GALAXY INTERNATIONAL INTERDISCIPLINARY RESEARCH JOURNAL (GIIRJ)
ISSN (E): 2347-6915
Vol. 13, Issue 3 March (2025)

EXISTING PROBLEMS IN THE RESCUE OF PEOPLE FROM HIGH-RISE BUILDINGS IN EMERGENCY SITUATIONS AND THEIR INNOVATION SOLUTIONS

Yuliev Nuriddin Zhumanazarovich
Docent, Academy of the Republic of Uzbekistan
Department of Combat and Physical Training
Doctor of Philosophy on Pedagogical Sciences (PhD),
e-mail: nuriddin0122@gmail.com

ABSTRACT

In the world, the search and Rescue Service is aimed at managing the physical development of the criteria, means and methods of sorting rescuers for training. Scientific research is being carried out on the distribution of training loads and planning, taking into account the anatomical-physialogical and psychological characteristics of the lifeguard organism. The rescue practice shows that their preparation is associated with a promising planning ridge of many years of preparatory training, which, together with the fact that the creation of the system requires a scientifically based approach, requires efficient management of the training process, conducting research based on an individual approach, taking into account physical and psychological readiness.

Keywords: Middle high mountains, rescue, physical qualities, strength, anatomical-physiological characteristics, innovation, psychological training, physical training.

INTRODUCTION

The number of high-rise, luxurious buildings is growing all over the world. In the conditions of an emergency of a natural and technogenic nature, the problem of the effectiveness of the immediate rescue of people from such buildings began to arise. As we all know, on September 11, 2001, in an emergency at the World Trade Center in New York, people were faced with problems in rescuing people.

The first report of the explosion comes at 8:47, and the last at 10:33. There will be more than an hour and a half for rescue work [1.2]. TV shows feature people jumping from the 40th floor. However, cases of rescue and the use of self-rescue tools are not recorded. This situation is evidenced by the fact that even in the most developed country there are problems in saving people from the upper floors. Subsequently, many emergency situations occur in high-rise buildings, and in this case problems arise with the rescue of people.

Currently, the only way to save people from the upper floors during an emergency is to save them using a ladder. Another method of rescue is considered rescue using a helicopter, in which many things still have to be done. In these methods, various evacuation tools are used in rescue work, including manual, automatic evacuation tools.

In addition to the ladder, other means of innovation should be introduced in the rescue of people from the upper floors. Such tools can be suspension lifts, seat suspension cabins used on Canat roads. Such tools are delivered by helicopter or to the desired height using systems based on lift-up. It may be very expensive to use helicopters in this, or it may not have the opportunity to widely introduce it in various incisive weather conditions. It seems to us that

the introduction of suspension elevators can be a good innovative solution to save people from high-rise buildings.

The development of the physical fitness of rescuers is considered as one of the leading tasks to eliminate the consequences of various disasters that occur in the world because no state is protected from emergency situations. Basically, they are being required to carry out search and rescue activities such as saving lives. Therefore, it is recognized that among the various preparatory tasks of its rescuers, physical fitness is one of the main components. In the system of their preparation, the development of the results of high physical training from year to year is due to the fact that the world's complex climate is changing, that is, the extreme hot-cold, snow-rain, fog, mud, water, rock, and rescue work under various conditions. The elimination of the consequences of the various natural and man-made disaster that is taking place is encouraging lifeguards to develop a strategy of physical fitness and manage it systematically. It is necessary to include practical training on the conduct of rescue work in high-rise buildings in the current existing rescue training programs, as well as to increase the hours of such training. In turn, it is time and conditions that make the innovative teaching tools for rescuers available all over the world more involved in educational programs.

