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Autore	Bole A. G (Alan G.)
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Nota di contenuto	Cover; Contents; Preface to Second Edition; Preface to First Edition; Acknowledgements; 1 Basic radar principles; 1.1 Introduction; 1.2 Principles of range measurement; 1.3 Principles of bearing measurement; 1.4 Picture orientation; 1.5 Picture presentation; 2 The radar system - operational principles; 2.1 Introduction; 2.2 Function of units; 2.3 Transmitter principles; 2.4 Aerial principles; 2.5 Receiver principles; 2.6 Display principles; 2.7 The siting of units on board ship; 3 Target detection; 3.1 Introduction; 3.2 Radar characteristics; 3.3 Target characteristics 3.4 Target enhancement - passive3.5 Target enhancement - active; 3.6 The detection of targets in sea clutter; 3.7 The detection of targets in precipitation clutter; 3.8 The radar horizon; 3.9 False and unwanted radar responses; 3.10 Future advances in target detection; 4 Automatic target tracking, specified facilities; 4.1 Introduction; 4.2 The acquisition of targets; 4.3 The tracking of targets; 4.4 Vectors; 4.5 The ARPA and ATA display; 4.6 The display of alphanumeric data 4.7 Alarms and warnings; 4.8 Connections with other equipment; 5 ARPA and ATA - additional facilities; 5.1 Introduction

5.2 Additional alarms and warnings; 5.3 Automatic ground-stabilization;
 5.4 Navigational lines and maps; 5.5 The predicted point of collision
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 Manual plotting - accuracy and errors
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 9.4 The classification of ARPA and ATA error sources

Sommario/riassunto

Radar and ARPA (Automatic Radar Plotting Aids) are standard systems on all commercial vessels and are widely used in the leisure maritime sector. This fully revised new edition covers the complete radar/ARPA installation, including AIS (Automatic Identification System) and ECDIS (Electronic Chart Display & Information Systems). It serves as the most comprehensive and up-to-date reference on equipment and techniques for radar observers using older and newer systems alike. Suitable for use both as a professional user's reference and as a training text, it covers all aspects of radar and ARPA tec