6 Weeks of Run Technique (You will need a Tempo Trainer or Seiko

Metronome)

use 60-120 second recoveries between repeats

Run Intervals: week 1: 3x's per week

3 Running drills:

Ball of foot hops with forward lean 3 x 3

Wall Drill: 3 x 20 on each leg

Forward Lunge (exaggerated foot pulls on one side) 3 x 10 each

2x's Through of:

4 x 30 sec @ 94-96 cadence

1 drill (choice)

1 x 2 min @ 91 cadence.

Run Intervals: week 2: 2-3x's per week

3 Running drills:

Ball of foot hops with forward lean 3 x 10

Wall Drill: 3 x 20 on each leg.

Forward Lunge (exaggerated foot pulls on one side) 3 x 10 each

2x's Through of:

4 x 1 minute repeats @ 96 cadence

1 x 4 minutes @ 91 cadence

Run Intervals: week 3: 2x's per week

4 Running drills:

Stable Arm Drill x 3

Carioca: 3 x 10 both directions

Forward Lunge (exaggerated foot pulls on one side) 3 x 10 each

Wall Drill: 3 x 20 on each leg

1x through of:

4 x 1min 30sec repeats @ 98 cadence

1 drill (choice)

1 x 6 minutes @ 93cadence

Run Intervals: week 4: 3x's per week

3 Running drills: Stable Arm Drill

Carioca: 3 x 10 both directions

Forward Lunge (exaggerated foot pulls on one side) 3 x 10 each

Wall Drill: 3 x 20 on each leg

1x through of:

4 x 1min 30sec repeats @ 100 cadence 1 drill (choice) between 1 x 6 minutes @ 94 cadence

Run Intervals: week 5: 2x's per week

3 Running drills: Stable Arm Drill

Carioca: 3 x 10 both directions

Forward Lunge (exaggerated foot pulls on one side) 3 x 10 each

Wall Drills: 3 x 20 on each leg

1x through of:

4 x 1min 30sec repeats @ 101 cadence, rest 2 minutes in between each repeat 1 drill (choice) between

1 x 6 minutes @ 92-94 cadence (find where you are comfortable)

Run Intervals: week 6: 2x's per week

3 Running drills: Stable Arm Drill

Carioca: 3 x 10 both directions

Forward Lunge (exaggerated foot pulls on one side) 3 x 10 each

Wall Drills: 3 x 20 on each leg

1x through of:

4 x 1min 30sec repeats @ 102 cadence w/ 2 min rest between repeat 1 drill (choice) between

1 x 6 minutes @ 92-94 cadence (find where you are comfortable)

Tempo Trainer Running Cadence chart

TT setting	Cadence
.67	90
.66	91
.65	92
.64	94
.63	95
.62	97
.61	99
.60	100
.59	101
.58	102
.57	105
.56	107
.55	109

Minimum cadence needed to receive the benefits of ground reaction force and muscle elasticity it 90.

Running Technique Basic Drills Sheet

DRILLS

Body Weight Awareness Drills "Where your body weight goes you move." Stand in good posture on balls. Shift BW in different directions until body moves in that direction Partner version. Stand in good posture and partner pushes athlete in different directions

Body Alignment Drills

Hops (like jump roping). Do correctly and incorrectly. Correct: neutral hips, head on spine, knees slightly bend, landing on balls without lower leg activation Incorrect: chin forward, head in front, bent at the hips, on toes, on heels

Pose/Posture Drills:

Stand up straight with head on spine line and hips straight. Feet should be shoulder width with weight on balls. Knees are slightly bent. Figure 4 Pose on left and right (In front of mirror). Check Posture. 60/60 Do 60 pulls in 60 seconds holding perfect pose on each step

Pulling Drills:

Single Leg Track lift (to figure 4). Pull heel up track of other leg

Cadence

Pull & Fall. 1-2. Pull hamstring of support leg, then let other foot fall Incorrect pulling: foot back – no knee lift. Knee up – foot in front of hips

Falling Drills:

Hops w/ lean (no bending at waist) Fall into wall or pole from ankles. Release weight from the ball of the foot. Accelerator Drill – Start running in place by Pulling. Add lean to fall into forward movement.

Pull back up to vertical until running in place again. Repeat fall and level out several times.

Sharpening & Awareness Drills:

Arms in front (straight out) "Charlie's Angels Drill" No waging or bouncing. Helps with feeling of falling and not over-reaching.

Arms in back Helps feeling of falling forward and not over-reaching with the foot in front Two Fingers on Belly Button Centering exercise

Focus on movement of GCM. Not bouncing. Analogy: Model or waitress. Be a Hovercraft.

