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Airmobile Fire-fighting Complex

Fires in dense urban areas and high-rise buildings are a big problem in terms of suppression. To extinguish such fires, special-purpose helicopters are often used, which drop water or use horizontal fire extinguishing systems - water cannons. The effectiveness of such systems is not optimal, and they play more of an auxiliary role than the main one. Currently, drones are used to extinguish fires, allowing delivery of a fire hose to a great height and close to the fire. However, drones also have disadvantages due to the difficulty of preparing for use and their rapid activation. This project proposes to use an airmobile fire-fighting complex, including a helicopter-tanker which carries fire-fighting foam, provided with a special platform on which a firefighter drone is located. The drone is connected by a hose to the tank with fire-fighting foam, ensuring the delivery of the hose to the fire site. The range of the firefighting drone is about 30 metres from the helicopter. This fire-fighting complex enables effective extinguishing of fires in areas of dense residential development and high-rise buildings, where it is difficult to use conventional fire extinguishing means. The response time of an airmobile fire-fighting complex for extinguishing fires is much shorter in comparison with standard fire extinguishing methods.

