

Egwt ug'P co g'<'Dcej gmt 'qhRj { uleclGf wecvkqp"  
[ gct 'Kw'  
Rcr gt'P co g'<'Unklcpf 'Hwpf co gpvclqh'Cvj ngvku"  
Rcr gt'P q0'D"  
Ngewt g'P q0'3"  
Vqr k'P q05"  
Ngewt g'Vkg'<Nqpi 'Lwo r<Vgej pls wgu'cpf 'Twgu'

## Introduction

Hello and welcome to yet another module on physical education and today we are talking about a very special game that is long jump. We will be discussing about various techniques and the famous people , the famous athletes associated with it.

### Rules

At the elite level, competitors run down a runway (usually coated with the same rubberized surface as running tracks, crumb rubber also vulcanized rubber known generally as an all-weather track) and jump as far as they can from a wooden board 20 cm or 8 inches wide that is built flush with the runway into a pit filled with finely ground gravel or sand. If the competitor starts the leap with any part of the foot past the foul line, the jump is declared a foul and no distance is recorded.

A layer of plasticine is placed immediately after the board to detect this occurrence. An official (similar to a referee) will also watch the jump and make the determination. The competitor can initiate the jump from any point behind the foul line; however, the distance measured will always be perpendicular to the foul line to the nearest break in the sand caused by any part of the body or uniform.

Therefore, it is in the best interest of the competitor to get as close to the foul line

as possible. Competitors are allowed to place two marks along the side of the runway in order to assist them to jump accurately. At a lesser meet and facilities, the plasticine will likely not exist, the runway might be a different surface or jumpers may initiate their jump from a painted or taped mark on the runway. At a smaller meet, the number of attempts might also be limited to four or three.

Each competitor has a set number of attempts. That would normally be three trials, with three additional jumps being awarded to the best 8 or 9 (depending on the number of lanes on the track at that facility, so the event is equatable to track events) competitors. All legal marks will be recorded but only the longest legal jump counts towards the results. The competitor with the longest legal jump (from either the trial or final rounds) at the end of competition is declared the winner.

In the event of an exact tie, then comparing the next best jumps of the tied competitors will be used to determine place. In a large, multi-day elite competition (like the Olympics or World Championships), a set number of competitors will advance to the final round, determined in advance by the meet management. A set of 3 trial round jumps will be held in order to select those finalists. It is standard practice to allow at a minimum, one more competitor than the number of scoring positions to return to the final round, though 12 plus ties and automatic qualifying distances are also potential factors. For record purposes, the maximum accepted wind assistance is two metres per second (m/s) (4.5 mph).

## **Training**

The long jump generally requires training in a variety of areas. These areas include: speed work, jumping, over distance running, weight training, plyometric

training.

### Speed work

Speed work is essentially short distance speed training where the athlete would be running at top or near top speeds. The distances for this type of work would vary between indoor and outdoor season but are usually around 30 - 60 m for indoors and up to 100 m for outdoors.

### **Jumping**

Long Jumpers tend to practice jumping 1-2 times a week. Approaches, or run-throughs, are repeated sometimes up to 6-8 times per session. Short approach jumps are common for jumpers to do, as it allows for them to work on specific technical aspects of their jumps in a controlled environment. Using equipment such as low hurdles and other obstacles are common in long jump training, as it helps the jumper maintain and hold phases of their jump. As a common rule, it is important for the jumper to engage in full approach jumps at least once a week, as it will prepare the jumper for competition.

### **Over-distance running**

Over-distance running workouts helps the athlete jump a further distance than their set goal. For example, having a 100m runner practice by running 200 m repeats on a track. This is specifically concentrated in the season when athletes are working on building endurance. Specific over-distance running workouts are performed 1-2 times a week. This is

great for building sprint endurance, which is required in competitions where the athlete is sprinting down the runway 3-6 times. Typical workouts would include 5x150 m. Preseason workouts may be longer, including workouts like 6x300 m.

## **Weight training**

During pre-season training and early in the competition season weight training tends to play a major role in the sport. It is customary for a long jumper to weight train up to 4 times a week, focusing mainly on quick movements involving the legs and trunk. Some athletes perform

Olympic lifts in training. Athletes use low repetition and emphasize speed to maximize the strength increase while minimizing adding additional weight to their frame. Important lifts for a long jumper include the back squat, front squat, power cleans and hang cleans. The emphasis on these lifts should be on speed and explosive as those are crucial in the long jump take off phase.

