


Three Radical

TIRED OF SLOGGING
THROUGH MILES OF
TRAINING? HERE'S HOW TO
RUN YOUR BEST MARATHON
ON THREE RUNS A WEEK

BY AMBY BURFOOT





Jimmy Brehm had completed four marathons, with a best time of 3:51. He wanted to run faster. Andy Goodwin had finished two marathons, with a best of 3:21, and he wanted to become faster, too. Kim Halley had other issues. She had run two marathons 10 years ago, then eased off to recreational running, then had her first baby. She simply wanted to get back in shape, and to finish another marathon. All three runners achieved their goals last December at the Kiawah Island Marathon in the USA. So did 18 others. The 13 veterans among those 21 runners improved on their most recent times by almost 20 minutes. Even more remarkably, they did so with a daring new marathon-training programme from Furman University in Greenville, South Carolina. Daring because it defies the conventional wisdom. Daring because it limits participants to just three running sessions a week. And daring, in the extreme, because it tells runners they'll become faster on fewer workouts.

"Train less, run faster" – you've heard the refrain before. It's a long-time favourite of snake-oil coaches with credentials from Charlatan University. Of course, real runners know that to become faster you have to log more miles and run intervals until your rear end is dragging on the track behind you.

Not this time. This time the "train less, run faster" claim is backed up by the experiences of real runners who followed the programme and got results. This time it's backed up by scientist-runners with advanced degrees in physical education and exercise physiology. This time you should give the programme a try. It just might work for you.

FIRST THING'S FIRST

The Furman Institute of Running and Scientific Training (FIRST) marathon programme was born, in a sense, when Bill Pierce and Scott Murr decided to enter a few triathlons way back in the mid-1980s. There was just one problem: they hit the wall when they added cycling and swimming to their running. The demands of three-sport training were too much, so they cut back their running from six days a week to four.

To their surprise, they didn't slow down in local road races. So they cut back to three days of running. "Lo and behold, our 10K, half-marathon and marathon times didn't suffer at all," says Pierce. "The more we discussed this – and we discussed it a lot – the more we became convinced that a three-day programme, with some cross-training, was enough to maintain our running fitness."

Pierce, chair of Furman's Health and Exercise Science department, has run 31 marathons, with a best of 2:44:50. At 55, he still manages to knock out a 3:10 marathon every autumn by practising what he preaches: running three workouts a week. While he has retired from triathlons, Murr, 42, with a doctorate in exercise physiology, still wants to complete another Hawaii Ironman, having already done five. He has run a 2:46 marathon, also on three training runs a week.

Pierce's and Murr's discussions, and personal successes, amounted to little more than that until early 2003 when

Pierce was given university permission to form FIRST. "It helped," he notes with a smile, "that I didn't ask for any funding." By that time, he had assembled a team of four FIRST cofounders, including Murr, Furman's exercise physiologist Dr Ray Moss, and the former Greenville Track Club president Mickey McCauley.

In the autumn of 2003 FIRST launched its training programme. Applicants were told that they would have to undergo pre- and post-programme physiological testing in Furman's Human Performance Lab, and run three very specific running sessions each week. There were no restrictions on additional running or cross-training workouts, and there was no "final exam" test race.

The post-programme lab tests showed that subjects had improved their running economy by two per cent, their maximal oxygen uptake by 4.8 per cent and their lactate-threshold running pace by 4.4 per cent. In other words, the three workouts had led to better fitness and race potential. FIRST was up and running.

In the summer of 2004, FIRST advertised a free marathon-training programme that would last 16 weeks and culminate with the Kiawah Island Marathon on 11 December. To enter the programme, you had to be able to run 10 miles. All participants also had to agree to lab testing, and promise not to run more than three days a week. In other words, this time the programme came with a clear running restriction. Partially as a counterbalance, participants were encouraged to do two additional days of cross-training, such as cycling, strength training, rowing or elliptical training.

From about 50 applicants, FIRST selected 25 subjects (17 with past marathon experience, eight first-timers), including engineers, accountants, managers, administrators, sales representatives, teachers, a nurse, a lawyer and a doctor. They began training in August with individualised schedules that Pierce calculated from the lab testing and a questionnaire. Each participant ran just three days a week, doing one long run, one tempo run and one speed session. They trained on their own, in their own neighbourhoods, according to their own daily/weekly schedules. (To adapt the programme for yourself, see the training schedule and strategies on the following pages.)

In December, 23 of the original 25 ran at Kiawah. One had dropped out of the programme because her house had been flooded, and one because of injury. "I had expected that we would lose at least five runners to injuries," says Pierce, "so I was very happy with this outcome. It seemed to prove that our workouts, which were harder than most of the runners were accustomed to, didn't lead to a rash of injuries."

