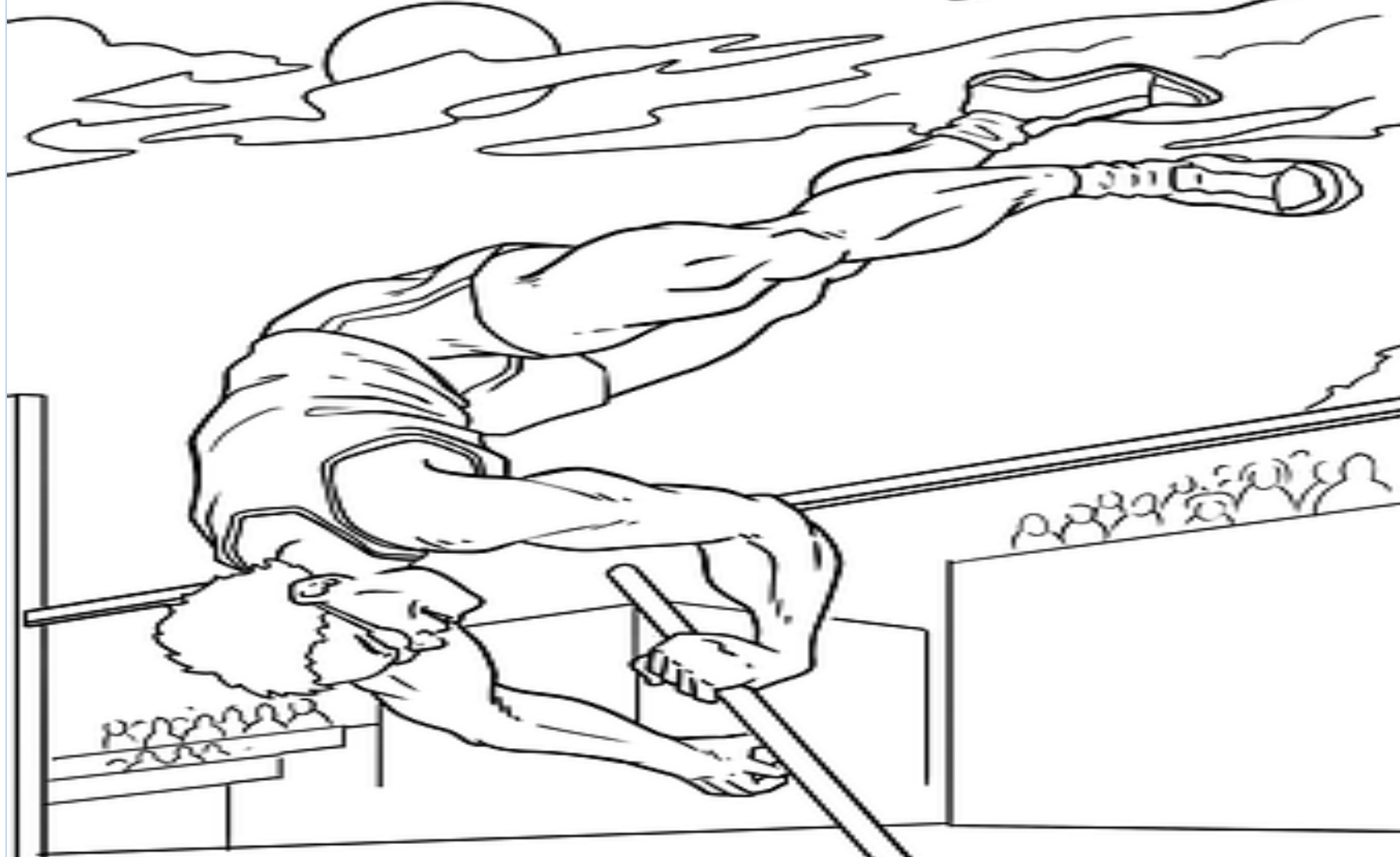


# POLE VAULT SET-UP AND BEYOND



# PRESENTED AND PREPARED BY:

GARY KIDD

UST&F OHIO ASSOCIATION

JANUARY 8, 2023



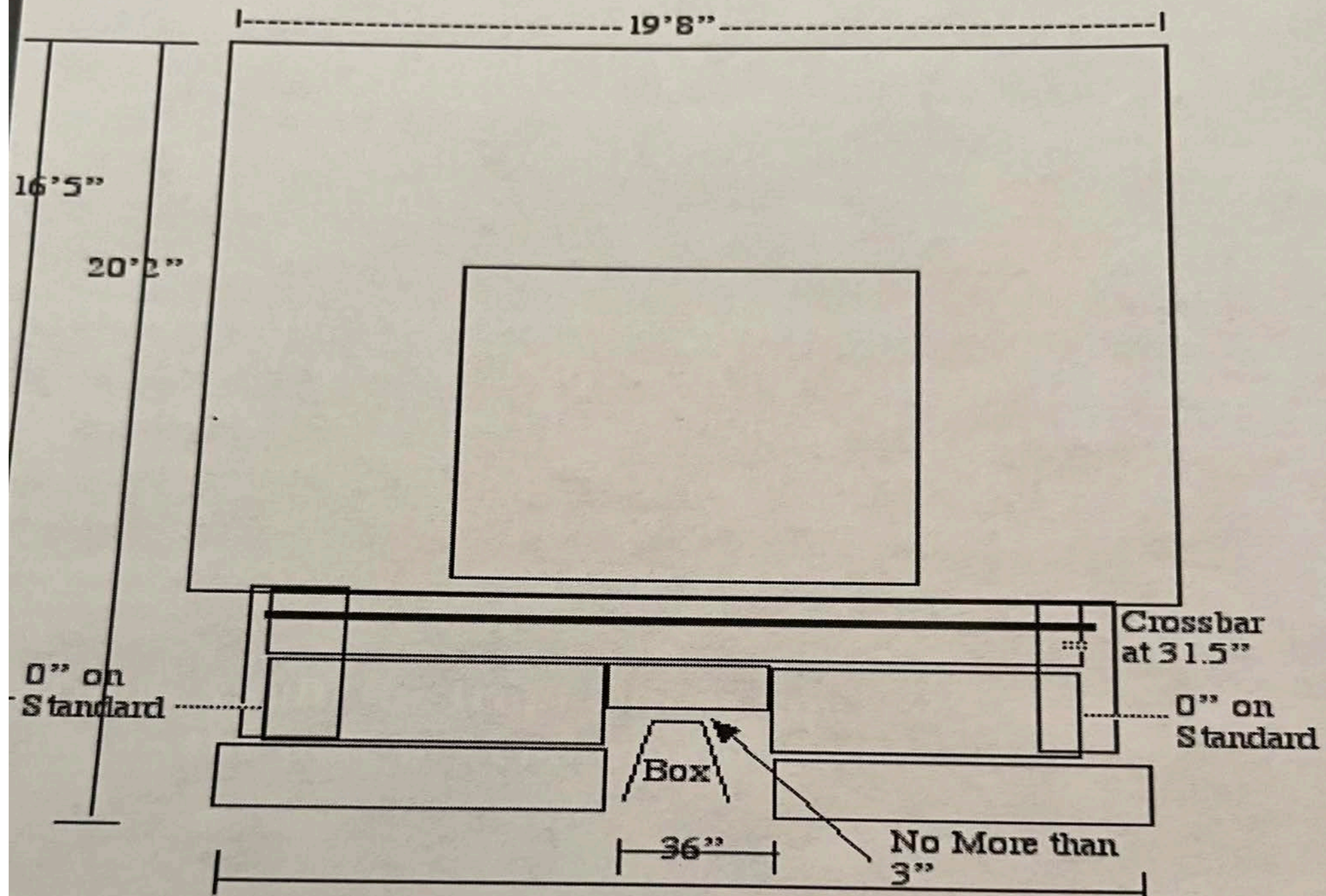
# FOR THOSE OFFICIATING THE POLE VAULT

Even after a walk around inspection:

- The cinder blocks, hurdles and other stuff used to hold the cover on
- The posts holding flags, streamers, or other crowd control devices too close to the pits
- The rake someone dropped off from the long jump
- Whatever else that could possibly impale, break, concuss or otherwise hurt an errant vaulter

# OVERALL LANDING SYSTEM

- Overall size of pole vault landing pad shall be a minimum of 19 feet, 8 inches (6 M) wide by 20 feet, 2 inches deep.
- The material of pad shall be high enough and of a composition that will decelerate the landing.
- When the landing pad is made up of two or more sections, the landing surface shall include a common cover pad extending over all sections.





