

Making Middle Distance Superstars: The Workouts



Wisconsin Track and Field Clinic 2018

"I am most fond of my Junior
World Cross Country title. Eight
kilometers is very far for me".

Asbel Kiprop
Kenyan Miler

Outline Wisconsin Middle Distance Workout Presentation

- Introduction to Training Theory
- Training Sequences and Schemes
- Training Techniques
- Conclusion

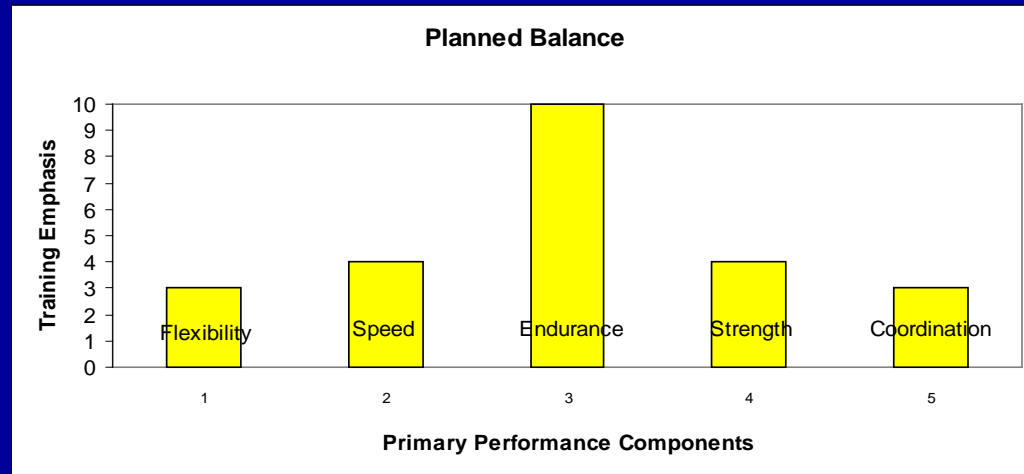
Distance Training Theory

The Primary Physical Performance Components

- Strength
- Speed
- Flexibility
- Coordination
- Endurance

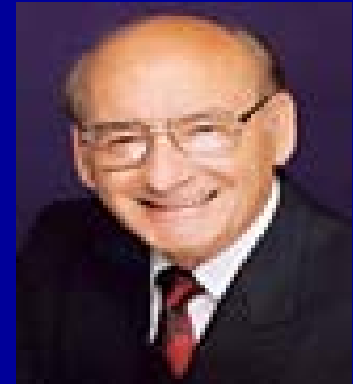
Middle Distance Multilateral Training

- Multilateral Training
- Balance
- Planned Balance
- Specialization



Training Theory

- The Annual Plan
- The Macrocycle
- The Phase
- The Period
- The Mesocycle
- The Microcycle
- The Session
- The Unit



It Starts With An Annual Plan

Sample Training Plan, Two Peaks/Macrocycles (Indoor and outdoor), 36 total weeks																																				
Month	October				November				December				January				February				March				April				May				June			
Date	6	13	20	27	3	10	17	24	7	14	21	28	4	11	18	25	1	8	15	22	1	8	15	22	29	5	12	19	26	3	10	17	24	31	7	14
Annual Plan	Annual Plan																																			
Macrocycles	Indoor																							Outdoor												
Phases	Preparatory																Competition						Preparation				Competition									
Periods	General Preparation								Specific Preparation								Precompetition				Competition				Specific Preparation				Precompetition				Competition			
Mesocycles	1				2				3				4				5				6				7				8				9			
Meso. Themes	Work Capacity				Technique				Speed				Strength				Synthesis				Peaking				Review				Synthesis				Peaking			
Microcycles	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36

Divide the Track and Field Macrocycle into Phases

- *Preparation Phase*
 - training to train
- *Competition Phase*
 - Training to race
- *Transition Phase*



Specific Phases Within the Middle Distance Macrocycle

- The **Preparation Phase** focuses on the athlete as an endurance runner (December, January, February).
- The early **Competition Phase** focuses on the athlete as a middle distance runner (March and April). The late **Competition Phase** focuses the athlete on championship races (May).

