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Time Trialing 101: The Four F's  
by Steve Hamlin

A mnemonic device is defined as "a technique or mechanism contrived to assist memory." Some common mnemonic devices include "RICE" to help to remember the first aid advice: rest, ice, compression and elevation; "FACE" for the spaces on a musical staff; and "Every Good Boy Deserves Favor" represents the lines on the same musical staff. The following example can make you a more effective time triathlete: the four F's.

The first F is Function. This means to use equipment that is well suited to the job at hand and that is in good mechanical condition. Your bike should be well adjusted and appropriate. In other words, don't use a mountain bike for a road time trial or vice versa and make sure your bike fits you and works properly.

Next is Form. In his '95 Runner's Log, John Jerome suggests, "When you get tired, concentrate on rhythm and smoothness." This is sage advice for running or cycling. When one tires, technique often goes out the window; but by concentrating, you can make yourself more efficient. Greater efficiency equals faster times. When I run, as I tire, my shoulders and neck tense and my upper body begins to rock with each stride. By forcing myself to loosen up and have a "quiet" body, my pace picks up even as my perceived effort remains unchanged. In any discipline, unproductive movement and unnecessary tension is a waste of precious reserves of energy.

The third F, Frequency, is related to Form. Frequency, more commonly known as cadence (what can I say-I needed an "f"), is a crucial aspect of technique. Often the first sign of fatigue is sluggish pedal speed. The key to an efficient cadence is effective use of your bike's gears. Choose a gear that allows you to maintain a ninety RPM cadence or better without sacrificing speed or smoothness.

For climbing, try practicing the following technique. Concentrate on carrying as much momentum into the hill as you can, then shift a little before you think you should keep a spin going as far up the hill as possible. Continue shifting, staying ahead of your cadence, until you either run out of hill or you reach your lowest gear. Once in your lowest gear, try to maintain a cadence as close as possible to 75 to 90 RPMs. Practice shifting until you can drop into an appropriate gear most of the time. You want to hit a gear that you can spin without being "spun out" so you lose all that momentum you are trying to carry. Usually the way to achieve that is to shift the front derailleur as early as you can without causing an extreme amount of chain deflection. Of course, that depends on the length and steepness of the hill you are attacking. Often, the most efficient way to get over a not-too-long hill is to hammer it in the big ring. The point, though, is to use your gears sensibly, and not let your latent machismo get the best of you.

The fourth and final F is Focus. Your greatest adversary in time trialing is yourself. There is usually nobody around you to chase and keep you motivated, so that motivation has to come from within. The way to achieve that is through Focus. In cycling, I find the most effective tool to keep myself focused is my computer. I set it on average speed and race against that, trying to keep my average as high as possible. It helps to know the course so you can set a reasonable goal: fast enough to do well against your competitors, but not so fast that you burn out before the end of the race.

While it's often not possible to know the course, you should at least know your own capabilities. There is no great secret to that; you have to practice, practice, practice. Find a course you like of a suitable distance that's close to home and ride it regularly. It doesn't matter

that much whether the course is hilly or flat. The important thing is that each time you do it, the course remain the same.

When you do your personal time trials, push yourself as hard as you can. Race against your own previous best time. Don't worry about hitting the wall-this is the time and place to find your threshold. Chances are, if you are eating right and staying hydrated, you won't anyway. Make yourself hurt. The secret of successful time trialing is as much the ability to dig deeper into your reserves, as it is to have great strength and technique.

Practice staying focused for the length of the time trial. Often it's helpful to stay focused by breaking the time trial up into several smaller goals. Choose landmarks on your course such as town lines or tops of hills and note your average speed or elapsed time at those points and try to equal or better your stats each time out. For these smaller goals, think in broad terms. If you're keeping track in terms of elapsed time, round it off to quarter minute intervals or whatever you are comfortable with. The idea is to give yourself a goal-not to get bogged down with a lot of useless information.

Another useful technique for staying focused is something called entrainment. This is where you match your breathing to your cadence. You might, for example, breathe in on every other power stroke of your right leg. This is especially useful in a short effort such as a sprint or the last kilometer of a time trial, but I often will use this technique for half to two-thirds of a ten mile race against the clock.

Function, Form, Frequency, Focus; let these four Fs help you to a faster bike split.  
Good racing to you.