1. Record Nr. UNINA9910634047003321

Autore	Dvornikov Sergey Viktorovich
Titolo	Radio-Electronic Equipment in Civil Aviation : Construction and Maintenance / / by Sergey Viktorovich Dvornikov, Alexander Fedotovich Kryachko, Igor Anatolyevich Velmisov, Dmitry Alexandrovich Zatuchny
Pubbl/distr/stampa	Singapore : , : Springer Nature Singapore : , : Imprint : Springer, , 2022
ISBN	981-19-6199-9
Edizione	[1st ed. 2022.]
Descrizione fisica	1 online resource (174 pages)
Collana	Springer Aerospace Technology, , 1869-1749
Disciplina	050
Soggetti	Telecommunication Measurement Measuring instruments Aerospace engineering Astronautics Signal processing Microwaves, RF Engineering and Optical Communications Measurement Science and Instrumentation Aerospace Technology and Astronautics Signal, Speech and Image Processing
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Chapter 1. Principles of building general reception paths -- Chapter 2. Radio receivers of amplitude-modulated signals -- Chapter 3. Private paths for receiving signals with frequency modulation -- Chapter 4. Private paths for receiving signals of frequency and double (two-channel) frequency telegraphy -- Chapter 5. Private paths for receiving signals of phase and relative phase telegraphy -- Chapter 6. Private paths for receiving signals of amplitude telegraphy -- Chapter 7. Digital radio receivers. Reception of complex signals.
Sommario/riassunto	This book presents the maintenance of radio equipment and the principles of operation of various radio receiving devices in civil aviation. The main feature of this book is the fact that it covers almost

all types of radio receivers currently used in radar, communication and navigation equipment of civil aviation. Special attention is paid to ensuring the sensitivity of the receiver, as well as noise suppression under various conditions. A detailed description of the set of methods for receiving signals, especially in the case of frequency telegraphy is presented. This book provides a detailed description of specific methods of signal processing with frequency modulation—the so-called threshold-lowering reception methods based on reducing the bandwidth to the detector part of the private reception path in combination with the principle of negative feedback. The material presented in this book follows a logical sequence with a large amount of illustrations. .