

365 DAYS OF TRACK STRENGTH & CONDITIONING

a year-long map for any single sport strength program

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BIOGRAPHY



- Found S&C as a multi-even athlete in college.
- USATF, USAW, CSCS, learn by doing, personal research with self and athletes
 - Key influences Donnie Maib, Vince Anderson, Loren Seagrave, Cal Deitz
- Coached in private sector and high school setting for 16 years.
 - Tom Allen – Aldine HS, Sinton ISD (2006-2012)
 - Pat Reineke – Houston Madison
 - Marvin Ratke, David Pollack and AD Jimmy Hamon – Seven Lakes HS (Currently)





Mentors, Friends, Influences

- Don Reinhoudt (World's Strongest Man)
- John Opfer (U Tennessee, Buffalo Bills, University of Buffalo, Performance Sports Training)
- Vince Anderson (U Tennessee, Texas A&M)
- Loren Seagrave (USATF, hurdles and sprints guru)
- Donnie Maib and Jeff Madden (UT)
- Ed Cosner (Legend)
- John Mitchell (CCVMHS)
- Doug Bull (DP)
- Rylee Maloles (Hammer Strength)
- Antwon Floyd (Mizzu, UH, CCU)
- Ursula Papandrea Garza (USAW)
- Any other coach whom I have ever been able to glean information from.
- My kids – my “experimental space monkeys”
- Family



Outline:



- I. Breakdown of Yearly Calendar
 - a) Big picture
 - b) Phases
 - c) Daily Plan
- II. Proper Force Application
 - a) Running Posture: Z-Line
 - b) Concerns and functional fixes in the weightroom
- III. Preferred lifts and progressions (philosophy)
 - a) Video support, questions, etc.
 - b) Final Word...

Heartless Plug: Why I believe what I'm telling you... Practice what you preach



July 2017



Dec 2018



August 2017



Offseason Framework:



- It's a long year...Decide how your training progresses optimally
- Map the school calendar (1/2 days, vacations, testing, etc.)
- Decide how important YOUR testing is

SLHS (Rathke and Pollack) Running System combined with
Spartan Track Weightroom Progressions.

- 2 days weights (push day, pull day = optimum)
- pure speed, UDI, ODI, Wickets (UH)
 - based on 100, 400, and stride length...
- 1 day flex (circuit training, fun runs, ***competition day***, etc.)

*****Prioritize running and lifting according to YOUR plan*****



Focus on Phase progression:



Phase 1A+B – August – October (transitions depend on athlete growth)

- movement prep, work capacity, teaching (more 1A than B)
 - Compound movements (double leg, total body, multi joint, begin teaching phases of Oly. Lifts; be prepared to change the plan, assess quickly with basic skills in mind)
 - Hip mobility
 - Work capacity and what work looks like
 - Body weight
 - DRM



Build consistency and install “Game-Speed” lifts and workouts with time:



Phase 2 (Preseason 1 and 2) – *Pre and Post Thanksgiving; Early January*

- Preseason 1 – reduce work time (improve work capacity) and improve athlete efficiency through work sets
 - Install season patterned workouts and work loads
 - Workout and “overtime”
 - Complexes
 - Slow Cook – get them where you want them first, and take all the time you need to do it.

*Improved mobility, movement patterns, etc. lead to diversified movements, actual percentages of lifts based on 5RM***

Adjustments to loads and lift types still depend on the learning curve of the athlete. Not going to lift a kid for my own ego.

- Preseason 2 – leads into the beginning of track season; reestablish work capacity, regiment, etc. Short remediation before things kick off.



Focus on Phase progression:



Phase 3: In Season

- **12 weeks long** – Linear progression unless you are looking at peaking at specific meets (can easily improve strength 10-15% in season)
- **OBVIOUS FOCUS IS COMPETITION and PERFORMANCE**
- Focus mainly on maintaining strength and injury prevention
 - Monitor soreness, injuries, etc. and modify lifting accordingly
 - Advanced Athletes can be adjusted further depending on peaking, specific event concerns, etc.
 - We WILL look at 2 days minimum for field events and 3 days for runners (2 lift, 1 plyo)
- Keep training with intensity and focus.
- Speed of bar over load on bar; mobility and flexibility over brute strength.
- Focused auxiliary and posterior chain lifts for endurance and injury prevention.
- The key for most of our athletes should be to compete at the highest level possible at **DISTRICT**; Always special cases, make adjustments when needed.

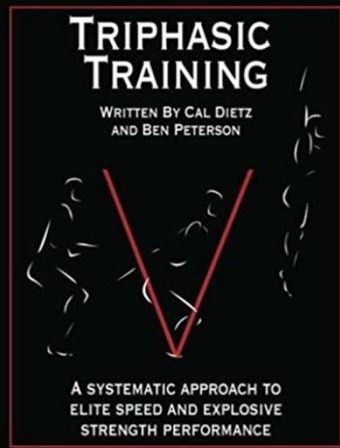
Focus on Phase progression:



- **Championship Season (Phase 3B)**
- Very individualized training because of small groups:
 - Huge need for event coach and strength coach to be honest with athlete's performance and response to training.
 - No training is more important than an athlete's success, but success can be improved with strategically planned training.
- **Post Season Recovery):**
 - **SELL SUMMER TRAINING, CROSS TRAINING IN OTHER SPORTS, SUMMER TRACK TO THOSE WITH THE LOVE OF THE SPORT...**
 - **GOTTA LOVE SPORT!!!**
 - The length of this phase depends on the length of competition through State (Phase 3B and Championship will run in tandem...most of the team on rest and repair, while those still competing increase intensity through their championship run.)
 - Get to end of year; create **EXPECTATIONS** for summer session
 - Injury, flexibility, mobility issues addressed
 - work capacity back up



