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Lecture Title

Shot Put-1

Script

Welcome friends, today we are going to start with a new topic in athletics i.e. short put.

Shot put is an athletics sport where people try to "put" a heavy weighted ball as far as they can. They are not allowed to throw it, but instead they push the ball out into the air. They "put" the ball by holding it at their neck and pushing it through the air. The shot put has been part of the Olympics since 1896.

The weight of the ball can vary from 6 to 16 pounds (2.76 to 7.26 kg), depending on level age and gender of the participants. The object of the sport is to throw it as far as possible.

The Shot put is similar to the javelin. It is an official Olympic event and can be seen at the Olympic Games. The athlete cannot wear gloves when they are participating. If wearing gloves, the athlete will be disqualified.

The shot put event was first seen in the Middle Ages, when they would throw cannonballs at their enemies.

It is an outdoor event and cannot be played inside. It is a track and field event.

The **shot put** is a track and field event involving "throwing"/"putting" (throwing in a pushing motion) a heavy spherical object—the *shot*—as far as possible. The shot put competition for men has been a part of the modern Olympics since their revival in 1896, and women's competition began in 1948. The shot put has been an Olympic event since the first modern Olympics in 1896 in Rome. It's a sport that requires technique as well as strength, and changes in throwing style have since led to significant gains in the power of the thrower and the distances achieved.

Origin

Scottish Highland Games historians believe the shot put originated from the ancient Celtic tradition of "putting the stone" which, according to Scottish folklore, was used by Clan chieftains to help them identify their strongest men for battle purposes. The earliest documented evidence of the tradition can be found in an Irish book titled the "Book of Leinster," which was written in the 12th century and describes the events of the Tailteann Games held in County Meath. One of the events included is stone throwing, but how much further back in history the tradition stretches remains unproven.

History

Homer mentions competitions of rock throwing by soldiers during the Siege of Troy but there is no record of any dead weights being thrown in Greek competitions. The first evidence for stone- or weight-throwing events were in the Scottish Highlands, and date back to approximately the first century. In the 16th century King Henry VIII was noted for his prowess in court competitions of weight and hammer throwing.

The first events resembling the modern shot put likely occurred in the Middle Ages when soldiers held competitions in which they hurled cannonballs. Shot put competitions were first recorded in early 19th century Scotland, and were a part of the British Amateur Championships beginning in 1866.

Competitors take their throw from inside marked circle 2.135 metres (7.00 ft) in diameter, with a stopboard about 10 centimetres (3.9 in) high at the front of the circle. The distance thrown is measured from the inside of the circumference of the circle to the nearest mark made in the ground by the falling shot, with distances rounded down to the nearest centimetre under IAAF and WMA rules.

Rules

Early shot put events were judged on the distance the stone, or shot, could be thrown from behind a raised wooden board following a short run-up of no more than seven feet. By the early 1890s, the run-up had been replaced by a seven-foot-diameter circle marked on the ground with the raised board, now shaped to follow the front edge of the circle. In both cases, stepping over the board meant the throw would be disallowed. An article published in 1892 in the American magazine "Outing" describes the events of the Caledonian Games and discusses the then "prevailing" rule of a "standing" throw from within a circle. The main reason for the change from the run-up to the circle was to increase the accuracy of measurements by being able to measure the exact distance from where the shot landed straight back to the closest point on the edge of the circle.

Legal throws

The following rules (indoor and outdoor) are adhered to for a legal throw:

- Upon calling the athlete's name, they have sixty seconds to commence the throwing motion otherwise they are banned from the game.
- The athlete may not wear gloves; IAAF rules permit the taping of individual fingers.
- The athlete must rest the shot close to the neck, and keep it tight to the neck throughout the motion.

- The shot must be released above the height of the shoulder, using only one hand.
- The athlete may touch the inside surface of the circle or toe board, but must not touch the top or outside of the circle or toe board, or the ground beyond the circle. Limbs may however extend over the lines of the circle in the air.
- The shot must land in the legal sector (34.92°) of the throwing area.
- The athlete must leave the throwing circle from the back.

The athlete may enter the throwing circle at the location of their choice.

Foul throws (slides)

Foul throws occur when an athlete:

- Does not pause within the circle before beginning the throwing motion.
- Does not complete the throwing movement within sixty seconds of having their name called.
- Allows the shot to drop below his shoulder or outside the vertical plane of his shoulder during the put.

At any time if the shot loses contact with the neck then it is technically an illegal throw.

- During the throwing motion, touches with any part of the body (including shoes):
 - the top or ends of the toe board
 - the top of the iron ring
 - Anywhere outside the circle.
- Throws a shot which either falls outside the throwing sector or touches a sector line on the initial impact.
- Leaves the circle before the shot has landed.
- Does not leave from the rear half of the circle.

