## Cycling Field Test

This is a simple 30-minute test that you can perform in order to determine your heart rate and/or power training zones for the bike when using an ENDURANCEWORKS training plan. When you repeat the test throughout your training plan, the test serves as a marker set that allows you to monitor changes in fitness.

This test should be performed on a relatively consistent course (mostly flat with minimal turns requiring slowing down or stopping) or on a trainer. Ideally, you will perform this test
 on the same course and in same conditions each time.

Please note that if you are new to triathlon training, have been inactive for a prolonged period of time or are not yet able to maintain a sustained 30-minute effort, we recommend that you use Rate of Perceived Effort during the first 4-6 weeks of your training program prior to performing this test.

## Test Preparation

1. Make sure that you are well rested from training before the test.
2. Any workouts the day before the test should be very light.
3. Don't eat or consume caffeine for three hours before the test and be well hydrated.
4. If you are preforming the test on a trainer, be sure to use a fan for cooling so that you do not overheat.

## Test Protocol

1. Prior to starting the test, warm up easy to moderate for at least 10 minutes. Include $6 \times 15-30$ " pickups where you speed up to a high cadence.
2. For the test, bike continuously for 30 minutes at a hard effort. The challenge will be pacing. You ideally want to pick an effort that you can maintain throughout the 30-minute duration.
3. If using a heart rate monitor:
a. Note your heart rate at 10 minutes, 20 minutes and at the end of the test. Take the average of the three data points.
b. This is your lactate threshold heart rate (LTHR).
4. If you are using a power meter:
a. Note your average power for the 30-minute test.
b. This is your functional threshold power (FTP).
5. Once you are finished, warm down easy.

## Calculate Your Training Zones

TraininingPeaks will calculate your training zones for you:

- Login to your TrainingPeaks account.
- Click on your name in upper right-hand corner for drop down then select "Settings."
- Click on "Zones."


## Heart Rate Training Zones

The average heart rate that you observed during your test is a good estimate of your Lactate Threshold Heart Rate (LTHR). Lactate threshold is the intensity above which acidosis occurs - your muscles will feel heavy with a burning sensation and your breathing becomes labored.

To calculate your heart rate training zones:

- Click on "Add Activity" under "Heart Rate."
- Choose "Biking."
- Enter your LTHR from your test.
- Under "Choose Type," select "Lactate Threshold."
- Under "Method," choose "Joe Friel for Cycling (7)" then click on "Calculate."
- Click on "Apply" to save your bike heart rate training zones.

Please note: We only use Zones 1-5 in workouts the training plans (Z5 in a workout refers to Z5a in the zones calculation).

## Power Training Zones

The average power that you maintain for 30 minutes during a field test is equivalent to your Functional Threshold Power (FTP). FTP is an estimate of the power that you could maintain for an all-out 60-minute effort (e.g. in a race). We use FTP to calculate power zones.

To calculate your power training zones:

- Click on "Add Activity" under "Power" section.
- Choose "Biking."
- Enter your FTP under "Threshold."
- Under "Choose Type," select "Threshold Power"
- Under "Method," choose "Andy Coggan (6)" then click on "Calculate."
- Click on "Apply" to save your zones.

Please note: We only use Zones 1-5 in the training plans.

## Additional Notes

Be sure to cross-reference your training zones with Rate of Perceived Effort (RPE) to ensure that your training zones make sense:

| ZONE | RPE <br> $(6-20$ SCALE $)$ | DESCRIPTION |
| :---: | :---: | :---: |
| Z1 | $10-12$ | Fairly light effort |
| Z2 | $12-14$ | Moderate effort |
| Z3 | $14-16$ | Moderately Hard |
| Z4 | $16-18$ | Hard |
| Z5 | $18-20$ | Very Hard |

Do your training zones match the description of perceived effort for each zone?
If not, you may need to adjust your training zones up (or down) slightly to better match RPE. Keep in mind that setting training zones is not an exact science as training zones are meant to be a guideline. As long as you are in the ballpark intensity for your training zones, you will get the desired training effect.

## WAIVER OF LIABILITY

What you are about to undertake is a fitness program. Injuries may occur in any exercise program, as with this specific program written by David Glover, Krista Schultz and ENDURANCEWORKS, LLC. By downloading and using this program, you are waiving any liability to David Glover, Krista Schultz or ENDURANCEWORKS, LLC. This is a training program that has worked for many others, but it may not be right for you. It is recommended that you consult a physician before undertaking any new fitness regiment.