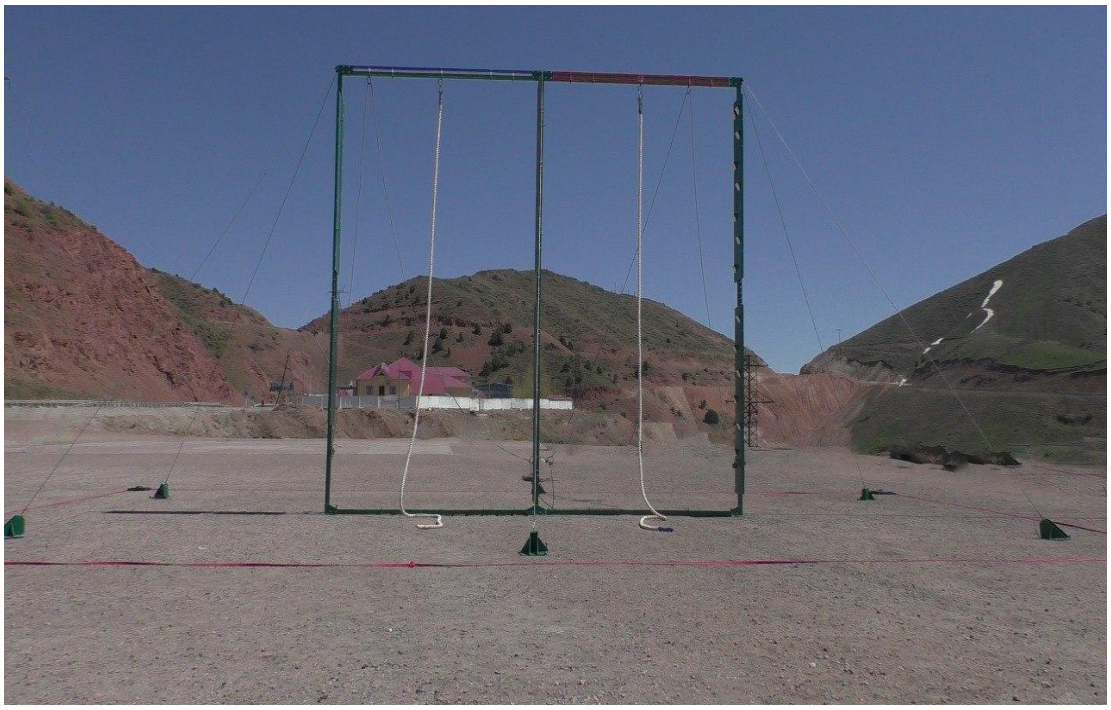
From the above extents, we also invented the innovative stretch-free zina (ladder) trainer. This staircase (staircase) has the following amenities:

1) to carry out training with the safety of rescuers without getting too high;
2) to create the possibility of climbing high mountains in different conditions, such as;
3) shape the skill of the lifeguard to climb the height at a certain time of its increased loads;
4) makes it possible to increase the physical and professional training of rescuers.

The equipment in question consists of stairs located vertically, which automatically adjust to your body weight when you put your feet on it. As you step towards the top, the zina (ladder) moves downward and comes back to the starting position, and this state is repeated. In the device, the lifeguard can perform continuous climbing exercises for hours and allow you to achieve positive results.

Continuous unfinished staircase (ladder) simulator

It should be noted that in recent years, regular annual "Young savior" competitions have been held in all schools of the republic, the school championship among schools, the district championship among schools, the competition of the most winning saving teams of the regional and Republican scale. On the author's side, keyngi's innovative invention is the "rescue training portable tower complex", which is 6 meters high.



This mobile training tower complex, which is convenient for training and training rescuers and young rescuers (issued patent No. 02.2024 y sap 2502 by the state institution "intellectual property Center" in khuzuri, Ministry of Justice of the Republic of Uzbekistan)

It would be desirable if the above-mentioned rescuers were used extensively in training and training and in competitions.

In conclusion, it can be said that in an emergency it will be necessary to carry out several measures to save people from high-rise buildings. These events include:

1. When designing high-rise buildings and structures, it is necessary to consider the installation of devices that allow the installation of rescue tools.

2. The training of rescuers who carry out work on high-rise buildings and the implementation of innovative educational tools for this, as well as the further increase in the hours of the training program.

The special physical training of rescuers is counted from the main tasks of professional rescue training of rescuers.

In the conditions of medium-high mountains, rescue work is carried out in a variety of weather conditions, often in the most difficult extreme passable laborious conditions.

Therefore, rescuers who are only physically trained, resilient and well trained in Mountain conditions, who are able to exert little mental energy, achieve lossless success, learn an educated, mountain pass method, can act rationally, enthusiastically in a variety of mountain ranges, and can aim for mountain rescue in a mountainous location can carry out effective rescue.

