

Course Name: Bachelor of Physical Education

Year: Ist

Paper Name: Skill and Prowess

Paper No. I (Part-B 2)

Topic No. B (4)

Topic Name: Tripple Jump

Lecture No.: 51

Lecture Title

Triple Jump

Script

History and Origin

The triple jump is a track and field event in which athletes accelerate to full speed on a runway before completing a hop, a step, and then a jump into a landing area. Its history goes back several thousand years. The first recorded evidence of the event was in the annual Tailteann Games held at Telltown or Taillten, County Meath, Scotland from 1829 AD to 554 BC and later until 1166 CE. One of the events was “geal-ruith” or triple jump.

Completely separate from the triple jump in Scotland, the event was probably contested in the ancient Olympic Games held in Olympia, Greece from 776 BCE to 393 CE. The long jump was definitely an event, but we can surmise that some form of triple jump was also part of the schedule. Distances of over 50 feet were recorded, which would suggest three leaps rather than one or even two. A famous athlete from the ancient games was Chionis of Sparta who competed in 664 to 656 BCE and won running events as well as the long jump and a triple jump. The rules of this jump were unclear but he was known to achieve distances up to 52 feet or 15.85 meters. His long jump record was 23 feet or 7.01 meters. The ratio between his triple and long jumps is similar to those of modern day athletes, so it seems something approximating the triple jump was performed at the ancient games.

In the 1880s and 1890s, Scottish and Irish athletes were regarded as the best triple jumpers. The unofficial world record was held by Matthew Roseingreue of Ireland at 15.26 meters. At that time, the series of jumps usually consisted of two hops and a jump. This was one of a range of routines used in the triple jump at the first modern Olympic Games at Athens in 1896, where seven athletes contested the “hop, skip, and jump,” as it was called at the time. The event was won by James Connolly of the US with a jump of 13.71 meters, just over a meter better than his nearest rival. It was the first event decided in the games, so he has the honor of being the first Olympic champion since ancient times. His style was to take two hops and then a jump. By the 1900 Olympics in Paris, the triple jump had been standardized as a hop, step and jump. It was known by this name for most of the 20th century, with the term “triple jump” replacing it in the last few decades.

General Conditions

Where there are more than eight athletes in the competition, each should be allowed three trials and the eight competitors with the best valid jumps should be allowed three additional trials. If

there is a tie for the eighth place, any competitors so tying should have three extra trails. If there are eight competitors or fewer, each should be allowed six trails.

As they complete their run-up, competitors take-off from a board, the 'take-off line' being the edge to the landing area. They may place markers alongside the runway to help them in their run-up and take-off, but may not mark the place any mark beyond the take-off line. Competitors are judged to have failed a trail if they:

- Touch the ground beyond the take-off line with any part of the body, whether in the act of jumping or running up without jumping;
- Take off from out-side either end of the take-off board, whether beyond or before the extension of the take-off line;
- In the course of landing touch the ground outside the landing area at a point nearer to the take-off than the nearest break in the sand made by the jump;
- Walk back through the landing area after a completed jump; or
- Somersault in any fashion while in their run-up or in the act of jumping.
- Each athlete is permitted two markers which are placed alongside the runway– not on it.
- Markers are not permitted in the landing area/pit.
- Once competition has begun, athletes are not permitted to use the competition runway for practice purposes.

If an athlete takes- off before reaching the board, but within its width span, the jump should not be counted as a failure.

Measurement

The measurement of a triple jump is made at right angles from the nearest break in the landing area made by any part of the competitors' body to the take-off line or its extension. Distances should be recorded to the nearest 1cm below the distance measured if the distance measured is not a whole centimeter. In the case of a tie in the competition, the second best jump of the competitors typing should determine the result. Then, if necessary, the third best and so on. If the tie is still not resolved and it concerns first place, those competitors involved should compete again in the same order until the tie is decided. Each athlete should be credited with the best of all his or her jumps in the competitions, including those achieved in deciding a tie for first place.