# Overall view of pit

---





# Comments on marks on Runway





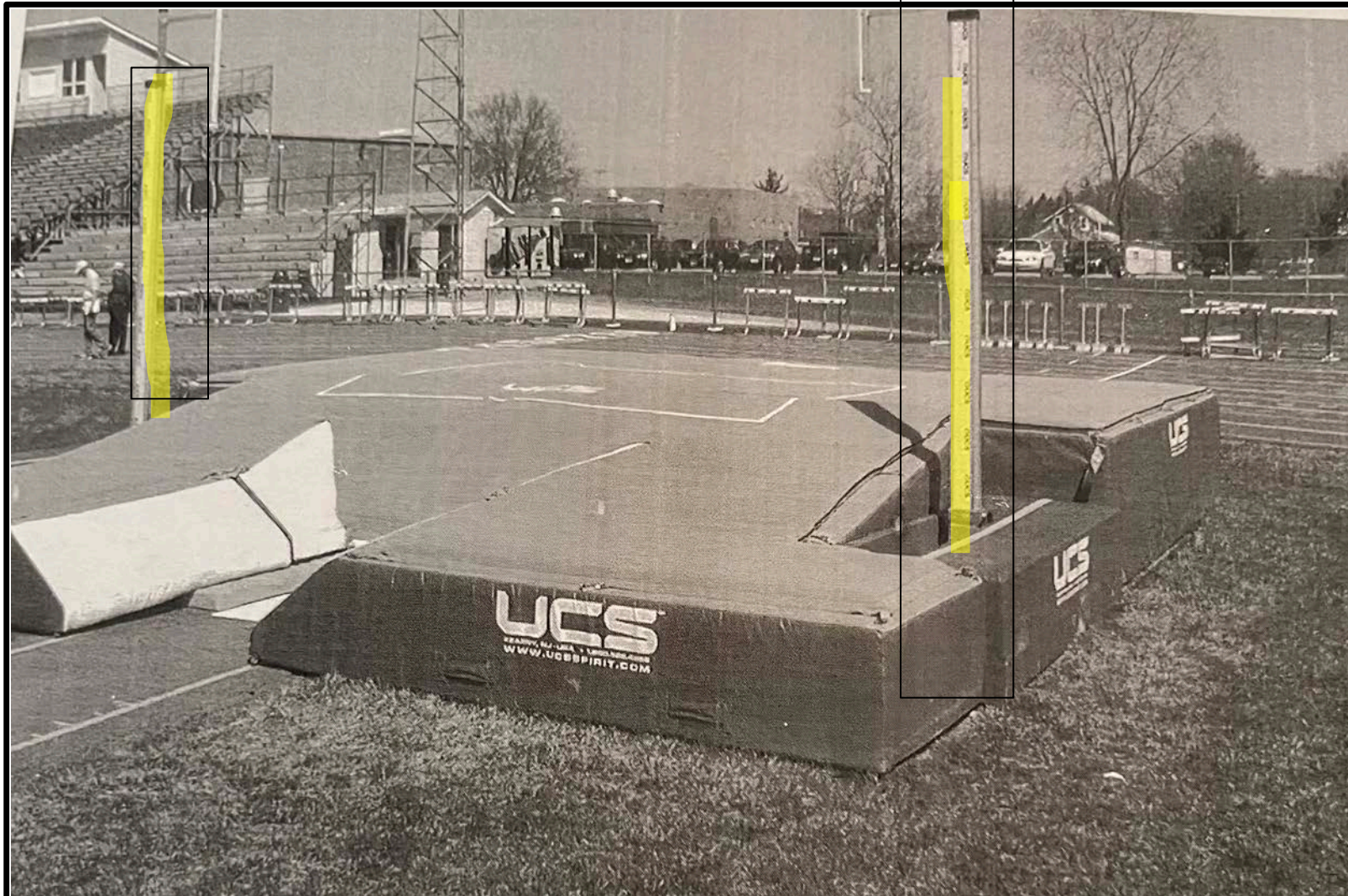
# Flexible measuring tape

Officials should have on hand





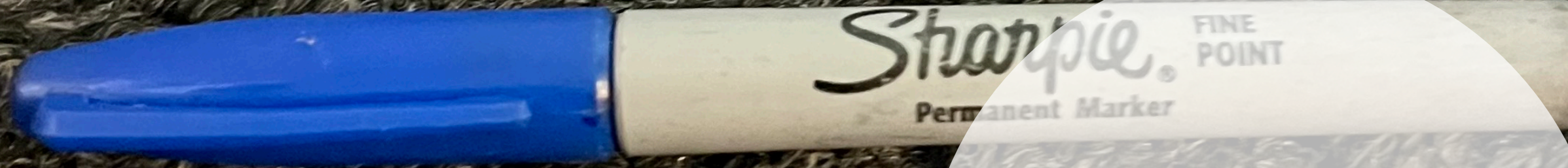
# The Standards



# White Tape







Why the Sharpie

---



# Marking the Cross Bar?

- Marking the ends Left and Right.
- Marking the center of the cross bar in reference to vault box.
