Features of Evaluation of Risks for Complex Objects

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Abstract:
The paper made theoretical generalizations and obtained promising solutions to the scientific and theoretical problem of quantitative risk assessment for the flight safety management system in order to increase the reliability forecast of the occurrence a negative aviation accident. The current state and prospects for the development of a proactive approach to the system of flight safety risk management and risk prediction based on expert evaluation of informational parameters are analyzed. Generalization and modern prospects for the development of expert assessment tand he need to eliminate the subjectivity of expert opinion made it possible to outline unresolved issues, formulate a scientific problem and substantiate appropriate approaches to its solution, in particular, to develop an automated risk assessment system based on information parameters with the possibility of identifying inconsistency in expert opinion when making decisions. The use of rank correlation methods based on the Kendal and Spearman coefficients has made it possible to increase the efficiency of decision-making by warning if experts' opinions are found to be wrong in the risk assessment system, since this can be a serious compressive aspect of the risk assessment in aviation. If you think about the convenience of the decisions of the experts, revisit the installed inter-role, the program issues warnings about the need to revise the expert assessment.

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