# MIDDLE DISTANCE TRAINING

Devlyn Lovell dlovell@antonian.org

2020 32nd NMTCCCA Clinic Embassy Suites Albuquerque, New Mexico

# DEVLYN LOVELL

- Tom C Clark High School (1986)
- East Texas State University (1994)
- Almost a world record in the 3000m (1991) 7:36.41
- Antonian High School (1995)
- College of the Southwest (2004) and NMJC
- Pete Belman (2006 All-American)
- Conference Champions (2006,2007)
- UMass-Dartmouth (2007)

- Jon Garcia (2008 All-American/National Champion)
- Antonian High School (2008)
- Cross Country State Championships (2000, 2001(G/B), 2009(G/B), 2010(G/B), 2011(G/B), 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019)
- Rebecca Diane Brune (2010)
- Rory Diana Lovell (2011)
- Ryder Devlyn Lovell (2014)

# MESSS MHO HAS INFLUENCED

FRANK HORWILL JACK DANTELS ALSCHMIDT JANTEE MTILLER JAMES KITTELL PHTL WILLIAMS SCOTT CHRISTENSEN DAVID MARTIN JOE NEWTON PETER COE JOE NEWTON **TOE VIGIL** 

# TABLE OF CONTENTS

- Experiences
- My Resources
- Physiological Characteristics
- Model of Training
- Training Program





# COLLEGE OF THE SOUTHWEST

- Start-Up Program
- Limited Resources
- Recruiting to an unfamiliar place
- What I learned





# FIGURING THINGS OUT AT ANTONIAN

Running Workouts:

- Efficiency
- Lactate Threshold
- Aerobic Power
- Glycolytic
- Alactic



- Track & Field Education (USTFCCCA/USATF)
- Athletic Periods
- Internal Recruiting
- Multi-Paced Training Plans
- 14 State Championships since 2007 (Not bragging, just proud)



	_	
Race #10 6A Boys 5k (6A)		
EAM SCORING SUMMAN	۹Y	
nal Standings	Score	
1 Antonian College Preparat	39	
2 St. Thomas High School -	90	I
3 The Village School - Houst	91	I
Cathedral High School - El	130	T
Central Catholic - San Anto	155	I
Midland Christian School	164	ŀ
Nolan Catholic High School	207	Ī
Liberty Christian School - A	228	T
St. Plus X High School - Ho	241	Ī
Bishop Dunne High School	260	Ī
St. Dominic Savio Catholic	285	3
John Paul II - Plano	325	3
Bishop Lynch High School	388	δ
Prestonwood Christian Aca	405	6
Trinity Christian Academy -	422	4
Monsignor Kelly Catholic H	425	5
Saint Mary's Hall - San Ant	435	6
Concordia Lutheran High S	503	7
Parish Episcopal School -	543	9
TOUAL RESULTS	-	
CANTU Jonathan	Dist	-
TIJERINA, Benjamin	Antonia	Di
and the second second second second second	Particular State	П.

# RESOURCES

#### Books-

- Author: Martin and Coe
  - Title: Better Training for Distance Runners
- Author: Jack Daniels, PhD
  - Title: Daniels' Running Formula
- Author: Steve Magness
  - Title: The Science of Running
- Coaches Education
  - USATF Level I, II, III
  - USTFCCCA Sports Specialization, Masters...

# PHYSIOLOGICAL CHARACTERISTICS

- 1. Evaluate current fitness with a 1 or 2 Mile Time trial or 7' test to establish  $vVO_2$
- 2. Establish paces based on the fractional utilization of the  $vVO_2$
- 3. Complete an Athlete Preparation Worksheet with each athlete
- 4. Work backwards from seasonal goal to establish a training plan
- 5. Determine mileage goals based on level chart
- 6. Retest Time Trial every 2-3 weeks.
- 7. Have "Benchmark" Workouts that can be repeated to compare fitness levels
- 8. Implement "Rest" week every third or fourth week to remain fresh (15% less volume)
- 9. Planed rest periods should follow macrocycle. High school runners should rest 10% of the year.

# FRACTIONAL UTILIZATION PERCENTAGES

# Event

- 400m
- 800m
- 1600m
- 3200m
- 5000m
- 10,000m

# Percentage of VO<sub>2</sub>

- 138-140%
- 120-136%
- 110-112%
- 100-102%
- 97-100%
- 92-93%

# ATHLETE PREPARATION PLAN

ATHLETE PREPARATION F	'LAI
-----------------------	------

Athlete :		Sport/Event :	DO B :
Result Target:		Performance Target:	
Current Status:		Current Status:	
Result Prognose	s		
	For Target Competition	Challenge(s)	Current Performance Challenge(s)
Platinum			
Gold			
Silver			
Bronze			
Personal Best			