- Will always be in the same position for all competitors.



# WHERE IS THE ZERO POINT?

- The zero point is at the top of the back of the planting box. It is used to determine the distance the crossbar travels towards the back of the landing surface, the starting point of the runway and to identify the proper placement of the landing surface.

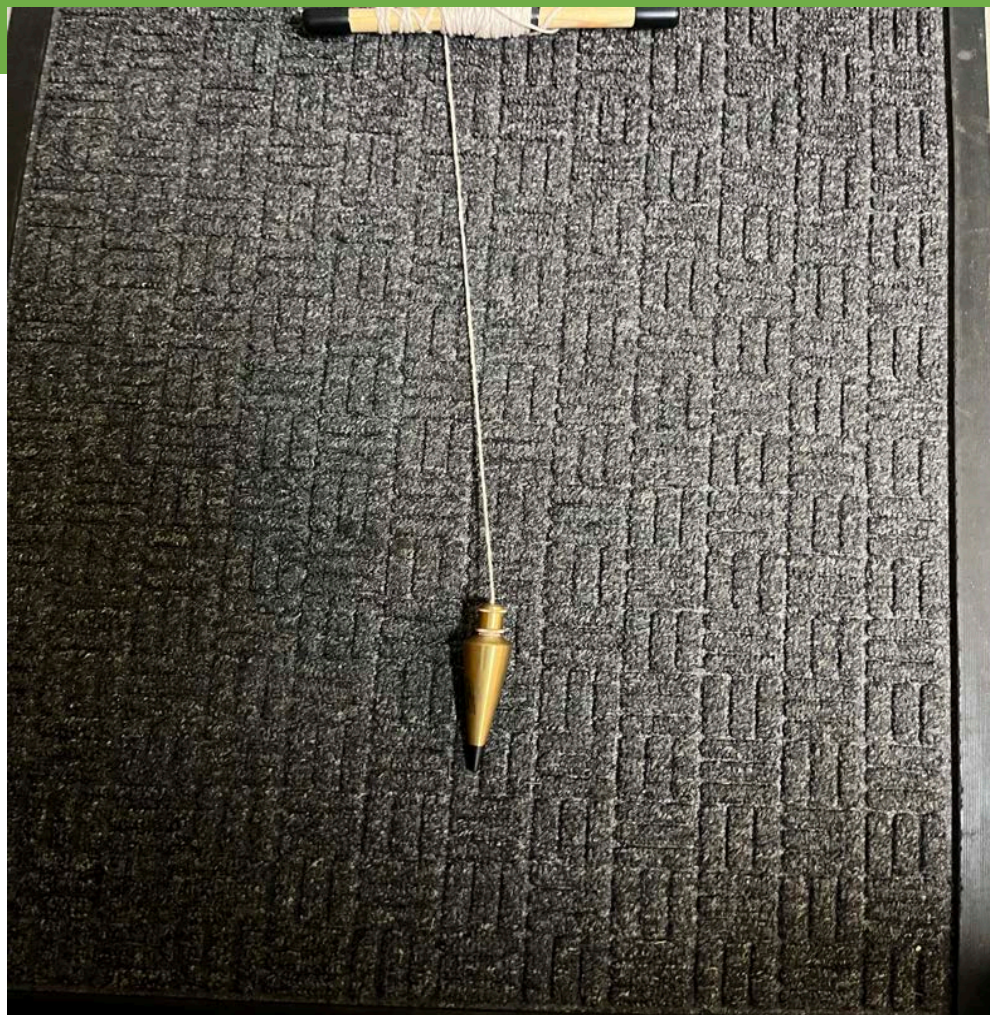
Zero – is the point where all measurements are made

