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# Fundamentals of Pole Vault

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# Outline

- Overview of Pole Vault
  - Basic Rules
  - Time Limits for initiating an attempt
  - Definitions of Foul Attempts
- Safety
  - Venue inspection and preparation
- Venue Set-Up Procedures
- Procedures for conducting a safe competition
- How to score a Pole Vault competition
  - Tie Breaking procedures
  - Jump-Off procedures
- USATF Officials Best Practices



# The Pole Vault Venue





# Pole Vault Basics

<b>Crossbar Length</b>	4.50 meters		
<b>Number of Attempts</b>	Unlimited until 3 misses in row		
<b>Opening height</b>	Athlete's choice		
<b>Height progression</b>	Set by Games Committee		
	<b>IAAF/USATF</b>	<b>NCAA</b>	<b>High School</b>
<b>Late arrival after start of competition</b>	Start at current height, if entered	Can't jump	Can't jump
<b>Bar support pins</b>	55 mm	55 mm	76 mm (3 in)
<b>Height increments</b>			
<b>Open</b>	15 cm	15 cm	6 in
<b>Combined Events</b>	10 cm	10 cm	15 cm
<b>Standards</b>	0 – 80 cm	45-80 cm	45-80 cm
<b>Passes</b>	Pass <b>height</b>	Pass <b>attempt</b>	Pass <b>attempt</b>
<b>Warm-ups on runway after competition starts</b>	Not allowed	2 min. after 1 hour w/o bar @ entry height	2 min. after 3 consecutive passed heights w/o bar @ entry height



# Time Limits for Initiating an Attempt

	Pole Vault Time Limits (minutes)					
	IAAF/USATF		NCAA		High School	
	Individual Event	Combined Event	Individual Event	Combined Event	Individual Event	Combined Event
> 3 athletes	1	1	1	1	1	1
2 – 3 athletes	2	2	3	3	3	3
1 athlete	5	3	5	3	5	5
Consecutive attempts	3	3	3	3	3	3
<b>Warning:</b> Raise yellow flag	15 sec		15 sec		No rule	



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# It is a foul if ...

- When the crossbar is displaced in an attempt to clear it;
  - Exception: If, in the judgment of the official, the wind blew the pole into the crossbar causing it to fall.
- When a competitor touches the ground or landing area beyond the plane of the crossbar or the crossbar extended without first clearing the bar.
  - It is not a foul if the athlete's arm or pole breaks the plane without touching the ground or landing area beyond the plane.
- If a competitor fails to initiate a trial within the time limit.
- If, during or after the jump, the competitor deliberately steadies or replaces the bar.
- If the pole is touched when it is falling toward the bar or uprights such that, without the intervention, the bar would have been knocked off.
- If a competitor violates the warm-up restrictions.



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# It is a foul if ... (cont.)

- High School only:
  - If, after successfully clearing the bar, a competitor accidentally bumps the standards and displaces the bar while exiting the pit.
  - If the competitor uses a pole that is rated below his/her weight; the competitor will also be disqualified from the event.
  - If the competitor leaves the ground in an attempt and fails to clear the bar.
    - **EXCEPTION:** The competitor aborts the approach and in stopping plants the pole and momentum causes his/her feet to leave the ground.
- **Note:** *It shall not be counted as a trial or failure if a competitor's pole breaks during an attempt to clear the bar. The vaulter shall be awarded a new trial.*



