

## SELECTION AND VALIDATION OF RATIONAL METHOD OF IMPROVEMENT IN EFFECTIVENESS OF ANTI-RIOT WATER CANNONS

The choice of a rational method for improving the effectiveness and safety of anti-riot water cannons with long-range streams of the dispersed water and water solutions is grounded. The utility of the hydraulic pulse dispersion is most apparent for initiating these streams because it allows an operative control of the characteristics of the stream dispersion and the form of its spray. The methodic support was developed for the choice of the dispersed stream parameters resulting in a useful solution of the problem of prevention and mitigation of the negative phenomena occurring in the mass-riot zone providing the improved security level of the opposing sides and the minimum expenses on modernization of water cannons and fire-engine vehicles used.

**Keywords:** *mass riot, crowd, negative phenomena, water cannon, hydraulic pulse jet, parameters, effectiveness, safety.*

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