Beginner Running Practices

8 x 200m maintaining form and having no more then 2-3 sec deviation in time. Perform the following:

Wall Drill + 2 x 200m rec 1 min between each

Carioca + 2 x 200m rec 1 min between each

Forward Lunge + 2 x 200m rec 1 min between each

Stable Arm Drill + 2 x 200m rec 1 min between each

 $3 \times (2 \times 400 + 800) \text{ rec } 1-2 \text{ min between } 400\text{'s and } 800$

#1 @ marathon Pace

#2 @ Half Marathon Pace

#3 @ 10K pace

 $3 \times (200 + 400 + 600) \text{ rest } 1-2 \text{ min between each distance}$

#1 Slowest

#2 Second Fastest

#3 Fastest times of entire set

Overtraining = Not able to maintain desired technique and pace

Advanced Running Practices

Tabata Intervals on Treadmill or Road/Track

8 rounds of 20 seconds running + 10 seconds rest at 12% Grade and best 5k Pace. If you cannot hold pace for entire "Tabata" slow it .5 mph. This will be an indication that you are lacking in cardio-respiratory endurance. Running hills will make you not only a stronger runner, but also a faster runner. On a road or track go 20 seconds all out and rest 10 seconds. Then turn around and try and match that distance repeating the process for 8 rounds.

8 x 200m repeats

Progression for speed Maintaining form you want to be able to hold the fastest pace possible and have the ability to recover and repeat. You also want the ability to hold or descend each 200, not slow down. This can be used at the end of weekend slowed down by 10-15 sec, followed by a recovery strength set. Recovery: start w/ 90sec progress to 30sec

4x 400m repeats (can advance up to 10 x 400m)

Progression for speed Maintaining form you want to be able to hold the fastest pace possible and have the ability to recover and repeat. You also want the ability to hold or descend each 400, not slow down. This can be used at the end of weekend slowed down by 10-15 sec, followed by a recovery strength set. Recovery: Start w/ 3 min progress to 60-45sec

3 x 800 (can advance up to 5 x 800m)

Progression for speed Maintaining form you want to be able to hold the fastest pace possible and have the ability to recover and repeat. You also want the ability to hold or descend each 800, not slow down. This can be used at the end of weekend slowed down by 10-15 sec, followed by a recovery strength set. Recovery: Start w/ 3 min progress to 60sec

4-5 x 1000m/1k

Progression for speed Maintaining form you want to be able to hold the fastest pace possible and have the ability to recover and repeat. You also want the ability to hold or descend each 1000/1k, not slow down. This can be used at the end of weekend slowed down by 10-15 sec, followed by a recovery strength set. Recovery: Start w/ 3 min progress to 60sec

2 x 200, 2 x 400, 2 x 1k

Progression for speed Maintaining form you want to be able to hold the fastest pace possible and have the ability to recover and repeat. You also want the ability to hold or descend each 200, then each 400, then each 1k, not slow down. Recovery: Start w/3 min progress to 60sec for each set

5 x 800

Progression for speed Maintaining form you want to be able to hold the fastest pace possible and have the ability to recover and repeat. You also want the ability to hold or descend each 800, not slow down. This can be used at the end of weekend slowed down by 10-15 sec (no closer then 2 weeks out from a race), followed by a recovery strength set. Recovery: Start w/ 3 min progress to 60sec

Distance Sets (instead of long slow distance) Have the ability to hold or maintain pace. This can apply to road, trail, track, or if needed (not recommended) treadmill. These are advanced sets and if they are set too fast they/you will not recover and will not make the interval. These should not be used until the individual is ready to handle! So all of the prior interval sets have been met.

2 - 3 x 2 mile

I like to do these mid week, and the same principles apply as the above stated. Also, keep in mind your cadence and form needs to be maintained for all sets. Recovery: Start w/ 10 min progress to 2min

$2 - 4 \times 5k$

I like to do these on the weekend, and the same principles apply as the above stated. Also, keep in mind your cadence and form needs to be maintained for all sets. 6-3 weeks out form a race. Followed the next day by one of the other interval sets, and Strength & Conditioning Recovery. Recovery: Start w/ 15 min, progress to 3-5 min

Strength and Conditioning Recovery... This can and should be done the day of races, after long runs, or on Sundays after interval work. Restores the body back to its normal functioning stature post race.