-Standards- start at ZERO- Vault from 18" to 31.5" Back

Crossbar- Top center of Bar is measured from ZERO

Runway Markings- All measured from ZERO

# Plumb Bob





ZERO IS THE TOP OF THE  
BACK OF BOX

Zero point

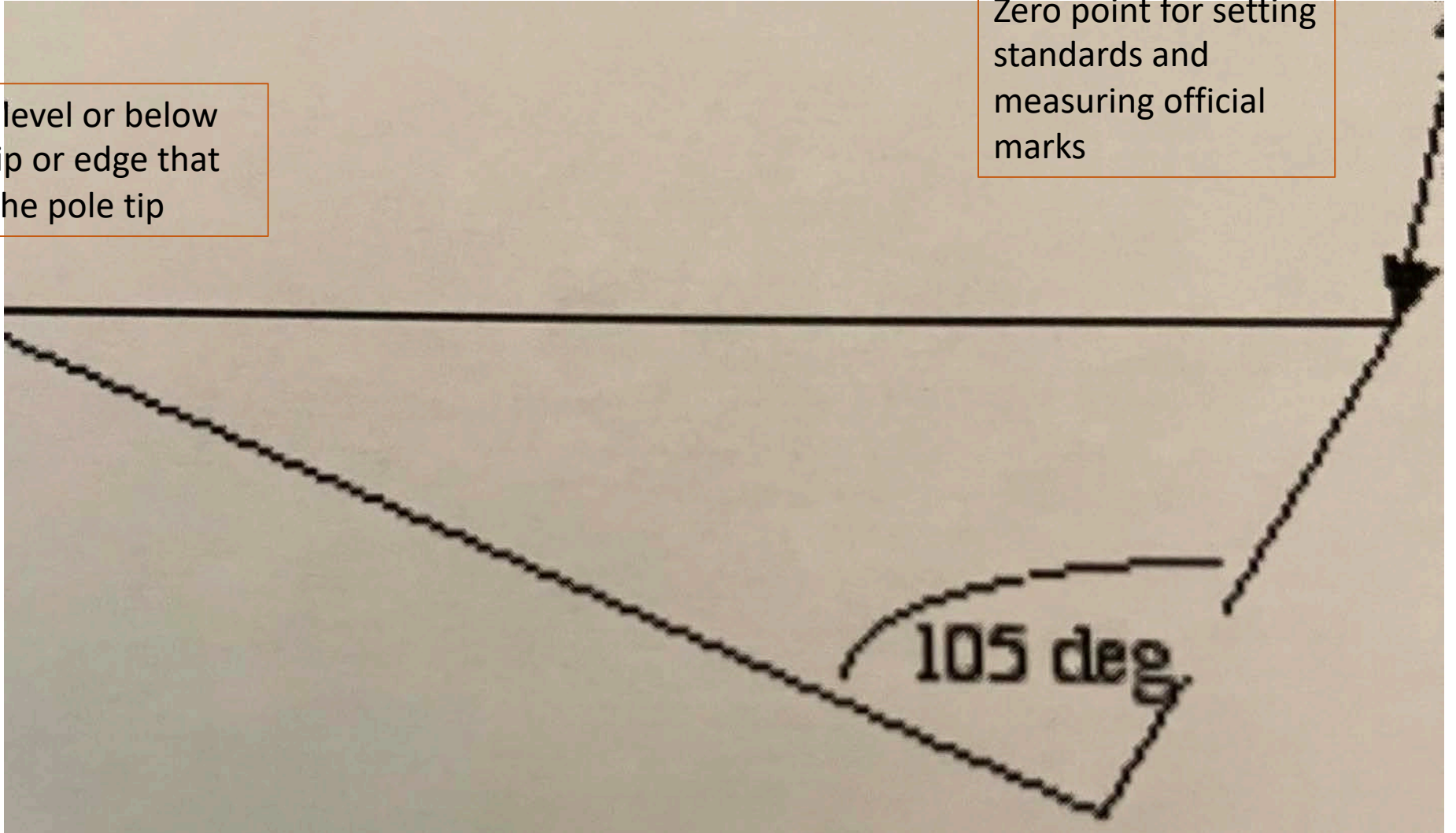


# Pole Vault Box

Box must be level or below runway- no lip or edge that could catch the pole tip

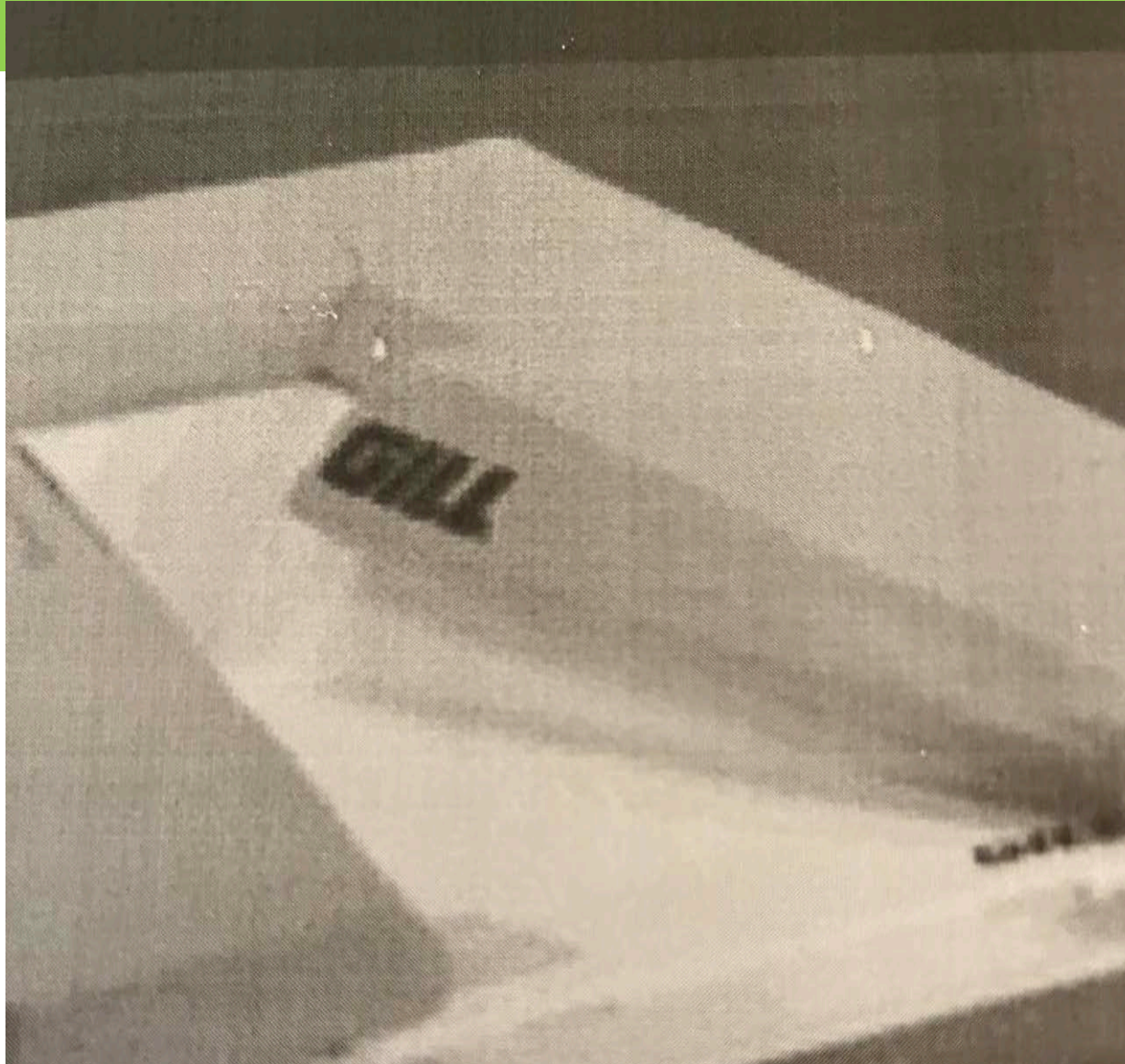
Zero point for setting standards and measuring official marks

105 deg

A technical diagram of a pole vault box. It features a horizontal line extending from the left edge to a point on the right. From this point, a line descends diagonally to the left, and another line descends diagonally to the right. These two diagonal lines meet at a vertex at the bottom, forming an angle labeled '105 deg'. The entire diagram is drawn on a light-colored, textured background.