# TRAINING VOCABULARY

- AEROBIC EFFICIENCY
- AEROBIC POWER
- ANAEROBIC ALACTIC
- ANAEROBIC GLYCOLYTIC

# AEROBIC EFFICIENCY

- CONDITIONING RUNS
  - REGULAR RUNS
  - USUALLY DONE AT 70%-75%
- RECOVERY RUNS
  - OFF DAYS, or
  - USUALLY DONE AT 65%-70%
- LONG RUNS
  - USUALLY DONE AT 65%-70%
  - EQUAL TO 20%-25% OF WEEKLY MILEAGE

# AEROBIC EFFICIENCY: LACATATE THRESHOLD

#### TEMPO

- USUALLY DONE AT 85%-90%
  - EXAMPLES:
    - LONGER TEMPO
      - 40' @ 80-85%, 6+ MILES
    - MEDIUM TEMPO
      - 30' @ 85-88%, 4-5 MILES
    - SHORTER TEMPO
      - 25' @ 88-92%, 3-4 MILES
    - LT INTERVALS
      - 4 X 1 M @ 90% REST: 1'

# AEROBIC POWER

# COMBINED ZONE TRAINING INTERVAL TYPE WORKOUTS

• USUALLY DONE AT 90%-100%

# • EXAMPLES:

- 10K PACED EFFORTS = 92% VO<sub>2</sub> MAX
- 8K PACED EFFORTS = 95% VO<sub>2</sub> MAX
- 5K PACED EFFORTS = 97% VO<sub>2</sub> MAX
- 3K PACED EFFORTS = 100-102% VO<sub>2</sub> MAX

# ANAEROBIC GLYCOLYTIC

#### • SPECIAL ENDURANCE II = 112%-120% VO<sub>2</sub> Max

• SPECIAL ENDURANCE I = 130% - 136% VO<sub>2</sub> MAX

# ANAEROBIC ALACTIC

- 8-10 x 30-40m Fly's with 20m run in.
- Rest: 3-4' between bouts of work.
- All speed work should be done at the beginning of practice.
- Good time to work on the mental piece with the kiddo's.
- Example workout: 8 x 30m fly's with 4' rest.
- 24 hour recovery.

#### DEVELOP SCIENCE BASED TRAINING PLAN

MesocycleGeneral Prep (4 weeks)

Workout Type Aerobic Efficiency Lactate Threshold vVO<sub>2</sub>

• Specific Prep (4 weeks)

Pre-Comp (4-6 weeks)

Lactate Threshold vVO<sub>2</sub> Glycolytic

vVO2 Lactate Threshold Glycolytic

vVO<sub>2</sub> Glycolytic Recovery

• Comp (3-4 weeks)

# HOW CAN YOU USE IT?

# **Develop Science Based Training Plan**

#### **Energy Source Comparisons for Various Events (from Gastin, 2011)**

#### "Classic" Model

Energy Source	200	400	800	1500	5000	10000	Mar
Aerobic (%)		18.5	35.0	52.5	80.0	90.0	97.5
Anaerobic (%)		81.5	65.0	47.5	20.0	10.0	2.5

"Current" Model

Energy Source	200	400	800	1500	5000	10000	Mar
Aerobic (%)	29.0	43.5	60.5	77.0	94.0	97.0	99.0
Anaerobic (%)	71.0	56.5	39.5	23.0	6.0	3.0	1.0

The "current" model was determined using the latest methodology in oxygen kinetics, and with a much more elite subject population than the "classic" model.

# **BY THE NUMBERS**



# of energy need is developed in runs of 70-100% of VO<sub>2</sub> max

# **23%** is made up of runs (100%+) or faster.

# WORKOUT REFERENCE

TYPE	% OF VO <sub>2</sub>	DURATION	VOLUME	RECOVORY
LONG RUN	65-70%	7-14 MILES	18-25% OF WEEKLY MILEAGE	
TEMPO	85-90%	3-7 MILES		
CV	89-91%	800-3000m	8000m	
5k	97-100%	400-1600m	6400m	½ time
3k	100-102%	400-1600m	5000m	1:1
1500m	110-112%	200-600m	2400m	1:2
800m	120-136%	150-300m	1600m	1:3

# TEMPO/LT EXAMPLES

#### • LONGER TEMPO

- 40' @ 80%, 5-6 MILES
- MEDIUM TEMPO
  - 30' @ 85%, 4-5 MILES
- SHORTER TEMPO
  - 25' @ 90%, 3-4 MILES
- INTERVALS
  - 8' @ 85% Rest: 1' jog + 8' @ 85% Rest: 1' jog + 8' @ 85% Rest: 1' jog
  - 5 X 1600M @ 87% Rest: 1' jog
  - 2(3 x 1000m) @ 88% Rest: 45" reps/2' sets