Glute Ham Developer Sit-ups (make sure you are extending knees aggressively to come up... your quads should also burn on this) 3 x 15, Glute Ham Developer hip extensions (hamstrings and butt should burn), Kettlebell/Dumbbell swings 3 x 15, Bench Press, Pull-ups All exercises with light - medium weight. 3 sets! Reps are until you feel burn in target area or prescribed amount.

Race Warm-up & Pacing Strategies

It is important to treat your race much like you were treating your training. Your training should have been serious enough that your diet was built for optimum performance and limited in grains and processed foods, if not void of them. You should have gotten the best possible rest and recovery. Along with all of this, you should

have warmed up properly before each workout in order to give 100% at each training session. None of this should change come race day!

Warm-up

The basic idea of "the shorter the race, the longer the warm-up" is a good concept to go by. If it takes you a while to get going, then a longer warm-up may be necessary for a 5 or 10K. For longer races you should look at the first few miles of your race as a continuation of your warm-up and not start out too hot. When getting into ultra distance events the first few miles should definitely be the warm up. There is no reason intensity in an event that is going to take 6 plus hours should be high at the beginning of an event like these.

For 5k to 1/2 marathon... Start about 15-30 minutes to race time Run 5-10 minutes EZ to elevate HR and warm muscles. Do 4-8 x 100m pick-ups. Build EZ leg speed without too much effort. These can be done right in front of the starting line with about 5 minutes to race start. This will keep your HR up near where it will be for the race. It will shock your system if you are standing around for 10 minutes before the race with a little to no exertion, only to ramp it up to almost max effort immediately.

Get your system ready to go hard by elevating exertion levels before race start so that once you begin it isn't a shock.

Race Strategies to hit your goal time

Choose a goal time that is reasonable for you to achieve on that particular course and time of season. Input your PR in a recent time trial into the McMillan Run Calculator (Google it) for an accurate display of where you should finish. Be prepared to modify the goal time if conditions are tougher than usual, you are dealing with sickness, or some other issue that may affect peak performance. The goal should be to run the best possible race you can for THAT day, which means it might not necessarily be a PR for you to be happy with it.

Additional Tips

Try to get your mile splits on your watch. If you wear a watch that has lap times on it (HIGHLY RECOMMENDED) you can hit splits at each mile marker. This allows you to see where you are in terms of time. Knowing if you've been 5 seconds fast or 10 seconds slow each of the last 3 miles still gives you a parameter for actual race time (plus or minus). Remember this is an endurance event (ENDURE!) not Fran. You will suffer the consequences of too fast a start if you don't watch it.

Evaluating the data after the race will help you set goals and racing strategies for your next event.

Here is a link to a Running Pace Chart to help you figure things out: http://www.races2run.com/
Pace%20Chart%20-%20Marathon%20Sports.htm

Running Technique Sheet

Name: Date:	
Scoring: 0-10 (0=Not at all, 10=Perfect)	
POSTURE	
Neutral Head Position Straight "Pillar" Slightly leaning forward	_ Relaxed
shoulders	
Elbow bent more than 90 degrees Relaxed face	
RHYTHM & TIMING	
Arms swing front to back90+ cadence Floating head (not bouncing)	
TECHNIQUE	
Heels lift straight up toward butt Figure 4 position ("Pose") Landing	midfoot
directly beneath knee	
ERRORS	
Knees straightened Feet on ground for too long Shopping Cart Posit	
(Bending at waist) Over pulling (heel too close to butt) Under-pulling (nor	
enough) Pushing (over extending the leg in back) Pronation Supinate	on
Loud feet	
Comments:	

The CrossFit Endurance Warm Up

- 1) Random Hand Push-Ups: Complete 15 push-ups using a different hand position for each repetition.
- 2) Alternating Plank Lunge: Get into a plank position and bring your right foot to the outside of your right hand into a lunge; press your hips forward and keep the back leg as straight as possible. Bring the right leg back to the starting position and repeat with your left side leg. Perform 10 reps on each leg.

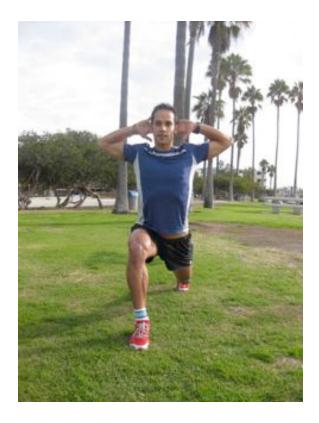




3) Alternating Open Chest Plank Lunge: Repeat the steps for the Alternating Plank Lunge, but after placing your right leg next to your right hand, bring both of your hands behind your head and open up the chest like you are performing a lunge from a standing position. Again, focus on pressing the hips forward while keeping the back leg straight. Place your hands back on the ground and return to the starting position to repeat on the opposite side. Repeat 5 - 10 reps on both legs.









