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# SPORTS TRAINING IN THE NAVAL PENTATHLON – SYSTEMIC CONCEPT

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#### Abstract

*Aim.* With Romania's accession to CISM in 1992, the Romanian naval pentathlon had to adapt and modernize in order to reach the level of international military and political requirements. In order to achieve the priority objective of the Romanian Army, that of creating a small, flexible, highly mobile, professional army, equipped with modern equipment, capable of fulfilling its mission as a guarantor of the sovereignty, independence, and unity of the state, of territorial integrity of the country, and constitutional democracy, and to participate in the general efforts to strengthen and maintain security and peace in Europe and the world. (T.C.Military Penthatlon, Appendix, 1987).

*Methods.* Driven by the created conjuncture and forced to form a national team of naval pentathlon, we face many shortages in terms of training periodization, organization of specific trainings, and training bases for naval pentathlon trials. The Romanian naval pentathlon has become a necessity imposed by the modernization and connection of the military system to international political and social requirements. Determined by these circumstances, in the composition of a national naval pentathlon team, we are faced with several deficiencies, regarding the periodization as structure and content of a specific training system in order to participate in the World Championships. (Hugi T., 1980)

The specific approach of the research will contribute to the design of the content of the training process during a macrocycle and the elaboration of the selection and competition model in the naval pentathlon.

*Conclusions.* This work highlights the preparation process in the naval pentathlon and its importance. Training periodization is an important part of this.

The theme of the paper addresses the issue of the periodization of training in the utility swimming test in the Romanian military naval pentathlon, both from a theoretical point of view and especially from a practical point of view.

Keywords: naval pentation, periodization of training, utility swimming

#### Introduction

The specialists of the field highlight in their works both the appearance and evolution of the international naval pentathlon as well as the evolution of the performances obtained by the military athletes selected for the representative teams of European, Asian, and South American countries. (Ene V., 2003)

It is found that there is a need to create a new training system for the representative team of naval pentathlon of Romania after its accession to the CISM. In order to face the international competitions in which he participates, the first thing he can start from is the development of the physical and performance capacity of military athletes at the Mircea cel Bătân Naval Academy.

The efficiency of the training process through the use of specific efforts is largely determined by the way it is combined with the non-specific ones (Adrian Dragnea et al., 2006).

Military physical education is an activity intended for maintaining, improving and perfecting basic motor qualities, especially strength and resistance, motor skills and applicative skills for all personnel who are part of the army.

The dimensions of physical education result from the analysis of military actions, from the point of view of the effort they require, from the maximum utilization of the physiological and psychomotor possibilities of the soldiers to solve the missions, as their priority objective. The dynamism of the actions, the interpenetration of the forms and methods of combat, their complementarity and suppleness throughout the duration of a conflict, are characteristics of the armed struggle that determine the entire content of this activity. Physical education provides quantitative and qualitative bio-psychomotor support, to which is added a varied system of motor skills and applicative utilitarian skills (I. Leonte, 1998).

All of these were widely used and formed the based on on which the expertise pyramid for each weapon in the Romanian Army had to be built. Military sport starts from the psychomotor values of teenagers and soldiers and refers to the goals and content of specific training plans in a certain age range.

Military physical education does not only mean preparing the body for effort, it is also determined by the extent of the educational instructional process that includes multiple didactic activities for learning, consolidating and perfecting skills and motor skills, and actions to educate the body posture and correct some physical deficiencies. In the

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conditions where military physical education can determine sports success, the positive transfer of motor skills led by training to dynamic stereotypy, can be achieved in the context of the transformation of multipurpose physical education lessons, into sports training lessons with a specific theme from utilitarian swimming or water sports.

## Methods

Training specific to the military is carried out through actions based on the results of military physical education. Thus, there is an assimilation of military physical education in the general training process, specific to each unit, this becoming indispensable for the training of military athletes for sports competitions and military applications that take place at the army level in different categories.

In a particularly complex system, military physical education and sports directly participate in the training of athletes and the performance in good conditions of competitive military-specific activities.

Starting from the premise that in competitive conditions, the motor and mental potential of man can be researched (V.N. Platonov and V.S. Keller, 1993), the authors mention the fact that for an adequate selection the coaches will establish the determining indicators in the content of the skills, which represent in essence the core of the sports

vocation. Taking this aspect as a starting point, we mention the fact that the students of the military faculties go through a first stage of the sports selection in the organized framework, the entrance exam, within the Military Physical and Psychic Testing Centers. The percentage allocated to the discipline of physical education and sports for admission to higher military profile institutions is 100%, and these are the eliminators. It is what we would call the "core of the sports vocation" in the case of military physical education with orientation in the selection for military performance sports. It is obvious that when talking about performance and high-performance sports, the technical and psychomotor components become paramount in achieving sports performance.

Being an educational institution with a military and civilian branch, physical education is divided into two methods of implementation:

- For civilian students, they practice physical education in the first two years of study;

- For military students, they practice physical education during all 4 years of study.

