

INFLUENCE OF INFORMATION PHENOMENA ON THE PRECONDITIONS OF AVIATION ACCIDENTS

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Awareness of the importance of aviation safety and efficiency is a major driver of its ongoing development. The aviation community must constantly work to improve safety around the world. It is in aviation, first, that the most modern technologies are introduced, including information technologies, which require highly qualified personnel serving the aviation industry, equipment, and increasing the level of safety.

The processing of information by an air operator is an important part of its reliable operation, as it is an element of decision-making. In addition to making decisions, the air operator also processes a large amount of ancillary information, the amount of which may vary depending on the complexity of the task and the mode of operation.

To obtain estimates that characterize the information processes and to investigate the reasons for the decline in information reliability is possible in two ways:

- modelling
- experiment.

Modelling simplifies the analysis and considers only those characteristics that are needed at the moment.

Complex and dangerous situations in the activities of air operators create the preconditions for violations of the work process, the appearance of erroneous actions, the threat of occurrence and real manifestations of emergencies.

However, in the practice of aircraft operation there are cases when an important element of the situation is not in doubt, but in fact, is wrong. Thus, the danger can become noticeable only when there is no time to rectify the situation.

In the activities of the operator of air navigation systems, the cause of many erroneous actions and failures of equipment is a violation of information interaction in the system "man-machine".

On the one hand, the emergence of erroneous actions in the process of solving the tasks of the air operator, often accompanied by the development of mental stress and stress.

On the other hand, factors of complexity, responsibility, and the danger of operator activity cause tension and stress, which in turn causes the occurrence of errors, accidents, air crashes.

Information traps can be different and appear:

- in an ambiguous interpretation of the reasons for the operation of emergency warning and alarm systems;

- not understanding the reasons for the development of the emergency, its danger;

- poor understanding between crew members; changes in air traffic controllers or maintenance engineers and ignorance of the actions of one of them, which have already affected the development of the emergency;

- in the chaotic actions of air operators, who experienced information stress and panicked;

- air operators are affected by many factors, which makes it difficult to identify the main ones and implement appropriate measures to eliminate them.

The study of the causes of information stress and the mechanisms of their formation will help reduce the level of their impact on the body of the aircraft operator, and will further help maintain the level of reliability of the operator.

Although at the present stage of development of science trends and patterns of detection and flow are almost not considered, especially since they have a significant impact not only on the efficiency and reliability of air operators but also on flight safety in general.

Especially in the conditions of constant growth of the volumes of the information processed by operators.

In addition to the identified causes, further attention should be paid to cases of accumulation of information, when the air operator may lose basic information, which in the future may lead to the incident

It should also be noted that in the case of an emergency, the ability of the operator to receive new information can be reduced to almost zero.

So, no one is safe from mistakes. Humans make mistakes every day, but our task is to learn to identify and eliminate those that pose the greatest threat. In aviation, it is especially important to be able to get out of such information traps without consequences.

That is why it is important to solve the current scientific and practical problem of studying the impact of information phenomena on the preconditions of aviation accidents and incidents based on the study of information processes during the operation of aircraft, aviation accidents and incidents.

Redundancy can be used as a measure to prevent the occurrence of certain information phenomena and their impact on the development of the emergency on the aircraft. That is additional funds and capabilities required for the operator to perform the specified functions.

The purpose of introducing redundancy should be to increase the probability of error-free operation of the aircraft operator over some time.

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