# A proper set-up helps produce ...

- A safe competition
- A legal competition
- A fair competition







# Crossbar

**Midpoint: It may not be in the middle of label**

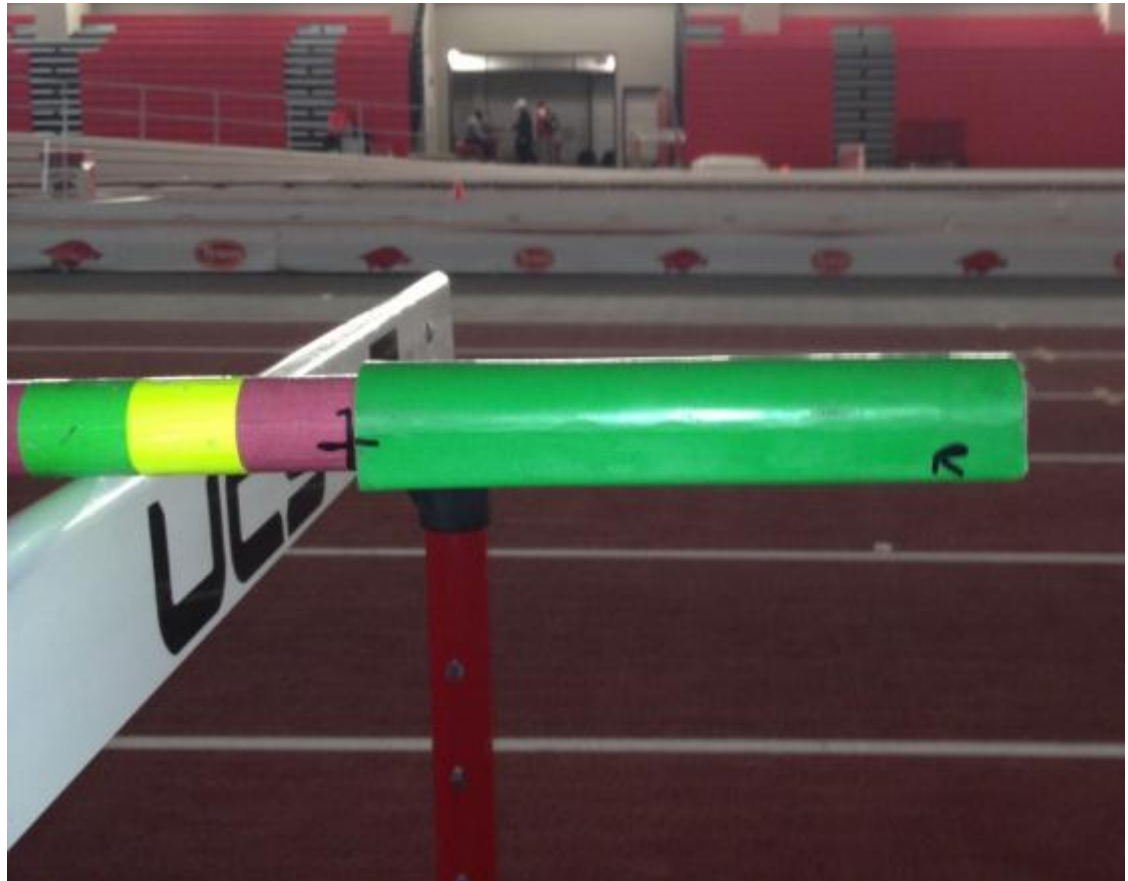


Courtesy of Mike Armstrong  
Arkansas Association

# Crossbar

## Ends

- Align and mark end pieces (NCAA 6.5.2) so that bar sag is down



Courtesy of Mike Armstrong  
Arkansas Association

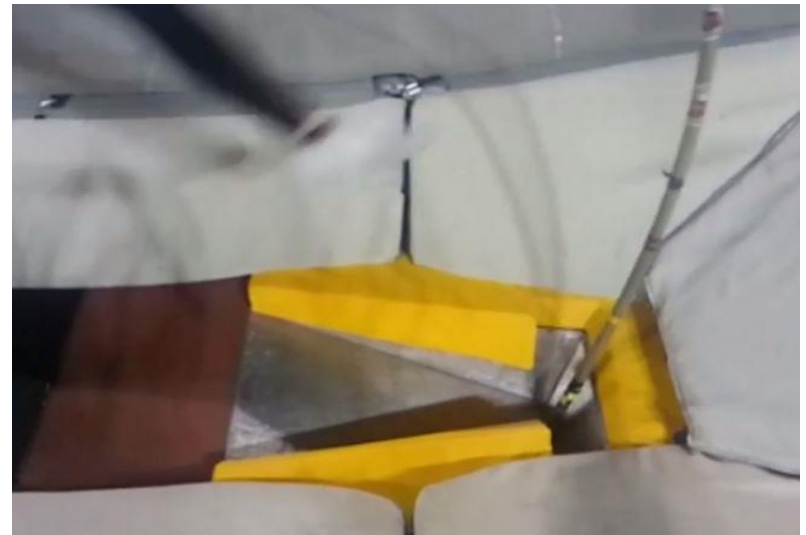
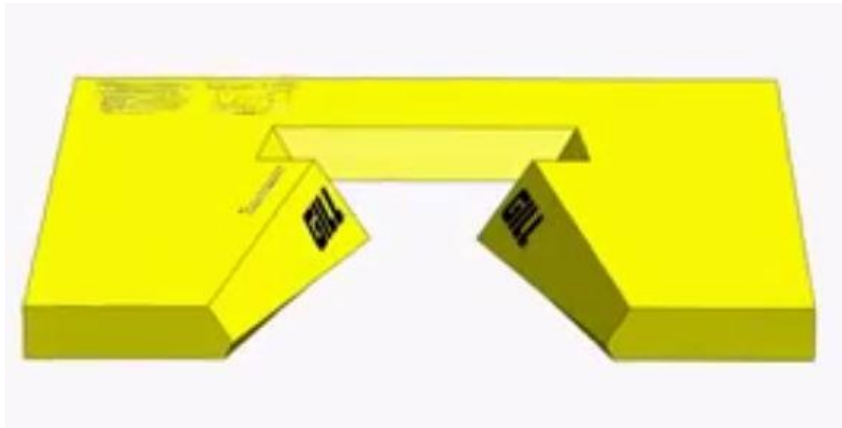
# Pole Vault Venue Set Up

- Cover hard surfaces such as concrete, metal, wood or asphalt with a minimum of 2 inches of dense foam or other suitable material
- Remove movable objects such as hurdles





# NCAA & high school competitions: Verify there is a box collar





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# Inspect the Box & Landing Area

- Check the area around the box
  - Remove debris & water from the box
  - Verify adequate clearance for poles to the pads
- Verify that the pits are properly connected and the top cover is in place
- Observe the condition of the pit
- Verify the pegs are the proper length
  - 55 mm for USATF & NCAA
  - 76 mm for High School
- Install extenders if necessary