Physical education is an important component of global education. Through its content and specific tasks, through its systemic influences on the individual, both in terms of motor and physical, intellectual, affective, aesthetic, etc., it constitutes a path toward general education. (Adrian Dragnea et al., 2006)

Modern sports training is an activity that is particularly complex and involves considerable efforts on the part of specialists. Through the multitude of issues raised by the training of athletes - military students and their behavior in competitions, it interest's coaches, doctors, psychologists, sociologists, methodologists, leaders of sports activities, leaders of various departments, etc.

Modern sports training is defined in specialized literature as a systematic and continuously graded pedagogical process of adapting the human body to intense physical and mental efforts involved in participating in competitions organized in different sports branches. (Dragnea, A., Mate, S., T., (2002)

Bompa emphasizes that sports training is a difficult, long-lasting, high-intensity activity that subjects the athletes to special efforts, to a severe work and life regime, to the straining of attention, thinking and imagination, to the long and difficult practice of technical skills and tactics, and to many other efforts of a physical and mental nature. (Bompa, T., O. 2002)

Modern sports training is the main means of training athletes in order to increase the effort capacity of the body and achieve programmed and planned performances (both in team sports and in individual sports) (Cârstea Gh., 2000), in this case in the case of the team of naval and individual pentathlon for the athletes selected for the utility swimming event.

The system of modern sports training has several components that identify:

• Pedagogy through the didactic process used in training;

• Biological - through the objective effects in terms of functional development and adaptation of the body to the requirements of the specific effort;

• Psychological - through the moral and emotional implications of the athlete;

• Sociological - through relationships and their way of integration in the social environment;

• Hygienic – through the specific conditions of food, rest, comfort and environment in which the athlete trains and recovers;

• Ethics through fair play and total and honest engagement in preparation and competition;

• Aesthetics – through the beauty and refinement of acts and motor actions;



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The objectives of modern sports training:

The ability to realize, in an overall synthesis, everything that has been acquired through training (theoretical, practical knowledge, analysis capacity, selfanalysis capacity).

OBJECTIVES OF MODERN SPORTS TRAINING

Acquiring practical and theoretical knowledge that allows the evaluation of one's own level of training (specialized theoretical training, intellectual training, practicalmethodical knowledge) Development of specific motor skills, which are of the greatest importance for the athlete (cognitive, motor, psychomotor, Educating volitional qualities (the desire to win, the ability to sustain maximum efforts, attitude, motivation, decision.

> Strengthening health and consolidating correct physical development, as a means of preventing trauma and accidents (somato-functional development,metabolic balance, complex physical training);

> > Development of fundamental motor skills conditional and coordinative (combined motor skills, coordinative motor skills, relaxation, strength, endurance, skill, suppleness)

Improving fundamental motor skills (strength in speed mode, coordination in power mode, speed, resistance in speed mode);

Within the sports training process in the naval pentathlon, there are a series of requirements and rules that ensure the smooth development of the training process of the selected military athletes.

The increase in the importance of sports performances in the military naval pentathlon, of the technical-material bases of modern sports training, led to the progress of sports in the first place, which determines the improvement of the sports training system as well as to modern trends based on the following directions: (Dragnea A ., Teodorescu, S., M., 2002):

1. The decrease in sports longevity in favor of increasing the training period, which is achieved through: early preparation, multi-year programming of training, 900-1100 hours of annual training, which results in much trainings;

2. The selection of athletes was carried out according to contemporary scientific criteria;

3. Approaching the conditions and content of the training to those of the international military naval pentathlon competitions, modeling the training based on the performance components: biological, biomechanical, motor, psychological, and moral-volitional;

4. Respecting the principle of correlating the gradation of efforts with the use of maximum efforts in training as well as the unity and continuity of general and special physical training;

5. The use and adaptation of training means and methods characteristic of athletics, rowing, swimming as elements of specific training;

6. Good recovery after each training and competition in which the athletes participate with the help of modern techniques;

7. Elevating this principle is the individualization of training and sports technique based on the simultaneous combination of training factors.





In general, modern sports training is a changing dynamic system regarding the body's functionality and effort capacity, which has the effect of a deep internal request, caused on the one hand by acts, actions, motor activities, and their combinations, on the other hand a external request imposed by the training conditions of the coach through direct or indirect actions on the athlete. (Simion, G., Simion, I., 2006).