The development of physical and special qualities of rescuers in the mountain range, one of the common tasks of physical training in the mountains serves to increase the readiness to develop speed, endurance, agility, strength, flexibility, which is considered mandatory to be in them.

Training on the crossing of the middle high mountain barriers involves the complex training and improvement of all the basic physical qualities. But physical weight (intensity) should be

taken into account to determine the individual aspects of a person's movement capabilities, which should be taken into account in the process of training rescue team rescuers.

The development of a separate speed of movement, depending on the types of direction, makes it possible to carry out and determine the actions of movement in the minimum span of time. When passing various medium-high mountain ranges, it depends not only on the speed, but also on the dynamics of strength, dexterity, creakiness, development of technical training, as well as the strength of mountain ranges. That is why the process of improving the speed of movement in the mountain range is also involved in the condition and strength of other physical qualities, technical training, especially mountain ranges.

The following styles of movement speed development are proposed:

- improvement of movement in individual mountain ranges and mountaineering pavement areas in mountains requiring maximum strength, speed and endurance performance;
- develop the speed of movement in the passage of mountain ranges (bridged fields) on the pavement of mountain ranges and in the execution of a control task.

When carrying out the indicated assignments, it is necessary that the commander (instructor) adhere to the following methodological recommendations:

— the methods of crossing the mountain peaks in the bridging areas of the mountain path should ensure the highest speed and safe execution of tasks (ascents and descents, running uphill from sloping Timbers, crossing the track, etc.);

- it is necessary to be attentive in the movement of mountain passers-by on the bridge platforms of the mountain pass. At such a time, willpower must be delivered to my automatism so that the body is focused on endurance and the speed of completing the task (exercise) ;

— in order to maintain the maximum speed of movement, the distance of movement (range) in the pavement of the mountain peaks should not be much;

— it is necessary to educate that the commander (instructor) seeks to increase the maximum speed previously indicated in rescuers.

Assignments and rest intervals should help restore the body's working capacity.

The style of the race is of particular importance for increasing speed. The emotional increase in the duration of competitions allows the development of the speed of movement of learners. The main types of competitions are in pairs, sectional and group competitions. Group competitions are considered very effective. This technique makes it possible to better take advantage of the potential opportunities of learners.

The development of dexterity makes it possible, on the one hand, to quickly master new complex actions and methods in mountaineering, and on the other hand, to competently cope with new, unexpectedly emerging tasks (complexities) in the directions of mountaineering in a timely and rational way.

It can be seen that agility is a complex complex quality that does not have a single evaluation criterion. In the process of training on the passage of the middle high mountain barrier, the style of its development is as follows:

1) develop the ability of learning rescuers to master complex actions, methods and actions in mountaineering;

2) the formation of the skill of timely and rational re-vision, the use of actions, methods and actions in accordance with the changing situation of the correlation.

Various new complex driving skills and methods are regularly acquired by learners in mountaineering training, such as running mountaineering trails or mountaineering walks. This leads to the accumulation of experience in various methods and skills, as well as a good effect on the task of the organs of movement.

Agility in training on a mountain course or on a Mountain Relay route provides a great opportunity to develop a timely rational re-vision of methods and movements in changing conditions with resourcefulness.

Therefore, when choosing field tools (mountaineering), it is required that the directions of the mountaineering are constantly updated with new elements of the relief, while the conditions of execution are constantly complicated by bringing them closer to the conditions of rescue.

In the composition of the route, the novelty is achieved as follows:

a) to perform one method (e.g., types of caution) in different combinations with other methods and actions under constantly changing conditions of the correlation;

b) the application of random signals and commands that are considered necessary when working with ropes in the direction, movement, necessity, in the absence of the appearance of the direction distance;

D) change the distance of the complex-field direction of the relief, increase the number of directions, etc.;

e) perform methods, actions in inconsistent meteorological conditions in different mountainous areas, during the day and during the dark day.

The development of strength is physical quality, that is, the ability to overcome external resistance through the use of muscle strength (movements and actions).

In the conditions of complex medium-high mountains, modern rescue work on the Mountain, High requirements are imposed on the development of power qualities in rescue team rescuers. It is known that a person's strength depends, first of all, on the formation of conditioned reflector connections that provide a significant concentration of excitation and stopping processes, the simultaneous mobilization of various muscle groups and biochemical changes resulting from exercise (weight).

