INFORMATION TECHNOLOGY FOR ASSESSMENT OF THE FUNCTIONAL RELIABILITY OF THE HUMAN OPERATOR

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Every year technically more advanced computer environments for human-machine interaction appear. However, the problem of ensuring efficient and reliable work of the human operator still remains unresolved. This problem is associated with a variety of subjective and objective factors, among which we can note the individual characteristics of the operator (medical and biological indicators, moral and psychological qualities, psychophysiological properties of a person), the level of preparedness for this type of activity, hardware, environmental (objective conditions of the situation and organization of operator's activities), work and rest schedules for operators, organization of group activities, number of work shifts, issues of operator interchangeability, etc.

The basis of the created information technology is a method for assessing the functional reliability of a human operator, which takes into account the characteristics of the quality of his activities, emotional and operational tension caused by the complexity of the work performed, and also allows to predict his behavior.

The implementation of the developed information technology will make it possible to promptly eliminate the operator's erroneous actions, conduct training that allows for the reinforcement of correct actions, and also achieve a greater understanding of the mechanism of the operator's influence on the stability of human-machine systems.