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Receiver for Known Non-white Noise; 6.4 Adaptive Receiver for Unknown Non-white Noise; 6.5 Space-time Adaptive Processing 6.6 Waveform and Ambiguity FunctionPart II: Target Detection and Tracking; Chapter 7. Clutter Cancellation; 7.1 Introduction; 7.2 Waveform Selection; 7.3 Improvement Factor and Spectral Purity; 7.4 Dynamic Range and Linearity; Chapter 8. Air-to-Air Detection; 8.1 Introduction; 8.2 Non-coherent Low-PRF Mode; 8.3 Pulse-compression Radar; 8.4 Low-PRF Doppler Radars (MTI); 8.5 High-PRF Radar; 8.6 Pulse-Doppler Mode (High- and Medium-PRF); Chapter 9. Air Target Tracking; 9.1 Introduction; 9.2 Platform Motion and Attitude-Coordinate Systems; 9.3 Single-Target Tracking (STT); 9.4 Plot Tracking 9.5 Track-While-Scan (TWS)Chapter 10. Ground Target Detection and Tracking; 10.1 Introduction; 10.2 Detection and Tracking of Contrasted Targets; 10.3 Detection and Tracking of Moving Ground Targets; Chapter 11. Maritime Target Detection and Tracking; 11.1 Maritime Surveillance Radars; 11.2 Search Strategy; 11.3 Surface Vessel Detection; 11.4 Detection of Small Targets (Periscopes); 11.5 Maritime Target Tracking; 11.6 Maritime Target Classification; Chapter 12. Electromagnetic Pollution; 12.1 Introduction; 12.2 Electromagnetic Compatibility; 12.3 Interference from Other Radar Components 12.4 Inter-equipment Interference on the Platform12.5 Unintentional Interactions; Part III: Ground Mapping and Imagery; Chapter 13. Ground Mapping; 13.1 Introduction; 13.2 Principal Parameters; 13.3 Ground Mapping with Monopulse Sharpening; Chapter 14. Radar Imagery; 14.1 Imaging Radar Applications; 14.2 Image Quality; 14.3 Special Techniques for Range Resolution; Chapter 15. Synthetic Aperture Radar; 15.1 Design Principle; 15.2 SAR Ambiguities; 15.3 Spaceborne SAR; 15.4 SAR Operating Modes; Chapter 16. Synthetic Aperture Radar Specific Aspects; 16.1 Migrations; 16.2 Phase Errors 16.3 Platform Motion

Sommario/riassunto

A practical tool on radar systems that will be of major help to technicians, student engineers and engineers working in industry and in radar research and development. The many users of radar as well as systems engineers and designers will also find it highly useful. Also of interest to pilots and flight engineers and military command personnel and military contractors. """"This introduction to the field of radar is intended for actual users of radar. It focuses on the history, main principles, functions, modes, properties and specific nature of modern airborne radar. The book examines radar's

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Sommario/riassunto	In this era of rapid technological evolution, the landscape of education continually transforms. This compilation is a timely endeavor, capturing the intersection of technology and learning, a synergy pivotal for the future. This anthology, a mosaic of innovation and insight, beckons readers to witness the dawn of a transformative epoch in education.