

Yeadon, M.R., Lee, S. and Kerwin, D.G. 1990. Twisting techniques used in high bar dismounts. *International Journal of Sport Biomechanics* 6, 2, 139-146.

At the 1988 Seoul Olympic Games, eight full twisting somersault dismounts from the high bar were filmed using two cameras during the compulsory exercises of the Men's High Bar competition. Angles describing body configuration and orientation were determined and were input into a computer simulation model of aerial movement. The deviations between simulation and film were less than 2.5° for tilt angles and less than 0.07 revolutions for twist angles. The twisting techniques employed were quantified using the tilt angle as a measure of twisting potential. Contributions to the maximum tilt angle were determined using simulations based on modifications of the film data. Each of the eight competitors obtained most of the tilt using aerial rather than contact techniques. In general, the majority of the aerial contributions arose from asymmetrical arm and hip movements.