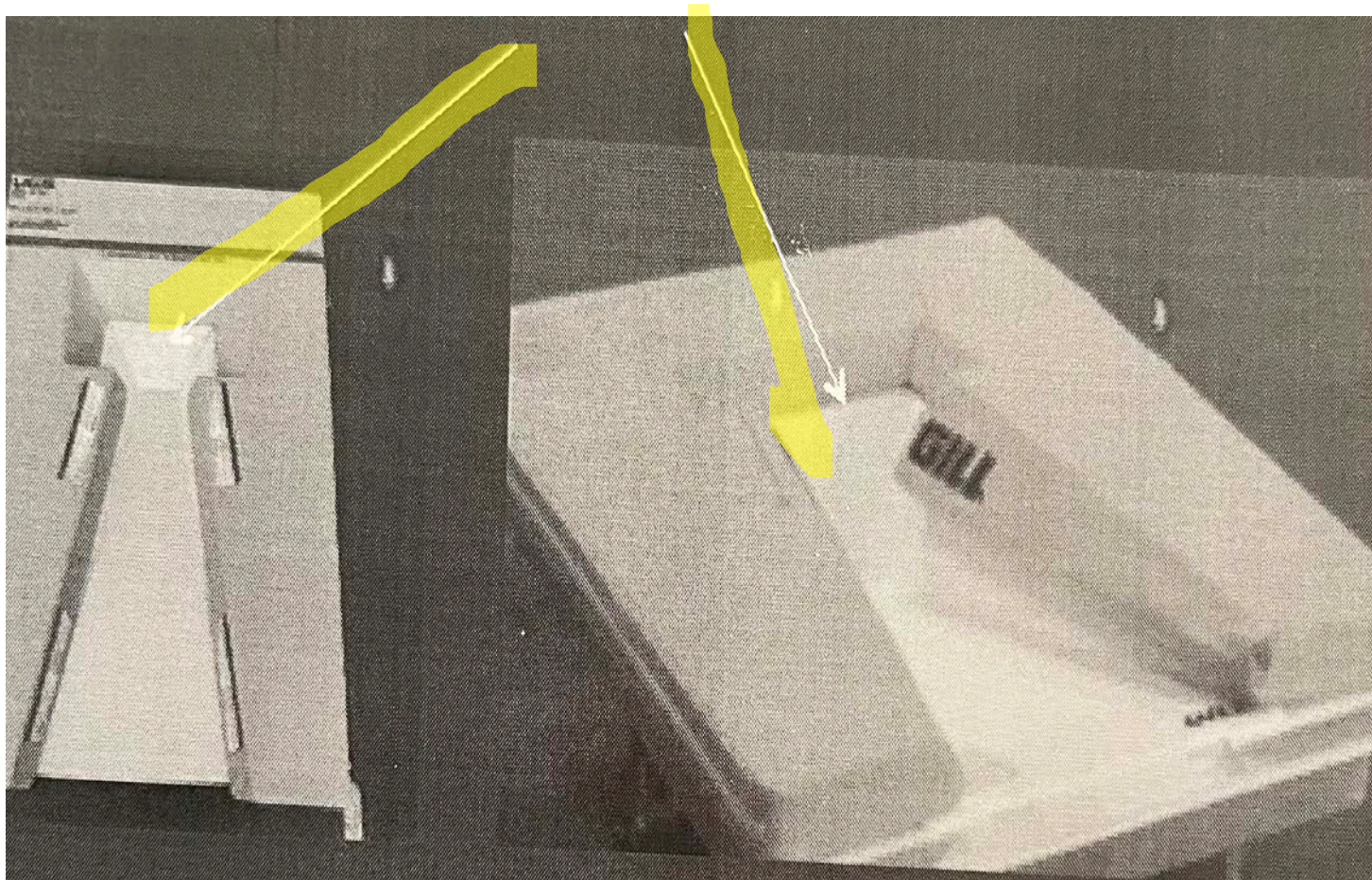


# Box Collar





# Bend Cavity



# Poles are hitting the pit while bending

- If a( vaulter feels) the position of the landing pad would hinder the bend of his or her pole and the pad was not placed at it's maximum distance from the stopboard, he/she should have made wishes known prior to the beginning of the competetion



# And Beyond



How high

WE WILL GO OVER SOME INFORMATION QUOTED BY (THE NATIONAL POLE VAULTING SAFETY COMMITTEE).

- INJURY SITES FOR POLE VAULTERS (NCAA RESOURCE 2020)

- WHAT IT TAKES FOR THE VAULTER TO MAKE THE HEIGHT.

- THE POLE

- IMPROVEMENTS IN POLE VAULTING BEING STUDIED.



# Whatever goes up must come down

- According to the National Pole Vault Safety Committee (2019)

8 catastrophic injuries have occurred in 350 male athletes in the United States who have pole vaulted 17' 6.75" (5.35 Meters) or higher since 1971, an incidence of 2,286 per 100,000.

# Frequent injury sites for Pole Vaulters

NCAA SOURCE  
2020

**NCAA SOURCE 2020**





# ANKLE 24%



[This Photo](#) by Unknown Author is licensed under [CC BY-NC-ND](#)

