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Measuring the length of your training runs is sexy!

by Tony Brinklow, Director, Critical Path Software

OK, maybe there's just a little bit of artistic licence at work there, but nevertheless there are definitely substantial benefits in knowing exactly how far you run in training: seeing changes in fitness much sooner, feeling motivated and — the runners' Holy Grail — gaining significant resistance to overtraining injuries. In fact, as I shall explain, you really don't need a high boredom threshold, a Mathematics PhD, or even a large bank account, to get a precision for your routes approaching IAAF standards. There are a surprisingly large number of ingenious ways the average runner in the street can estimate distances quickly and accurately. Let's take a look at what can be done.

Perhaps the simplest approach is to forget about mileages altogether and just think "hours, minutes and seconds". After all, they're far easier to measure. But isn't there a sense that a simple time can never quite capture the sheer effort involved: while many people might claim they can exercise for 1 hour (does "shopping" count as aerobic, I wonder?), how many of them could actually run 10 miles in that time? And, of course, there's always the macho thing about length...no, let's not go there!

So what's the next step up? Well, quite literally, it's to count your steps. However, unless you can concentrate for England, this is totally impractical beyond a few hundred yards. And the fear is that you get within sight of home, are distracted, and have to start over. "D'Oh!"

So pedometers are a better bet in this respect. Fit one to your belt or shoe, input your stride length and away you go. But there's a catch here too: the precise location of the pedometer on your body is crucial to how reliable a clicker your unit is, and systematic errors of 20% or more in the overall distance estimate are not uncommon. However, the real coup de grace is that you just can't assume that stride length remains constant — just ask anyone who has hit The Wall. Perhaps that's the real reason why the final 6 miles of a marathon always feels more like 20...the pedometer told you so!

“No problem, I use a car odometer” I hear you cry. “I can get distances to within a tenth of a mile that way”. Yep, I must admit I used to think so too. I would travel to work the same way every day in my (t)rusty Metro – 20 miles on the nose every time and derived the length of all my training runs from this one measurement, calculated speeds, and planned fartlek intervals. You name it, it was all tied to those 20 miles. Not 20.2, not 19.8, but 20.0. Then, quite by chance, I had to take the wife's Citroen to work. I sensed something wasn't quite right when I reached my one mile marker tree in 0.9 miles. “Can't have reset the tripmeter properly”, I thought as I hurriedly searched for an explanation, possible implications laying uneasily in the pit of my stomach. But the writing was already on the dashboard: sure enough, when I got to work, I had driven only 18 miles. Zut alors! as they say in Citroen garages everywhere.

So what's left? Cycle computers are an interesting option. But keep your tyres pumped up, don't put on any weight, and don't even think about wobbling. What's more, the law-abiding citizens amongst us (come on, there must be one or two of you out there) will realise that public footpaths are supposedly out of bounds to bikes. And bridleways, although bike-legal, are usually so awash with all sorts of dodgy material that running along them is often a manure idea.

So having discussed the shortcomings of some of the simpler methods of measuring distance, let's now set sail for the brave new world of Technology. But make sure you've got very deep pockets, both for your wallet and for carrying your GPS receiver around with you on your runs. Or maybe you're one of those runners who insists on hand-carrying theirs instead so it gets all sweaty and wet. Perhaps it clips to the waistband on your shorts, in which case you probably end up praying that you don't get cautioned for indecent exposure as your shorts head south with the weight! Tricky one that. Then, of course, there's the things they don't tell you in the GPS adverts – that “multipath scattering” off buildings drives a bus through positional accuracy and, even worse, that if you can't see the wood for the trees, your GPS won't see the satellites for the leaves. Anyone for the trans-Siberia marathon?

And that's where we were back in early 1999. Whichever way I chose to measure distances, there always seemed to be a catch. Then an idea struck, a light bulb flickered on above my head: why not get your map somehow displayed on a PC monitor and trace around it with your mouse? AccuRoute was born!

Initial tests confirmed that, at 99% accuracy, it was at least as good as all the alternatives. Plus, you wouldn't actually need to set one foot outside the door to measure routes, allowing you to plan training routes as far in advance as you liked. I showed it to a friend, who told all his running buddies, and before long people were asking me how much it cost. Bingo! It would seem I wasn't alone in craving an easy way to measure routes.

Fast forward to 2004 and there are now more than 11,000 registered users worldwide. With the keenly-awaited release of AccuRoute2, we're no longer talking 99% precision, but a colossal 99.9%. We're talking visually-striking height profiles à la Tour de France, total ascent and

descent figures, and spot gradients. We're talking pan and zoom functionality as smooth as velvet, while still adhering to the pure simplicity of Version 1.

If over-training injuries are really getting you down, let AccuRoute2 re-kindle your love affair with Running. And for all you race organisers out there, what could offer more flexibility than planning any number of courses from the comfort of your armchair? Whether you're a runner new to PCs or a PC user new to running, discover how quickly AccuRoute2 becomes an indispensable part of your training. I certainly wish I had created it years ago – it would have saved me a lot of time, frustration, and wasted effort.

If I've whetted your appetite, why not try AccuRoute2 for yourself and Take your Mouse for a Run!