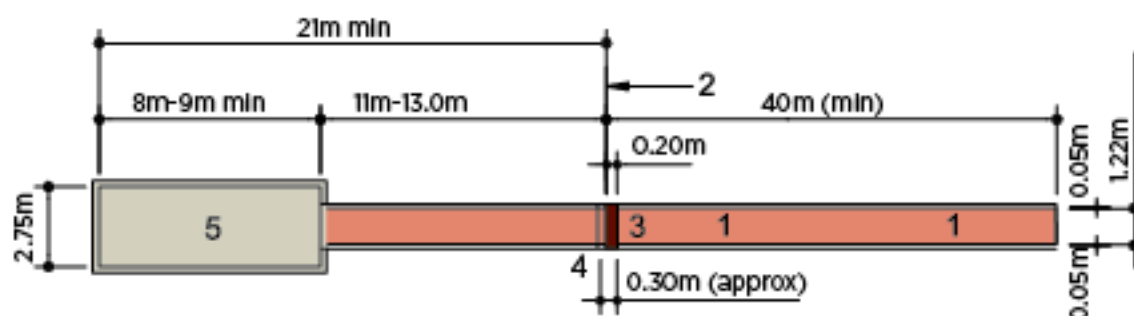
Wind speed

As for track events, the wind speed should be measured and recorded for triple jump wherever possible. A gauge should be set up 2m (22yds) from the take off line, not more 2m ($6^{1/2}$ ft) from the edge of the runway, at a height of 1.22m (4ft). The wind component should be measured for a 5-second period from the time the competitor passes a mark positioned 40 m (44yds) from the take-off board in the case of the long jump and 35 m (28yds) for the triple jump. If competitor's run-up is less than these distances, the reading should be taken from the time the competitor starts to run.

3. Preparation of Field

The take-off board should be sunk level with the runway and rigidly fixed. Painted white, it should be made of wood, measuring 1.21 m to 1.22 m long (approx 4 ft), between 19.8 cm and 20.2 cm (approx 8 in) wide, and 10 cm deep. The minimum length of the runway should be 40 (44yds), with a minimum width of 1.22 m. for record purpose, the maximum allowance for lateral inclination of the runway should not exceed 1:100 and the overall inclination in the

running direction 1:1000 before a competition the sand in the landing area should be dampened, as this help jumps to be accurately measured. The sand should be level with the top of the take-off board.