HEEL 19%





LOWER BACK 12%



KNEE 8%



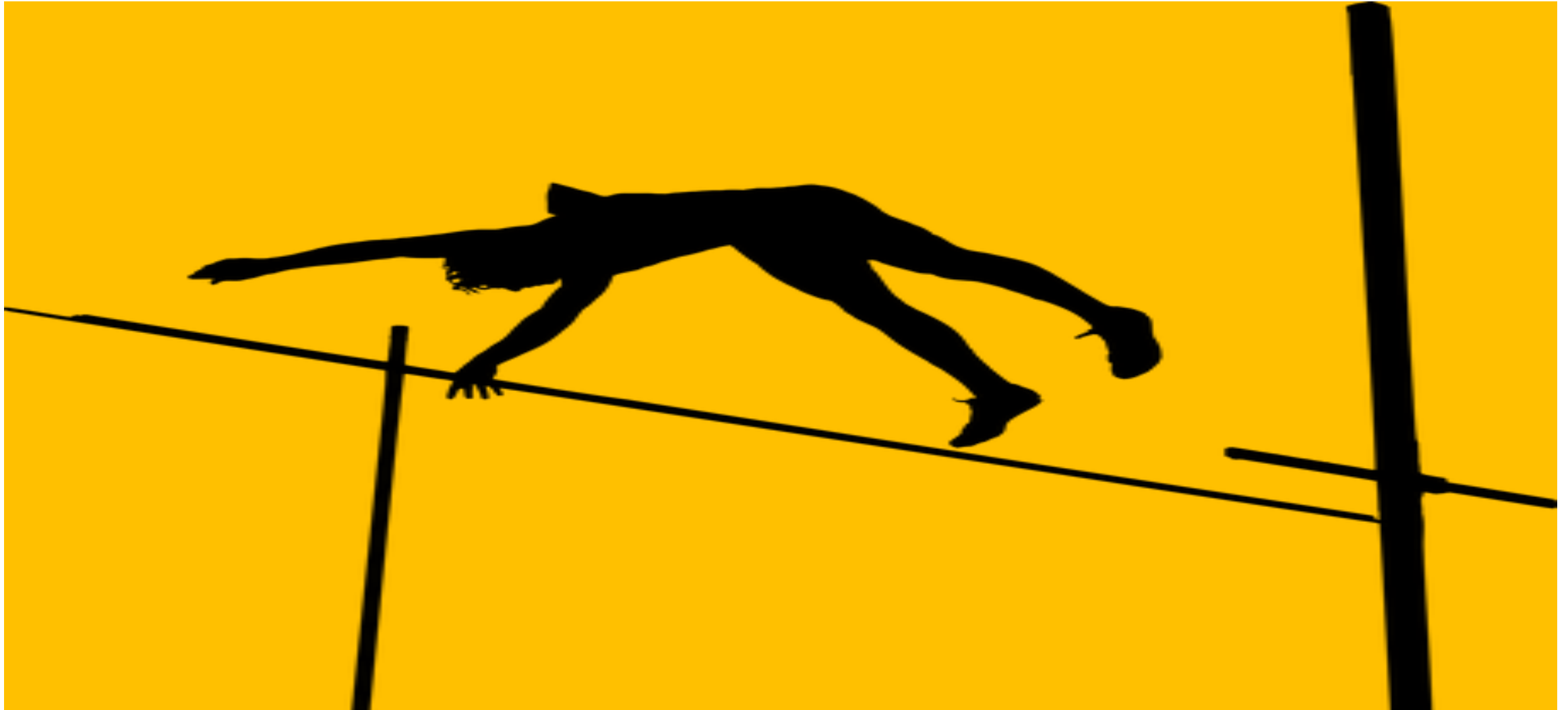




## VAULT BOX

- In pole vaulters survey, 77.2 of pole vaulters landed in the vault box, 6.12% landed in the vault box four to six times and 0.84% landed in the vault box seven or more times.

You're falling from the highest when you pole vault, so it is easier to be injured.





# What it takes from the athlete pole vaulting?

- Coordination, Timing, Speed and Gymnastic ability
- The modern pole vaulter makes a run of 40 meters (131.2 Feet), while carrying the pole and approaches the take off with great speed.



Some common pole vault skill deficiencies to be aware of when officiating.

**SKIPPING STEPS**

**POOR POSTURE**

**NO JUMP  
AT TAKE  
OFF**

**LATE POLE  
DROP**

**POOR ARM  
EXTENSION**





# A COMMENT ABOUT VAULTING POLES

- VAULTING POLES ARE RATED BY HOW MUCH BODY WEIGHT THEY CAN BEAR (LOADING), AND THE HEIGHT OF THE HANDHOLD.

EXAMPLE:

