Gain Cycling Speed!

By Coach Steve

velocitize: (vuh.LAWS.i.tyz) v. *To cause a person to become used to a fast speed. —velocitization n*

You swim interval sets for most pool workouts, and you probably run a tempo workout or hit the track once a week, but do you put the same intensity into your weekly bike workouts?

If the answer is "yes," you're in the minority; if the answer is "no," the good news is you probably haven't reached your cycling potential yet! The difference between my base-training speed and my speed with interval training is substantial—about 1-1.5 mph on race day. Each Spring after putting-in enough mileage to feel my baseline bike fitness is sufficient, I integrate various types of speed workouts into my cycling week.

There are several ways to integrate speedwork on the bike, both group and solo. If you have the skills for group rides you can jump-in with others of similar experience and speed (better yet, a little faster) for a weekly high-intensity ride. If you're not an enthusiastic solo rider (for speedwork) look for organized group ride opportunities. Most areas have some sort of weeknight or weekend hammer ride, be it bike racers or multisport athletes. Even though I don't compete in bike races anymore, I do a weeknight group ride with "roadies" (a race really). Riding near "redline" for a while every week with others is the best way to bring your speed up level without structured speedwork.

If you don't yet have the skills to join an intense group ride…it's time to develop them! Begin with a friendly, smaller group of buddies, expanding your horizon to a faster organized ride as you become more confident. Even though duathlon and triathlon rides are solo time trial efforts for age groupers, developing bike-handling skills in training with other riders around you will help you to push through the whole bike leg without hesitation in race day "traffic."

For solo bike speed workouts I recommend two distinct types:

1. Short aerobic/anaerobic intervals for 45 up to 90 seconds.
2. Short TT (time trial) efforts of 3 to 5 miles at AT (anaerobic threshold) as repeats or a single TT.

The short intervals develop your explosive power, improving your top end speed. These are essentially "weight training" on the bike when done at full intensity. If you can increase your top speed over short distances, either your "old" race pace will become easier to maintain, or you'll develop new speed for the distance; your "economy" at sprint, Olympic, and even Ironman distance will improve.

I prefer relatively long recoveries after the short intervals so the focus is on attaining a very

high speed rather than shorter recoveries at lower intensity/speed. A set of 6 to 10x 45 seconds on (interval), with 1:15 off (recovery) is a favorite of mine best done towards the end of a moderate 75 to 90-minute ride. The goal should be to maintain the intensity with no fade for the last few reps! The intensity should build with each rep so you keep the same pace as your heart rate drifts up and lactic acid accumulates; you might start at 85-90% effort and build to 95% by the last rep.

I prefer to do cycling speedwork on a flat to rolling course. I recommend using the same gear you would for a TT or race effort on the same stretch of road, but with a cadence 10 to 15rpms faster, about 95 to 110rpms for most of us. Each interval should begin with a standing or sitting near-sprint effort getting you up to top speed fast. And, at proper intensity the last 30% of each interval should become anaerobic as your breathing maxes-out and your quads take a "lactic bath." Shift to a lower gear during the recovery phase, pedal easily and get your heart rate back down. These intervals should feel much like running a 200 to 400 on the track at 95% effort.

If you watch HR (heart rate) during the short intervals, target 85% of max for the interval, and 65% on the recovery phase. Note: These HR ranges are percentages based on your run max HR which is normally higher than cycling max by 5 to 8%, so based on cycling max HR alone you should target about 90% for the intervals.

The long intervals or time trials develop your steady state speed, endurance, and pacing skills by keeping your effort level at AT for the duration. I believe a timed effort substantially shorter than your race distance works best, better yet several short repeats. The goal is to keep you riding at race pace or faster for the duration of the interval so your body adapts to a new faster pace.

Find a safe course where you know the distance and can come back later, repeating the same workout to measure your progress. I use loop courses as well as point-to-point courses of 3 to 5 miles for these timed efforts. Recovery should be at least ½ the time of the TT, up to another full lap of the course. You don't need to go the full race distance as a set of TTs to get an effective workout. Riding at this intensity is enough to get results, and target heart rates should be 85 to 90% of max (again, based on running max. HR). I've done 3x 3-miles, and 2x 5-miles for my own training with excellent results.

A favorite workout is a short set of 45 second intervals (5 to 6), then ride easy for 5 to 10-minutes, then do one time trial (~5-miles). Again, I recommend this intensity work takes place toward the end of a moderate paced ride of 90-minutes.

Keep in mind that week-to-week continuity of speedwork at slightly lower intensities will yield better results than more intense workouts with missed workouts. Several consistent weeks with a periodic week(s) off works well. The timing depends on your season's goals.

When you combine over-speed (intervals, short TTs), with over-distance (long steady rides of race distance or longer), your race day performances on the bike will be of equal quality to your swim and run -- where you've probably been doing intensity work all along.