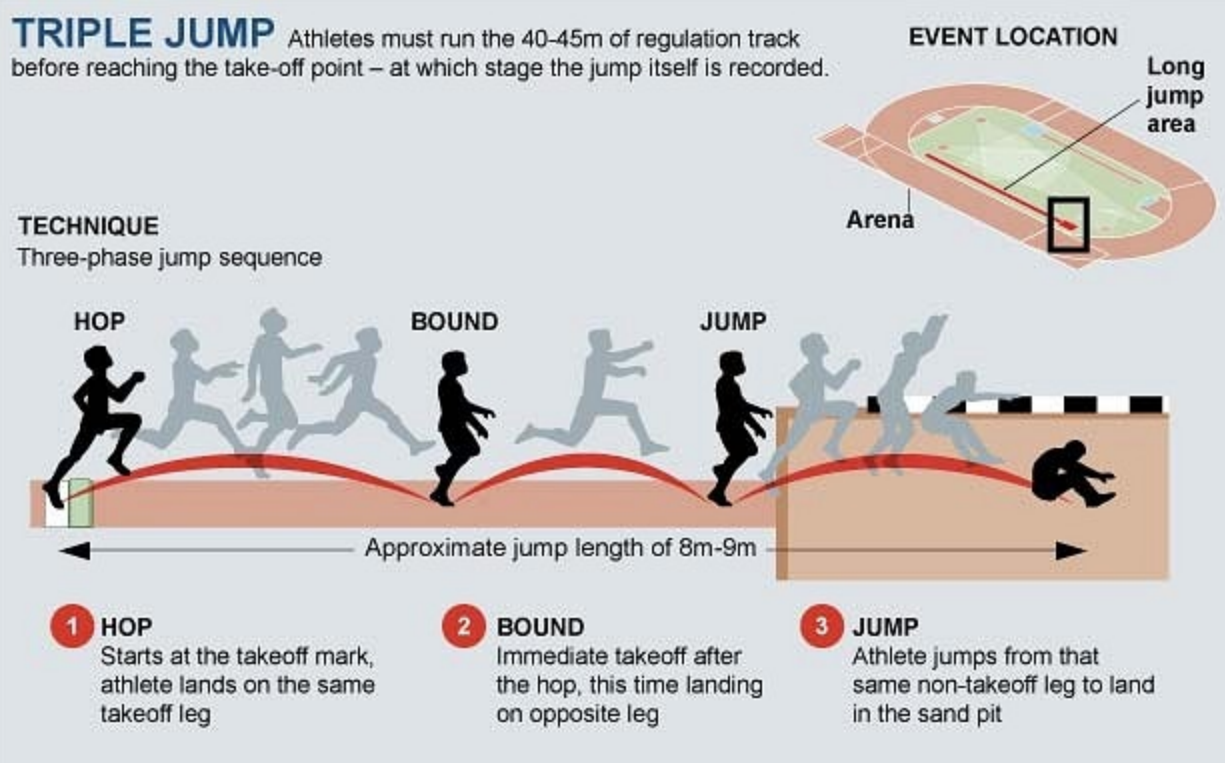


At a glance

1. Length and width of runway = 40m-45m/ 2.75m-3.0m
2. Landing area/ depth of landing area = 9m/ 38cm (15")
3. Take-off board <ul style="list-style-type: none"> Length/width= 1.22m/20cm (±2mm) Depth/thickness= 10 cm
4. Distance between take off board and nearest point of landing area <ul style="list-style-type: none"> For men= 13m (minimum) For women= 11 m (minimum)
5. Length/width of foul indicator= 1.22m/10cm (±2mm)
6. Thickness of foul jump indicator= 7mm ± 1mm
7. Angle= 45 degree

Tell-Table

Above, plasticine indicator board should, if possible, be positioned immediately beyond the take-off line for recording a competitor's footprint in the event of a foot fault. It should consist of a rigid board, between 9.8 cm and 10.2 cm (approx 4 in) wide and 1.21-1.22m (approx 38 in) long. Covered with plasticine, the surface should rise from the level of the take-off board at an angle of 30 degrees in the running direction to a maximum height of 7 mm ($2^{2/4}$ in) above the take-off board. If such an installation is not possible, soft earth or moist sand should be sprinkled to a height of 7 mm and for 10 cm (4in) beyond the take-off board. The landing area should be between 2.75 m and 3 m wide and 9 m long (approx 3 by 10yds).



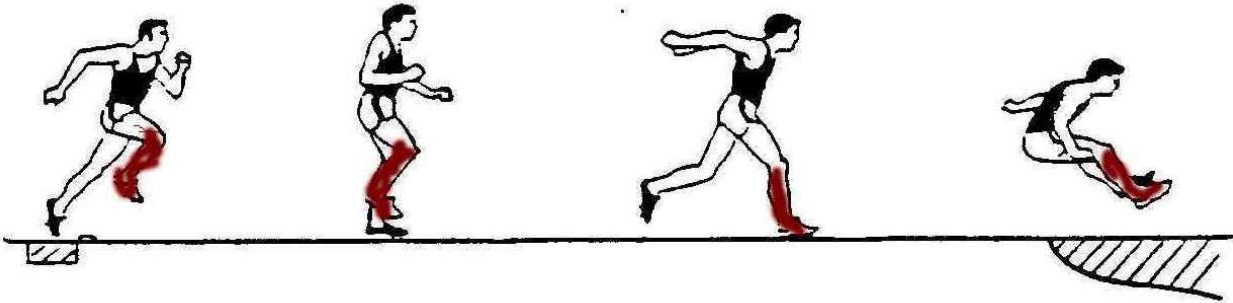
Guidelines for practice and competitions of triple jump

- The triple jump is divided into the following phases: approach, “hop”, “step”, “jump” and landing.
- Depending on level of performance, approach varies between 10 (beginners) and 20 strides (top class athletes).
- Increase approach speed progressively until take-off.
- Take-off foot should land actively and ready for attack; swing thigh of free leg downwards and to the rear.
- Keep trunk upright.
- Take-off quickly; extend ankle, knee and hip joints; swing thigh of free leg to horizontal position.
- During the “step”, take-off position is virtually maintained; to prepare for the “jump”, extend free leg forwards and downwards.
- Take-off quickly; swing thigh of free leg to horizontal position.
- As for long jump, flight stage may involve hang or stride technique.
- Draw trunk forwards and downwards to land; bring arms forward.
- Land with both feet in the sand.
- Let body drop on to the sand alongside the legs.

Fundamental skills and lead up the jump

Identify the optimal body position at take-offs. An even rhythm Triple jump off a short approach.

Sequence for Triple Jump



HOP must take off and land on same foot

STEP must land on opposite foot

JUMP must land in the landing area

Games and exercises

As for long jump with the additional emphasis of what is meant by “hop”, “step” and jump. A typical exercise would be to use three different types of obstacle and to place these randomly around the grass warm up area. One types of obstacle would be hooped over, another stepped over and the third jumped over.