### 5K PACED EXAMPLES POWER

# • INTERVALS

- 12 X 400 @ 97% Rest: 200 JOG
- 6 X 800M @ 97% Rest: 200 JOG
- 5 X 1000M @ 97% Rest: 400 JOG
- 3 x 1600m @ 97% Rest: 400 JOG

#### Blend Workouts:

Two or more intensities are intermixed. 1600@ 92% + 600@ 100% + 1200@ 92% + 400@ 110% + 800@ 97% Rest: 3-4'

#### Combo Workouts:

Combining two or more workout types or intensities, can be utilized as transition work. 2 x 1000m @ 90% Rest: 1' + 3 x 800 @ 97% Rest: 1:1

## 3K PACED EXAMPLES POWER

#### • INTERVALS

- 12 X 400 @ 100% Rest: 1:1
- 6 X 800M @ 100% Rest: 1:1
- 5 X 1000M @ 100% Rest: 1:1
- 3 x 1600m @ 102% Rest: 1:1

#### CUT-DOWN INTERVALS

• 1600@ 97%, 1200@ 100%, 1000@ 100%, 800@ 102%, 400@ 110% Rest: 1:1

"The greatest gains in maximal aerobic capacity occur when exercise intensity is at levels requiring 90-100% of maximum capacity/VO2." -Vigil

#### 1600M PACED EXAMPLES SPECIAL ENDURANCE II

# • INTERVALS

- 4(4 x 200) @ 110% Rest: 100 jog reps/400 sets
- 4(2 x 300) @ 110% Rest: 100 jog reps/400 sets
- 3(4 x 400) @ 110% Rest: 100 jog reps/400 sets
- 6 x 400 @ 110% 1:1
- 4 x 600 @ 110% 1:2
- 3 x 800 @ 110% 1:2
- 2(300-400-600) @ 110% Rest: 1:2 jog reps/600 sets

## 400/800 PACED EXAMPLES SPECIAL ENDURANCE I & II

#### • SPECIAL ENDURANCE II INTERVALS

- 8 x 150 @ 120% Rest: 250 jog
- 2(4 x 200) @ 120% Rest: 100 jog reps/400 sets
- 5 x 300 @ 120% Rest: 3'
- 3 x 400 @ 120% Rest: 4'

## SPECIAL ENDUARNCE I INTERVALS

- 4 x 200 @ BEST EFFORT Rest: 4'
- 3 x 300 @ BEST EFFORT Rest: 6'
- 2 x 400 @ BEST EFFORT Rest: 8'

# LONG RUNS

- Long Run
  - 10 miles
    - 20-25% weekly mileage
      - 50 x .20 = 10
    - $65\% VO_2 Max = 8:27 (11:00/3200)$

# • Other example of Long Run

- Progression Long Run
  - 1/4 easy, 1/4 slightly slower than Tempo, 1/4 at Tempo, last 1/4 easy.
  - Very demanding and should be done only every other cycle.

# HILL TRAINING

## • Power

- 4 x 800M Hills (continuous)
  - Pace can be 10k pace (based on slope)
  - Shoot for same time for each bout of work
  - Rest: 88% recovery job back down the hill

# • Other example of Hill workouts

- 6 mile continuous run over hills
  - Effort should be timed
  - Pace @ 75%

# MY FAVORITE WORKOUTS

#### • 5K PACED WORK

3 X 1600 ALTERNATING (80% LAP 1/3, FOLLOWED BY 97% LAP 2/4) Rest: 1:1

#### • 3K PACED WORK

1600@ 97%, 1200@ 100%, 1000@ 100%, 800@ 102%, 400@ 110%
 Rest: 1:1

#### 1500M PACED WORK

• 3(800@ 100%, 300@ 110%) @ Rest: 1' R/3 S

#### • HILL WORKOUTS

 WFD: 3-6 x 800m uphill @ 92-97% with JB @ 75-80% (continuous)

General Preparation Period (4 week • 40' @ 80% (6:27), 5-6 MILES cycle)

Date Pace: 4:42

- Training Runs, LT and Long Runs
- Sample Workouts
- Build mileage with aerobic conditioning runs of 45 minutes to 90 minutes.
- Threshold Training
- Sample Workouts
- TEMPO RUNS

- 25' @ 90%, (5:44), 3-4 MILES
- LT Interval Workout:
- 2(3 x 1000m) @ 88% (5:52) Rest: 45" reps/2' sets
- Alactic
- 4 x 30m Flys
- Strides
- 8 x 150 @ 85% (34")

Specific Preparation Period (4 week recycle)

Date Pace: 4:35

Specific workouts are done primarily at LT, 3kDP, 1600mDP, 800mDP. Sample Workouts