Distance Training Theory Specifics

- Divide the phases into four periods.
- Periods into mesocycles and microcycles.
- Microcycles into sessions



Guidelines For Setting Up Each Middle Distance Training Period

- Do train for several microcycles before racing in the General Prep Period.
- Do race once every 9-12 days during the Specific Preparation Period.
- Don't race more than twice every 12 days during the Pre-competition Period.
- Do let the races dictate the workload in the Competition Period.

The Multi-Paced Spring Track Training Scheme

- Structured on a 12 day microcycle for middle-distance and a 9 day cycle for the 3200 meters (same as cross country).
- The time difference is based on event specific aerobic and anaerobic demands.
- With clever planning the two training groups can share about 60% of the training sessions.
- Individual modification of training based on Type 1 or Type 2 athlete.

The Components of the 9 and 12 Day Microcycles

- The long run, tempo run, strength run, recovery run, and races are included within both the 9 and 12 day microcycles.
- Both microcycles also include training sessions of distinctively varied velocity/intensity paces that deliver significant energy chiefly through the anaerobic system.
- This is the multi-paced training scheme.

A Primer on Interval and Repetition Running

- Intervals have short and incomplete rest.
- Repetition Runs are longer with more complete rest.
- Intervals = efficiency work
- Repetition Running= capacity work
- Work may be anaerobic or aerobic.
- Intensity is determined by rest period.
- Total workout volume can exceed race distance, but not individual bouts of work.

Workout Construction

- Aerobic workouts are mainly done with bouts of continuous runs.
- Anaerobic workouts are mainly done with bouts of interval or repetition runs
- Interval runs are work punctuated with periods of incomplete rest

The 5 Levels of the Training Scheme That Are At Or Slower Than Race Pace

- VO_2 max Run
- Tempo Run
- Lactate Threshold Run
- Long Run
- Recovery Run

The 5 Levels of the Training Scheme That Are At Or Faster Than Race Pace

- Speed (30-60 meters)
 - Speed Endurance (60-150 meters)
 - Special Endurance 1 (150-300 meters)
 - Special Endurance 2 (300-600 meters)
-
- Strength Training (short bursts of resistance)

12 Day Multi-Paced Microcycle

- Day 1:
- Day 2:
- Day 3:
- Day 4:
- Day 5:
- Day 6: Race
- Day 7:
- Day 8:
- Day 9:
- Day 10:
- Day 11:
- Day 12:

Date pace continuous

12 Day Multi-Paced Microcycle

- Day 1: VO_2 max Date pace intervals
- Day 2:
- Day 3:
- Day 4: Special 1 Goal pace intervals
- Day 5:
- Day 6: Race Date pace continuous
- Day 7:
- Day 8: Special 2 Goal pace intervals
- Day 9: Tempo Run Date pace continuous
- Day 10:
- Day 11:
- Day 12:

- # 12 Day Multi-Paced Microcycle
- Day 1: $\dot{V}O_{2\max}$ Date pace intervals
 - Day 2: Hills (strength) Max effort intervals
 - Day 3: Recovery Run Date pace continuous
 - Day 4: Special 1 Goal pace intervals
 - Day 5: Recovery Run Date pace continuous
 - Day 6: Race Date pace continuous
 - Day 7: Long Run Date pace continuous
 - Day 8: Special 2 Goal pace intervals
 - Day 9: Tempo Run Date pace continuous
 - Day 10: Speed Max effort repetition
 - Day 11: Recovery Run Date pace continuous
 - Day 12: Speed Endurance Date pace repetition

