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Titolo	Aerospace Radionavigation Systems : Electromagnetic Compatibility // by Dmitry Alexandrovich Zatuchny, Grigory Grigoryevich Negreskul, Oleg Ivanovich Sauta, Artem Yuryevich Shatrakov, Yuri Grigoryevich Shatrakov
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Soggetti	Aerospace engineering Astronautics Measurement Measuring instruments Telecommunication Electrodynamics System theory Control theory Signal processing Aerospace Technology and Astronautics Measurement Science and Instrumentation Microwaves, RF Engineering and Optical Communications Classical Electrodynamics Systems Theory, Control Signal, Speech and Image Processing
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Nota di contenuto	Chapter 1. Methods for evaluating the electromagnetic compatibility of integrated ground systems and onboard systems -- Chapter 2. Method of obtaining information unintentional interference in radar systems and radio navigation systems with a generator-type -- Chapter 3. Theory of predicting unintended interference of radar and radio navigation equipment due to the properties of the oscillatory system of

the microwave generator used -- Chapter 4. Experimental research characteristics that determine the electromagnetic compatibility of radio electronic systems using the space-harmonic analysis -- Chapter 5. Methodology for calculating reference values ring systems -- Chapter 6. Research work stabilitrone generator in sync mode -- Chapter 7. Influence of the output generation method the microwave signal transmission path in the relative level of spurious emissions -- Chapter 8. Electromagnetic compatibility microwavedevices with phase modulation -- Chapter 9. Features of industrial interference in a radar transmitter on stabiliton -- Chapter 10. Calculate electromagnetic fields scattered elements of the airframe -- Chapter 11. Bearing errors caused by scattering of the electromagnetic field by elements of the aircraft body -- Chapter 12. Evaluation of antenna decoupling if there is an electromagnetic shield -- Chapter 13. Ensuring electromagnetic compatibility in civil aviation, taking into account modern requirements -- Chapter 14. Solving problems of electromagnetic compatibility of antenna devices -- Chapter 15. Models of electromagnetic influence radio engineering systems. Calculation of electromagnetic compatibility of navigation systems rsbn and dme.

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#### Sommario/riassunto

This book presents concepts for radio engineers to ensure electromagnetic compatibility based on the methodological approaches to reduce the probability of failures of radio equipment and improve the flight safety of complex aerospace systems. The book deals with issues related to methods for assessing the electromagnetic compatibility of integrated ground and on-board complexes, methods for obtaining information about unintentional interference, the theory of predicting unintentional interference, experimental studies of the characteristics that determine electromagnetic compatibility, methods for calculating reference systems, the influence of the method of generating the output signals of the transmitting path on the relative level of spurious radiation, electromagnetic compatibility of ultrahigh-frequency devices with phase modulation, with the features of industrial noise, with the calculation of electromagnetic fields scattered elements of the airframe, with direction finding errors caused by the scattering of electromagnetic fields by elements of the airframe, with the evaluation of isolation between antennas in the presence of an electromagnetic screen, solving problems of electromagnetic compatibility of antenna devices with the model electromagnetic interference radio systems, calculation of electromagnetic compatibility of specific navigation systems, with the provision of electromagnetic compatibility in civil aviation, taking into account modern requirements.

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