- VO<sub>2</sub> Workouts
- 6 x 800m @ 97% (2:34) Rest: 300j
- 4 X 1000M @ 100% (5:02) Rest: 1:1
- Glycolotic Workouts
- 4(2 × 300) @ 110% (51")Rest: 100 jog

veek reps/400 sets

- 8 x 150 @ 120% (23")Rest: 250 jog
- Threshold Training
- Sample Workouts
- TEMPO RUNS
- 25' @ 90%, (5:35), 3-4 MILES
- Alactic
- 6 x 30m Flys
- Strides
- 8 x 100 @ 95% (20")

Pre-Competition Period (4-6 week • 800@102% (2:24), 400@110% (66") Rest: 1:1

- cycle) Date Pace: 4:29
- Specific workouts are done primarily at 3kGP, 1600mDP, 800mDP.
- Sample Workouts
- VO<sub>2</sub> Workouts
- 4 x 1000m @ 102% (3:31) Rest: 1:1
- Cutdown Workout
- 1600@ 97% (5:04), 1200@100% (3:40) 1000@100% (3:03),

- Glycolytic Workouts
- 6 x 400 @ 110% (66") Rest: 1:1
- 2(4 x 200) @ 120% (30") Rest: 100 jog reps/400 sets
- TEMPO RUNS
- 25' @ 90%, (5:44), 3-4 MILES
- Alactic
- 6 x 30m Flys
- Strides
- 8 x 100 @ 90% (18")

Competition Period (3-4 week cycle) Date Pace: 4:25 Specific workouts are done primarily at 1600mGP, 800mGP.

- Sample Workouts
- Glycolytic Workouts
- 5 x 300 @ 120% (45") Rest: 3'
- 2(300-400-600) @ 110% (32") Rest: 1:2 jog reps/600 sets
- 8 x 200 @ 120% (30")Rest: 4'

- VO<sub>2</sub> Workouts
- 3 x 1000m @ 104% (2:54) Rest: 1:1
- Alactic
- 6 x 30m Flys

## MULTI PACED TRAINING PLAN ADVANTAGES

- 1. Within the 13-14 day cycle we will hit different training paces. Paces are fluid differ depending on the time of year.
- 2. Helps reduce the monotony of training.
- 3. Allows for more recovery days if needed.
- 4. Works well with racing schedules.
- 5. Can hit the all of the major training parameters with in the cycle fairly easily.
- 6. Speed and Endurance can be done each within each cycle if needed.

# General Preparation Period (4 weeks)

- Training Emphasis: Aerobic Efficiency, Lactate Threshold, and vVO<sub>2</sub>
- Mon Long Run
- Tuesday Tempo (Short) + Strides
- Wednesday Aerobic Efficiency Run
- Thursday 6 X 800M @ 97% Rest: 300 JOG
- Friday Aerobic Efficiency Run
- Saturday Time Trial (1 Mile)

# SAMPLE 2-WEEK CYCLES

- Sunday Aerobic Efficiency Run
- Monday Tempo (Long) + Strides
- Tuesday Aerobic Efficiency Run
- Wednesday 6 x 30m Flys
- Thursday Aerobic Efficiency Run
- Friday Hills
- Saturday Long Run
- Sunday Aerobic Efficiency Run

# SAMPLE 2-WEEK CYCLES

# Specific Preparation Period (4 weeks)

- Training Emphasis: Lactate Threshold, vVO, and Glycolytic
- Mon Long Run
- Tuesday Tempo (Short) + Strides
- Wednesday Aerobic Efficiency Run
- Thursday 5 X 1000M @ 100% Rest: 1:1
- Friday Aerobic Efficiency Run
- Saturday Time Trial (2 Mile)
- Sunday Aerobic Efficiency Run

- Monday Tempo Run (Long)
- Tuesday 6 x 30m Flys
- Wednesday Aerobic Efficiency Run
- Thursday 4(2 x 300) @ 110% Rest: 100 jog reps/400 sets
- Friday Aerobic Efficiency Run
- Saturday Hills
- Sunday Aerobic Efficiency Workout

# SAMPLE 2-WEEK CYCLES

# Pre-Competition. Period (4 weeks).

- Training Emphasis: vVO<sub>2</sub>, Lactate Threshold, Glycolytic
- Mon 3 x 1600m @ 102% Rest: 1:1
- Tuesday Aerobic Efficiency Run
- Wednesday 30m Flys
- Thursday Aerobic Efficiency Run
- Friday Tempo (Short) + Strides
- Saturday 3(4 x 400) @ 110% Rest: 100

jog reps/400 sets

- Sunday Aerobic Efficiency Run
- Monday 2(4 x 200) @ 120% Rest: 100 jog reps/400 sets
- Tuesday Aerobic Efficiency Run
- Wednesday Thursday Tempo (Long)
- Thursday Aerobic Efficiency Run
- Friday Recovery Run
- Saturday Race
- Sunday Long Run