VO₂ max Run

- Static stretching then 1 mi active warmup
- Work is 5 x 800 meters @ Astrand protocol VO₂ max pace. (2 mile pace)
- Total volume is 4000 meters.
- Done as an interval style workout.
- *Pace is date specific.*
- *Rest equal to work.*

Long Run

- Static stretching, then an 800 meter active warm-up
- Work is an 8 mile continuous long run
- 15 minutes of stretching after

Special Endurance 1 Intervals

- Static stretching then 1 mile active warm-up.
- Several very active strides.
- Extent of work is 5 * 200 meters at near max effort on the track.
- Rest is extensive at 8 minutes between repeats.
- 1 mile jog.

Generic Regeneration Timeframe

24 hours

- Normal long runs, strength runs, recovery runs, moderate tempo runs, alactic runs

48 hours

- Races, long runs plus, lactate threshold runs, basic glycolytic, strong tempo runs, $\text{VO}_2 \text{ max}$

72 hours

- Long races, very strong glycolytic, very strong or long tempo runs

Strength Run as Hills

- *Greater resistance to force is the goal.*
- *Any running is strength work.*
- Hill repeats are the main target workout.
- Hill repeats are done in 5 week blocks of time in and out of season.
- 35-45 second bouts of work.
- 4 minute jog of incomplete recovery.
- Sets of 3-5.

Another $VO_{2\max}$ Day

- *$VO_{2\max}$ pace needs constant reminding to the athletes. The concept of date pace and full effort must be emphasized.*
- 2 mile active warm-up to same course.
- Extent of work is 4 x 1 mile. Intensity is maximum aerobic capacity effort. 2 mi/2 from last week. Record all times.
- Work time = Rest time
- 2 mile cool-down. Elevate and stretch.

Tempo Run (TR) Broken into an Interval Session

- 2 mile active warm-up.
- Four or five 60 meter strides just after active warm-up.
- Extent of run is 12 x 400 meters with a very short rest interval.
- Intensity is based on 80% of date 3200 pace (see chart). @ ~Lactate Threshold.
- 2 mile easy cool down, Stretch and elevate.

LT Interval Reference

Date 3200	Reps	Work distance	Rest (s)	Pace (s)
14:15	12	400 m	15	120
13:20	12	400 m	15	112
12:20	12	400 m	15	105
11:30	12	400 m	15	97
10:35	12	400 m	15	90
9:40	12	400 m	15	83

Speed Endurance

- *With a measuring wheel and can of spray paint, mark a dot on the track exactly 150 meters from the finish line.*
- 2 mile very active warm-up. Strides.
- Do a 400 meter test to exhaustion.
- Rest 15 minutes.
- Extent of work is 4 * 120 meters on the track at max effort. Use a starting device.
- Rest is 4 minutes.
- 3 mile easy run @AT.

Special Endurance 2

- 2 mile active warm-up.
- Several very fast strides.
- Extent of work is 5 * 400 meters at near max date pace effort on the track.
- Rest is 3 minutes.
- 2 mile jog cool down. Stretch and elevate.

More Workout Ideas

1. 5 * 100 with 8 min rest
2. 4 * 300 with 2 min rest
3. 2 * 600 on grass with 10 min rest
4. 10 * 200 with 90 sec rest
5. 4 * 1000 with 7 min rest
6. 8 * 400 with 4 min rest

- Speed Endurance
- Special Endurance 1
- Special Endurance 2
- Intensive Intervals
- $\text{VO}_{2 \text{ max}}$ work
- Extensive Intervals

Conclusion

1. Aerobic development is the main focus of middle distance training. Anaerobic is still crucial.
2. However, do not wait to start fast work, just give lots of aerobic work between anaerobic efforts.
3. Encourage running strong on the harder days and gentle running on the easier days.
4. Avoid getting caught in too many “medium” efforts. Use lots of variety.
5. Do all of the various modalities of aerobic and anaerobic work and follow the scientific guidelines.