Regulation misconceptions

The following are either obsolete or non-existent, but commonly believed rules within professional competition:

- The athlete must enter the circle from the back (none of the rule books contain such a clause).
- The athlete entering the circle, then exiting and re-entering it prior to starting the throw results in a foul (all the rule books allow an athlete to leave a circle prior to starting a throw, but this still counts within the one-minute time limit; the allowable method of exiting the circle varies by rule book).
- Loose clothing, shoelaces, or long hair touching outside the circle during a throw, or an athlete bringing a towel into the circle and then throwing it out prior to the put results in a foul

Style

Before 1951, the main movements involved in the shot put were to stand and throw from a crouched starting position. The winner of the shot put Olympic gold medal in 1896 was Bob

Garrett of the USA with a throw of 11.22 m. The current men's shot put world record holder is Randy Barnes of the USA, who had an outdoor throw of 23.12 m. His success as a thrower is attributed to the rotational style of throwing known as the "spin," which was first introduced in 1976 by American shot putter Brian Oldfield. The spin developed from a throwing style known as the "glide." The glide was pioneered by American Parry O'Brien in 1951 and is now considered a major turning point in the history of the sport as it introduced the technique of facing away from the direction of the throw at the beginning the movement. A key factor in all shot put styles is that the shot must be put as opposed to thrown; this is achieved by keeping the ball in close proximity to the chin in all movements prior to its release.

Putting styles

Two putting styles are in current general use by shot put competitors: the *glide* and the *spin*. With all putting styles, the goal is to release the shot with maximum forward velocity at an angle of approximately forty degrees.

Glide

The origin of the glide dates to 1951, when Parry O'Brien from the United States invented a technique that involved the putter facing backwards, rotating 180 degrees across the circle, and then tossing the shot.

With this technique, a right-hand thrower would begin facing the rear of the circle, and then kick to the front with the left leg, while pushing off forcefully with the right. As the thrower crosses the circle, the hips twist toward the front, the left arm is swung out then pulled back tight, followed by the shoulders, and they then strike in a putting motion with their right arm. The key is to move quickly across the circle with as little air under the feet as possible, hence the name 'glide'.

Spin

In 1972 Aleksandr Baryshnikov set his first USSR record using a new putting style, the spin invented by his coach Viktor Alexeyev. The spin involves rotating like a discus thrower and using rotational momentum for power. In 1976 Baryshnikov went on to set a world record of 22.00 m (72.18 ft) with his spin style, and was the first shot putter to cross the 22 meter mark.

With this technique, a right-hand thrower faces the rear, and begins to spin on the ball of the left foot. The thrower comes around and faces the front of the circle and drives the right foot into the middle of the circle. Finally, the thrower reaches for the front of the circle with the left foot, twisting the hips and shoulders like in the glide, and puts the shot.

When the athlete executes the spin, the upper body is twisted hard to the right, so the imaginary lines created by the shoulders and hips are no longer parallel. This action builds up torque, and stretches the muscles, creating an involuntary elasticity in the muscles, providing extra power and momentum. When the athlete prepares to release, the left foot is firmly planted, causing the momentum and energy generated to be conserved, pushing the shot in an upward and outward direction.

Another purpose of the spin is to build up a high rotational speed, by swinging the right leg initially, then to bring all the limbs in tightly, similar to a figure skater bringing in their arms

while spinning to increase their speed. Once this fast speed is achieved the shot is released, transferring the energy into the shot put.

Usage

Currently, most top male shot putters use the spin. However the glide remains popular since the technique leads to greater consistency compared to the rotational technique. Almost all throwers start by using the glide. Tomasz Majewski notes that although most athletes use the spin, he and some other top shot putters achieved success using this classic method (for example he became first to defend the Olympic title in 56 years).

The world record by a male putter of 23.120 m (75 ft 10.236 in) by Randy Barnes was completed with the spin technique, while the second-best all-time put of 23.063 m (75 ft 7.992 in) by Ulf Timmermann was completed with the glide technique.

Measuring which technique can provide the most potential is difficult, as many of the best throws recorded with each technique have been completed by athletes under doping suspicions, or with a record of drug violations. The decision to glide or spin may need to be decided on an individual basis, determined by the thrower's size and power. Short throwers may benefit from the spin and taller throwers may benefit from the glide, but many throwers do not follow this guideline.