# SAMPLE 2-WEEK CYCLES

# Competition Period (4 weeks)

- Training Emphasis: vVO<sub>2</sub>, Glycolytic, Recovery
- Mon Aerobic Efficiency Run
- Tuesday 3 x 2000m @ 90% Rest: 2'
- Wednesday Aerobic Efficiency Run
- Thursday Aerobic Efficiency Run
- Friday 5 x 300 @ 120% Rest: 3'

- Saturday Long Run
- Sunday Aerobic Efficiency Run
- Monday 3 x 800 @ 102% Rest: 1:1
- Tuesday Aerobic Efficiency Run
- Wednesday 4 x 200 @ BEST EFFORT Rest: 4'
- Thursday Aerobic Efficiency Run
- Friday Easy Run
- Saturday Race
- Sunday Long Run

# TRAINING WORKSHEET

# TRAINING WORKSHEET BASE/SPECIFIC PREP

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday					MPW-50
Saturday, February 15, 2020	Warm up + 4 mile Tempo @ 92% + Strides	Warm up + 6 miles @ 78%	Warm Up + 6x30m Flys Rest: 3' + 6 miles @ 70%	Warm up + 8 miles @ 78%	7 miles @ 70% over hills	10 miles(7 miles@ 70%/3 miles @ 78%) 1600m	4 miles gr / 800-1	10% 100m	200.00	100 m	103-0	100-5
HEAT #1	01/15/20	65.00%	70.00%	78.00%	92.00%	97.00%	88.00%	100.00%	136.00%	102.00%	110.00%	136.00%
Prefontaine, Steve (Coos Bay)	08:41.5	05:41.2	06:12.5	05:34.3	04:43.4	04:28.8	02:27.3	01:04.8	00:23.8	00:15.9	00:14.7	00:11.9
Rupp, Galen (CC)	08:42.4	05:41.8	06:13.1	05:34.9	04:43.9	04:29.3	02:27.5	01:04.9	00:23.9	00:15.9	00:14.8	00:11.9
Munoz, Marcos (TAMU-CC/ANTONIAN)	09:12.5	07:05.0	06:34.6	05:54.2	05:00.3	04:44.8	02:36.0	01:08.7	00:25.2	00:16.8	00:15.6	00:12.6
Harrison, Kashon (Kirtland Central)	09:13.5	07:05.8	06:35.3	05:54.8	05:00.8	04:45.3	02:36.3	01:08.8	00:25.3	00:16.9	00:15.6	00:12.6
Gazda, Andrew (ANTONIAN)	09:17.3	07:08.7	06:38.1	05:57.2	05:02.9	04:47.3	02:37.4	01:09.3	00:25.5	00:17.0	00:15.7	00:12.7
Gallardo, Anthony (SLA/ANTONIAN)	09:21.5	07:11.9	06:41.1	05:59.9	05:05.2	04:49.4	02:38.6	01:09.8	00:25.7	00:17.1	00:15.9	00:12.8
Hickey, Justin (Academy)	09:32.6	07:20.5	06:49.0	06:07.1	05:11.2	04:55.2	02:41.7	01:11.2	00:26.2	00:17.4	00:16.2	00:13.1
Flores, Martin (Hagerman)	09:38.4	07:24.9	06:53.2	06:10.8	05:14.4	04:58.2	02:43.4	01:11.9	00:26.4	00:17.6	00:16.3	00:13.2
Salas, Stevie (La Cueva)	09:44.2	07:29.4	06:57.3	06:14.5	05:17.5	05:01.1	02:45.0	01:12.6	00:26.7	00:17.8	00:16.5	00:13.3
Mortensen, Kim (Thousand Oaks)	09:52.0	07:35:4	07:02.9	06:19.5	05:21./	05:05.2	02:47.2	01:13.6	00:27.0	00:18.0	00:16./	00:13.5
Hasay, Jordan (San Luis Obispo)	09:55.6	07:38.1	07:05.4	06:21.8	05:23.7	05:07.0	02:48.2	01:14.0	00:27.2	00:18.1	00:16.8	00:13.6
Bridge, Kieth (Los Alamos)	09:56.5	07:38.8	07:06.1	06:22.4	05:24.2	05:07.5	02:48.5	01:14.1	00:27.3	00:18.2	00:16.8	00:13.6
Howey, Justin (Cottonwood)	10:04.3	07:44.9	07:11.7	06:27.4	05:28.4	05:11.5	02:50.7	01:15.1	00:27.5	00:18.4	00:17.1	00:13.8
Lopez, Olivia (Tulsa/ANTONIAN)	10:52.3	08:21.8	07:45.9	06:58.1	05:54.5	05:36.2	03:04.2	01:21.1	00:29.8	00:19.9	00:18.4	00:14.9
Volz, Melissa (TAMU/ANTONIAN)	10:58.7	08:25.7	07:50.5	07:02.2	05:58.0	05:39.5	03:06.0	01:21.9	00:30.1	00:20.1	00:18.6	00:15.0
Gonzalez, Johnathon (Cimarron)	11:00.8	08:28.3	07:52.0	07:03.6	05:59.1	05:40.6	03:06.6	01:22.1	00:30.2	00:20.1	00:18.7	00:15.1
Kozar, Bridgette (SFA/ANTONIAN)	11:12.4	08:37.2	08:00.3	07:11.0	06:05.4	05:46,6	03:09.9	01:23.6	00:30.7	00:20.5	00:19.0	00:15.4
Monternayor, Robin (ANTONIAN)	11:13.1	08:37.8	08:00.8	07:11.5	06:05.8	05:47.0	03:10.1	01:23.6	00:30.8	00:20.5	00:19.0	00:15.4
Mastor, Alyx (Taos)	11:48.7	09:05.1	08:26.2	07:34.3	06:25.2	06:05.3	03:20.2	01:28.1	00:32.4	00:21.6	00:20.0	00:16.2
Ray, Brandy (Navajo Prep)	12:21.4	09:30.3	08:49.5	07:55.2	06:42.9	06:22.1	03:29.4	01:32.1	00:33.9	00:22.6	00:20.9	00:16.9
Rios, Emily (Loving)	12:43.9	09:47.6	09:05.6	08:09.7	06:55.2	06:33.8	01:47.9	01:34.9	00:34.9	00:23.3	00:21.6	00:17.5
Hernandez, Karina (Hondo Valley)	13:07.0	10:05.4	09:22.1	08:24.5	07:07.7	06:45.7	03:42.3	01:37.8	00:36.0	00:24.0	00:22.2	00:18.0