## **Plyometrics**

Plyometrics, including running up and down stairs and hurdle bounding, can be incorporated into workouts, generally twice a week. This allows an athlete to work on agility and explosiveness. Other plyometric workouts that are common for long jumpers are box jumps. Boxes of various heights are set up spaced evenly apart and jumpers can proceed jumping onto them and off moving in a forward direction. They can vary the jumps from both legs to single jumps. Alternatively, they can set up the boxes in front of a high jump mat if allowed, and jump over a high jump bar onto the mat mimicking a landing phase of the jump. These plyometric workouts are typically performed at the end of a workout.

## **Bounding**

Bounding is any sort of continuous jumping or leaping. Bounding drills usually require single leg bounding, double-leg bounding, or some variation of the two. The focus of bounding drills is usually to spend as little time on the ground as

possible and working on technical accuracy, fluidity, and jumping endurance and strength. Technically, bounding is part of plyometrics, as a form of a running exercise such as high knees and butt kicks.

## **Flexibility**

Flexibility is an often forgotten tool for long jumpers. Effective flexibility prevents injury, which can be important for high-impact events such as the long jump. It also helps the athlete sprint down the runway. Hip and groin injuries are common for long jumpers who may neglect proper warmup and stretching. Hurdle mobility drills are a common way that jumpers improve flexibility. Common hurdle drills include setting up about 5-7 hurdles at appropriate heights and having athletes walk over them in a continuous fashion. Other variations of hurdle mobility drills are used as well, including hurdle skips. This is a crucial part of a jumper's training since they perform most exercises for a very short period of time and often aren't aware of their form and technique. A common tool in many long jump workouts is the use of videotaping. This enables the athlete to go back and watch their own progress as well as letting the athlete compare their own footage to that of some of the world-class jumpers.

Training styles, duration, and intensity vary immensely from athlete to athlete and are based on the experience and strength of the athlete as well as on their coaching style.

## **Long Jump Records**

### **Notable Jumps**

Jesse Owens set a long jump world record at the 1936 Summer Olympics of 8.13 m (26 ft 8 in) that was not broken for 25 years and 2 months, until 1960 by Ralph Boston. At the 1968 Summer Olympics Bob Beamon jumped 8.90 m (29 ft 2&1/4

in) at an altitude of 7,349 feet (2,240 m), a jump not exceeded for 23 years, and which remains the second longest legal jump of all time. On 30 August 1991 Mike Powell of the United States set the current men's world record at the World Championships in Tokyo. It was in a well-known showdown against Carl Lewis, who also beat Beamon's record that day but with an aiding wind (thus not legal for record purposes). Powell's record 8.95 m (29 ft 4 $\frac{1}{4}$  in) has now stood for almost 25 years; Beamon's Olympic record through the next 12 Olympiads.

Some jumps over 8.95 m (29 ft 4 $\frac{1}{4}$  in) have been officially recorded. 8.99 m (29 ft 5 $\frac{3}{4}$  in) was recorded by Mike Powell himself (wind-aided +4.4) set at high altitude in Sestriere, Italy in 1992. A potential world record of 8.96 m (29 ft 4 $\frac{3}{4}$  in) was recorded by Ivan Pedroso, with a "legal" wind reading also at Sestriere, but the jump was not validated because videotape revealed someone was standing in front of the wind gauge, invalidating the reading (and costing Pedroso a Ferrari valued at \$130,000 the prize for breaking the record at that meet). Lewis himself jumped 8.91m moments before Powell's record-breaking jump with the wind exceeding the maximum allowed. This jump remains the longest ever not to win an Olympic or World Championship gold medal, or any competition in general.

The current world record for women is held by Galina Chistyakova of the former Soviet Union who leapt 7.52 m (24 ft 8 in) in Leningrad on 11 June 1988, a mark that has stood for 28 years.

### **Equipment and Jumping Rules**

The sole of a long jumper shoe can have a maximum thickness of 13 millimeters.

