

# Long/Triple Jump

Drills and Techniques

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# 2017 UIL State Meet Winners

## Boys Long Jump

6A	24-1
5A	24-5
4A	24-9
3A	23-7.75
2A	23-1
1A	22-1.5

\*consistent solid jumps throughout the season should be the goal, the big one will come if you prepare them mentally and physically for their target meet

# 2017 UIL State Meet Winners

## Girls Long Jump

6A	21-2.75
5A	19-6
4A	20-0.25
3A	19-4.5
2A	17-10.25
1A	17-10.5

# 2017 UIL State Meet Winners

## Boys Triple Jump

6A	50-2.25
5A	50-2.25
4A	48-8.25
3A	45-8.5
2A	47-0
1A	43-11.75

# 2017 UIL State Meet Winners

## Girls Triple Jump

6A 42-1.5

5A 43-4.75

4A 40-1

3A 38-2.75

2A 36-11.5

1A 39-1.5

# Topics

- Approach Run
- Take-off & Flight Phase
- Landing Phase
- Drills
- Managing your LJ/TJ on Meet Day

# Approach Run

- Most important part of the jump (my opinion)
- Most easily measured by number of take-off leg steps
- Acceleration must be achieved gradually
- Proper acceleration and posture are very important
- Coach should watch for progressive shin angles
- Start and Coaches Mark are critical for success
- Three Phases of the approach run are:
  - Drive
  - Continuation
  - Transition

# Common Errors

- Gunning out of start of run (spinning wheels)
- Jogging out of start of run (not pushing out)
- Popping up too soon (not pushing out long enough)
  - All lead to improper positioning at the board (reaching, chopping, decelerating or fouling)



# Approach Length and Checkpoints

- TJ is usually between 14 & 20 steps (7 & 10 take-offs)
- LJ is usually between 16 & 22 steps (8 & 11 take-offs)
  - Depends on athletes strength, coordination, training age & time of season
- Checkpoints should be located at start of approach run and beginning of transition phase (last 4 steps or 2 take-off steps)

# 3 Phases of Approach Run

- Drive
- Continuation
- Transition

# APPROACH-Drive Phase

- Look for proper alignment of head, hips & contact foot
- Foot Strike should occur behind hips
- Look for oval recovery foot pattern
- All of these result in a pushing action that gets the athlete started
- “Boulder” analogy