The opinion of many authors is that sports training has its own laws that are reflected in certain principles and rules. They materialize:

• The continuous character of the training process: The training process has a continuous and rhythmic character that lasts for the entire duration of a calendar year. Only in this way can the objectives and complex tasks of the training be solved, such as: physical athletic development, improvement of combined and coordinated physical qualities specific to each branch or sport test, and improvement of technique and tactics; (Bompa, T., 2003)

• The unity between the special and multilateral orientation of the training - the military naval pentathlon, in our case, the utilitarian swimming test through its moments claims a complex manifestation of all motor qualities, several abilities, skills and motor movement skills, which is the basis of the procedures technical-tactical; a fast, varied thinking for solving every moment of the test, theoretical knowledge and volitional qualities. All this can only be formed through the multilateral education of military athletes, which must be organically combined with the development of all the above qualities toward the current requirements of the test; (Mihăilă, I., 2006)

• The gradual, intense and maximal increase of the effort - this principle refers to the following aspects: the duration, intensity and degree of difficulty of the effort must increase progressively; the rate of increase in effort will be proportional to age, degree of mastery and current level of training; the maximum efforts, applied rationally, ensure that the body's functional capacity, considered the limit at a given moment, is exceeded, through the care of the trainer in collaboration with the doctor; (Siclovan, I., 1979)

• The cyclic nature of modern sports training - the training process is divided into periods and stages of training cycles, with variable tasks, objectives, means, and methods depending on: the competitive calendar, level of training, age, individual characteristics, material conditions, climate, etc. (Simion, G., Amzar, L., 2009)

The motor qualities involved in the specific effort in the military naval pentathlon are the following: speed, coordination, and strength:

The complexity of the effort in the naval pentathlon and the involvement of sports training components lead to the development of all known motor skills. Considering these assumptions, we consider that a sufficient theoretical basis is necessary based on studies from the specialty literature.

The first motor quality we address is speed. It represents the ability of the human body to perform acts or motor actions with the whole body or only with certain segments of it in the shortest possible time and with maximum speed depending on the existing conditions. It is a part of the stable qualities of the individual, depending to a large extent on the hereditary dowry (Cârstea G., 1993).

In this study, in the utilitarian swimming test, reaction speed, execution speed, and movement speed, the latter appears at most moments of the test.

Coordinative abilities generically designate a complex of predominantly psychomotor qualities that presuppose the ability to quickly learn new movements and quick and efficient adaptation to varied conditions specific to different types of activities by restructuring the existing motor fund. Coordination is achieved through the stimulating action of the central nervous system and skeletal muscles to execute a voluntary movement, so that there is a harmonious chain between the different components of this movement. (Hahn E., 1996)

In the utility swimming event of the naval pentathlon, strength plays an important role in the athlete. Considering that it is a test that occurs 100% in water, the muscles must be very well developed.

The increase in sports performance in naval pentathlon to close to the physiological limits of the human body requires a change in activity at the level of the main structural elements, namely training and competition. From this perspective, the functional, motor, and mental demands of naval pentathlon determine the performance capacity. Capacity is a multifactorial outcome determined by skills, the degree of personality maturation, learning, and exercise that can be educated through exercise. (Teodorescu S., 2009).

The conducted studies specify that in order for an athlete to reach such an ability to train, he must gradually and systematically go through all the stages of sports training, forming his ability to train through a thorough, thorough and responsible preparation during the training of base and construction. (Olbrecht J., 2000)

The training process in the naval pentathlon aims to continuously increase the effort capacity to ensure a good to excellent level of preparation in the pre-competitive period as well as maintaining a high level of energy for the competitive period.

The mental processes that are part of the sports training and in the specific conditions of the utilitarian swimming competition will be included in the psychological preparation of the athletes, which will use a set of methods and means specific to learning, consolidation and technical and tactical improvement, carried out in the context of the education of qualities intellectual, affective, volitional and personality traits (Moise D., 2002).

The principles of athletic training refine and improve the mental training of naval pentathletes and give priority to the development of courage, perseverance, discipline and efficiency - traits characteristic of cadet selection, a set of





characteristics of psychological needs in competitive conditions: distributive attention, antistress, emotional stability, will, motivation etc.

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The mental requirements in the training of athletes in the utilitarian swimming test are governed by the method of intervention in the psychological preparation (Popa C., 2006) from the spot training specific to the naval pentathlon.

Man can be considered as a complex system characterized by the capacity of self-regulation and self-organization, and the mechanisms that regulate mental states are of particular importance both theoretically and practically; we can affirm that maximum efficiency and optimal behavior in the utilitarian swimming test cannon exist without physical and mental exercises being used to the maximum. The regulation and self-regulation of mental states involve a series of complex and interconnected processes that result:

- the control of emotionality and implicitly the education of mental stability;
- control and mobilization of intellectual capacities;
- maximum volitional employment capacity in the activity;

- general motivational and energetic mobilization of the body responds as best as possible to the demands of the situation;

- motor mobilization corresponding to stable tasks.

#### Conclusions

Based on the bibliographic study and with the help of the tests that will be given to military students, a preparation model for the utilitarian swimming test within the naval pentathlon will be developed.

The valorization of the results of this research consists of establishing a model of selection, training, and competition that will be as efficient as possible for the sports activity in military institutions, in particular those with a naval profile, in order to obtain notable results, which correspond to the standards and objectives competition from the international circuit in accordance with the principles of Romania's integration into the Euro-Atlantic structures.

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