

Development of a Model of Interchange and Compliance of Barriers in the Mobile Training Complex of the Activity of Fire-Rescue Units in Fire-Rescue Garrisons

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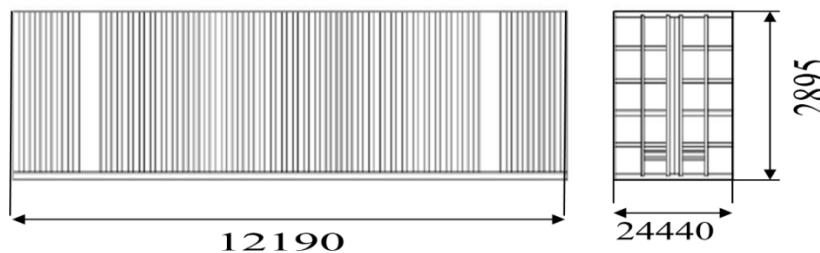
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ABSTRACT

At present, one of the pressing issues is the provision of effective extinguishing of fires that occur in different situations of Fire-Rescue units in Fire-Rescue garrisons. And for this, the formation of the spiritual preparation of divisions is one of the main issues. However, in practice, all of the existing Fire-Rescue garrisons are not provided with mental preparation and hot smoke rooms, while we can see that some are in disrepair. The solution of this issue, however, requires an economic surplus of expenditure. The only solution to this is an effective and technically high-quality designed training complex of the type of contactor installed in trucks. Especially in the use of quality products, it is desirable to use a standard sea container of 40 tons (High Cube).

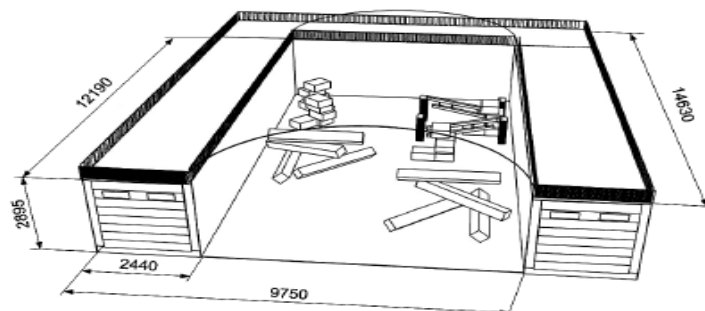
KEYWORDS: *Fire-Rescue, Mobile, Garrisons.*

Such containers (1-picture) have the following dimensions: 12190 x 2440 x 2895 mm.



1-Picture. The appearance of the proposed 40-ton container

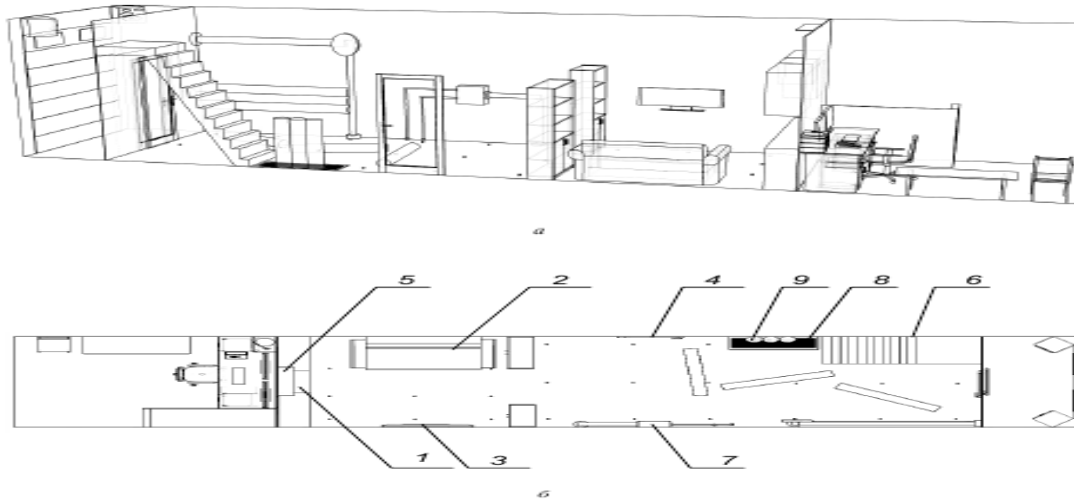
Metal construction provides savings in excessive economic costs, there is an opportunity to install doors and windows. Connecting the container to each other and located in all corners is carried out with the help of special adapted parts clamps, which give the opportunity to model different situations. In picture 2, one of the contexts is a training complex (operator) systems control punk, while the other is designed to simulate the situation in the modeling of fires in residential and industrial facilities.



