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Autore	Ilev Stoje Dimov
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Sommario/riassunto	This book presents the principal structure, networks and applications of the Global Aeronautical Distress and Safety System (GADSS) for enhanced airborne Communication, Navigation and Surveillance (CNS).

It shows how their implementation works to ensure better security in flight and on the airports surface; improved aircraft tracking and determination in real space and time; and enhanced distress alerting, safety; and Search and Rescue (SAR) system for missing, hijacked and landed aircraft at sea or on the ground. Main topics of this book are as follows: an overview of radio and satellite systems with retrospective to aeronautical safety; security and distress systems; space segment with all aspects regarding satellite orbits and infrastructures; transmission segment of radio and satellite systems; ground segment of radio and earth ground stations; airborne radio and satellite antenna systems and propagation; aeronautical VHF and HF Radio CNS systems and networks; Inmarsat, Iridium and Cospas-Sasrast aeronautical satellite CNS systems and networks; Aeronautical Global Satellite Augmentation System (GSAS) and networks; Digital Video Broadcasting - Return Channel via Satellite (DVB-RCS) standards and Aeronautical Stratospheric Platform Systems (SPS) and networks. Features a complete introduction of new GADSS space, users and ground segment; Emphasizes CNS capabilities, tracking, positioning and determination of aircraft in flight, missing and hijacked aircraft, and the procedure during distress alert and SAR operations; Includes detail on the Global Aircraft Tracking (GAT) system and networks, aimed at eliminating future disappearance of aircraft; Representd the basic platform for the preparation of the Future GADSS Manual.