

## MODELLING OF LOW GRAVITY CONDITIONS FOR GUN SHOOTERS IN THE PROCESS OF PREPARATORY BASIC TRAINING.

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At present specialists are conducting a deep search for the factors which determine the possibilities of the intensification of the study of complex movements. Wide use is made of the means of biomechanical control, various technical means and fitness stations, all of which promote a solution to the problem in the practice of sports.

The purpose of this work is to promote the efficiency of the instruction and training process of the shooters through differential stability of gravitational interactions between separate parts of the arm which hold the weapon.

The purpose of the investigation is reached through making a special base for the shooter's body, a kind of support. It provides for a decrease of the gravitational loads onto the muscular system while the shooter is aiming. According to the proposed design, the support for the shooter's body consists of a plate and an attached telescope mount. To this mount, through the means of a pulley system, are attached moveable supports for the arm actually holding the weapon. These moveable supports are made in the shape of rings of various diameter with a soft padding. The rings are connected to special rubber bands which have shock-absorption areas. The rings are mounted on the moving part of the telescopic mount together with some dynamometers.

The essential difference and novelty of the device is that the support relieves static loading of the muscles which provide for various movements. It also holds the hand in place while it is shooting a pistol. It allows the shooter to relax arm's muscles, to decrease their working load and stop the trembling associated with it. Thus, s/he can concentrate more on aiming precisely. All this serves for a more relaxed shooting practice, promotes marksmanship and increases the effectiveness of the instruction through the process of training and learning the skills of aiming a weapon onto the target.

**МОДЕЛИРОВАНИЕ УСЛОВИЙ ПОНИЖЕННОЙ ГРАВИТАЦИИ СТРЕЛКОВ-ПУЛЕВИКОВ НА ЭТАПЕ ПРЕДВАРИТЕЛЬНОЙ БАЗОВОЙ ПОДГОТОВКИ**

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**МОДЕЛЮВАННЯ УМОВ ЗНИЖЕНОЇ ГРАВИТАЦІЇ СТРІЛЬЦІВ-КУЛЬОВИКІВ НА ЕТАПІ ПОПЕРЕДНЬОЇ БАЗОВОЇ ПІДГОТОВКИ**

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