# TRAINING WORKSHEET PRE-COMP

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday					WM 43
Saturday, February 15, 2020 HEAT #1	Warm up + 2(4x200) @ 120% Best: 100jr/400js 01/15/20	Warm up + 8 miles @ 76% 65.00%	Warm up + 5 miles @ 885: Tempo + Strides 70.00%	Warm up + / miles @ 76% 76.00%	Warm up + 4 miles @ 65% 85.00%	Bace 1600m 97, 00%	9 10 miles @ 70% 800m 85.00%	400m 100.00%	200m 120.00%	100m 102.00%	100m 110,00%	100m 136.00%
Prefontaine, Steve (Coos Bay)	08:41.5	06:41.2	06:12.5	05:43.1	04:55.3	04:78.8	(12:27.8	01:04.8	00:27.0	00:15.9	00:14.7	00:11.9
Rupp, Galen (CC)	08:42.4	05:41.8	06:13.1	05:43.7	04:56.8	04:29.3	02:27.5	01:04.9	00:27.0	00:15.9	00:14.8	00:11.9
Munoz, Marcos (TAMU CC/ANTONIAN)	09:12.5	07:05.0	06:34.6	06:03.5	05:13.9	04:44.8	02:36.0	01:08.7	00:28.6	00:16.8	00:15.6	00:12.6
Harrison, Kashon (Kirtland Central)	09:13.5	07:05.8	06:35.3	06:04.1	05:14.5	04:45.3	02:36.3	01:08.8	00:28.7	00:15.9	00:15.6	00:12.6
Gazda, Andrew (ANTONIAN)	09:17.3	07:08.7	06:38.1	06:06.6	05:16.6	04:47.3	02:37.4	01:09.3	00:28.9	00:17.0	00:15.7	00:12.7
Gallardo, Anthony (SEA/ANTONIAN)	09:21.5	07:11.9	06:41.1	06:09.4	05:19.0	04:49.4	02:38.6	01:09.8	00:29.1	00:17.1	00:15.9	00:12.8
Hickey, Justin (Academy)	09:32.6	07:20.5	06:49.0	06:16.7	05:25.4	04:55.2	02:41.7	01:11.2	00:29.7	00:17.4	00:16.2	00:13.1
Flores, Martin (Hagerman)	09:38.4	07:24.9	06:53.2	06:20.5	05:28.6	04:58.2	02:43.4	01:11.9	00;30.0	00;17.6	00:16.3	00:13.2
Salas, Stevie (La Cueva)	09:44.2	07:29.4	06:57.3	06:24.3	05:31.9	05:01.1	02:45.0	01:12.5	00:30.3	00:17.8	00:16.5	00:13.3
Mortensen, Kim (Thousand Oaks)	09:52.0	07:35.4	07:02.9	06:29.5	05:36.4	05:05.2	02:47.2	01;13.5	00:30.7	00:18.0	00:16.7	00:13.5
Hasay, Jordan (San Luis Obispo)	09:55.6	07:38.1	07:05.4	05:31.8	05:38.4	05:07.0	02:48.2	01:14.0	00:30.8	00:18.1	00:16.8	00:13.6
Hridge, Kieth (Los Alamos)	09:56.5	07:38.8	07:06.1	06:32.4	05:38.9	05:07.5	02:48.5	01:14.1	00:30.3	00:18.7	00:16.8	00:13.6
Howey, Justin (Cottonwood)	10:04.3	07:44.9	07:11.7	06:37.6	05:43.4	05:11.5	02:50.7	01:15.1	00:31.3	00:18.4	00:17.1	00:13.8
Lopez, Olivia (Tulsa/ANTONIAN)	10:52.3	08:21.8	07:45.9	07:09.1	06:10.6	05:36.2	03:04.2	01:21.1	00:33.8	00:19.9	00:18.4	00:14.9
Volz, Melissa (TAMU/ANTONIAN)	10:58.7	08:26.7	07:50.5	07:13.4	06:14.3	05:39.5	03:06.0	01:21.9	00:34.1	00:20.1	00:18.6	00:15.0
Gonzalez, Johnathon (Cimarron)	11:00.8	08:28.3	07:52.0	07:14.7	06:15.4	05:40.6	03:06.6	01:22.1	00:34.2	00:20.1	00:18.7	00:15.1
Kozar, Bridgette (SFA/ANTONIAN)	11:12.4	08:37.2	08:00.3	07:22.3	06:22.0	05:46.6	03:09.9	01:23.5	00:34.8	00:20.5	00:19.0	00:15.4
Montemayor, Robin (ANTONIAN)	11:13.1	08:37.8	08:00.8	07:22.8	06:22.4	. 05:47.0	03:10.1	01:23.6	00:34.9	00:20.5	00:19.0	00:15.4
Mastor, Alyx (Taos)	11:48.7	09:05.1	08:26.2	07:46.2	06:42.7	06:05.3	03:20.2	01:28.1	00:36.7	00:21.6	00:20.0	00:16.2
Ray, Brandy (Navajo Prep)	12:21.4	09:30.3	08:49.5	08:07.7	07:01.2	06:22.1	03:29.4	01:32.1	00:38.4	00:22.6	00:20.9	00:16.9
Bios, Emily (Loving)	12:43.9	09:47.6	09:05.5	08:22.6	07;14.0	06:33.8	01:47.9	01:34.9	00:39.5	00:23.3	00:21.6	00:17.5
Hernandez, Karina (Hondo Valley)	13:07.0	10:05.4	09:22.1	08:37.7	07:27.1	. 06:45.7	03:42.3	01:37.8	00:40.8	00:24.0	00:22.2	00:18.0

