DAY/DATE: MONDAY/MAY 6, 2013

FOCUS: DISTANCE FREE/PACE

PACE	EFFORT	PERCEIVED EX/TARGET HR
EN-1	FAIRLY LIGHT	12-14/120-150
EN-2	SOMEWHAT HARD	15-16/150-175
EN-3/SP-1	HARD-VERY HARD	17-18/175-MAXIMUM
SP-2/SP-3	EXTREMELY HARD	19-20/MAXIMUM
RECOVERY	VERY LIGHT	7-12/90-120

REC TO EN-1	**200 swim** **100 kick** **8 x 25 @ r=10** • 25 drill/25 swim
EN-1 TO EN-2	**2 x through:** • **1 x 400 swim @ 6:30 or r=30** • moderate pace • **2 x 200 swim @ 3:20 or r=20** • faster pace than 400 • **4 x 100 swim @ 1:40 or r=10** • faster pace than 200's • **extra 30 seconds rest**
REC	**100 swim**

TOTAL: 3000 METERS

Workouts: Off the beaten path
SJ Black, PhD
www.workoutsoffthebeatenpath.wordpress.com

DAY/DATE: TUESDAY/MAY 7, 2013

FOCUS: IM

PACE	EFFORT	PERCEIVED EX/TARGET HR
EN-1	FAIRLY LIGHT	12-14/120-150
EN-2	SOMEWHAT HARD	15-16/150-175
EN-3/SP-1	HARD-VERY HARD	17-18/175-MAXIMUM
SP-2/SP-3	EXTREMELY HARD	19-20/MAXIMUM
RECOVERY	VERY LIGHT	7-12/90-120

REC	**500 choice**
EN-1 TO EN-2	**2 x through:** • **4 x 25 fly kick @ 45 or r=10** • 1st 12.5 underwater • **2 x 50 choice kick @ 1:30 or r=15**
EN-1 TO EN-2	**2 x through:** • **4 x 50 pull @ 1:00 or r=15** • breathe 3/5 by 25's • **4 x 50 drill @ 1:10 or r=15** • IM order • **4 x 75 swim @ 1:45 or r=20** #1: 50 fly "long & strong"/25 back "fast" #2: 50 back "long & strong"/25 breast "fast" #3: 50 breast "long & strong"/25 free "fast" #4: 50 free "long & strong"/25 fly "fast" • **extra 30 seconds between rounds**
REC	**200 choice**

TOTAL: 2500 METERS

DAY/DATE: WEDNESDAY/MAY 8, 2013

FOCUS: MID-DISTANCE FREE/PACE

PACE	EFFORT	PERCEIVED EX/TARGET HR
EN-1	FAIRLY LIGHT	12-14/120-150
EN-2	SOMEWHAT HARD	15-16/150-175
EN-3/SP-1	HARD-VERY HARD	17-18/175-MAXIMUM
SP-2/SP-3	EXTREMELY HARD	19-20/MAXIMUM
RECOVERY	VERY LIGHT	7-12/90-120

REC	**400 swim** **200 kick**
EN-1 TO EN-2	• **1 x 400 pull @ 7:00 or r=60** • breathe 3/3/5/3 by 100's • **4 x 100 swim @ 1:45 or r=15** • descend times 1-4 • **1 x 300 pull @ 5:15 or r=45** • breathe 3/5/3 by 100's • **4 x 75 swim @ 1:30 or r=15** • descend times 1-4 • **1 x 200 pull @ 3:30 or r=30** • breathe 3/5/7/5 by 50's • **4 x 50 swim @ 60 or r=15** • descend times 1-4 • **1 x 100 pull @ 1:45 or r=15** • breathe 3/5/7/5 by 25's • **4 x 25 swim @ 30 or r=10** • descend times 1-4
EN-1/EN-3	**12 x 25 swim @ 30 or r=10** • 25 easy/25 fast
REC	**100 choice**

TOTAL: 3000 METERS

Workouts Off the Beaten Path
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DAY/DATE: THURSDAY/MAY 9, 2013

FOCUS: DRAG FORCES – PART ONE

PACE	EFFORT	PERCEIVED EX/TARGET HR
EN-1	FAIRLY LIGHT	12-14/120-150
EN-2	SOMEWHAT HARD	15-16/150-175
EN-3/SP-1	HARD-VERY HARD	17-18/175-MAXIMUM
SP-2/SP-3	EXTREMELY HARD	19-20/MAXIMUM
RECOVERY	VERY LIGHT	7-12/90-120

Topic: Drag Forces - Part One

Water is 1000 x denser than air. Swimmers must push streams of water molecules out of their way to open holes in the water for their bodies to pass through. As they do this, swimmers encounter "**resistive drag**." Resistive drag holds swimmers back and is directly proportional to the turbulence created.

When smooth water is interrupted, turbulence results. Water that is less turbulent creates less resistance for swimmers. Conversely, turbulent water creates more resistance. One sign of turbulence is the presence of air bubbles.

How to minimize drag:

Minimize the space you take up in the water (i.e., improve horizontal and lateral body alignment).

Tips to improve horizontal alignment:

- Practice floating – float in a streamlined position on front or back, notice the longer you get the more horizontal your body becomes.
- Keep your kick about 8" in diameter; don't kick deeper, higher, or wider than necessary.
- Imagine swimming *through* the water, not over it.

Tips to improve lateral alignment:

- Rotate your entire body as one unit, as if you were swimming with a skewer down the center of your body.
- Practice swimming in a 1-foot diameter tube.

DAY/DATE: FRIDAY/MAY 10, 2013

FOCUS: SPRINT -BASED

PACE	EFFORT	PERCEIVED EX/TARGET HR
EN-1	FAIRLY LIGHT	12-14/120-150
EN-2	SOMEWHAT HARD	15-16/150-175
EN-3/SP-1	HARD-VERY HARD	17-18/175-MAXIMUM
SP-2/SP-3	EXTREMELY HARD	19-20/MAXIMUM
RECOVERY	VERY LIGHT	7-12/90-120

REC	**400 swim** **8 x 25 drill @ r=10**
EN-1	**12 x 25 pull @ 30 or r=5**

EN-1 TO SP-1	**4 x through (add fins for rounds 3 and 4):**
	• **2 x 75 @ 1:30 or r=15**
	  • 50 drill/25 build
	• **2 x 50 @ 1:10 or r=20**
	  • 25 DPS/25 fast
	• **2 x 25 swim @ 40 or r=20**
	  • all fast
	• **extra 60 seconds rest**

EN-1	**12 x 25 pull @ 30 or r=5**
REC	**100 choice**

TOTAL: 2500 METERS