4) Plank Lunge to Perfect Squat: Repeat the steps for the Alternating Plank Lunge. After placing your right leg next to your right hand, bring your left leg next to your left hand into a squat position. Place your hands together and, using your elbows, gently push your knees out into a squat. From here, raise your arms up into a perfect squat in the bottom position. Walk your hands back out into the plank position and repeat on the opposite side. Complete 5 - 10 reps on each leg.









5) Walking Downward Dog: Get into the Downward Dog position. Keeping your legs as straight as possible and your lumbar curve arched (a lack of flexibility will make this difficult), drive your heels into the ground. While maintaining this position, begin walking forward with arms and legs simultaneously for a distance of 10m, then reverse and walk backward to the starting position. Focus on keeping the legs straight and heels on the ground; tight calves and/or tight hamstrings will definitely be felt!



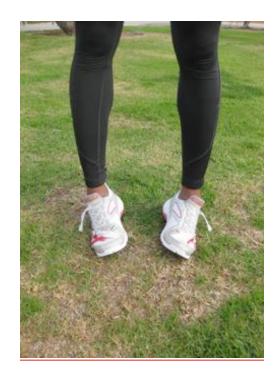
Foot Exercises

The foot exercises include lateral to Ball of Foot (BOF) ankle rotations, medial to BOF ankle rotations, internal foot rotation stretch, and external foot rotation stretch.









5) In addition, another foot exercise we use is as follows: Place the right heel against the toes of the left foot to create a straight line with your feet. Keeping the right leg straight, bend the left leg and lean into the right leg. You should feel a stretch in the right leg. If flexibility permits, pull your right toe up for a more intense stretch. Repeat on the left side. Complete 10 reps on each side.





6) For this exercise, place the right heel on top of the left foot and rock back and forth on the left foot, moving from the heel of an active, dorsiflexed foot to the BOF, while applying pressure downward with the right heel. Complete 10_rocks and repeat on the other side.







7) For the final exercise, stand on your left BOF. Take your right foot and reach across your left foot and imitate picking up marbles or pieces of string with your toes. Keeping your balance, bring the right leg back across your body to the right side and touch the right toe out to the side. Complete 10_reps and then repeat on the opposite side. This exercise is used to burn out the planted foot.





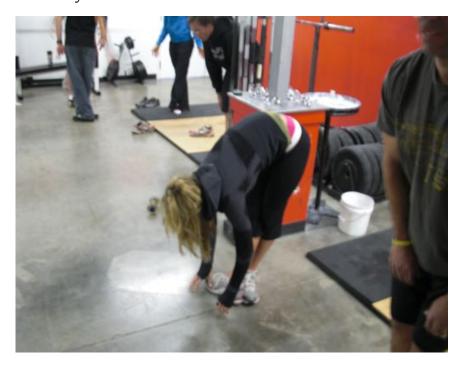
In Lunge, knee slightly behind hips. Hips extended, midline stabilized, you should feel a stretch at low back, hip flexor, and quadriceps.



Palms together behind back. This will stretch the wrists, and shoulders. Do not force.



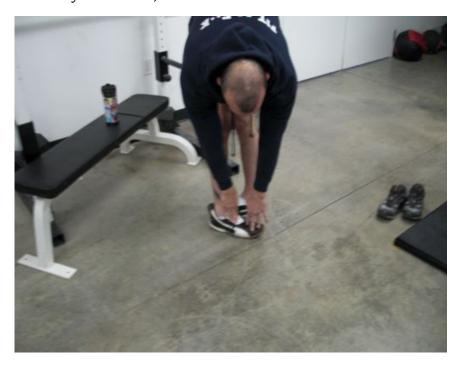
Externally rotate feet with one foot in front of the other.



Bend at waist with knees locked out. Do not force, hang until comfortable, then reach for ground briefly, and relax. Repeat 3 times, and then switch feet.



Internally rotate feet, one in front of the other.



Bend at waist with knees locked out. Do not force, hang until comfortable, then reach for ground briefly, and relax. Repeat 3 times, and then switch feet.



Lift toes up and balance on heels. While maintaining balance bend at waist and reach for toes.



Right foot slightly in front of left. Extend right knee and lock. Slightly bend left knee and bend at waist. Should feel stretch in caf muscles, hamstrings, and glutes.



Switch legs and repeat.