2-Picture. Designed to prepare fire-rescuers proposed overview of the mobile training complex

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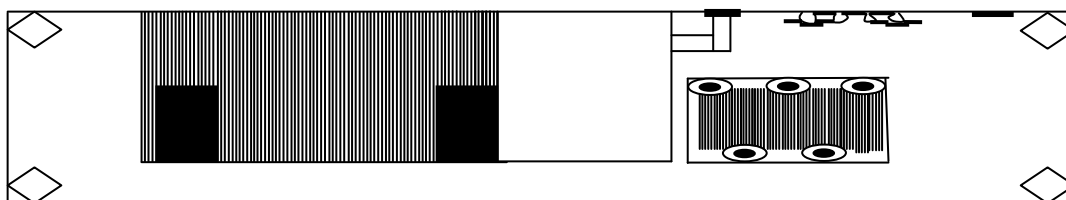
A characteristic feature of the proposed sample (unlike other well – known analogues) is its " Π " - shape, which allows you to use the area created for additional imitation, for example, in cases closer to buildings and structures. This provides training opportunities of the complex in the process of training fire-rescuers, for example, to create forms close to buildings and structures and to work with pneumatic, emergency rescue equipment. It should be noted that in the training of firefighters, modeling of fires in residential and production buildings is envisaged in one of the modules (picture 3).



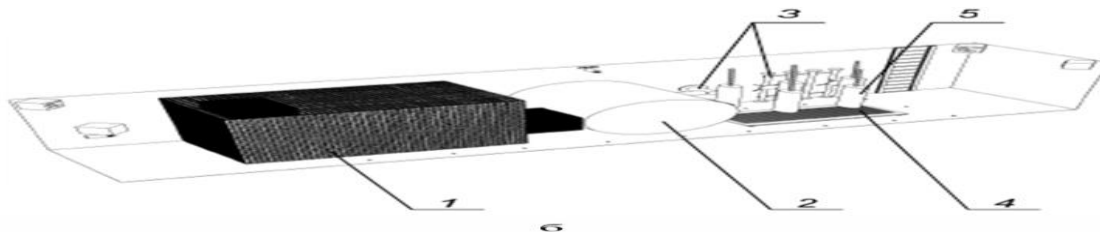
3-Picture. Proposed appearance of the module for training fire-rescuers: a) - a joint appearance with the place of management and training complexes; b) - a top view of the complex where the training equipment is located

The module control structure consists of control panel, lighting control system, acoustic communication and voting system, simulator control system, ventilation and control system, temperature control system built-in, fire modules. The following models are involved in the training process. It consists of burning kitchen simulator, burning sofa simulator, burning TV simulator, burning door simulator, large volume flame imitator, burning ladder simulator, burning pipe and cable hillgisi simulator, ground burning liquid simulator, burning gas cylinders simulator.

Elimination of the flames during the exercise can occur in an automatic mode, in some cases a decrease in the pressure in the protective equipment and a system was provided that allows you to turn off the flames if various conditions related to the health of the participants were observed. In the training module, it is possible to study the possibility of changes in the internal walls, as well as the elements that mimic the rescue work as a result of the action of combustible liquids. This module provided a thermal and smoky effect on fire-rescuers. In addition, the participants were presented with a system for creating sound and light effects, designed as an additional spiritual charge. It was also installed with equipment that generated noises during the Test experience. He described the collapse of the equipment, mainly the screams of the victims, the sound of liquid and/or gas coming out of the pipe under pressure.



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4-Picture. The appearance of the training complex, in which the state of the production facilities is reflected: a)-volumetric view; b) – training equipment location view from above the complex.

It should be noted that the ceiling of the complex can be used as one of the elements of the mental preparation group. At the same time, there is an opportunity to perform a certain element in the execution of exercises. This makes it possible to develop a variety of scenarios in the preparation of fire-rescuers. An important feature of the samples is the possibility of moving the Polygon (its individual set of elements) to its subdivisions in different locations in the system of the Ministry of Emergency Situations. This opportunity provides savings in economic costs by creating a large number of stationary samples. The provision of these samples in each department of the Ministry of Emergency Situations of the Republic of Uzbekistan ensures in the future the provision of quality activities of Fire-Rescue units in various situations and the perfect fulfillment of the tasks set before them.

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