head

hips

foot

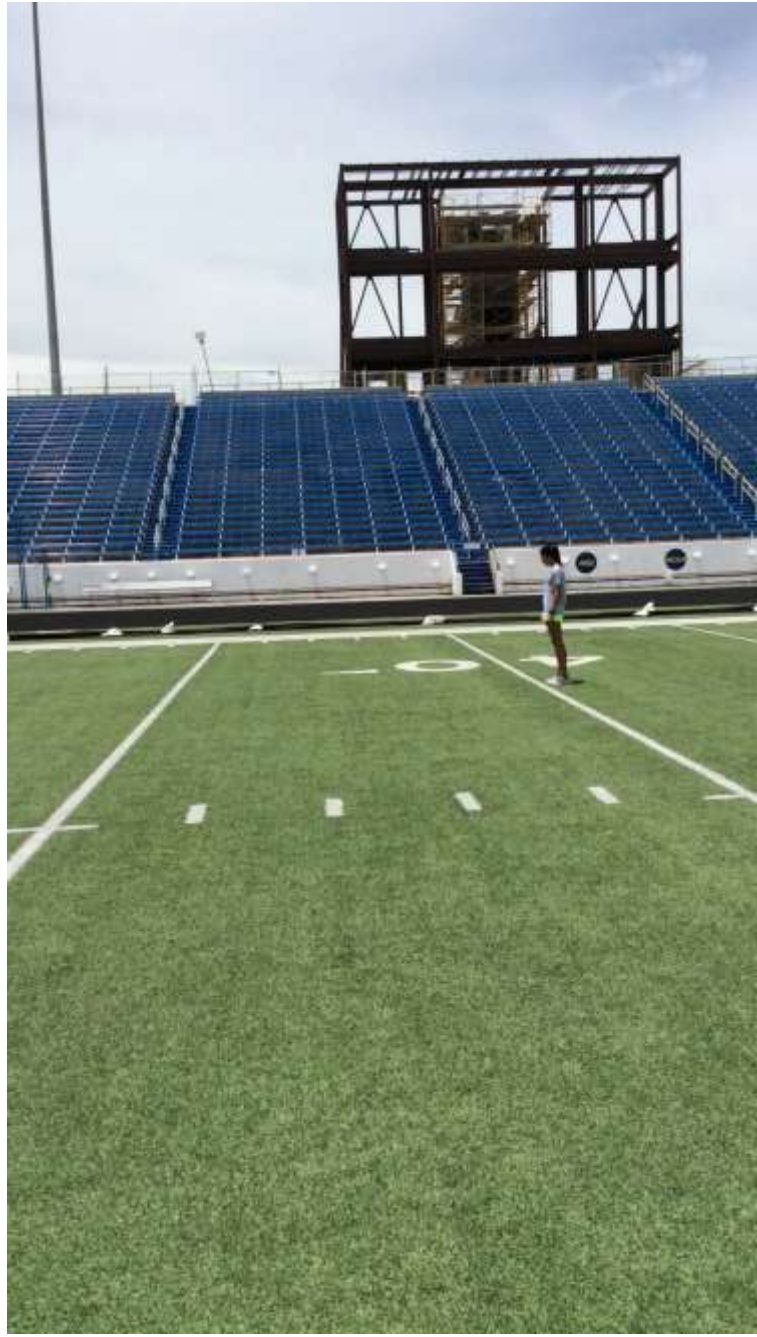
# Drive Phase cont...

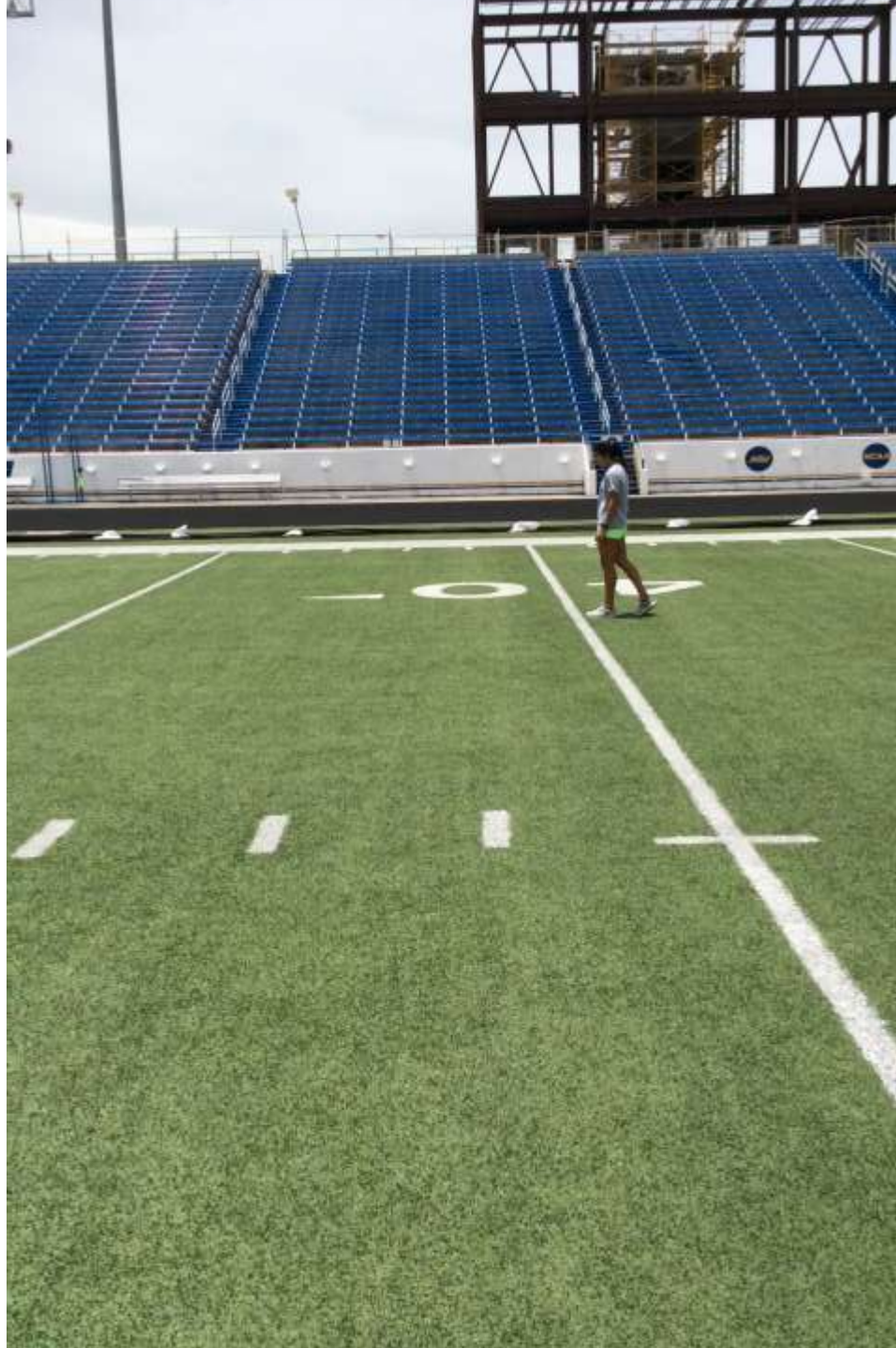
- Drive should take 6 to 8 steps, depending on length of the approach
  - Full Extension of Push Leg
    - Low Frequency (slow but strong)
    - High Displacement of COM
  - Swing/Drive Leg is Free Swinging
    - Big Separation (large ROM)
  - Shin Angles of contact foot and athlete's body lean should be progressively becoming upright (climbing the ladder)