Two participants dropped down to the half-marathon because they had developed minor injuries during training, but they recovered in time to attempt the shorter distance. Both were able to finish the half-marathon with good performances.

That left 21 FIRST marathon runners on the starting line. How did they do? All 21 finished, with 15 setting PBs. Four of the six who didn't set PBs ran faster than at their most recent

marathon. "It was so exhilarating to watch them come in, and quite a relief, too," says Pierce. "When 21 people have cut back their marathon training because you told them to, well, that can make you a little nervous."

What's more, as post-race lab testing showed, the FIRST participants had improved their maximal oxygen uptake by an average of 4.2 per cent and their lactate-threshold running speed by 2.3 per cent. As a bonus, they had also reduced their body fat by an average of 8.7 per cent. "We think the results show that our programme was a big success," says Pierce. "Our people didn't hurt themselves, and most ran their best-ever marathon. I think we showed that you can teach people to train more efficiently."

Become a FIRST-Timer

Official participants in Furman's marathon programme undergo lab testing, attend monthly meetings, and receive individualised advice, sometimes even daily emails. But anyone can adapt and use the programme's basic principles. Just follow the eight rules below, and the 16-week FIRST training plan (left). For more information, visit www.furman.edu/FIRST.

RUN EFFICIENTLY, RUN FOR LIFE

Bill Pierce is a tough, performance-oriented guy, but he explains the FIRST programme from a fitness and philosophical perspective. He believes that a three-day running week will make running easier and more accessible to many potential marathon runners. It will also limit overtraining and burnout. Finally, with several days of cross-training, it should cut your risk of injury substantially. This may lead to faster race times. More importantly to Pierce, it adds up to a programme that many time-stressed people can follow for years without injury. "Our most important objective is to help runners develop and maintain lifelong participation in running," he says. "Our second goal is to help them achieve as much as possible on a minimum of running training."

RUN THREE TIMES A WEEK... AND NO MORE

This is the centrepiece of the entire FIRST programme. FIRST runners do only three running sessions a week. This decreases the overall time commitment of the programme, and the risk of injuries – important considerations to many runners. Each of the three workouts has a specific goal. That's something few runners have considered. "With most runners, when I ask them what they're hoping to accomplish on a given run, they look back at me with a blank stare," says Pierce. "I don't think they've ever thought about this question before. We have." The three FIRST workouts – a long run, a tempo run and a speed workout – are designed to improve your endurance, lactate-threshold running pace and leg speed.

BUILD YOUR LONG RUN TO 20 MILES

The FIRST marathon training programme builds up to two 20-mile sessions, the second one taking place three weeks before your marathon race date. But covering 20 miles is the easy part of the FIRST programme. The harder part is the pace – 60-75 seconds slower per mile than your 10K race pace. Many other marathon programmes allow you to run much slower than this, by as much as 30-40 extra seconds per mile. "It's true that our long runs won't let you admire the scenery as much," says Pierce, "but they aren't painful either. They just push you a little beyond the comfort zone. If you're going to race a marathon, you have to do some hard long runs to find the toughness and focus you'll need on race day."

RUN THREE DIFFERENT KINDS OF TEMPO RUNS

The tempo run has become a mainstay of many training programmes, but the FIRST programme carries the concept further than most, adding more variety and nuance. FIRST runners do three different kinds of tempo runs: short tempos (three to four miles), mid tempos (five to seven miles) and long tempos (eight to 10 miles). Each of these is run at a different pace. "We've found that the long tempo run is particularly helpful," says Pierce. "You're basically running at your marathon goal pace, so you're gaining maximum specificity of training, and improving your efficiency at the pace you want to run in your marathon."

THE FIRST TRAINING PLAN

The FIRST marathon programme includes three running sessions per week: a speed session, a tempo run and a long run. Here's the full, 16-week marathon training programme. (See "The FIRST paces", below, to find your correct workout paces.) Participants are also encouraged to cross-train for 40 to 45 minutes on two other days.

WEEK	TUESDAY SPEED	THURSDAY TEMPO	SATURDAY LONG
1	8 x 400m	3 miles	10 miles
2	4 x 1200m	5 miles	12 miles
3	6 x 800m	7 miles	13 miles
4	3 x 1600m	3 miles	10 miles
5	10 x 400m	5 miles	14 miles
6	5 x 1200m	5 miles	15 miles
7	7 x 800m	8 miles	17 miles
8	3 x 1600m	10 miles	13 miles
9	12 x 400m	3 miles	18 miles
10	8 x 800m	5 miles	15 miles
11	4 x 1600m	8 miles	20 miles
12	12 x 400m	5 miles	15 miles
13	6 x 1200m	5 miles	20 miles
14	7 x 800m	4 miles	15 miles
15	3 x 1600m	8 miles	10 miles
16	30 minutes easy with 5 x 1 minute fast	20 minutes easy with 3 or 4 pickups	Marathon

The FIRST paces

The training paces recommended by the FIRST programme are somewhat faster than those recommended by other training plans. Of course, with just three running days a week, you should be well rested for each workout. Here are the paces you'll need to run, each expressed relative to your current 10K race pace.

