



## **INTRODUCTION**

The Challenged Athletes Foundation (CAF) Million Dollar Challenge (MDC) training program will prepare you for the 2019 MDC. This program will assist in your physical progress to be ready to tackle the route for 2019.

## **OVERVIEW**

The training plan will follow a specific trajectory for building Endurance, coping with Load and building your Capacity, followed by a Taper that will re-charge the batteries in the weeks prior to the MDC depart. The approach for 2019 will be working on using terrain and hours in the saddle, as opposed to just "logging miles".

## **PLAN STRUCTURE**

The training plan is progressive and structured. With a reinforced approach on hours, elevation and energy expended as opposed to just mileage, you will see hours as the first metric and followed by an averaged mileage of 15mph, just a reference guide. For some it may be less, 12mph-13mph and others more 17-18mph. The hours are key.

There is a defined reason for the specific workout and rest days and the building phase of using micro cycle periods, such as 3 and 4-day blocks, during the macro cycles of Endurance (6 weeks), Load (6 weeks), Capacity (4 weeks) and Taper (3 weeks) as defined below.

## **ENDURANCE**

Fitness base building phase of hours/miles to ensure you are capable of handling and progressing during later phases of training. Endurance riding should allow you to talk comfortably and there should be constant pressure on the pedals. Typically, coastal and rolling terrain is helpful.

## **LOAD**

A continuation of the Endurance phase with increased hours/miles and elevation which helps to dictate the effort. During this phase you will require some efforts that will increase HR and Power typically dictated by terrain, whilst reverting to Endurance and Tempo pace for most of the ride. You will begin to see signs of fatigue.

## **CAPACITY**

Combining the foundation of the Endurance and Load cycles and incorporating them with increase in intensity to fine tune your body. There is a slight decrease in volume (hours/miles) to be able to cope with the increase of intensity. The training will assist in upper tempo work. Hilly terrain and repeat interval work will be common.

## **TAPER**

A structured rest period to achieve peak performance. The Taper is a very important cycle as it will help to facilitate the recovery phase. The workouts are shorter and lower in intensity. Your hardest day of training should be equal to your hardest day of rest.

## **TRAINING ZONES**

There is a description of the training zones as an attachment. You can approach the training zones in 3 ways: perceived effort, heart rate or power, as described in the attachment.

As the MDC is an endurance event, most of the workload will be facilitating and increasing one's aerobic capacity to handle the hours in the saddle that each day will require.

## **HOURS / ELEVATION / DISTANCE / TERRAIN**

With the change in current coaching and training methods it is important to be aware of the reason behind the re-prioritization of certain metrics. Mileage, whilst being an important goal, is not the be all and end all of achieving the desired workout. As we are all at slightly different physical levels, the hours and the elevation and therefore intensity, should be of high priority.

A 4-hour, 70-mile coastal (1800 ft.) ride will require a lot less energy consumption than a 4-hour, 50-mile hilly (4000 ft.) ride. In clarification of the terrain dictating your training route, and with people who do not live on the coast or live out of town, an explanation of terrain is below:

**COASTAL – Less than 1500ft of elevation gained**

**ROLLING – 1500ft to 3500ft of elevation gained**

**HILLY – 3500ft to 7000ft of elevation gained**

## **FINAL NOTE**

The 2019 MDC, for many, will be the pinnacle of our endurance athletic endeavors for the year. Do the work over the next few months so that you enjoy your week of riding in October.

## TRAINING ZONES: OVERVIEW

Zone	Meaning
L1: Active Recovery	Easy, leisurely cruise to the coffee shop and back. You barely break a sweat.
L2: Endurance	Easy pace during which you can speak in complete sentences. Pace for most long rides, plus pace for CAF rides.
L3: Tempo	A pace that "feels like work," but you can maintain for a long time. You can speak in short phrases. OK for short periods.
L4: FTTHR	Hard pace that you can maintain for maximum of 30 minutes to an 1 hour. You will not want to talk.
L5: VO2 Max	Very hard pace that you can maintain for only a few minutes before you have to back off the pace.
L6: Anaerobic Capacity	Extremely hard pace that you can only maintain for less than a minute, and usually only 30 seconds or less.
L7: Neuromuscular Power	Short high pedal rate bursts that are not taxing when performing, but can make your legs feel very heavy afterwards.

## TRAINING ZONES: DETAILED

1. Perform a Functional Threshold Heart Rate or Functional Threshold Power Test. Follow this link to a handout explaining the test:  
<https://goo.gl/Vkv2bv>
2. Multiply the Threshold number by the percentages to the right to populate zones.

	Zone	HR from %FTHR	%FTHR
Functional Threshold Heart Rate (FTHR) ____ beats/minute	L1: Active Recovery	< ____ HR	<70%
	L2: Endurance	____ to ____ HR	70% to 83%
	L3: Tempo	____ to ____ HR	83% to 94%
	L4: FTTHR	____ to ____ HR	94% to 101%
	L5: VO2 Max	> ____ HR	>101%
	L6: Anaerobic Capacity	>> ____ HR	>>101%
	L7: Neuromuscular Power	N/A	N/A

	Zone	Power from %FTP	%FTP
Functional Threshold Power (FTP) ____ watts	L1: Active Recovery	< ____ W	<55%
	L2: Endurance	____ W to ____ W	55% to 75%
	L3: Tempo	____ W to ____ W	75% to 90%
	L4: FTP	____ W to ____ W	90% to 105%
	L5: VO2 Max	____ W to ____ W	105% to 120%
	L6: Anaerobic Capacity	> ____ W	>120%
	L7: Neuromuscular Power	>> ____ W	>>120%