# Mark 0 to 80 cm scale on bases

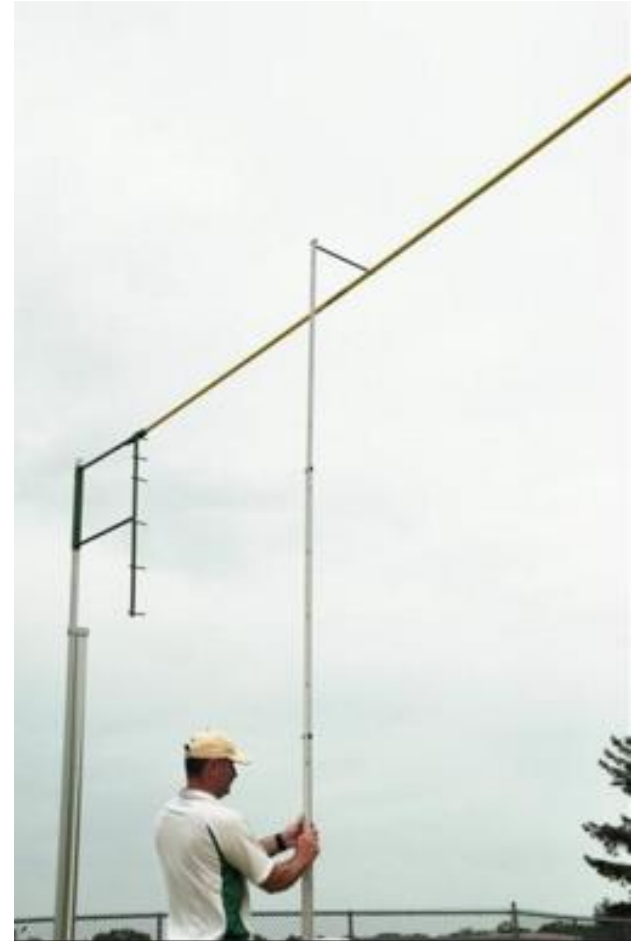


# Align standards with 0 line



# Check Accuracy of Standards

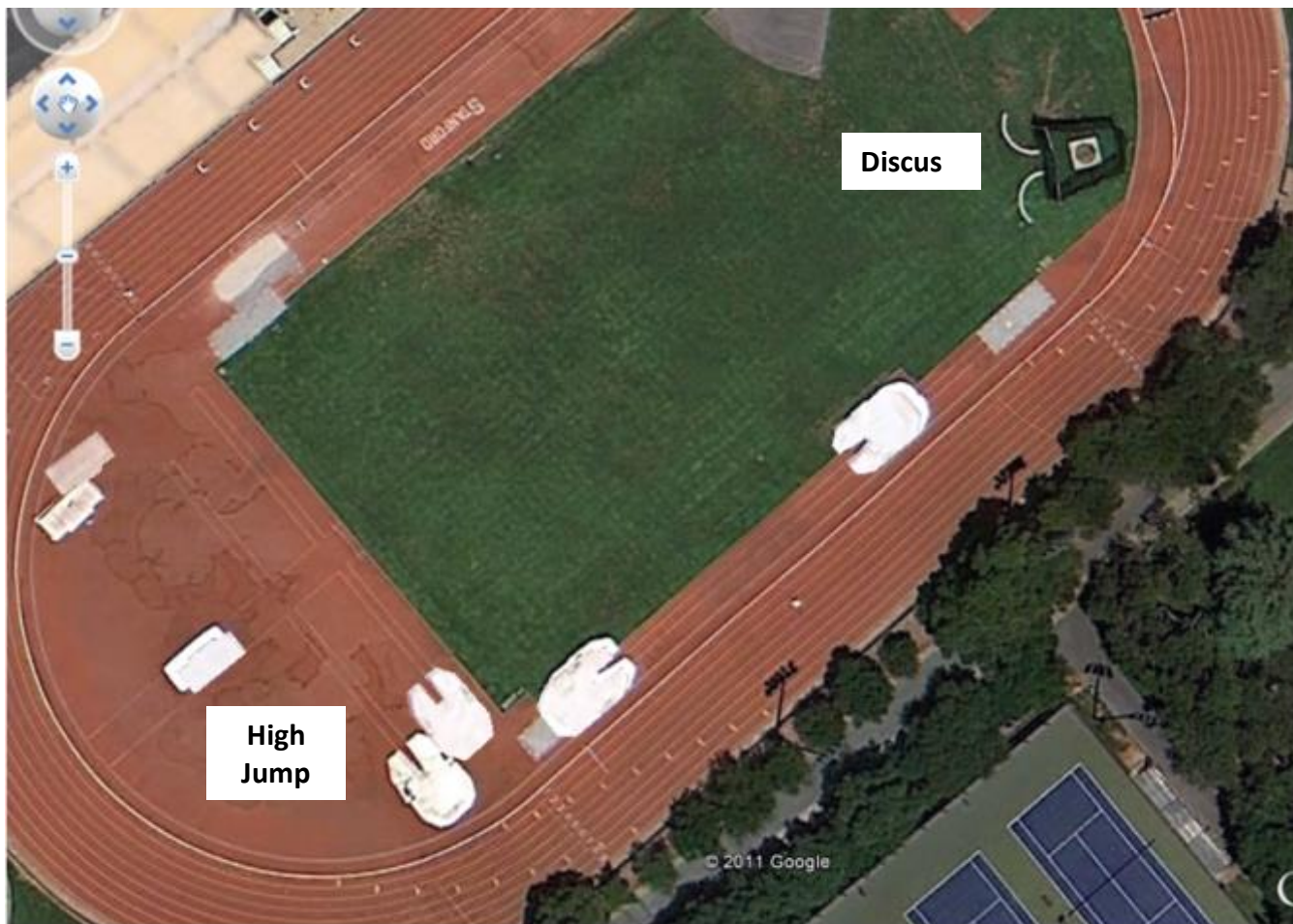
- Move standards to “0”
- Put crossbar on pegs to be used
- Center bar on pegs & check overlap of ends
- Measure height & determine offset from standards setting