# Drive Phase Drills

- Walls
  - Postural alignment
  - Pushing down and back
- Falling & Rolling Starts
  - Proper start angles
- Tire Pulls
  - Forced “pushing”











# APPROACH-Continuation Phase

- Continue “climbing ladder”
- Oval recovery becomes circular
- Ankles cocked (dorsiflexed) during recovery
- Foot strike changes from behind to underneath hips
- Tall body positioning, hips under COM
- Speed nearing optimal, posture gradually changes from

head		head
hips	to	hips
foot		foot

# Continuation Phase Drills

- Walls
  - Postural alignment
  - Knees and toes up in recovery
  - Step down
- Wickets
  - Force “step down”
    - 5-8 ft depending on time and gender





# APPROACH-Transition Phase

- Last 4 Steps (including penultimate & take-off)
- Proper max velocity sprinting technique
- Good Postural Alignment (head, hips, & contact foot)
- Vertical Shanks (shins straight up and down)
  - head
  - hips
  - foot

# Transition Phase Drills

- Run, run, gallop
  - Transition between last 2 running steps, to penultimate, to jump
- Run, run, jump
  - Adds the take-off







# JUMP-Take-off Phase

(last 2 steps of approach & early flight)

- Penultimate Step
  - Full foot, rolling contact
  - Drop knee over toe (all the hip drop needed)
- LJ Take-off Step
  - Slightly in front of hips (more than TJ, but less than HJ)
  - Full foot , rolling contact
  - Hitch/Hang (keep simple, few 26'+ jumpers out there)
- TJ Takeoff Step (Hop)
  - Slightly in front of hips (run off board)
  - Step
  - Jump
    - TJ hop, step, & jump should be three relatively equal phases (take-off!, take-off!, take-off!)
    - LLR or RRL (cycle, bound, bound)
    - Different thoughts on which leg should take two phases