Long run 10K pace + 60 to 75 seconds/mile

Long tempo 10K + 30 to 35 seconds

Mid tempo 10K + 15 to 20 seconds

Short tempo 10K pace

1600m reps 10K – 35 to 40 seconds

1200m reps 10K – 40 to 45 seconds

800m reps 10K – 45 to 50 seconds

400m reps 10K – 55 to 60 seconds

Just one more lap around mainland Britain, and that's our long run done



PUT MORE VARIETY IN YOUR SPEEDWORK

Many runners do no speedwork at all. Those who do often fall into a rut, running the same session time after time. Pierce learnt long ago that this approach makes speedwork much harder than it should be. "I used to run exactly the same speed workout week after week," he recalls. "After a while, I would start to dread that session. Speedwork is much easier when you change it around a lot." The FIRST runners do many different speed sessions at different paces, generally taking just a 400m jog between the fast repeats. For the sake of simplicity, we've narrowed the selection to four distances at four paces. (See "The FIRST Paces", page 60.) Be creative, though – you don't need to stick to these particular sessions. Pierce has just one more rule for speed training: start modestly, but after a month, the total distance of all the fast repetitions in one session should equal about three miles or five kilometres (i.e. running 5 x 1,000m, or 12 x 400m).

CROSS-TRAIN TWICE A WEEK – HARD

Last autumn the FIRST coaches asked their subjects to cross-train twice a week, but they didn't provide any additional instruction. This autumn they will, because they think too many of the runners dawdled through the cross-training last year. This caused them to miss out on some potential training benefits. "We believe that if you cross-train correctly, you can use it to increase your overall training intensity, without increasing your injury risk," says Pierce. "At the same time, you can still go out and run hard the next day." The point is this: even though last year's test group didn't cross-train as hard as they could have or should have, they still set a slew of PBs.

DON'T TRY TO MAKE UP FOR LOST TIME

Stuff happens. During a 16-week marathon programme, lots of stuff happens. You become ill, you sprain your ankle, you have to go on several last-minute business trips, and so on. Result: you miss some key

I will not be beaten by a woman



sessions, maybe even several weeks of running. Then what? "You can't make up what you missed," says Pierce, "and you certainly shouldn't double up on your workouts to catch up with your programme. Often, if you had a slight cold or too much travel, you can recover and return to where you want to be quickly. But if you have foot pain or iliotibial band (ITB) syndrome or something like that, you have to take care of your injury first." This can take weeks, and it's really difficult if you've been looking forward to a big race. You have to accept it, though, and often you return to health and can run an accompanying half-marathon. But you shouldn't try the marathon until you're fully prepared for it. Reschedule another in a few months' time.

FOLLOW A THREE-WEEK TAPER

The FIRST programme builds for 13 weeks, with the second 20-mile long run coming at the end of the 13th week. After that, the programme begins to taper off, with 15- and 10-mile long runs during weeks 14 and

15. The speedwork and tempo runs taper down slightly, with a final eight-mile tempo run at marathon goal pace coming 10 days before the marathon. "The marathon taper has tripled in length during my career," Pierce notes. "When I first started out in the 1970s, we did only a six-day taper for our marathons. Now the conventional wisdom is three weeks, and that makes sense to me. It seems about the right amount of time to give you the maximum spring back in your step."

If you feel sluggish doing just the easy running in the final week (this is very common, by the way), then do five or six 100m strides or pickups after the Tuesday and Thursday workouts. Do some extra stretching afterwards as well.

Making other plans

For more marathon-training programmes, go to www.runnersworld.co.uk and click on Training.

Scrap yards

The three-day-a-week plan retains all the meaningful elements of a standard marathon-training plan, but none of the "junk mileage". Here's proof.

Max. weekly miles you run on a standard marathon plan: 54

Max. weekly miles for the three-day plan: 32

Hours spent running each week on a standard plan: 7 1/2

Hours spent running each week on the three-day plan: 4 1/2

Percentage of weekly miles at race pace or faster on a standard plan: 32.5

Percentage of weekly miles at race pace or faster on the three-day plan: 35

Number of long runs (15+ miles) in a

standard plan: 6

Number of long runs (15+ miles) in the three-day plan: 8

Average improvement for those who had run a recent marathon:

19:48 minutes