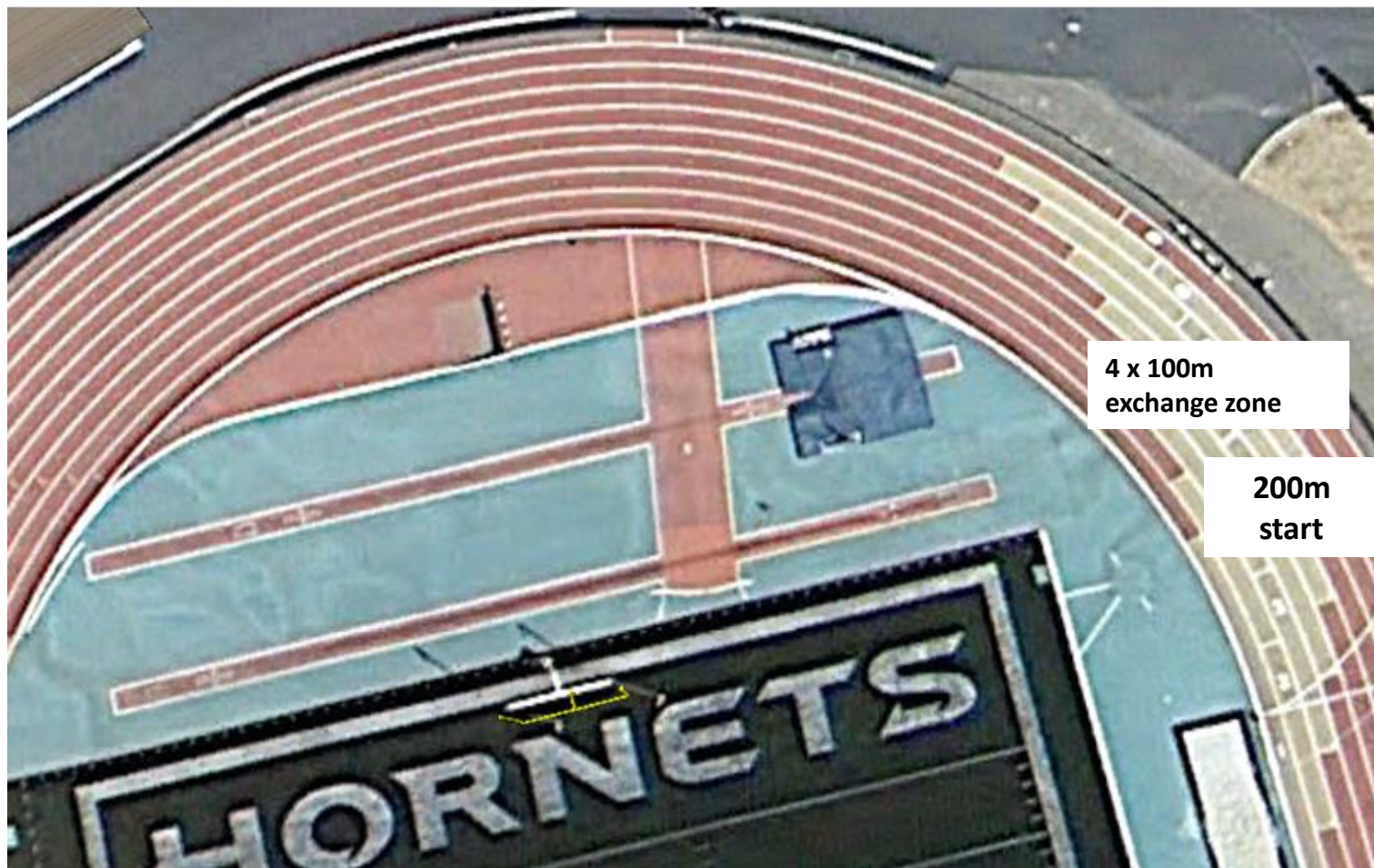


# Observe the surroundings & anticipate problems you may encounter:





# Anticipate Potential Problems from adjacent events





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# Conducting a Competition

- Read the rules the night before (from correct book)
- Arrive early (at least 1 hour before event start) to allow time for venue set-up and warm-ups
- Pick up 2 copies of entry sheets
- Make sure you have necessary equipment (crossbars, lifters, extenders, etc.) & helpers
- Make sure the venue is safe
- Have fun!



# Scoring

X = Miss/Fail

O = Cleared

– = Pass

NCAA and High School: Record a “–” for each *attempt* that is passed.

- Be sure to ask athlete if they are passing, the attempt or the height.