Types of shots

The shot put ball is made of different kinds of materials depending on its intended use. Materials used include sand, iron, cast iron, solid steel, stainless steel, brass, and synthetic materials like polyvinyl. Some metals are more dense than others making the size of the shot vary, for example, indoor shots are larger than outdoor shots, and so different materials are used to make them. There are various size and weight standards for the implement that depend on the age and gender of the competitors as well as the national customs of the governing body.

Equipment

The shot put is a sport with little equipment involved, but that means the equipment that is used is even more important. Shots come in several sizes and materials for each weight, which includes turned steel, stainless steel, brass, iron and turned iron. The most popular shots are the turned iron and turned steel because they are not too smooth and have the best grip. The size of the shot has a limit on the circumference for each weight, and many throwers tend to get the largest shot possible because the smaller shot seems to roll off the hand and fingers more in the delivery phase of the throw. The next piece of equipment to cover is footwear.

All the major footwear companies make a shot put shoe designed for rotation. They usually have a smooth, hard outsole for fast spinning and a high arch to keep the thrower on the toes more. The most popular spin shoe today is the Nike Zoom Rotational that is worn by many of the elite throwers. The Nike shoes have the fastest outsole but are the stiffest of the shoes. The Adidas shot put shoe has a softer outsole and conforms to the foot better for a more snug fit. Reebok, New Balance, Mizuno and Asics all make shot put shoes but are less popular because their lack

of sponsorship with throwers and the quality of the shoe. All the spin shoes have a strap across the middle of the foot to prevent the laces from coming out while throwing.

The last piece of equipment to be mentioned is the wrist wrap. Almost all shot putters either tape or wrap their wrist to prevent injury and give support. It is ideal to invest in a good wrist wrap that can be reused every day instead of having to buy and use tape on a constant basis. The wrist wrap can be adjusted after it is applied unlike a tape job, which would require taping the wrist again. The most important matter with all these equipment decisions comes down to the athlete and the comfort level with each product. No person is alike, and no piece of equipment is alike. The only way to find out which product suits the athlete best is to have them try it.

Shot Put Officials Duties

Plan arrival time

- At least ½ hour before the start of a dual meet
- At least 1 hour before the start of a relay meet Check in at Meet Site
- With referee (Dual) or Meet Director (Relay Meet)
- Review Event directions / changes Get meet information
- Dual Meet - Get clipboard (if provided) - Get measuring tape - Get Score sheet(s) for SP competition
 - Relay Meet - Get event information * Starting time of event * Order of throwing (boys/girls) and/or Division * Pick up clipboard(s) and measuring tape
- Coordinate responsibilities with other event officials Equipment List
- Uniform
- Rule and Case Book
- Pens/Pencils
- Clipboard
- White Athletic Tape
- Duct Tape (to differentiate boys marks from girls if back to back)
- Tape Measure

- Stop watch and Regular watch
- Plastic bag (for clip board in case of inclement weather)
- Elastic bands Inspect Area
- Check event site - toe bar - throwing sector
- Check surrounding area for obstacles and remove or cover any
- Check spectator area for safety issues Check in the competitors
- Get names and competing schools (Dual)
- Collect cards (relays, invitationals, etc) - separate boys and girls - seed by heights (lowest to highest) verify your paperwork
- Athletes name
- Schools entered (especially for meets contested by divisions)

Warmups

- 1 flight at a time
- 2 throws per athlete Before Competition begins, call athletes together and review rules
- Introduce officials
- New state rules
- Proper Uniform
- No Jewelry
- 60 seconds after called
- Within 10 minutes of completion of other event(running)
- Once in the ring must pause before attempt
- Shot must not be behind or below the shoulder – PUT - Do not throw!
- Do not touch top of board or outside of edge
- Do not touch top of ring or outside of circle
- Do not exit until “Mark” is heard. You must be in control before exiting

- Exit from back half of circle.
- Retrieve your shot! Measurement
- Measure from center point of ring
- Measure nearest lesser $\frac{1}{4}$ inch Meet conclusion
- Verify results with other officials
- Finalize by signing score sheet
- Give results to Head Field Judge Other important points
- Be friendly, yet professional
- Work with your colleagues
- Be encouraging
- Don't hesitate to consult the rule book

Conclusion-

Shot put is a game where player put heavy weighted ball as far as they can. They are not allowed to throw it, but instead they push the ball out into the air. They "put" the ball by holding it at their neck and pushing it through the air. It has been part of the Olympics since 1896.

The basic rules to be kept in mind are

1. The athlete must only use one hand and it must not drop below the shoulder or it could cause damage.
2. The athlete can be disqualified for leaving the circle before the shot hits the ground, or leaving the sector lines.
3. The athlete must not put a foot past the toe board, or it is a disqualification.
4. The athlete must not take longer than 60.00 seconds to take a shot.