Focus on Phase progression:



- **Phase 4 SAC Triphasic (Cal Dietz); Orange Crush**
- 6 weeks
 - 2 Eccentric
 - 2 Isometric
 - 2 Concentric (H.I.I.T.)
 - Creates base that can be added on to for the rest of the year.
 - Reemphasizes key movement patterns
 - Eccentric and Isometric work increases bone density and connective tissue health
 - Opportunities to cross train with other sports and enjoy training for the summer
- **Orange Crush**
 - Fun running and team competition
 - No emphasis on summer track meets but kids can if they want
 - Complements both active recovery and growth in the weightroom



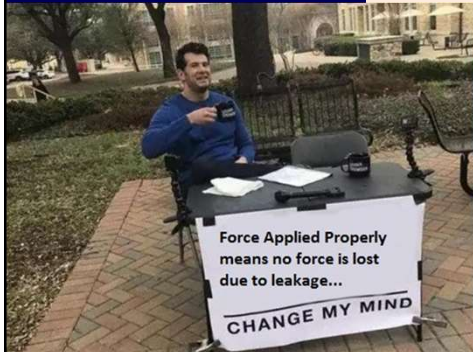
How to transition force application in the weightroom to the track

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NON NEGOTIABLES

- Newton's 3rd Law
- Law of Conservation of Mass and Energy
- Purpose to this situation:
 - When applying force, know where it's going!
 - Poor force application, lack of ridged spin, improper drive angles do damage optimal effects in training and competition.



Running Posture:

- Neutral spine and head – no force wasted through loose spine or bad angles
- Thigh angle – 90 degrees
- Shin angle – 45 degrees
- Dorsiflexion – calf locked in spring position



Z-Line

All of this allows for Optimal Force Application:

- **Triple extension** from hip to toe
- Muscle fire pattern = glute then hamstring
- Ankle should peddle around opposite knee (B-step)
- Even in Max – V phase, heels shouldn't strike glutes during turn-over...should aim for under thigh
- Driving force comes from contact with ground, not from knee drive in front.


Proper posture and movement pattern should ensure foot strike under hip and force travels optimally through the body and out the top of the head.



Lifts that establish key movement patterns:

1. Proper hip-hinging
 - Hip hinge, hip to feet
 - Hip drive (bar, and sprinter)
 - Speed Deadlift (Deadlift over squat, don't overload...train sprinters)
 - Doubles EMOM
 - Bands for force at the top of lock out
 - Tire Flip and post chain power movements
 - Speed and posture over weight
 - Clean/snatch from power position
 - Planking positions for posture and bracing





Lifts that establish key movement patterns:

2. Proper movement patterns while striking the ground (Step up variations, bounding and box jump patterning)
 - bench/box step up variations
 - Translates to better drive phase (A-step)

Coaching Points:

 - *Differentiate between lifting the body up and driving the ground out from underneath*
 - Drive through lock out (triple extension)
 - Keep climbing with the hip and hollow out mid-section (draw a line through the middle of the body, straight through the ceiling)
 - Keep trail leg straight and underneath, slowly reincorporate with control to no more than 90 degrees ("sweep," or "shin block;" emphasize block start concepts)





Establishing the proper patterns in the weightroom:

3. Power and explosion through proper muscle incorporation
 - **Olympic Lifts**
 - At least pull
 - Clean variations
 - Complex training (work capacity, intensity, time saver, in season awesomeness)
 - **Landmines**
 - The answer to all of your Olympic lift fears!
 - Don't need a cool apparatus...
 - **KB Swings**
 - **Squats from multiple positions** (but always to the floor please)
 - Split
 - Front
 - OVERHEAD



Post Chain: Can't fire a Cannon out of a Canoe (Ed Cosner)

1. **RDL – Single Leg SPRINTER RDL**
 - Form and posture...model running, no hip tilt
2. **Over Head Sled and banded high pulls**
 - Creates firing pattern all the way up the chain
3. **Physio Ball Curl**
 - Bring ball up closer to knee, dorsiflex, curl to butt
 - Hips must stay engaged
4. **HIP DRIVES** for power
5. **Walking Lunges** – any time the leg has to travel through ROM, hams are engaged
6. **Assisted Hams** (Great if you don't have glute hams)
 - Eccentric load down, hips engaged and pull with the heels on the way up
7. **Pull Ups, rows, body weight reverse rows...get the back strong!!**





Auxiliaries – Fix problems while you work:

- Preach Downward force with lifts (“push floor out from underneath”)
 - Model coaching cues on the track with cues in the weightroom
- Build the ability to absorb force (deceleration)
 - Slams
 - Box step off landings
 - Post chain work
- Build proper movement patterns with auxiliaries on heavy core lift days
 - Ex: Squat, single leg hip drive, sprinter step ups
- Heavy core lift: Fast and mobile auxiliary lifts
 - Ex. Heavy deadlift, split squat single leg hops, KB swings, OH Iso squat and hold (5 sec)



Other Considerations:

Don't assume they can do it or you can teach it just because others do it...

- Proper bounding progressions before moving right in to running bounds (especially single leg bounds)
- Proper Olympic lift technique and application – This is a Key to our program; WE WILL BE PROFICIENT Olympic Lifters (Clean, Snatch, Complex work)
- Maximum Vertical jump and box jump over “YouTube fabulous”
- Deceleration work





Final Words:

- Certifications and organizations (USAW, USATF, NHSSCA, GHSCA, etc)
 - Building an understanding of the profession
- Modeling and progressions
- don't just "drill to drill," a lot of bad work is still just bad work.
 - Be honest with your own comfort with progressions
 - Progress as a team or as individuals based on your own teaching style
- Remember tough love still needs to look like love...is still about family, no matter how big your family or how big your school.

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