-23	13 miles with last 20 mins @ M pace		5 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/ 5 mile jog between sets	4 miles	2 mile varmup. 5000m Track Race 3 mile cooldoorn	5 miles	45 miles
March 24-30	6 miles		5 miles	6 miles with 2x(5x100m) strides. 100m jog between strides/5 mile jog between sets	AM: 4 miles PM: 4 miles	3 mile warmup. 4 x 1600m @ 5K pace Rest=.75 3 mile cooldown.	4 miles	56 miles
March 31- April 6	4 miles	2 mile wagnum. 3 x 400m @ 10K pace 3 x 400m @ 5K pace 3 x 400m @ 3K pace 3 x 400m @ 1500m pace Rest= 200m jog in 90 secs 2 mile cooldown	5 miles	5 miles	4 miles	2 mile warmup. 1500m Track Race 1 mile jog 4 miles @ Marathon pace 2 mile cooldown	5 miles	36 miles

Total	30 miles	0 miles	0 miles	0 miles			
Sunday	Rest	Rest	Rest	Rest			
Saturday	2 mile szapung. 5000m Track Race 3 mile cooldown.	Rest	Rest	Rest			
Friday	4 8 8	Rest	Rest	No.			
Thursday	4 miles	Rest	Rest	Rest			
Wednesday	4 miles	Rest	Rest	Rest			
Tuesday	2 mile stanning. 5 x 400m @ 3K pace 5 x 400M @ 1500m pace Rest= 200m in 90 secs 2 mile coolddssn.	Net	Rest	Nest			
Monday	5 miles	Rest	Rest	Rest			
Week Monday	April 7-13	April 14-20	April 21-27	April 28 th . May 4th			

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Coe, Peter N. Winning Running: Successful 800m & 1500m Racing and Training. Ramsbury, Marlborough, Wiltshire: Crowood, 1996. Print.

Martin, David E., Peter N. Coe, and David E. Martin. *Better Training for Distance Runners*. Champaign, IL: Human Kinetics, 1997. Print.