Spikes are allowed.

The runway must be at least 40 meters long. Competitors may place as many as two location markers on the runway. The jumper's farthest point forward in contact with the takeoff board -- i. e., the toe of the jumper's shoe -- must be behind the leading edge of the takeoff board. The board itself must be 20 centimeters wide and level with the ground. Somersaults are not permitted. Jumpers must land within the sand pit in the landing area, which may vary in width from 2.75 to 3.0 meters.

Jumps are measured from the forward edge of the takeoff board to the impression in the landing pit closest to the takeoff board made by any part of the jumper's body.

Each jump must be completed within one minute from the time the jumper steps onto the runway. Jumps executed with a tailwind or more than two meters per second don't count.

### **The competition**

Twelve competitors qualify for the Olympic long jump final. Results from the qualification rounds do not carry over into the final.

Each finalist takes three jumps, then the top eight jumpers receive three more attempts. The longest single jump during the final wins. If two jumpers are tied, the jumper with the longer second best jump is awarded the medal.

### **The Complexity of the Long Jump**

Viewed casually, nothing could be simpler: the runner stands at the beginning of the runway, accelerates to the takeoff board, then jumps as far as he or she can.

In reality, the long jump is one of the more technical Olympic events. There are at least three different techniques for approaching the takeoff board, each with its

own arm and body position. The maximum acceleration is achieved with the longest legal runup -- i. e., by using the full 40 meters of the runway; but the more steps the jumper takes, the more difficult it becomes to calibrate the takeoff with the forward edge of the runner's takeoff foot as close as possible to the leading edge of the takeoff board without fouling. All but the last two strides are normally the same length. The second-to-last stride, however, is longer and is designed to lower the runner's center of gravity; the last stride is shorter than others and is designed to do the opposite -- to lift the center of gravity of the jumper's body as high as possible in order to begin executing the jump itself. Hand and arm position as well as the jumper's body angle during the time the jumper is in the air are also important. Several different techniques are used in order to maximize the jumper's total distance without causing the jumper to fall backward during the landing.

## **Conclusion**

### **Rules**

At the elite level, competitors run down a runway (usually coated with the same rubberized surface as running tracks, crumb rubber also vulcanized rubber known generally as an all-weather track) and jump as far as they can from a wooden board 20 cm or 8 inches wide that is built flush with the runway into a pit filled with finely ground gravel or sand. If the competitor starts the leap with any part of the foot past the foul line, the jump is declared a foul and no distance is recorded. A layer of plasticine is placed immediately after the board to detect this occurrence. An official (similar to a referee) will also watch the jump and make the determination. The competitor can initiate the jump from any point behind the foul line; however, the distance measured will always be perpendicular to the foul line to the nearest break in the sand caused by any part of the body or uniform.



Therefore, it is in the best interest of the competitor to get as close to the foul line as

possible. Competitors are allowed to place two marks along the side of the runway in order to assist them to jump accurately. At a lesser meet and facilities, the plasticine will likely not exist, the runway might be a different surface or jumpers may initiate their jump from a painted or taped mark on the runway. At a smaller meet, the number of attempts might also be limited to four or three.

Each competitor has a set number of attempts. That would normally be three trials, with three additional jumps being awarded to the best 8 or 9 (depending on the number of lanes on the track at that facility, so the event is equatable to track events) competitors. All legal marks

will be recorded but only the longest legal jump counts towards the results. The competitor with the longest legal jump (from either the trial or final rounds) at the end of competition is declared the winner.

In the event of an exact tie, then comparing the next best jumps of the tied competitors will be used to determine place. In a large, multi-day elite competition (like the Olympics or World Championships), a set number of competitors will advance to the final round, determined in

advance by the meet management. A set of 3 trial round jumps will be held in order to select those finalists. It is standard practice to allow at a minimum, one more competitor than the number of scoring positions to return to the final round, though 12 plus ties and automatic qualifying distances are also potential factors. For record purposes, the maximum accepted wind assistance is two metres per second (m/s) (4.5 mph).

So in this episode we have discussed a lot about the long jump, the techniques of

long jump, the various rules and regulations, the official principles when it comes to olympics and I hope that the information presented was of soe use to you all.  
Thank you so much for watching.