# TRAINING WORKSHEET COMPETITION

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday					MPW - 35		
Sunday, February 09, 2020	Warm-up + 5 miles @ 9 78%	Warm-up + 3x2000 @ 90% Rest: 2'	Warm-up + 6 miles @ 70%	Warm-up + 6 miles @ 78%	Warm-up + 5x300 @ 120% Rest: 3'	Race	Warm-up + 6 miles @ 70%							
				-		1600m	2000m	400m	300m	200m	100m	100m		
HEAT #1	01/15/20	65.00%	70.00%	78.00%	88.00%	97.00%	90,00%	90.00%	120.00%	120.00%	120.00%	136.00%	136.00%	136.00%
Prefontaine, Steve (Coos Bay)	08:41.5	06:41.2	06:12.5	05:34.3	04:56.3	04:28.8	06:00.1	01:12.0	00:40.5	00:27.0	00:13.5	00:11.9		
Rupp, Galen (CC)	08:42.4	06:41.8	06:13.1	05:34.9	04:56.8	04:29.3	06:00.7	01:12.1	00:40.6	00:27.0	00:13.5	00:11.9		
Munoz, Marcos (TAMU-CC/ANTONIAN)	09:12.5	07:05.0	06:34.6	05:54.2	05:13.9	04:44.8	06:21.5	01:16.3	00:42.9	00:28.6	00:14.3	00:12.6		
Harrison, Kashon (Kirtland Central)	09:13.5	07:05.8	06:35.3	05:54.8	05:14.5	04:45.3	06:22.1	01:16.4	00:43.0	00:28.7	00:14.3	00:12.6		
Gazda, Andrew (ANTONIAN)	09:17.3	07:08.7	06:38.1	05:57.2	05:16.6	5 04:47.3	06:24.8	01:17.0	00:43.3	00:28.9	00:14.4	00:12.7		
Gallardo, Anthony (SFA/ANTONIAN)	09:21.5	07:11.9	06:41.1	05:59.9	05:19.0	04:49.4	06:27.7	01:17.5	00:43.6	00:29.1	00:14.5	00:12.8		
Hickey, Justin (Academy)	09:32.6	07:20.5	06:49.0	06:07.1	. 05:25.4	04:55.2	06:35.4	01:19.1	00:44.5	00:29.7	00:14.8	00:13.1		
Flores, Martin (Hagerman)	09:38.4	07:24.9	06:53.2	2 06:10.8	05:28.6	6 04:58.2	06:39.3	01:19.9	00:44.9	00:30.0	00:15.0	00:13.2		
Salas, Stevie (La Cueva)	09:44.2	07:29.4	06:57.3	06:14.5	05:31.9	05:01.1	06:43.3	01:20.7	00:45.4	00:30.3	00:15.1	00:13.3		
Mortensen, Kim (Thousand Oaks)	09:52.0	07:35.4	07:02.5	06:19.5	05:36.4	05:05.2	06:48.7	01:21.7	00:46.0	00:30.7	00:15.3	00:13.5		
Hasay, Jordan (San Luis Obispo)	09:55.6	07:38.1	07:05.4	05:21.8	05:38.4	05:07.0	06:51.2	01:22.2	00:46.3	00:30.8	00:15.4	00:13.6		
Bridge, Kieth (Los Alamos)	09:56.5	07:38.8	07:06.1	05:22.4	05:38.9	05:07.5	06:51.8	01:22.4	00:46.3	00:30.9	00:15.4	00:13.6		
