

# The Bull-Jump Exhibitions at Mallia

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Aids devised to improve athletic performance were common in ancient Greek athletic competitions. Two contestants in the pentathlon event, the jump and the javelin, are prime examples. It is well-known that **Halteres** (jumping weights) helped pentathletes improve their performances in the long jump. For the javelin event it has been established that a leather strap attached to the middle portion of the javelin was intended to impart a rotary motion to the missile, thereby increasing the distance it would have been thrown.

In performing their bull-jumping exploits, Minoan athletes may have predated the ancient Greek athletes by several centuries in the use of a device to improve performance. Although there is no settled opinion where these bull-jumping exhibitions took place, there are some convincing arguments that they were performed in the central court yards of Minoan palaces. One popular technique used to accomplish the jump may be described as follows: the athlete seized the onrushing bull's horns and turned a somersault on them, landing on the animal's back. The vaulter completed the exercise by jumping to the ground into the waiting arms of a spotter or fellow athlete.

The palace at Mallia offers an additional clue about the bull-jumping feat. Located in the northwest sector of the central court yard is a large stone ball approximately 28 cm. high. Near the stone's apex is a groove about 14 cm. wide and 3 cm. deep. To date there is no clear explanation as to what role this large stone ball (**Boule A Cupule**) played in the central court yard festivities at Mallia. Suggestions have ranged from the stone being used as a ritual stone during the Bronze Age to a cannonball left over from the Turkish-Venetian War fought in modern times.

This paper has introduced a new hypothesis. The bull-jumpers may have used the **Boule A Cupule** as a stepping-stone similar in principle to the spring board used by modern-day gymnasts in vaulting over the long-horse. The groove near the top of the stone may have served as the place where the vaulter's foot was put just prior to executing the jump. A jumping experiment, using an object approximately the same height as the stone, was conducted to determine whether the stone could have provided increased vertical lift, and thereby, assist a vaulter in leaping over a bull. A biomechanical analysis of the data revealed that the vertical height of a vaulter's jump was increased by 28 cm.

It seems that devices used to help bull-jumpers vault over charging bulls was not limited to Mallia. Gem stones suggest that similar devices were used at other palaces. Furthermore, the palace at Phaistos has a carefully built set of blocks which, according to several authorities, served as a jumping platform for bull-jumpers.

If the central court yards of Minoan palaces were indeed used for bull-jumping as most scholars agree, then perhaps this information adds a detail to the general picture. In the case of the central court yard of Mallia, the **Bode A Cupule** used in a sporting context is not difficult to imagine.



Larry Fielding delivered the Seward Staley honor address