# Penultimate Step

## LJ & TJ

- 2<sup>nd</sup> to last step of approach (set-up step)
- 90 degree ankle
- Heel lead
- Flat ground contact
- Lowering of COM occurs here
  - Knee over toe at contact, slightly in front of COM
  - Lowering occurs after touchdown
  - Slight and simultaneously
- Rolling (bridging) action of foot (move over it)
- Flexion at toe only

# LJ Take-off Step

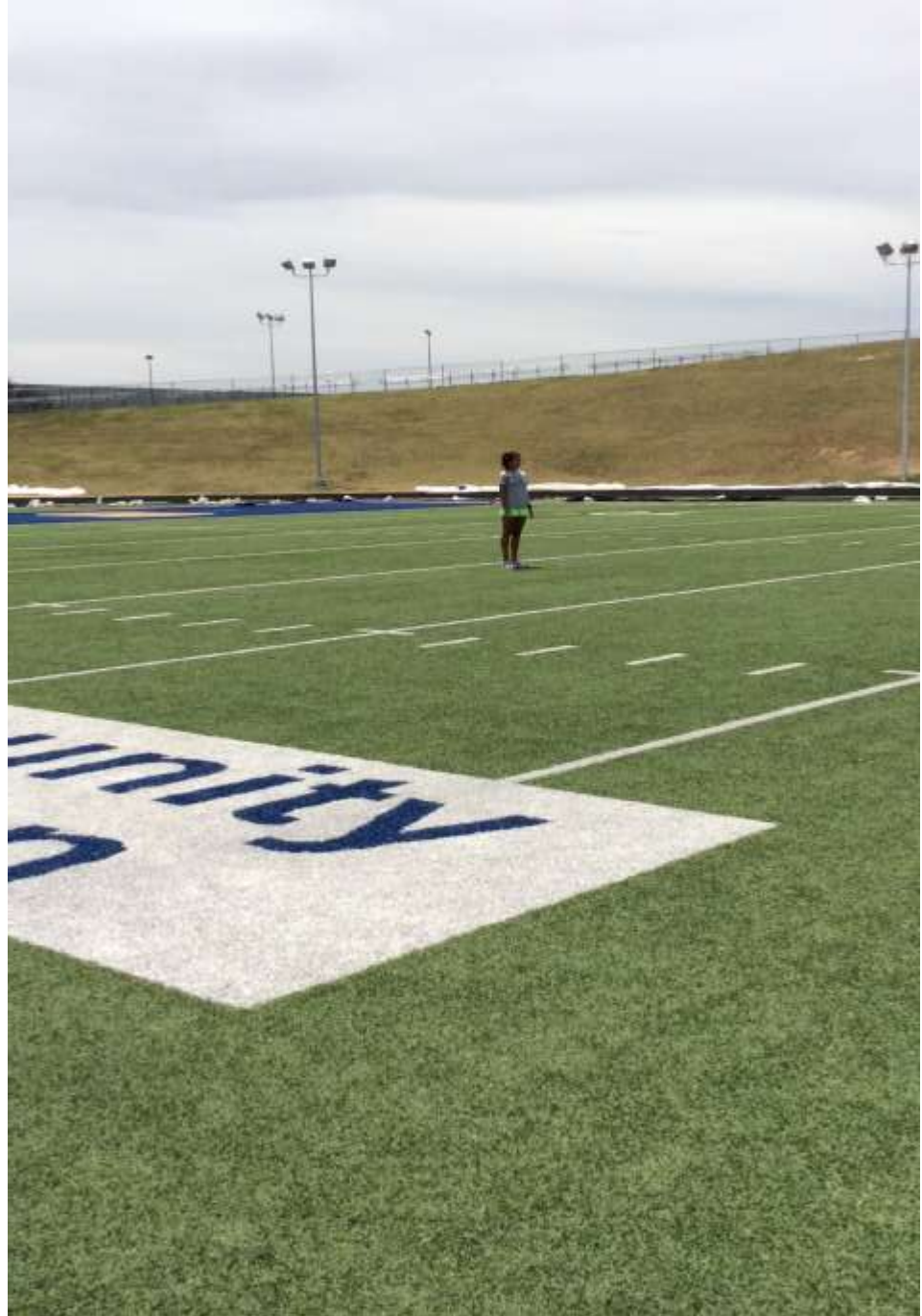
- Step through onto board with low heel recovery
  - Cue by telling foot passes ankle
  - Creates quick sounding step (not a short step!)
  - Conserves hip amplitude
- Full foot ground contact
- Full extension of jump leg
  - Leave foot behind on board (toe nailed to)
  - Push hips through
- Big ROM with swing leg (separation)
- All rise of athlete should occur PAST the board