USATF - a pass is a pass of the *height*.

Places are determined by 1) fewest attempts at a height; 2) fewest total misses throughout the competition.

- If the tie still remains for first place, the tying athletes must jump off.

Bib #	Name	Imper.												BEST MARK	Jumps Tied Ht Total Misses	PLACE					
		Metric 3.30		3.45		3.60		3.70		3.80		3.90									
1	Adams	–	–	–	X	O	–	–	–	O			X	X	X			3.70	1 / 1	3	
2	Bradley	O			X	O	X	O	-	X	X	X						3.60	2 / 2	5	
3	Crane	–	–	–	–	–	–	–	–	X	X	O	X	O		X	X	X	3.80		1
4	Douglas	X	X	X														N/H			
5	Edwards	–	–	–	–	–	–	O			X	O	X	X	X			3.70	2 / 1	4	
6	Graham	O			O		O		O				X	X	X			3.70	1 / 0	2	
7	Howe	X	O		X	X	O	X	O		X	X	X						3.60	2 / 4	6 Tie
8	Irons	X	X	O	X	O	X	O		X	X	X						3.60	2 / 4	6 Tie	
9	Jackson	O			X	O	X	X	O	X	X	X						3.60	3 / 3	8	





# Pole Vault Jump Off Procedures

	Pole Vault		
	IAAF/USATF	NCAA	High School
<b>Starting Height</b>	Next height in progression above tie	Next height in progression above tie	Lowest final failing height
<b>Increment</b>	5 cm	5 cm	3 inches

High School Example											
Athlete	Height and Performance						Total Fails	Jump Off			Place
	10'	10'6"	11'	11'6"	12'	12'6"		12'6"	12'3"	12'6"	
A	O	XO	O	XO	PPP	XXX	2	X	O	X	2
B	XO	O	PPP	XO	PPP	XXX	2	X	O	O	1
C	PPP	XO	XO	XO	PPP	XXX	3				3

NCAA, USATF and IAAF Example											
Athlete	Height and Performance						Total Fails	Jump Off			Place
	4.10	4.20	4.30	4.40	4.45	4.50		4.45	4.40	4.45	
A	O	XO	O	XO	P	XXX	2	X	O	X	2
B	XO	O	P	XO	P	XXX	2	X	O	O	1
C	P	XO	XO	XO	P	XXX	3				3



# USATF Officials Best Practices

<https://my.usatfofficials.com/resources/tag/vertical-jumps>

## Officiating Resources > Vertical Jumps

[Back to Resources Home](#)

### BEST PRACTICES

Absence from Competition - Field Events

January 2016

**BEST PRACTICE**



Field Events - General High Jump Horizontal Jumps Pole Vault Throws Vertical Jumps

Crossbar Preparation for Vertical Jumps

April 2016

**BEST PRACTICE**



High Jump Pole Vault Vertical Jumps

Evaluation Form - Vertical Jumps

January 2013

**BEST PRACTICE**



High Jump Pole Vault Vertical Jumps

Event Recording Sheet - Vertical Jumps (Landscape)

December 2010

**BEST PRACTICE**



Vertical Jumps

Event Recording Sheet - Vertical Jumps (Portrait)

December 2010

**BEST PRACTICE**



Vertical Jumps

Field Event Scoring and Tie-Breaking

May 2016

**BEST PRACTICE**



Field Events - General Horizontal Jumps Throws Vertical Jumps

Field Event Time Limits

January 2016

**BEST PRACTICE**



Field Events - General High Jump Pole Vault Throws Vertical Jumps

### OTHER RESOURCES

FieldLynx Quick Start Guide - Vertical Jumps (Palm OS)

November 2007



Electronic Measurement Vertical Jumps

FieldLynx Quick Start Guide - Vertical Jumps (Windows CE/Mobile)

November 2009



Electronic Measurement Vertical Jumps

Five Alive Clinic (2004 Olympic Trials)

July 2004



Field Events - General Vertical Jumps

Five Alive Webinar

April 2010



Field Events - General Vertical Jumps

Vertical Jump Pocket Guide

December 2007



Electronic Measurement Vertical Jumps

Vertical Jumps - USATF Officials Monograph Series

August 2012



Field Events - General Vertical Jumps