# SHOOTING READINESS AMONG ARCHERY-BIATHLETES AT THE STAGE OF HIGHER SPORTSMANSHIP

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#### **Abstract**

This article is about the results of a study of the shooting readiness of archery-biathletes at the stage of higher sportsmanship. The author states that in the process of pedagogical testing, control tests were selected in order to identify the level of shooting readiness of shooters. Based on the results of control tests, it can be concluded that the shooting readiness of biathlete athletes is at a fairly high level, since the results of the control test are significantly higher than the results required of athletes at the stage of higher sportsmanship.

**Key words:** archery-biathlon, shooting training, the stage of the highest sportsmanship, archer's position, coordinated movements.

**Introduction.** Much attention is paid to the development of physical culture and sports in our country, which is one of the important factors of human education. Everyone has the right to freely choose to engage in any kind of sport, as the emergence of new sports increases the likelihood of performing high ranks and titles.

One of the youngest and most exciting sports is archery-biathlon, which combines two completely different disciplines. On the one hand – ski racing, which requires an athlete of great performance, general and special endurance, and on the other hand – shooting, where you need unspeakable composure, extreme muscular and coordination stability, as well as endurance. Moreover, there are more and more varieties of archery - biathlon disciplines that attract a large number of fans with their unusual appearance and aesthetics.

For high-class athletes, shooting training plays an important role, therefore it is necessary to improve the elements of shooting in order to form a rational technique for conducting fast and accurate shooting from a standing and kneeling position. It is known that the shooting technique includes a large number of elements, the training of which requires their repeated reproduction and systematic control. The main condition for accurate shooting is the coordinated execution of all the actions of the shooter during the monotonous preparation of the shot for the shot. To achieve a high result in shooting, the archer - bow system must have a high degree of stability, which is ensured by stability when shooting a bow in a standing position and releasing the bowstring, especially in the final phase of the shot. In shooting, basically all the technique occurs due to micro-movements in the joints, muscles of the forearm and back, leading the shoulder blade to the athlete's spine. Therefore, in order to achieve high results in archery, a high level of shooting readiness is necessary, which must be maintained and improved throughout the entire stage of the highest sports skill. That is why the topic of our research is still **relevant.** 

**The purpose of the research:** to assess the level of shooting readiness of archery-biathletes at the stage of higher sportsmanship.

## The objectives of the research:

- 1. To determine the level of shooting readiness of archery-biathletes at the stage of higher sportsmanship.
- 2. To evaluate the shooting readiness of archery-biathletes at the stage of higher sportsmanship.

#### **Research methods:**

- 1. Analysis of scientific and methodological literature: the question of the peculiarities of shooting training at the stage of higher sportsmanship, the improvement of the elements of shooting training and its components was considered.
- 2. Pedagogical observation is a method by which archery-biathletes obtained data on shooting readiness. In the course of pedagogical observation, the method of logging and recording

the results of control tests of shooting readiness of archery-biathletes at the stage of higher sports skill was used.

- 3. Pedagogical testing was used in order to obtain data on the level of shooting readiness of archery biathletes at the stage of higher sportsmanship.
- 4. The method of mathematical statistics: the processing of the obtained data was carried out using the method of mathematical statistics. The arithmetic mean of the indicators of the archery-biathlete athletes and the degree of dispersion of the sample data from the sample average, as well as the coefficient of variation of the archery-biathlete results were found.

**Research results and their discussion**. The study was conducted on the basis of the Municipal Autonomous Institution sports School of Beloretsk district, Republic of Bashkortostan, the city of Beloretsk. It was attended by 4 people with the title of MS of Russia. The study was carried out jointly with the trainer and was carried out in 3 stages.

At the first stage (October - December 2020), we analyzed the scientific and methodological literature on the research topic, identified the features of the construction of the shooting training of archery-biathletes at the stage of higher sportsmanship. The object and subject of the study, its purpose and objectives were determined.

At the second stage (February - March 2021), we conducted control tests to determine the level of shooting readiness of archery-biathletes and pedagogical supervision. After that, the results were recorded and entered.

At the third stage (April - May 2021), the assessment of the shooting readiness of archery-biathletes was carried out. We have summarized and formalized the results of our research.

To study the shooting readiness of archery-biathletes at the stage of higher sportsmanship, the following control exercises were used: Holding a stretched bow in the ready position (s), Pulling the bowstring to touch the chin (number of times), Shooting at targets from 18 meters (s). Control tests were conducted on the same day with a 10 minute rest interval between control exercises.

After analyzing the results of the control tests, it can be seen that all athletes demonstrated excellent results, relative to the Federal standard indicators, which indicates high indicators of special endurance. After that, we calculated the average indicators and the coefficient of variation of the shooting readiness of the archery-biathletes. The dispersion of indicators relative to the arithmetic mean does not exceed 10%. A slight dispersion indicates a high qualification of athletes who have shown solid results. At the last stage, using the method of mathematical statistics, we conduct a comparative analysis of pedagogical testing with the results of standards according to the federal standard of the sport of archery. According to its results, all the subjects showed results significantly exceeding those specified in the Federal Standard for Archery, which indicates ideal shooting readiness.

**Conclusion.** After analyzing the literature sources, it was revealed that shooting readiness is determined mainly by a high level of special static and dynamic strength endurance, improvement of technical and tactical skills, a high level of psychological preparedness and includes non-specific means that stimulate the effectiveness and effectiveness of shooting exercises.

We conducted pedagogical observation and pedagogical testing to determine the level of shooting readiness of archery-biathletes at the stage of higher sportsmanship. To do this, we used the following control tests: holding a stretched bow in the ready position (c), pulling the bowstring to touch the chin (number of times), shooting at targets from 18 meters (c). The results were processed by mathematical statistics for further evaluation of the results. A small spread of results was revealed: they were very dense and exceeded the norms of the Federal Standard for the sport of archery, which indicates the high qualification of athletes.

Having analyzed the results of the control tests and the standards of the Federal Standard for Archery, we can say that the shooting readiness of archery-biathletes is at a fairly high level, since the results of the control test are significantly higher than the results required of athletes at the stage of higher sportsmanship.

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