# LJ Hitch/Hang

- Contra lateral Reflex
  - Segments compensate for balance as in hurdling
- Legs have big swings in front and small in back
- Arms are small and tight
- Shoulders remain square
- Can be taught naturally by doing running pops
  - Don't overcoach this because if athlete is worried about hitch, it could jeopardize take-off. (take-off is meat and potatoes, hitch and landing are gravy)
  - Flight path of COM is determined by take-off and where COM goes, so does rest of body

# LJ Takeoff Drills

- Pop-offs
- Bar Drills







# TJ Take-off Step

- Step through onto board with low heel recovery
- Slightly closer to COM at touchdown than LJ (shorter)
- Full foot ground contact and bridging of foot
- Velocity continues past board
- Swing leg and arms are open and full (separation)
  - Lower angle than LJ swing/drive (out, not up)
  - Arm action will come natural in most cases (single or double)
- Full extension of takeoff leg (kick board back and leave toe nailed to board)

# Hop cont...

- Take-off leg cycles through after full extension of hip
  - Extends, then falls striking with a heel lead and full foot contact UNDER the COM

# TJ Step

- Swing leg comes through low and open with a dorsiflexed (cocked) foot toward pit (out, not up)
- Full push of hips by take-off (contact) leg occurs in an outward direction toward pit
  - IT IS A LONG BOUND, NOT A STEP!

