Record Nr. UNINA9910682566303321 Autore Kryzhanovsky Georgy Alekseevich Titolo Modeling of transportation aviation processes // Georgy Alekseevich Kryzhanovsky [and four others] Singapore: ,: Springer, Springer Nature Singapore Pte Ltd., , [2023] Pubbl/distr/stampa ©2023 **ISBN** 981-19-7607-4 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (191 pages) Collana Springer Aerospace Technology Series Disciplina 387.7015118 Soggetti Aeronautics, Commercial - Mathematical models Aeronautics, Commercial - Technological innovations Air travel - Mathematical models Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references. Introduction -- Chapter 1. Transportation systems: basic concepts, Nota di contenuto processes, directions of modeling and their research -- Chapter 2. Kinds of models and their general description. Modeling principles and models of transportation companies as hierarchical active systems (has) -- Chapter 3. Basics of modeling control processes in transportation systems - has -- Chapter 4. Information, modeling and uncertainty measurement in transportation systems -- Chapter 5. Modeling of transportation processes in optimization and functioning transport space -- Chapter 6. Modeling of decision-making processes when driving in transport -- Chapter 7. Physical modeling of transportation processes. Simulation simulation, training complexes -- Chapter 8. Modeling of elements characterizing the activities of operators and dm of transportation processes -- Conclusion. This book presents the fundamental methods of modeling, analysis and Sommario/riassunto synthesis of transport processes which allow: - to optimize the work of transport organizations according to different criteria of their functioning; - to evaluate the quality of decisions made in conditions of high entropy and uncertainty of technological processes when applying

new technologies and systems: -to reduce the negative impact of the

human factor on the safety of ongoing transport processes by

increasing the motivational component of the training processes for the operator of active transport systems. The structural diagrams presented in this book make it possible to visualize the processes of training, self-training of operators and the mechanisms of the formation of volitional motivational efforts under various external influences of the environment and the teacher—instructor. The obtained functional dependencies serve as an assessment for determining and forming the dynamics of motivation and making a decision about the readiness for safe work of the operator of active transport systems and the decision-maker in the new conditions of the technological process.