**A 4 METER POLE IS AVAILABLE IN A RANGE OF BODY WEIGHTS FROM 100-180 LBS.**

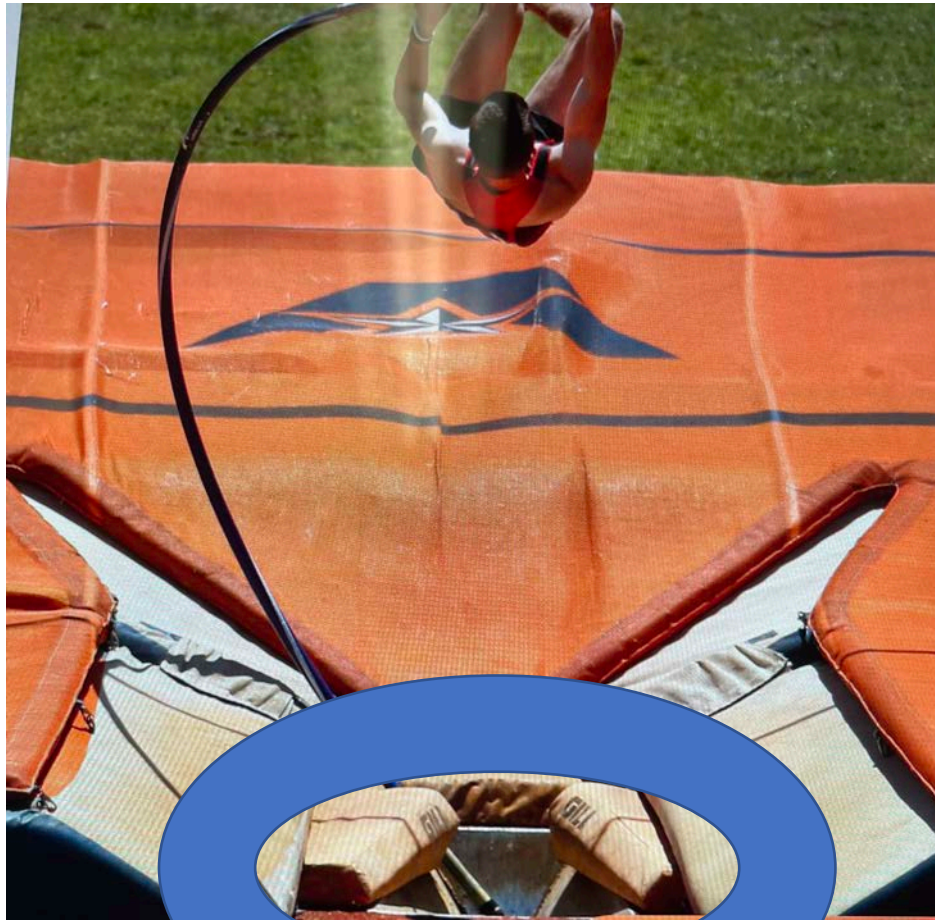
**DIFFERENT MANUFACTURERS: USE IMPERIAL AND METRIC SYSTEMS**

# POTENTIAL PREVENTIVE STRATEGIES

( ncaa pole vault committee 2020 )

Develop of materials with appropriate shock absorption capability.

Box Collar Padding



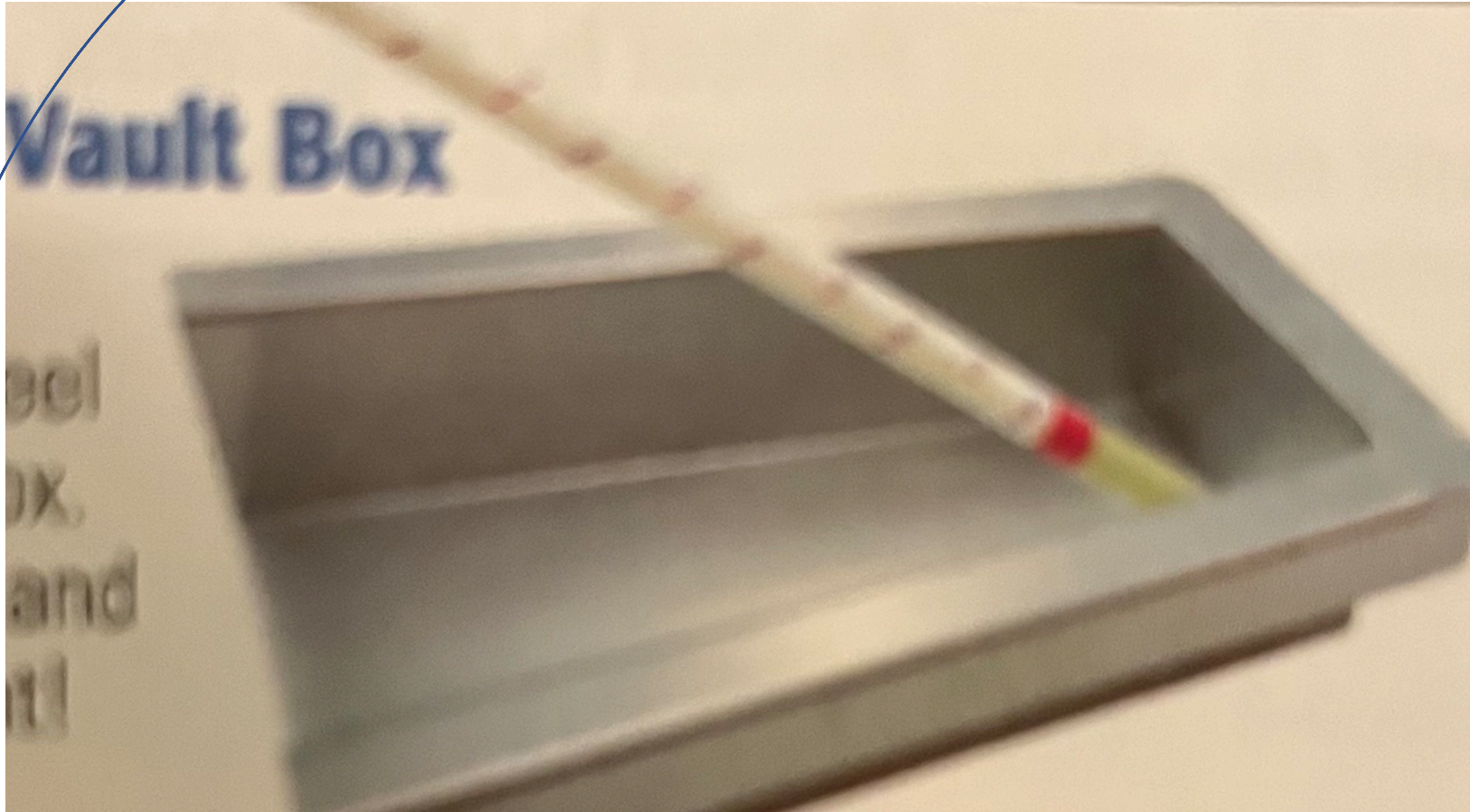


## Padding the sides and bottom



[This photo](#) by Unknown Author is licensed under [CC BY](#)

## Making Vault Box narrower





the researchers also concluded in their study. “The dimensions of the box collar and the pole, especially the stiffness and proper grip heights, as well as the ideal position for the cross bar also need additional study.



[This Photo](#) by Unknown Author is licensed under [CC BY](#)



RESOURCE:





# RESOURCE

- **NCAA MANUAL ( AVAILABLE MID FEB. 2023)**



# RESOURCE

- **NATIONAL FEDERATION OF HIGH SCHOOL HANDBOOK**





CLOSING  
COMMENTS  
&  
QUESTIONS