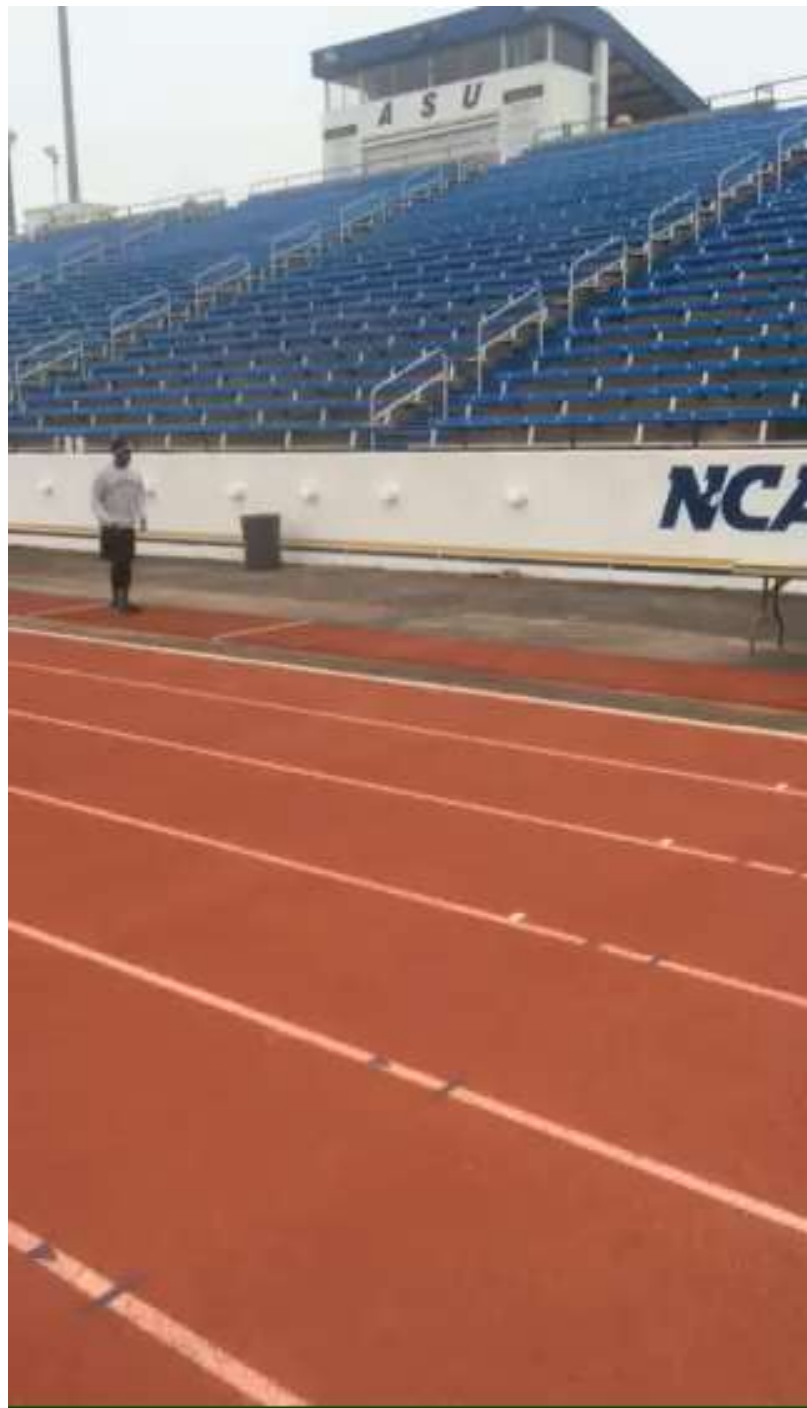
# TJ Jump

- Swing leg extends, falls, and becomes take-off (contact) step
- It strikes with a heel lead and full foot contact UNDER the COM
- Opposite leg becomes the swing/drive leg and comes through in an open full ROM
- Thigh of swing/drive leg blocks (stops) parallel to sand as the take-off (contact) leg extends hips up and out into the pit

# TJ Take-off Drills

- Single Leg Bounds
- Alternate Leg Bounds
- Repeats









# Landing Phase for LJ & TJ (late flight & sand)

- Arms sweep over the top as knees come up
- As hands pass outside knees then hips, legs extend with cocked ankles
- Shoulders remain parallel to back of pit
- As heels contact sand, legs collapse and hands punch hips/butt through or beside heel marks
- Kickout then occurs to preserve momentum

# Landing Drills

- Chair Drills
  - Slows everything down for athlete's understanding
- Assisted Landing Drills
  - Simulates momentum entering sand
- Standing LJ (no video)



# Putting It All Together

- Part to Whole Training
  - Early Season is for Drills
  - Combine the parts in the Early-mid Season (short run, full jumps)
  - Late Season is for Perfection of Whole Event

# Meet Day Strategies

## (Boo Schexnayder, SAC Speed)

- Early Season Meets
  - Runway management
  - Get athlete accustomed to meet intensities
  - First true full run practice (can't really simulate meet conditions in practice)
- Midseason Meets
  - Preparation & take-off management as athlete becomes used to full run (timing)
  - Temporal & spatial cues (glorified practice, now is time to clearing things up between athlete and coach that can't be explained in practice)
- Late Season Meets
  - Athlete's competition (coach needs to back off)
  - Holistic cues (keep them simple so athlete stays aroused)
  - Predicting where failure will come (head it off)
  - Keep communication positive

# Meet Day Strategies cont...

- Goals for specific jumps in competition
  1. Solid jump with no baggage (on the board)
    - Very hard to win big meet when athlete fouls first jump
  2. *Small changes with arousal\**
  3. Add arousal
  4. Low key, practice good technique (very few competitions are won on 4<sup>th</sup> jump)
  5. *Cue the runway, bring it\**
  6. *Go after big jump\**
    - Most competitions are won on one of these\**

# GOOD LUCK NEXT SEASON!

Remember that strategies, just like technique and physical training, must be rehearsed and periodized to meet the goals of the athlete!