Howey, Justin (Cottonwood)	10:04.3	07:44.9	07:11.7	05:27.4	05:43.4	05:11.5	06:57.2	01:23.4	00:46.9	00:31.3	00:15.6	00:13.8		
Lopez, Olivia (Tulsa/ANTONIAN)	10:52.3	08:21.8	07:45.5	06:58.1	06:10.6	05:36.2	07:30.4	01:30.1	00:50.7	00:33.8	00:16.9	00:14.9		
Volz, Melissa (TAMU/ANTONIAN)	10:58.7	08:26.7	07:50.5	07:02.2	06:14.3	05:39.5	07:34.8	01:31.0	00:51.2	00:34.1	00:17.1	00:15.0		
Gonzalez, Johnathon (Cimarron)	11:00.8	08:28.3	07:52.0	07:03.6	06:15.4	05:40.6	07:36.2	01:31.2	00:51.3	00:34.2	00:17.1	00:15.1		
Kozar, Bridgette (SFA/ANTONIAN)	11:12.4	08:37.2	08:00.3	07:11.0	06:22.0	05:46.6	07:44.2	01:32.8	00:52.2	00:34.8	00:17.4	00:15.4		
Montemayor, Robin (ANTONIAN)	11:13.1	08:37.8	08:00:80	07:11.5	06:22.4	05:47.0	07:44.7	01:32.9	00:52.3	00:34.9	00:17.4	00:15.4		
Mastor, Alyx (Taos)	11:48.7	09:05.1	08:26.2	07:34.3	06:42.7	06:05.3	08:09.3	01:37.9	00:55.0	00:36.7	00:18.3	00:16.2		
Ray, Brandy (Navajo Prep)	12:21.4	09:30.3	08:49.5	07:55.2	07:01.2	06:22.1	08:31.8	01:42.4	00:57.6	00:38.4	00:19.2	00:16.9		
Rios, Emily (Loving)	12:43.9	09:47.6	09:05.6	08:09.7	07:14.0	06:33.8	08:47.4	01:45.5	00:59.3	00:39.6	00:19.8	00:17.5		
Hernandez, Karina (Hondo Valley)	13:07.0	10:05.4	09:22.1	08:24.5	07:27.1	06:45.7	09:03.3	01:48.7	01:01.1	00:40.8	00:20.4	00:18.0		

## FIND TIME FOR YOUR GREATEST SUPPORTERS







# REFERENCES

- Newton, Durkin. Running to the Top of the Mountain. JJ Winning Edge Press. 1988.
- Simmons, Freeman. TAKE the LEAD. Simmons and Freeman. 2006.
- Daniels. Daniels' RUNNING Formula. Human Kinetics. 2005.
- Christensen. Preparation of the Elite Middle Distance Runner. 2011.
- Schmidt, AI (2008) Combined Zone and Critical Zone Training Regimes. Elitetrack.com
- Vigil. Road to the Top. Creative Designs. 1995.
- Rubio, Joe (2003) Fundamental Training Principles for the Competitive 1500m runner.
- Martin, Coe. Better Training for Distance Runners. Human Kinetics. 1997.
- Karp. 101 Developmental Concepts & Workouts for Cross Country Runners.
- Magness. The Science of Running. Origin Press. 2014