1. Record Nr. UNINA9910366595703321

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Titolo	Development of navigation technology for flight safety / / S. V. Baburov [et al.]
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2020
ISBN	981-13-8375-8
Edizione	[1st ed. 2020.]
Descrizione fisica	1 online resource (XVI, 233 p.)
Collana	Springer Aerospace Technology, , 1869-1730
Disciplina	629.1
Soggetti	Aerospace engineering Astronautics Wireless communication systems Mobile communication systems Microprogramming Signal processing Image processing Speech processing systems Electronics Microelectronics Computational intelligence Aerospace Technology and Astronautics Wireless and Mobile Communication Control Structures and Microprogramming Signal, Image and Speech Processing Electronics and Microelectronics, Instrumentation Computational Intelligence
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	General Description of Flight Safety Problems -- Methodology for Constructing Satellite-Based Landing Systems and Collision Avoidance Systems -- Methods for Improving Flight Efficiency and Safety for Satellite-Based Landing Systems -- Methods for Improving Flight Efficiency and Safety Based on Technologies Applicable in Collision

Avoidance Systems -- Integrated Technical Solutions on The Joint Use of Technologies Applicable in Collision Avoidance Systems and Satellite-Based Landing Systems -- Recommendations for The Application of The Proposed Technical Solutions In the Satellite-Based Landing Systems and Collision Avoidance Systems.

Sommario/riassunto

This book highlights practical solutions for flight safety improvement techniques, which are currently the focus of the International Civil Aviation Organization (ICAO). It has become clear that, in order to rapidly and significantly improve flight safety, the integrated use of new aeronautical technologies is called for. Considering the size of the aviation fleet, its constant growth and the long service lives of aircraft, new technologies should be adapted both to cutting-edge air navigation systems and to those that have been used for over a decade. Concretely, the book discusses methodological approaches to the construction of ground and on-board avionics that make it possible to achieve improved flight safety using innovative new methods. The proposed approaches are illustrated with real-world examples of e.g. satellite-based navigation systems and enhanced ground proximity warning systems. The book is written for professionals involved in the development of avionics systems, as well as students, researchers and experts in the field of radiolocation, radio navigation and air traffic control, the book will support the development and modeling of radio technical complexes, as well as the analysis of complex radio technical systems.