In the preparatory exercises held in the mountainous area, methods, actions and actions are used to develop strength qualities, and not special strength exercises (movement), but those that make up the sections "cross the mountain range" and "cross mountain ranges of varying complexity". For example:

1) movement with a backpack in a sharply crossed mountainous place;

2) movement in the Mountain Relay, manual ascent from the rope;

3) Movement along the complex area of the mountain range direction;

4) moving along the direction of the Rocky relief, carrying its body, over water, climbing-falling on a steep rock wall, etc.

In order to develop strength qualities in the process of training on mountain learning, the following are necessary:

— sharing movement methods and parts of the torso, weight for different muscle groups, movements in each workout;

- to perform methods, movements and actions in the direction of the balance, without giving the body the opportunity (demand) a slight weight to the muscles, the organs of the torso to fatigue;
- it is necessary to choose a direction that provides a high-quality (bold) transition of the direction with sufficient voltage, to restore breathing, to provide for short-time stops (breaks) with optimal capacity for obtaining the purpose of movement.

In order to develop strength qualities more rationally, there will be a method of returning physical weights, that is, a multiple transition of mountain slopes with a maximum weight.

Endurance is the ability of the body to resist fatigue (exhaustion), as well as unfavorable environmental conditions of the environment. Under endurance is understood the ability of the body of rescuers to perform for a long time without lowering the level of work in difficult conditions of the mountain range.

It has been found in research that mountaineering and complex mountaineering are valuable tools for the comprehensive development of the endurance of mountain rescuers. It passes under conditions where it is necessary to divert the weather from one view of the mountain range (cliffs, mountain ridge deposits, snow and ice and hakazos) to another in order to perform it when performing a long movement of maximum weight along the mountain range (directional) under complex meteorological conditions.

Endurance mountaineering cannot be without movements and actions, they will be in close connection together with driving and movement supports, methods, skills. That is why increasing endurance in the training process in learners depends on the pattern of various movements and activities in the direction of the Mountain Relay or in the direction of the mountaineering corridor. In such a direction, various actions and actions depend on the cashiness. Such directions must be performed many times and, as a rule, in a complex exercise.

Programs and standards of demand for the development of the physical fitness of rescuers have been developed. In extreme situations, anomalous weather conditions (sudden cooling or warming of air temperatures), as well as in the movement and professional training of man-made zones, a scientifically based special corridor was created in high mountain conditions, dedicated to the development of the qualities of speed, agility, strength, and at the same time durability. It is recommended to create the necessary conditions and infrastructure for the development of the physical fitness of rescuers in our country, to ensure that rescuers carry out decent work in labor activities and emergency situations through this corridor, to apply it as an improvement in the physical and professional skills of rescuers.

The corridor is also characterized by the level of physical fitness of rescuers, the ability to create in different extreme and natural conditions in accordance with the training processes of rescuers with different conditions, as well as the task of Service. This provides considerable assistance in shaping the movement skills and competencies of rescuers in overcoming various situations.

REFERENCES

1. Бальсевич В.К. Перспективы развития общей теории и технологий спортивной подготовки и физического воспитания (методологичекий аспект) //Теория и практика физической культуры. - М., 1999. - №2. - С. 21-26.

2. Биткин, В. М. Тренировка в среднегорье / В. М. Биткин // Сборник научно-практических статей и тезисов научно-практ. конф. профессорскопреподавательского состава /
3. Бомин, В. А. Влияние физических нагрузок при проведении похода выходного дня в условиях среднегорья на организм туристов / В. А. Бомин // Физическое воспитание и спорт в высших учебных заведениях интеграtsiя в европейском образовательном пространстве. – Харьков: Харьковская гос-ная академия физической культуры, 2005. – С. 31-33.
4. Верхошанский Ю.В. На пути к научной теории и методологии спортивной тренировки //Теория и практика физ. культуры. - М., 1998. - №6. - С. 44-46.
5. Ильин, В.И. Влияние факторов среднегорья на функциональное состояние регуляторных систем организма в тренировочном процессе спортсменов / В. И. Ильин и др. // Современный Олимпийский спорт и спорт для всех: Материалы XИ Международного научного конгресса (10-12 октября 2007, Минск), 2007. – С. 116-119.

1. www.aif.ru
2. www.news.aifnet.ru.
3. https://ventopro.ru