Teaching progressions

A triple jump grid should be marked out on the infield and also along the side of the pit. If the grid cannot be marked, cones or similar objects can mark a variety of even spaced hop-step jumps with the athletes landing adjacent to the cones.

Standing triple jump

- Using the infield grid and starting with shortest distance.
- Stand with left foot forward and hop to next line to land on the same foot. Walk back. Repeat with right foot.
- Stand with left foot forward and hop to first line and step onto the other foot on the second line. Walk back and repeat with start on right foot.
- Stand with left foot forward, hop to first line, step to second line and jump to land on both feet on the third line. Walk back and repeat with start on right foot. Rhythm of “Same-other-both”. Decide which foot forward feels the strongest through the whole jump.

Progressive triple jump

- Using the grid alongside the pit, progress along the grid so that the three phases of the hop, step and jump become progressively longer, higher and faster.
- Land in the pit.

Short approach triple jump

- As for 2, but now off a 5-7 stride approach run.

Developing the approach run on the track

- Acceleration to an optimal speed, the maximum controllable.
- Establish both short and long approaches.
- Short, 5-7 strides, for practice of teaching progressions or drills. Long, for competition.

- The full, long approach will depend on speed and ability, but a general guide is one stride for each year of age between 11 and 17, for example, 15 strides in competition for a 15 year old.
- Once consistent approach rhythm and length is established, measure the approach and transfer to long/triple jump runway.

Equipment used in triple jump

- Broom: For keeping runway clear of sand.
- Bucket/Hose/Watering Can: For keeping sand damp.
- Cone: For closing runway.
- Flags: Red, white, yellow.
- Hand Brush: To sweep take-off area after each jump.
- Indicator Markers: Placed either side of the selected take-off board.
- Marker: Two for each athlete to mark the start point of their run-up.
- Rake: To level the landing area sand after each trial.
- Recording Sheet: For recording all the performances of the athletes in the event.
- Shovel: For digging over landing area and moving sand.
- Spike: To hold zero end of tape at the nearest edge of the mark made by the athlete on landing.
- Stop watch: To time athletes.
- Take-off area: (mat, sand, tape or board).
- Tape Measures: 1 for measuring (20 meters), 1 for run ups (50metres).
- Wind Gauge: For wind measurements.

5. Officials and Referee

- **One official at take-off area:-** Tasks include watching for failed jumps, measuring
- **One official for recording**
- **Two officials at side of pit:-** Tasks include finding break (imprint) made in sand and Raking and leveling the sand in the pit.

Measurement of jump in competitions and practice for age 6years to fewer than 12years athletics

- Hand or whichever is closest to the imprint made in the take-off area by the take-off foot.
- If the athlete takes off before the take-off mat or board, then the jump shall be measured from the break in the sand, in a perpendicular line, to the back edge of the take-off area.
- The official selects the first break (imprint) made in the sand by the athlete's foot,
- The tape is straightened and laid over and in contact with imprint made by take-off foot in the take-off area or back of take-off area as applicable.

Measurement of jump in competitions and practice for another athletics age 13 to above

- All jumps shall be measured from the nearest break in the landing area made by any part of the body, or anything that was attached to the body at the time it made a mark, to the take-off line, or take-off line extended.
- If the athlete takes off before the take-off mat or board, then the jump shall be measured from the break in the sand to the front edge of the take-off board.
- The athlete who has the longest measured distance from all jumps recorded is the winner.
- The measurement shall be taken perpendicular to the take-off line or its extension.
- The selected point is marked by the spike and the zero end of the tape is held at the spike.

- The tape is drawn tight and the distance is measured to the nearest centimeter below the distance jumped unless the reading is a whole centimeter.

Summary

The triple jump is one of the more complicated events in track and field competition. As in the long jump, the athlete begins with a run-up to the take-off board in order to gain speed. The run-up is followed by three successive phases: a hop, a step, and a jump. In the hop, the athlete takes off and lands on the same foot; the step requires landing on the opposite foot; and finally the jump is terminated by landing on both feet in a sand pit. The three phases require a high degree of coordination and balance. The aim of this chapter is to achieve the best triple jump performances in the competitions from the athletes. Triple Jump is probably the most demanding of the jumping events in terms of stress on the joints and injury risk. Correct technique and training is important with the jumper aiming to make each of the three phases equal rather than a long hop, short step and long jump as many beginners end up doing.