LOGISTIC CHAINS OF APPLICATION OF FIREFIGHTING EQUIPMENT FOR SUPPRESION OF FOREST AND NATURAL ECOSYSTEMS FIRES

Assoc. Prof. DSc Vasyl Popovych¹ Andriy Gapalo¹ Assoc. Prof. PhD Igor Shukel² PhD Artur Renkas¹ ¹ Lviv State University of Life Safety, Ukraine ² Ukrainian National Forestry University, Ukraine

ABSTRACT

Fires in natural ecosystems, including forest fires, destroy whole ecosystems of states and can be extremely catastrophic. Total square of forest fund in Ukraine is 10.4 million ha, 9.6 million ha of which is covered with forests vegetation. Forest cover of the state is 15.9%. For the last 50 years, the square of the forests increased at 21% and wood stock – almost three times. Suppression of fires in natural ecosystems and forests would be impossible without transportation means. That is why, during emergency management transport is a uniting element of different emergency services. Classification of fire and emergency rescue equipment aimed at fire suppression in natural ecosystems and forests will facilitate the increase of efficiency of forces and means management during fire with the help of hierarchical structure of technical means division in accordance with the relevant tasks, which can be performed by them.

To create logistic chains of application of firefighting equipment for emergency management in natural ecosystems, it is necessary to be knowledgeable about tactic and technical characteristics of available means.

The work describes logistic chains of application of firefighting equipment for emergency management in natural ecosystems and forest fires in accordance with the equipment on the balance sheet of rescue units and forestry enterprises in Ukraine.

Keywords: logistic chains, natural ecosystems, forest fires

INTRODUCTION

Fire danger in natural ecosystems and woodlands is increased by the influence of human factor and weather conditions in early spring and late summer. Above 98 % of fires occur due to this reason.

The main reason of forest fires is violation of fire safety regulations in woodlands in the period of increased fire emergency and burning of vegetation on farmlands.

Due to their purpose and location, the forests of Ukraine have water-protective, protective, sanitary and hygienic, recreational and other functions, and meet the needs of society for forest resources.